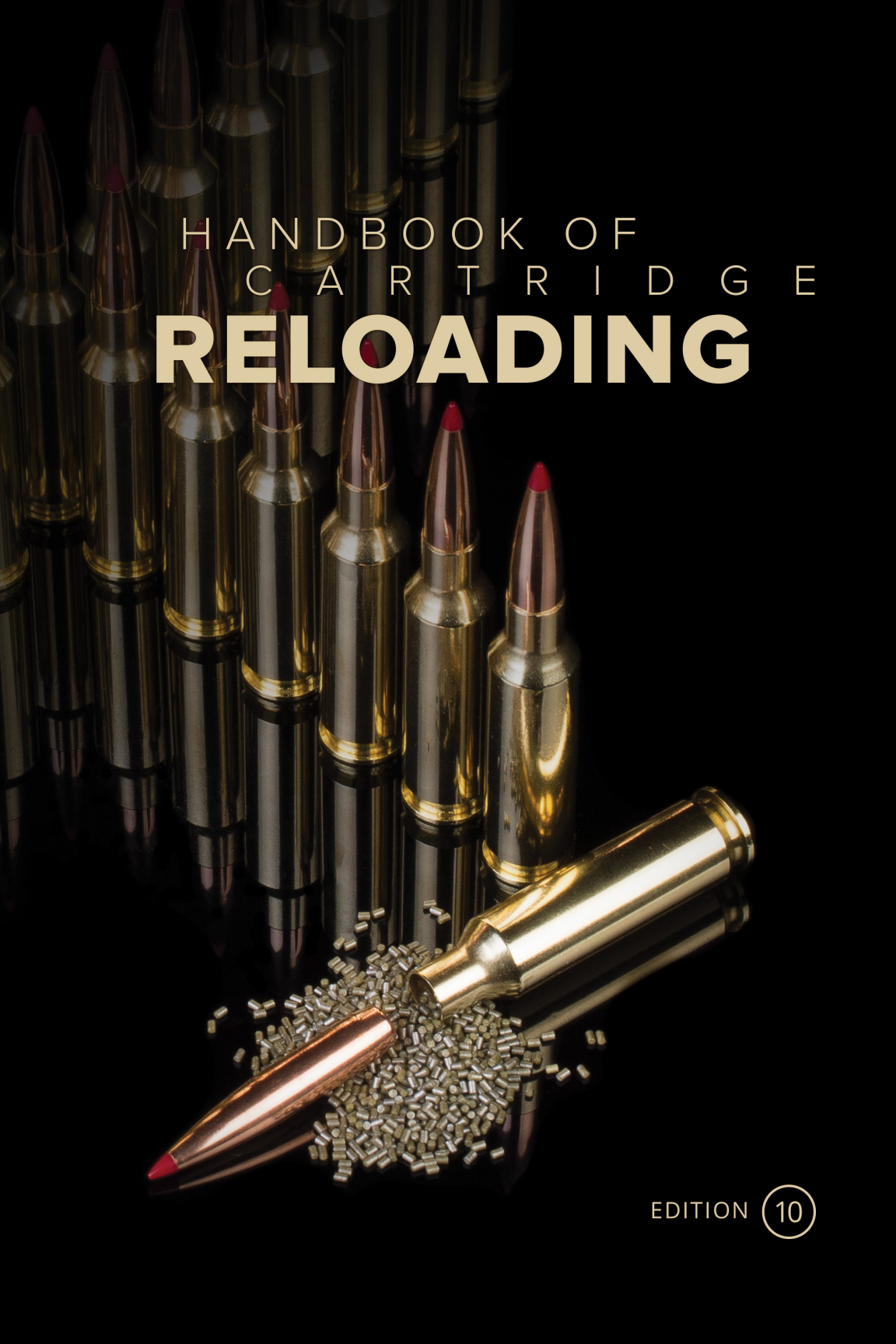
HANDBOOK OF CARTRIDGE RELOADING



EDITION 10

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HORNADY MANUFACTURING COMPANY
GRAND ISLAND, NEBRASKA 68802
U.S.A.

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Foreword, Acknowledgements & Introduction

We're approaching 50 years since the first edition of the *Hornady Handbook of Cartridge Reloading* was published in 1967. Needless to say, a lot has changed over those five decades. What started as a 360-page guide with 70 cartridges utilizing 68 different bullets, has grown steadily to over 200 cartridges and 300 bullets.

The 10th Edition of the *Hornady Handbook of Cartridge Reloading* is the culmination of hundreds of hours, thousands of rounds and dozens of people working together. New Hornady bullets from the past few years have been added to this edition, including the ELD-X® and ELD® Match bullet lines. There have been additions to the GMX,® SST® and FTX® lines as well. Many new powder introductions from the past four years are now included, along with a few cartridges making their first appearance in our load data.

To keep the overall page count manageable, we removed some proprietary or obsolete cartridges from the book, but have placed the data online for those who still load and can find components for them. These cartridges are located at Hornady.com/data. In addition, we maintain an online errata that outlines any corrections to the reloading data in this Handbook. It can be found at: Hornady.com/errata.

As previously mentioned, this publication is a group effort. Lowell Hawthorne has worked on a number of handbook editions and was again instrumental, along with Matt George, in compiling and helping to shoot the physical data for this edition. The majority of shooting in the lab was done by Trent Cannon. Mitch Mittlestaedt, Joe Thielen and others from the Hornady engineering department were helpful in providing specs, part prints and technical assistance. Todd Knecht and the rest of the technical service department were a huge help, as always, when it came to proofing the handbook and talking to customers who call in for reloading support. Emily Mierau spent many hours helping with photos, content ideas and proofing. Sherma Jones, Matt Hodtwalker, and the team from IdeaBank Marketing were crucial in the look and feel of the book, along with managing all the data behind the scenes. Thank you to the whole team for your help.

Neal Emery, Editor
Hornady Handbook of Cartridge Reloading, 10th Edition

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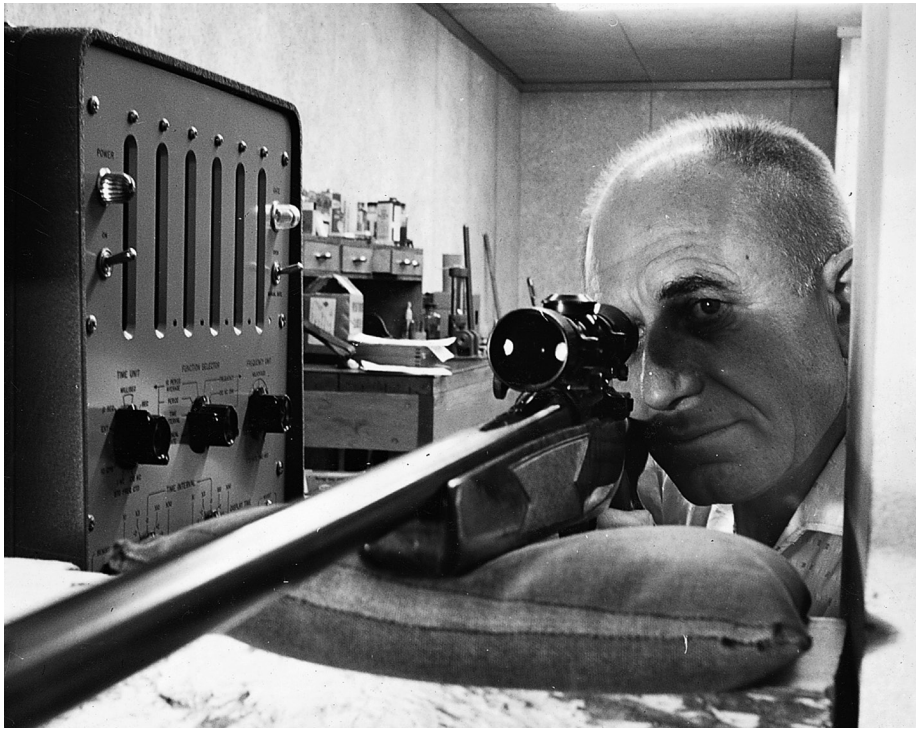
HERITAGE
& VISION
EDITION 10

The Hornady Heritage and Vision

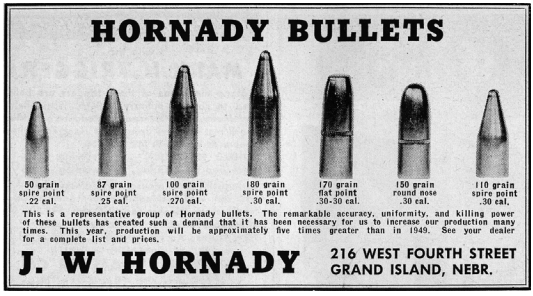
Joyce Hornady's bankers thought the idea was far-fetched, to say the least. Bullets? Making bullets for reloaders? What kind of business was that? A person could go broke in a hurry. The Hornady Sporting Goods Company was a business they could understand; bicycles, tennis rackets, team uniforms, basketballs, baseball bats and gloves. Now that was a business. But bullets… no, there was no future there. And so it was that J. W. Hornady learned the entrepreneur's first lesson; "a banker is someone who'll lend you an umbrella only when the sun is shining."

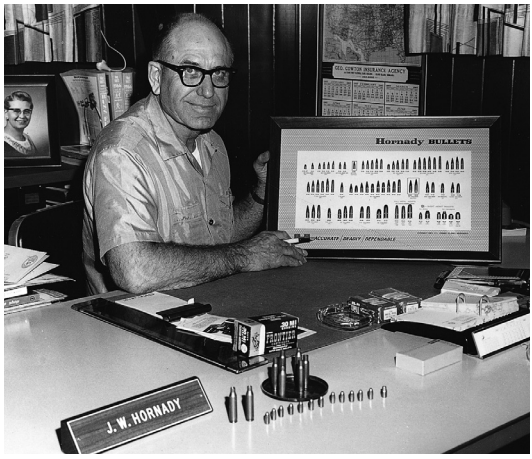
In 1949, with WW II over, with the economy returning to peace time status, with shortages beginning to recede, with Americans anxious to get on with normal lives, Joyce Hornady started a new business. The nation was optimistic. Hornady was especially optimistic. He knew, he absolutely knew there were thousands of shooters who wanted what he'd wanted; accurate, deadly, dependable bullets they could afford to reload. "Accurate, deadly, dependable" described his products so well that it was to become the new company's first advertising slogan.



When Joyce Hornady closed his sporting goods store and started making bullets in a two-room factory in downtown Grand Island, Nebraska, more than a few people were left scratching their heads. "Bullets? The war's over. Who's going to buy bullets?"

Hornady, the son of a pastor, was named for a prominent Methodist bishop, Bishop Joyce, who oversaw church affairs in Colorado and western Nebraska. The resourcefulness Joyce later put to use in his business was evident from his childhood on. His father died from an abscessed tooth—something modern medicine would cure in a moment—and he learned early on to share responsibilities helping his mother and his siblings make do on a tiny pastor's widow's pension. Nevertheless, he learned to shoot, he learned to hunt—and he loved both.





In 1949, Hornady produced 16 bullets in .22, .25, .270 and .30 calibers. By 1954, they were making 29 bullets in 11 calibers. In 1967, Joyce posed with his full line of 73 bullets.

Grand Island, Nebraska became home to the Hornady family when Joyce accepted work training and teaching marksmanship to the security force at the Grand Island Arsenal during the war. When WW II concluded, it was clear that there would be plenty of surplus ammunition available to shooters, though none of it loaded with bullets suitable for hunting. Whether or not his bankers saw any opportunity in this situation, he did. The first Hornady Bullet was a 30 caliber 150 grain Spire Point, a bullet that has, from the beginning, been one of the most popular in the Hornady line.

There was a demand for hunting bullets, there was a supply of surplus ammunition and cartridge cases—and there was a supply of surplus machine tools used to manufacture ammunition in the war effort. Hornady acquired the first of many Waterbury Farrell assembly presses, installed it in a former auto body shop, and began production. For all the risk and for all the effort, the fledgling company sold only $10,000 worth of bullets in its first year. Break-even operations were several years off.

Sales tripled the next year, the staff grew to four, and business indicators were positive. Hornady added equipment, confident that more growth lay ahead. The Korean War and the shortages it entailed were not anticipated, but rather than let the company wither, he earned contracts to produce condenser cans for the new war effort as well as some other miscellaneous products.

In 1958, Hornady moved from its small factory in downtown Grand Island into spacious new facilities. Since then, it has expanded, built an underground test range, added on, and expanded some more to reach its present size.

When the Korean War wound down growth did, indeed, resume. By 1958, the company's need for space required it to move to its present location, an 8,000 square foot plant with a 200 yard underground test facility. J.W. Hornady, who from the first had tested each lot of bullets by driving—winter and summer, rain or shine—to the Grand Island Rifle Range, could now just walk downstairs to the ballistics lab and range. Moreover, instead of spending a great deal of time on the road as the company's chief salesman, he employed a staff of professional sales representatives to handle marketing duties. The company's growth required every minute of attention he could provide.

The "bullet works," as his children sometimes light heartedly referred to the company, was a very interesting business. Hornady Manufacturing Company customers:

- Were shooting hobbyists and enthusiasts,
- Had the same performance expectations as J.W. Hornady did, and
- Could test bullet accuracy and dependability as well as the company's lab.

In brief, customers were generally knowledgeable, demanding, and critical. If a lot of bullets didn't measure up, feedback was immediate.

Two decades before all of American industry became aware of the importance of total quality control, Hornady Manufacturing was committed to it. J.W. Hornady captured the quality ideal in a simple phrase: “ten bullets in the same hole.” Operationally on the plant floor that translated into consistent performance and continuous improvement. The “same hole” could always get smaller. And customers could—and would—always test this for themselves.

A toolmaker creating a custom tool for one of the presses in the 1960s. Even today, Hornady toolmakers create many of the tools, dies and other equipment used to make Hornady products.

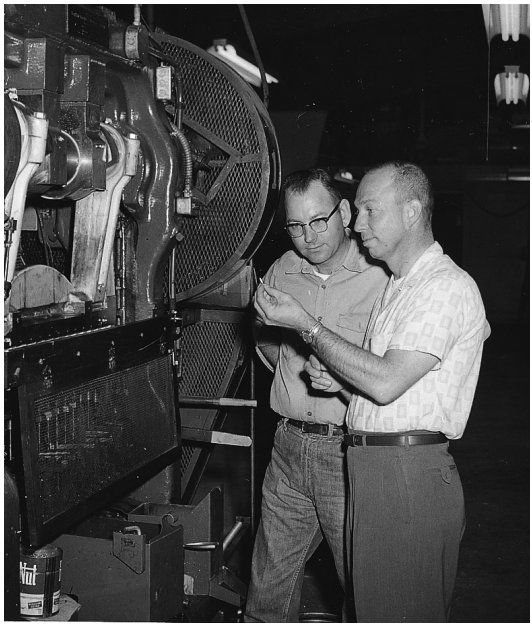
Just as quality had always been highly prized within the company, so, too, was innovation. It took new form in the early 1960s with the first major change of bullet design the company had undertaken. While the bullet catalog now ranged from 22 caliber to 45 caliber, all spire points retained their traditional conical point shape. The ballistics lab supported experimentation that led to the secant ogive spire point shape common to all pointed bullets currently.

Quality, continuous improvement, and innovation were bedrock principles on which the company’s growth was built. Behind them one could see some of the principles of the company’s founder; honesty, fair value, responsiveness to customer needs—and employee welfare. J.W. Hornady had paid his very first employees more than he paid himself. As the company grew, health and retirement benefits were added. As he succeeded, so he wanted his employees to succeed.

Market extension is another form of innovation, and the company did this in earnest with the formation of Frontier Ammunition in 1964. Using surplus military brass, the Frontier ammunition line was loaded to factory specifications with Hornady bullets. The advent of the Vietnam war forced the company to switch to new brass cases custom manufactured for it. The experience gained with Frontier has led to the creation of its successor, Hornady Ammunition.

As of the early 1960s, the company had tripled its manufacturing space to 25,000 square feet, employed 40 people, installed its first marketing director, acquired the most modern machine tools available at the time, had an inventory of Waterbury Farrell presses for further expansion, and was growing at a rate of 30% per year. Its sales reps were the best in the business. In just a dozen years or so the company had left its first home in a garage and was now an important member of the growing reloading industry. J.W. Hornady's bankers were beginning to think he was on to something. And J.W. Hornady himself was becoming one of the industry's most respected members, for his knowledge, his honesty, his foresight, and his business acumen.

Steve Hornady, Joyce's youngest son, joined the company in 1970 and Marval Hornady, his wife, began full-time employment in 1972. Additional management support was essential as the company entered the next stage of development. In 1971, the company diversified into reloading tools with the acquisition of Pacific Tool Company and into wholesaling with the acquisition of Western Gun and Supply Company.



Press operators inspecting a bullet just off the press. By constantly monitoring the quality of the bullets as they are being produced, Hornady can guarantee premium bullets that meet the company's high standards.

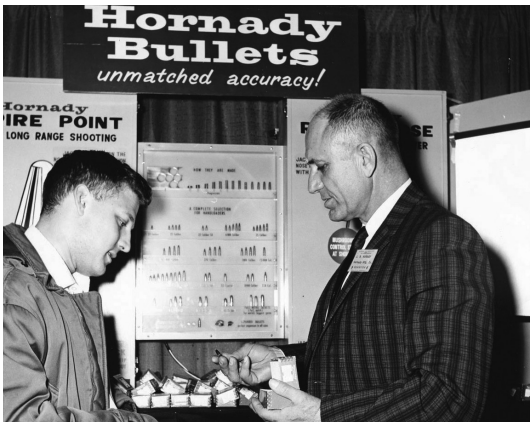
Pacific Tool was one of the oldest manufacturers of reloading equipment. It had invented the "C" type reloading press in 1928, thereby beginning the modern era of reloading. Its fortunes had risen and fallen several times before its acquisition by an investor group and its move back to Lincoln, Nebraska, one of the numerous moves it had made in its history. Pacific had begun to market the Model 105 shotshell reloader, an inexpensive and versatile tool for the casual or beginning reloader. A ready market for this tool fueled Pacific's growth, and combined operations of the Hornady units continued strongly, so strongly, in fact, that Western Gun was divested so the company could focus on core markets for bullets and tools.

The bedrock principles of quality, continuous improvement, and innovation led the company to introduce its "Innergroove" bullet design in 1965. Innergroove bullets were scored inside the bullet jacket tip, insuring consistent mushrooming whether the bullet was a Spire Point, Round Nose, or Flat Point. In 1977, Hornady introduced an even more important innovation, the "InterLock" design. Bullets with the InterLock feature have an interior ring that locks jacket and core together, thereby minimizing separation.

In its first two decades, Hornady Manufacturing grew from a new business start-up to a multi-divisional, multi-million dollar enterprise, respected within its industry, respected in its own community, and respected by a growing customer base throughout the world. J.W. Hornady was doing what he loved best. He was able at last to go on safari and to take other hunting trips he'd long hoped to do. His wife and youngest son had joined him in the business.

In January 1981, traveling with engineer Edward Heers and customer service manager Jim Garber, Joyce Hornady and his companions were killed when the company plane they were flying crashed en route to the SHOT Show in New Orleans. The linchpin of the company was suddenly gone. The company's founder, visionary, spokesman, leader, and strategist was tragically killed.

After the immediate shock and grief abated somewhat, a giant question remained. What was to happen to the company? There were those who doubted it could survive the tremendous loss of its first and only leader. That was not the belief of Marval Hornady. The family



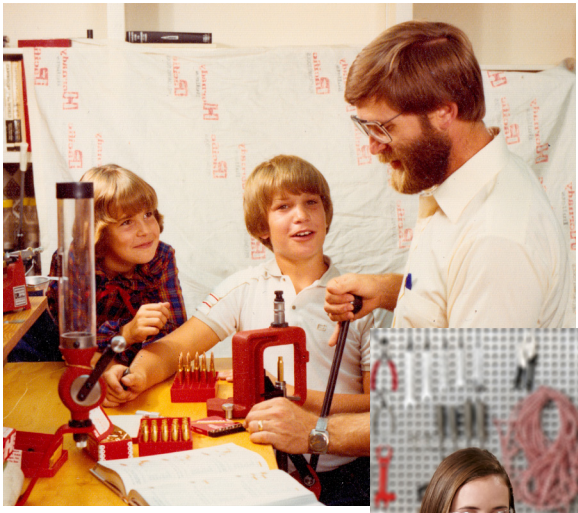
To get the word out about Hornady bullets, Joyce was a frequent exhibitor at shows throughout the country.

needed to regroup, and so it did. Steve Hornady became President and Marval the Chairman of the Board. Daughter Margaret Hornady David and her husband Don left careers at Polaroid to become Vice President and Chief Engineer respectively. A new era had begun.

As of the time of publication of this edition of the *Hornady Handbook*, the company has enjoyed a little over three decades of leadership by its founder and over three decades of leadership by Steve Hornady, his son and successor.

Joyce and Roger Barlow discussing the performance of a Hornady bullet in a particular rifle. Though he took his work seriously, Joyce's genuine love for shooting and hunting never wavered.

- The company's core business, Hornady bullets, is larger than ever. It has dramatically expanded in terms of bullet calibers, weights, features, and shapes.
- One Waterbury Farrell press in a small former auto body shop had grown to dozens of Waterbury Farrels on the floor of a fully modern production facility, and other such presses are in various stages of reconstruction and modernization.
- The bullet line extension has been in response to customer demand, a key principle of the firm. New designs have been introduced. And Hornady bullets are winning more and more shooting competitions around the world — a testimony to their accuracy.
- The company has made a major commitment to ammunition manufacturing, making cartridge cases as well as bullets and assembling them in a growing number of calibers. As well as making revolutionary strides in ammunition performance with products like Superformance® and LEVERevolution®, as well as cutting edge cartridge design of cartridges like the 6.5 Creedmoor, 204 Ruger, 375 Ruger, 30 T/C, 17 HMR, etc., etc.
- Reloading dies have been redesigned, new reloading tools introduced, and the entire line of Hornady reloading equipment has been augmented, updated and is leading the industry in quality and performance.



The Hornady family continues to pass down their love and passion for the shooting sports to each generation. Steve Hornady (above) shows his children the basics of reloading just as his son, Jason Hornady, (right) shows his children.

- Process improvements to make manufacturing faster, more precise, less expensive, and of ever higher quality have been rigorously pursued.
- Ballistics research and quality control personnel have increased fourfold over the past two decades.
- The company serves an increasingly international market for its entire product line.

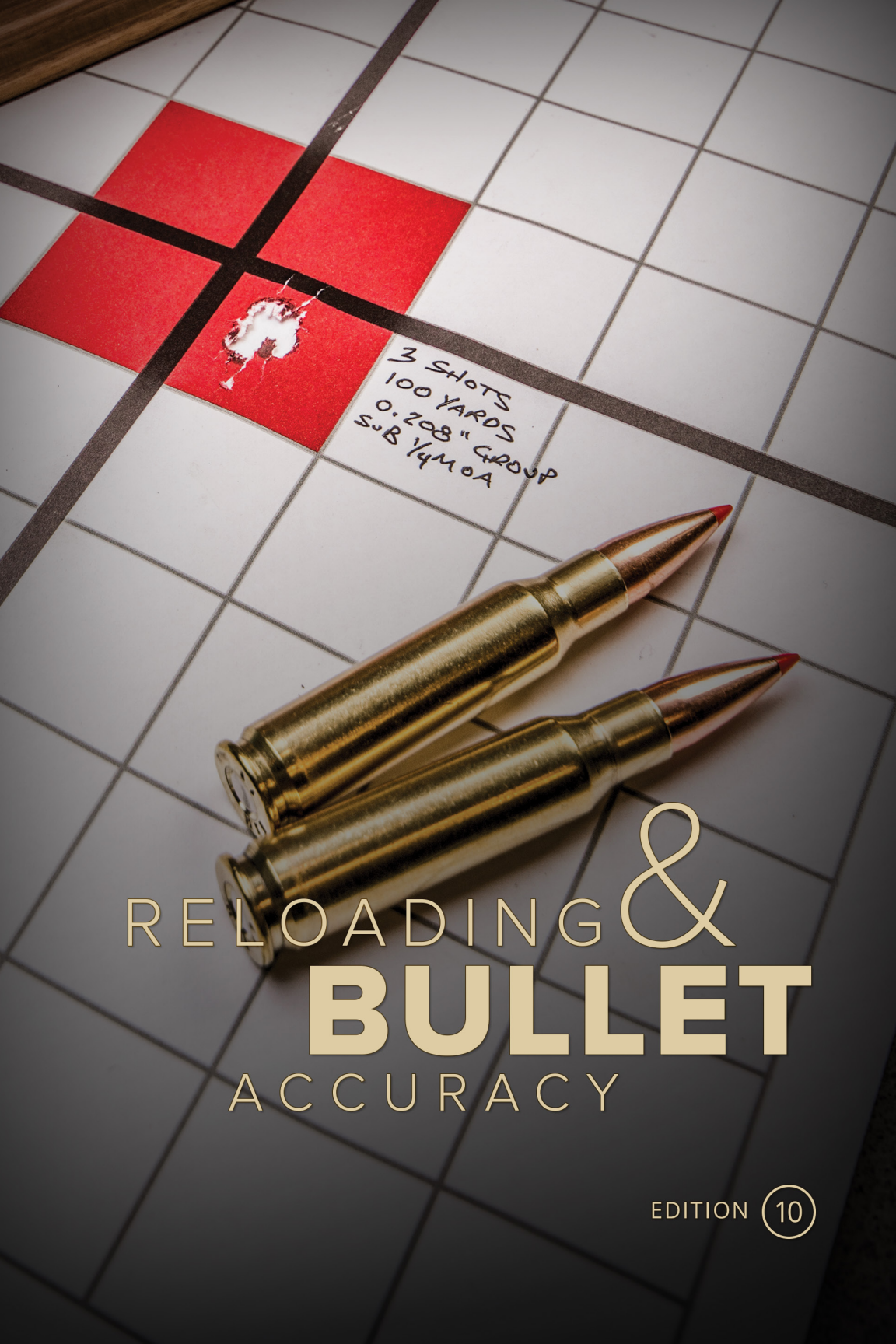
Executive leadership of the Hornady Manufacturing Company has not faltered in the firm's first sixty years. What was created in 1949 grew sound enough and strong enough to survive the cruel blow of the loss of the founder thirty-two years later. Under Steve Hornady's leadership, and with the active support and involvement of the Hornady family, the business has doubled, and doubled again, and doubled again. In 2006 Jason Hornady, Steve's son, returned to the company as Director of Sales and is currently Vice President. The stature of Hornady Manufacturing Company within its industry has never been higher.

Hornady Manufacturing has gone from a start-up in a small Grand Island former auto body shop to become the largest independently owned maker of bullets, ammunition, and tools in the world.

That's quite an accomplishment. It demonstrates that a great many things have been done right throughout the company's history. It suggests as well that the future may prove just as promising.

We note in conclusion that the Hornady Manufacturing Company is truly more than the sum of it's employees, equipment and facilities. A visitor to Grand Island, Nebraska can quickly discover how active the Hornady family has been in community affairs, how generous in its philanthropy, how concerned for helping others—including the larger shooting community.

Quality. Continuous improvement. Innovation. Responsiveness. Looking forward from the year 2016, it appears that the Hornady heritage and the Hornady vision are one and the same.



RELOADING & BULLET ACCURACY

EDITION 10

Preface

In modified form, the following essay has been featured in each of the preceding editions of the *Hornady Handbook*. We believe this essay illustrates key facts about its subject quickly, directly, and understandably. Sound, basic information is not a fad; and because the information to follow makes factual points in an easy-to-read fashion, we repeat the essay once again. Even if you've read it in an earlier edition, we encourage you to browse through it again. It's a very helpful piece.

Firing a Cartridge

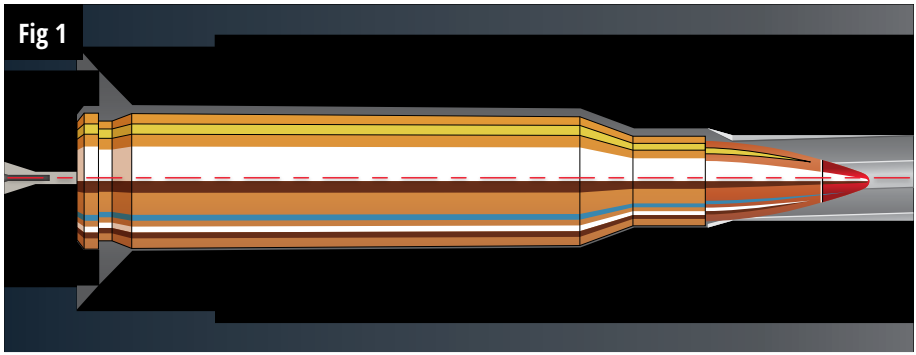
Accuracy is the theme of this section of the *Hornady Handbook*; what accuracy is, where it comes from, and how the shooter can improve it. We'll demonstrate in the following pages that it's possible for the shooter to do something about accuracy problems if he understands their origins and takes the right steps to correct them.

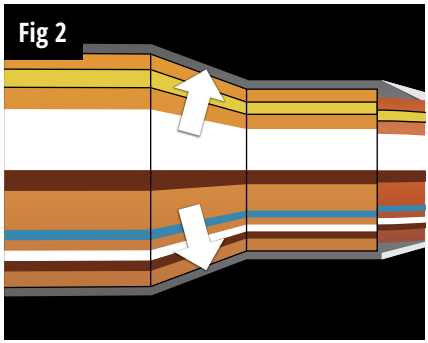
Factory ammo is, and must be, manufactured to specifications which will insure its functioning satisfactorily despite a wide range of chamber tolerances in a variety of bolt, slide, lever, autoloading, and single shot rifles, and revolvers and pistols both domestic and foreign. Factory ammunition must necessarily forego some accuracy potential for the individual rifle, to perform satisfactorily in all the different rifles in which it may be used.

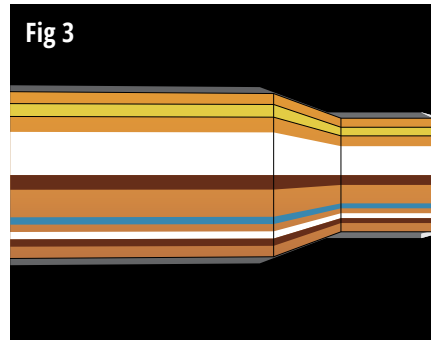
Handloads, however, can be made up for the individual firearm and its chamber without compromise and so can bring out its best capabilities.

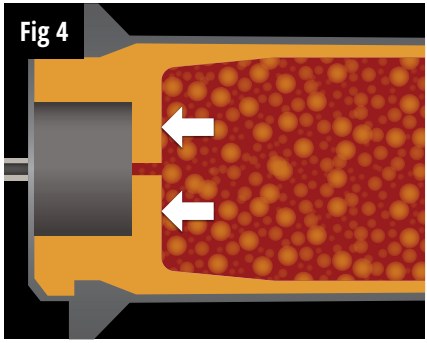
Handloading your own ammunition —ammunition of excellent quality, custom tailored to your own rifle or handgun, and your own shooting needs—could hardly be easier or safer. It requires only four different components (empty cases, primers, powder, and bullets) and this basic equipment: a powder measure, scale, a reloading press, a set of dies, some case lube, and a loading manual. Elsewhere in this book we present detailed step-by-step procedures for reloading rifle and pistol cartridges—plus most of the data required by both the beginner and the experienced reloader, regardless of the caliber of gun or type of target for which they're loading. Our purpose here is to help clarify certain aspects of shooting and reloading which are frequently unknown or misunderstood. The more secure your knowledge of these complex factors, the better will be your chances of obtaining the ultimate in accuracy and performance from your firearm and ammo.

To explain what actually happens in the chamber of a rifle or handgun when it is fired, how the case and bullet are affected, we will employ illustrations with exaggerated clearances which would otherwise be difficult to see.





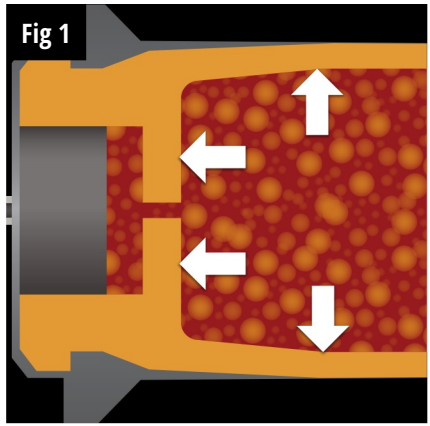


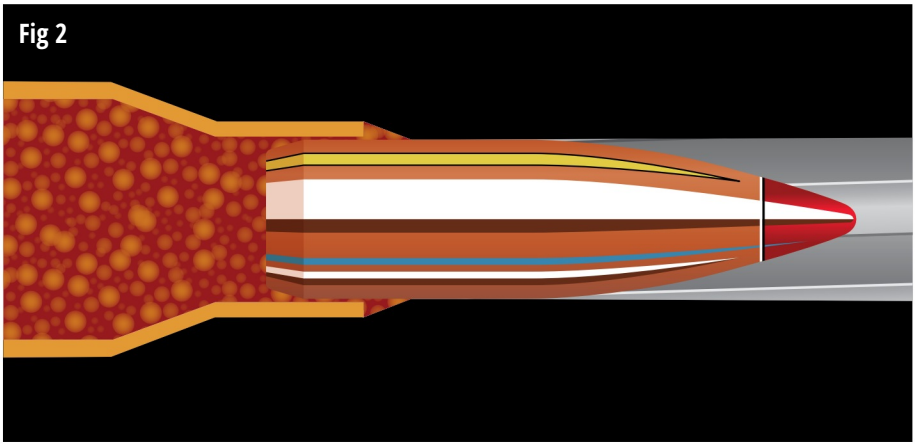


The rimless cartridge shown here (Fig 1) is a new factory round which fits the chamber rather loosely; its bullet is not in perfect alignment with the bore; and the case doesn't contact the front of the chamber (Fig 2).

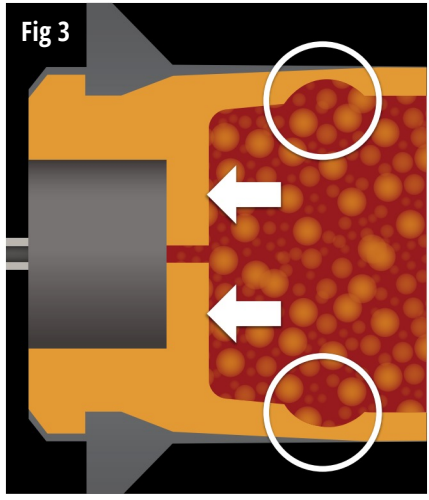
As the firing pin strikes, it moves the case forward to contact the front of the chamber (Fig 3), giving a little headspace (Fig 4)—but, not a dangerous amount.

Notice that the violence of its flash backs the primer part way out of the pocket (Fig 1) — and as the powder is ignited and pressure builds up, the brass case expands to fill the chamber completely (Fig 2), preventing any escape of gas to the rear.

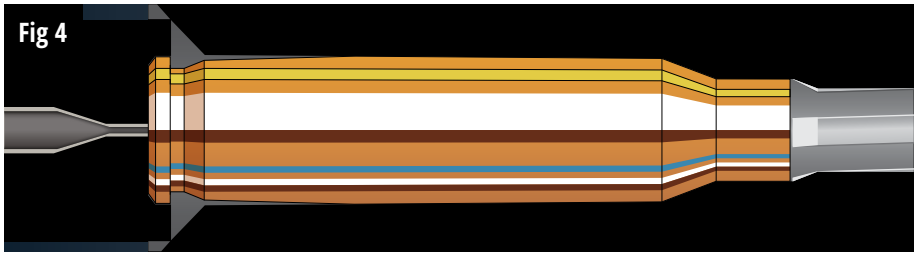




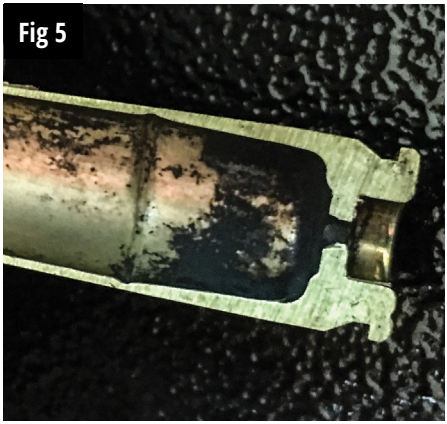
As the pressure continues to build, the case is forced so tightly against the chamber wall that it cannot move; but since we had a gap between the base of the cartridge case and the face of bolt or breech block—what we termed a little headspace—the case itself must stretch in the head region circled to force the case head back.

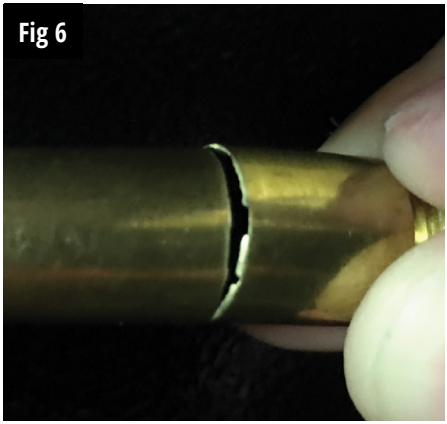


As the case is moved rearward, the primer is reseated in its pocket, when the bullet exits up the barrel the pressure drops, the case cools, and the brass contracts enough to permit extraction of the fired cartridge case from the chamber (Fig 4).

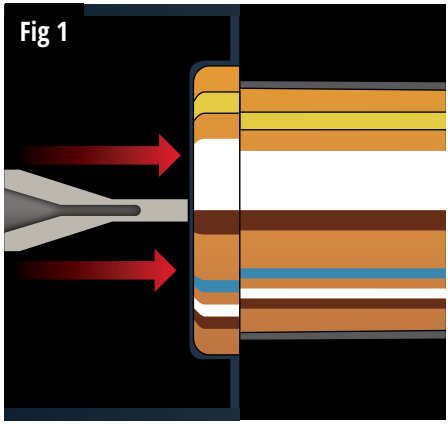


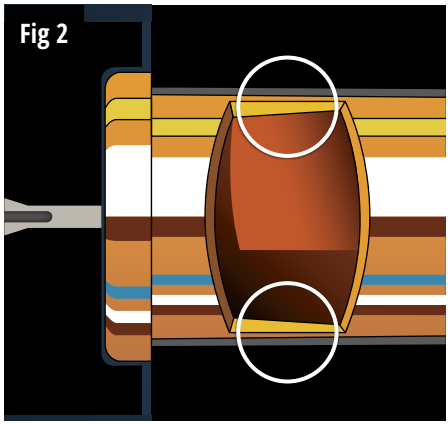
The concept of headspace is one every shooter should understand fully, both in the interest of more accurate shooting and personal safety. In the Illustrated Glossary we summarize four different headspacing systems and define the term very simply as "the fit of a cartridge in a chamber measured as the distance from the breech face to that part of the chamber which stops the case's forward movement." As we have just seen with this rimless case, an imperfect fit of the cartridge in the chamber will result in case stretching in the critical head region. Fired in a chamber having considerable headspace, this 308 Winchester case (Fig 5) has had its wall thickness substantially reduced at the critical head region—and would almost certainly have separated on the next firing—as did this case (Fig 6). Such a rupture might permit gas to escape rearward through the action, endangering the safety of the shooter.



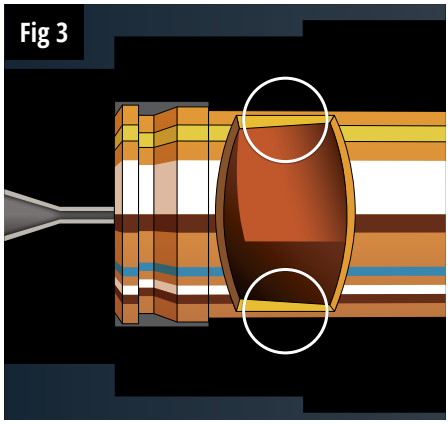


Next, we'll illustrate another type of case with a different headspacing system; the rimmed case. When the primer in this case is struck by the firing pin (Fig 1), the case itself cannot move forward appreciably because it is the rim and not the shoulder which stops its forward movement and thus positions it in the chamber. As the powder is ignited and pressure builds inside the case, its thin walls readily expand to contact the chamber; but because the rimmed head is virtually in contact with the bolt face or breech block the case (Fig 2) will not stretch as much in the critical head region as did the rimless case we first illustrated — unless the action used is an exceptionally weak one.





The belted case — often used in so-called "Magnum" cartridges — is a third type of design frequently encountered. The "belt" is in effect a rim moved to the front of the head rather than being at the rear. When this type of cartridge is struck by the firing pin, it is moved forward only slightly, regardless of the space at the shoulder. When its has been fired (Fig 3) there is very little stretch in the critical head region; however, if headspace is not close the case will stretch just above the belt.



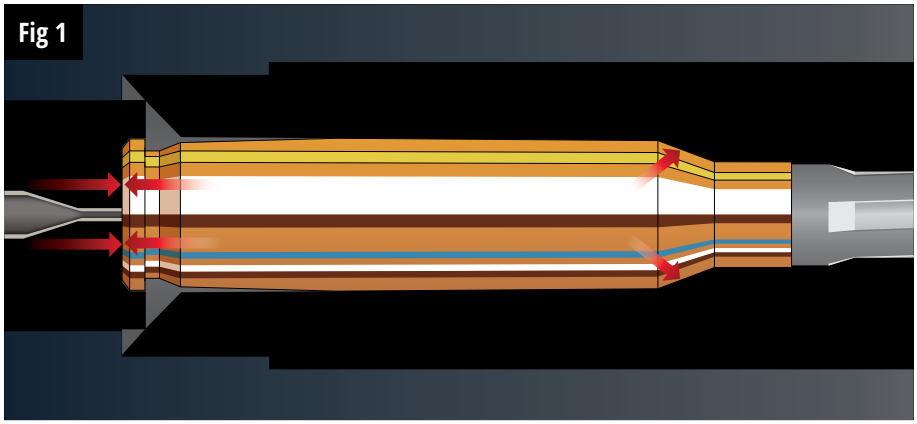
A cartridge case plays a demanding role in the process of firing. It must contain hot gases under immense pressures and seal the chamber to prevent their rearward escape. Despite safety features incorporated in modern rifle actions, case failure resulting from faulty headspacing poses possible dangers to the shooter. As we'll show, the careful reader who understands the concept of headspace can take steps to minimize the risks of case separation.

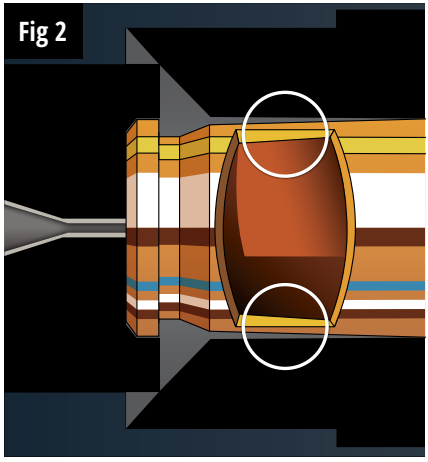
To review our discussion up to this point, we've established that factory ammunition, manufactured to function in a wide variety of actions and chambers of varying dimensions, will be an imperfect fit in the individual rifle and handgun. The bullet will not necessarily be in perfect alignment with the bore; and the case will expand on firing to conform to the dimensions of the chamber when the cartridge is fired. If headspace is not close, there will be some stretching or thinning of the case wall in the process.

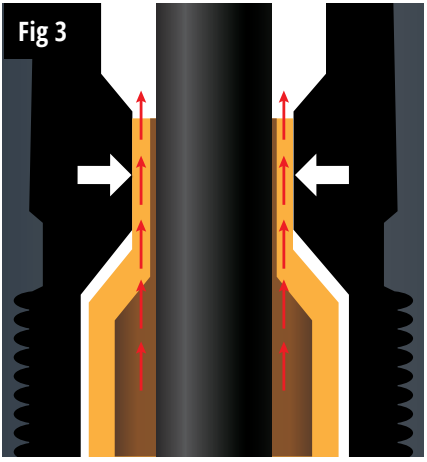
But, while our case conforms perfectly to the chamber in which it has been fired, one important dimension has been changed so that it cannot be reused as is: the case neck has expanded to release the bullet and is now too large to hold a new bullet securely. This brings us face to face with a decision that plagues and confuses many reloaders: whether they should full-length resize their cases, returning them to standard dimensions—or whether they should resize the necks only.

Let's examine the process of neck sizing to see what advantages it affords. Most cases can be neck sized in a normal full length die just by unscrewing it slightly, though a proper neck sizing die is preferred. Since the body of the case will not be worked in the die, it is not necessary to lubricate the full case. It is necessary only to dip the neck lightly in a dry lubricant, such as powdered graphite, to prepare for the resizing operation. A new primer, some new powder, and a new bullet get the case ready for reuse.

Though some rifles deliver their best groups when full length resized, neck sizing alone usually promotes better accuracy, because when our reloaded cartridge is returned to the chamber it is almost a perfect fit; headspace is just right with all cases, whether rimmed, belted, or rimless; and most helpfully of all, the new bullet is almost perfectly aligned with the bore.

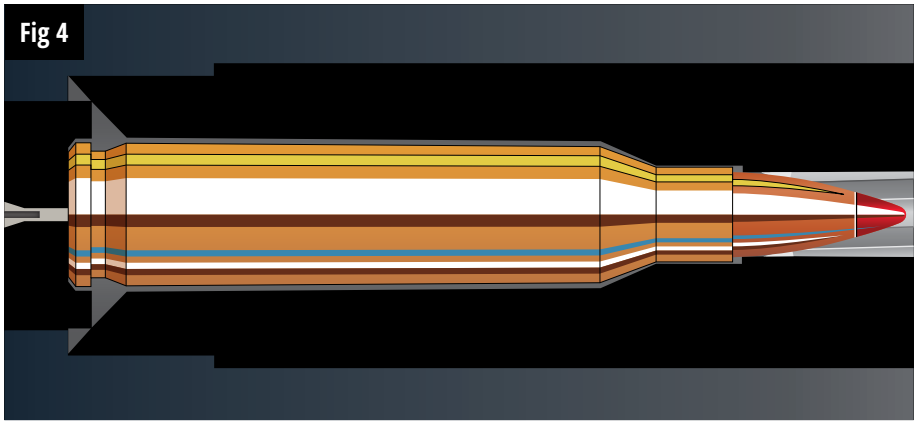


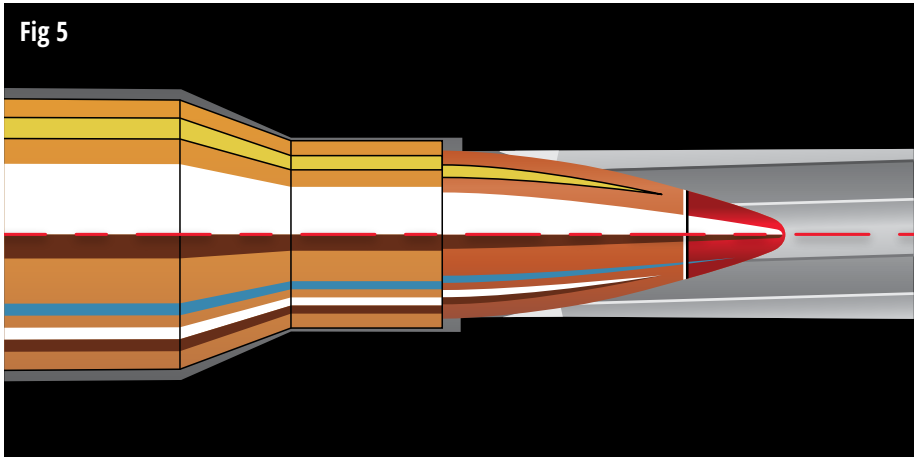




Observe what happens when this reloaded cartridge is fired: the striker does not drive the case forward because the shoulder is already in virtual contact with the chamber (Fig 1); and headspace is minimum. The case is not subject to stretching in the critical head region (Fig 2) as it was when fired originally.

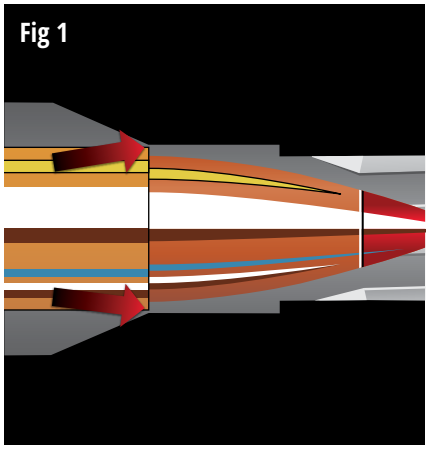
Some reloaders may wonder why it would not be possible to adjust a full length size die to eliminate excess headspace and obtain the advantages we've just noted for the process on neck sizing only. To get the answer to this question we'll return to our cutaway illustrations. The full length sizing die, though adjusted for minimum headspace, "works" the brass, eventually making it flow into the neck area thereby lengthening the case (Fig 3).

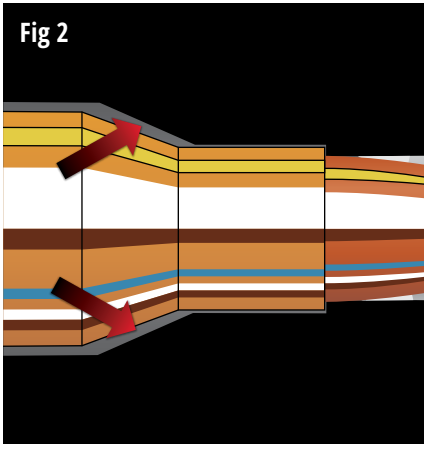


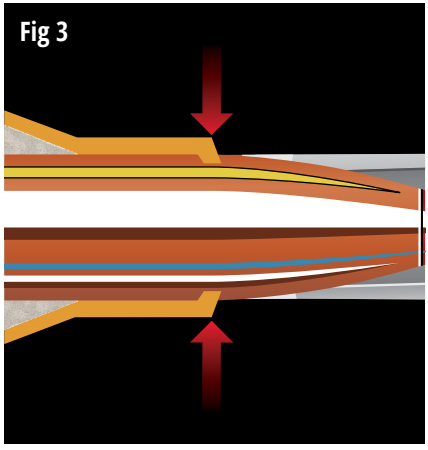


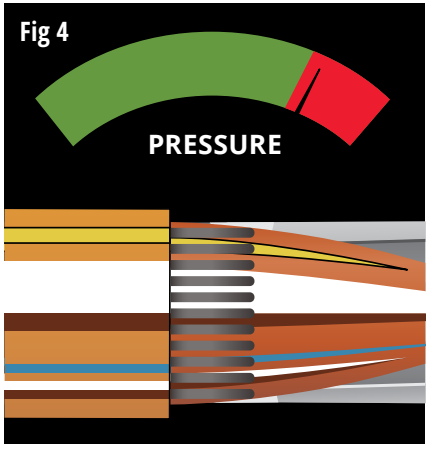
When the reloaded cartridge is returned to the chamber, it doesn't have excess headspace—but, it's almost as loose a fit as it was when brand new (Fig 4). One benefit full length resizing provides (if done with minimum headspace) is in aligning the bullet with the bore (Fig 5), though some misalignment may still be possible due to case or chamber eccentricities.

Repeated full length resizing will keep lengthening the case until it must eventually be trimmed, possibly after only three or four rounds. The reasons for this are simple. The case body expands on firing; and its diameter is reduced in full length resizing. The brass displaced must go somewhere—and it does; it is pushed upward to lengthen the case.









When an overlength case is chambered, the mouth or edge of the neck will come up against the throat (Fig 1) before the bolt has fully closed or the case shoulder has contacted the chamber (Fig 2). The camming action of the bolt is so powerful that it will actually crimp the case mouth fully into the bullet (Fig 3) and wedge the case so solidly between the bullet and the throat that the neck cannot expand to release the bullet. Chamber pressures in this situation can and most certainly will go dangerously high (Fig 4).

There will be ample evidence to confirm the existence of dangerous pressure levels directly attributable to the overlength cases. The shooter may get belted sorely in the cheek; the bolt may have to be hammered open; and case head may present clear indications of too much pressure (Fig 5). The primer will be excessively flattened; there will be a crater around the firing pin indentation; and brass may have been extruded into the ejector slot.

Fig 5

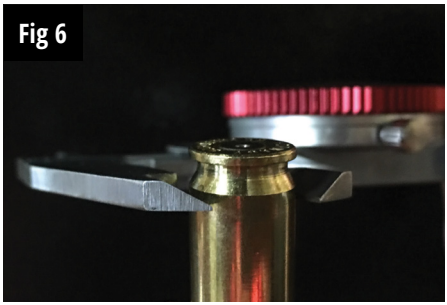
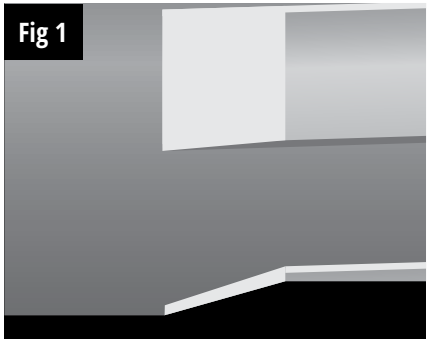


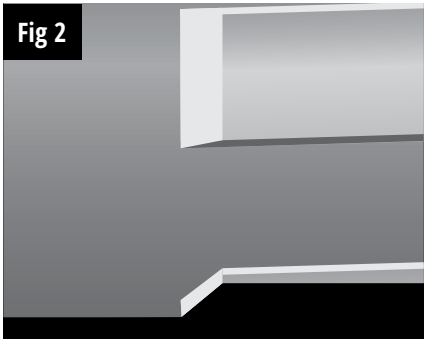
Fig 6

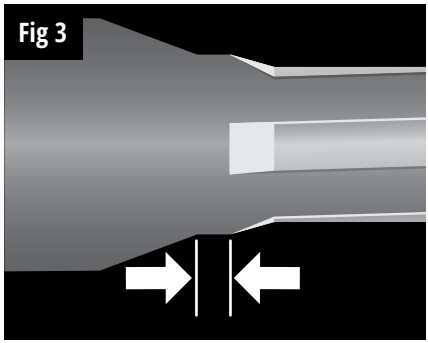
If the case head is miked (Fig 6), it may show expansion—and even half of one thousandth of an inch (.0005") increase in the diameter of the case head is an indication of high pressure.

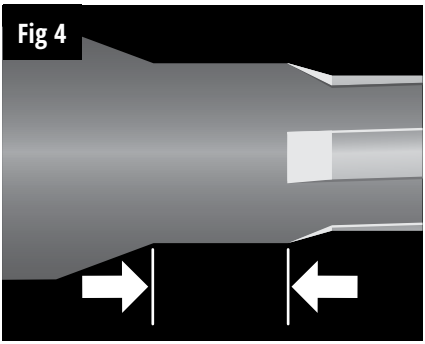
Case lengthening produced by repeated full length resizing will shorten case life. Continuous working of the brass between chamber and die stretches it, eventually producing cracks in the case and finally complete head separation. Hot loads, even if necks are trimmed as called for, speed up this process.

If optimum accuracy and prolonged case life are important to the reloader, our advice is to neck size alone whenever practical. There are of course, situations in which it is advisable to full length resize. Shooters reloading for pumps, lever-actions, and autoloaders must do so to facilitate reliable chambering. A lever-action, for example, doesn't have the powerful camming action of a bolt action and may not easily chamber cases larger than factory standards. Shooters who reload cases from one bolt action for another will also find it necessary to full length resize. Even shooters reloading for one bolt action will occasionally need to full length resize for the sake of easy clearance; over repeated firings the case may conform more and more tightly to chamber dimensions, making chambering and extraction increasingly difficult.



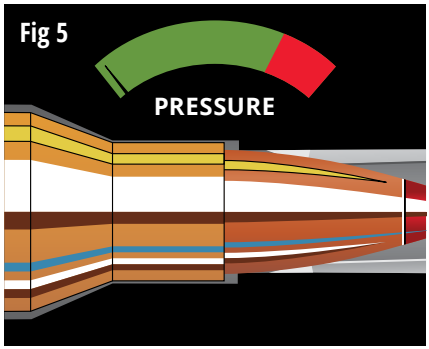


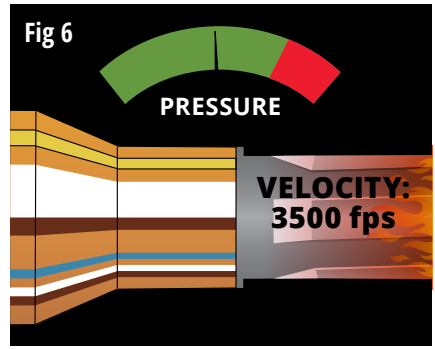


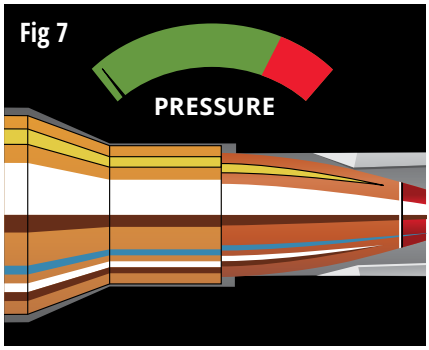


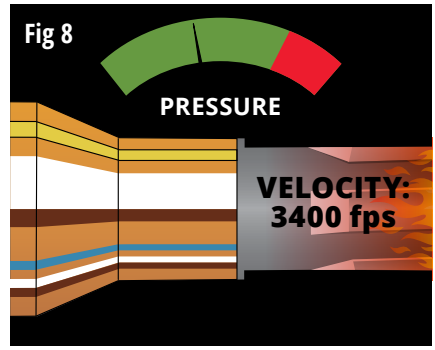
While the issue of cartridge case to chamber fit is of vital importance to the subject of accuracy, bullet seating has a considerable effect on accuracy in many rifles—and on pressure and velocity as well.

The section ahead of a rifle's chamber just before the rifling starts (Fig 1, Fig 2) is called the "leade," throat, or "freebore" and is really the bore of the barrel with the rifling reamed away. As our illustrations show (Fig 3, Fig 4), it varies considerably in length and in the angle at which the rifling is cut, depending on the views of different factories, cartridge designers, and barrel and gun makers. Normally it is quite short and the rifling starts perhaps only one 32nd of an inch from the bullet; but in some rifles the freebore might allow over half an inch of bullet travel before it contacts the rifling firmly.





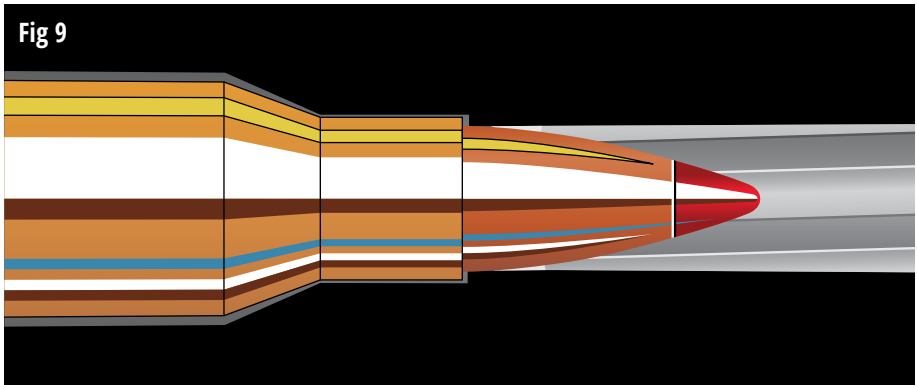


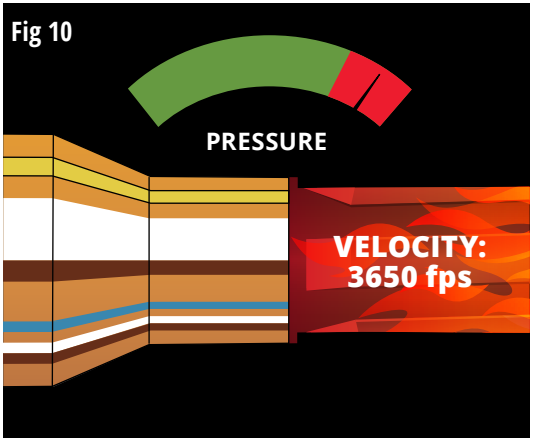


To illustrate the effects of variations in bullet travel before the bullet enters the rifling, we'll compare a standard load with adjustments made only in the bullet's seating depth.

In a "normal" load with the bullet seated to allow about one 32nd of an inch gap (Fig 5) between the bullet and the initial contact with the rifling, pressure builds very smoothly and steadily even as the bullet takes the rifling. Pressure remains safe throughout the powder burning period (Fig 6), and the velocity obtained—3500 fps—is "normal" for this load in this rifle.

Seating the bullet deeper to allow more travel before it takes the rifling, as in these next two illustrations, permits the bullet to get a good running start (Fig 7). Powder gases quickly have more room in which to expand without resistance, and their pressure thus never reaches the "normal" level. Nor does the velocity; with the same powder charge it only comes to 3400 fps (Fig 8).





When the bullet is seated to touch the rifling, as in the accompanying illustrations, it does not move when the pressure is low (Fig 9); and not having a good run at the rifling as did the other bullets, it takes greatly increased pressure to force it into the rifling. As the rapidly expanding gases now find less room than they should have at this time in their burning, the pressure rise under these conditions is both rapid and excessive (Fig 10). Velocity is high at 3650 fps—but at the expense of rather dangerous pressure.

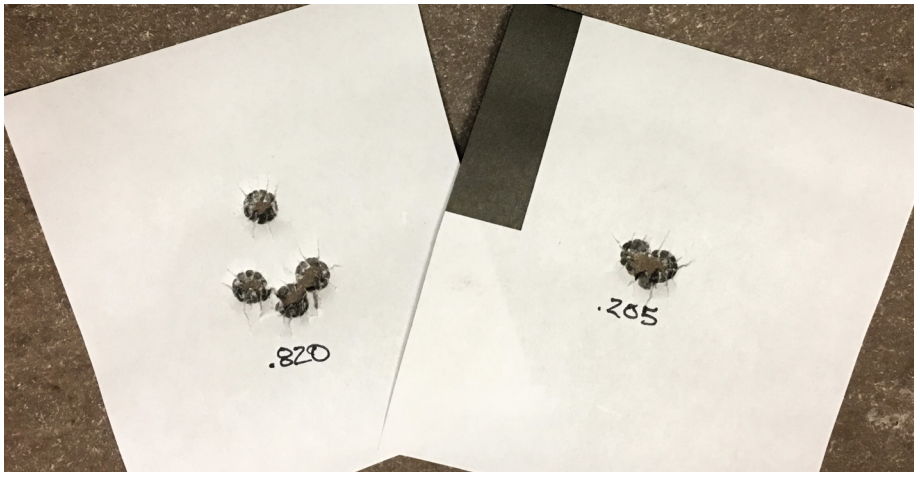
Many rifles deliver their best groups when bullets are seated just touching the rifling. Seating bullets, thus, can be done quite safely if the reloader will reduce his charge by a few grains. The lighter load will still produce the "normal" velocity without excessive pressure.

This brings up another pointer on accuracy for shooters who may have a few thousand rounds through their rifle barrel and have noted a fall off in the accuracy they can obtain with their standard loads. Hot gases from the shots previously fired through the barrel erode the throat and thus increase the distance a bullet must travel before contacting the rifling. By loading longer bullets and seating them farther out so they'll touch the rifling—making powder charge adjustments as necessary, of course—accuracy can often be improved.

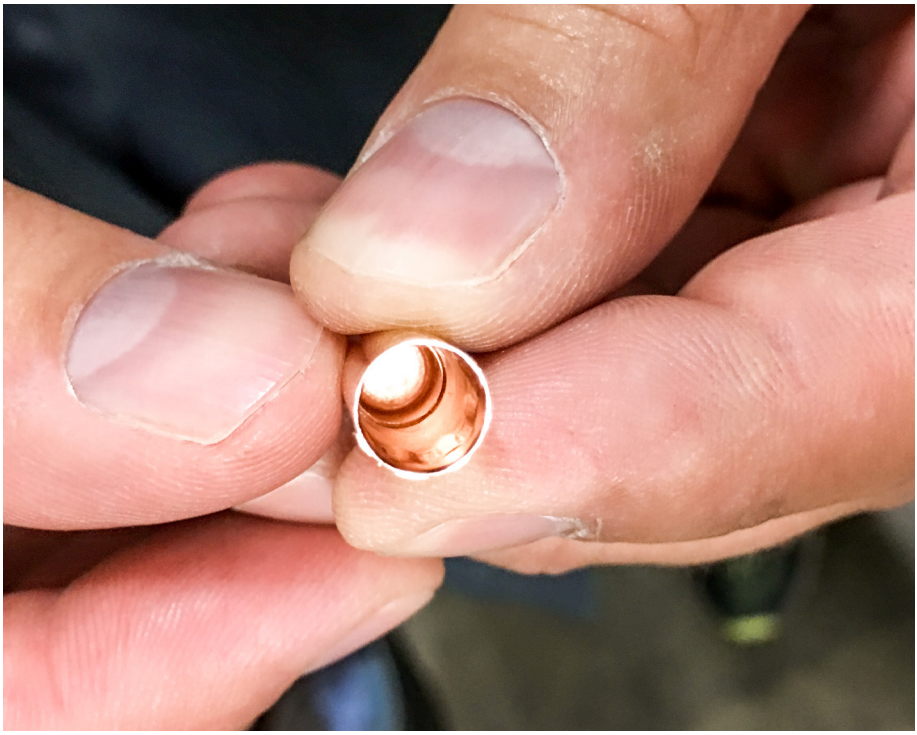
The number of factors affecting the performance of a cartridge is remarkable; we've looked at the cartridge to chamber fit; alignment of the bullet with the bore; the depth to which a bullet is seated and the amount of travel it undertakes before contacting the rifling. The primer, a component many reloaders take for granted, may influence performance if it's not up to the task of igniting densely packed smokeless powder. Some powders burn more uniformly than others and contribute to better accuracy.

The firearm itself may be the cause of inaccuracy if the muzzle is burred, if the throat is eroded in the barrel, or if the trigger is so jerky the shooter cannot maintain his hold from shot to shot. The stock and action must be properly bedded to maintain a uniform fit or inaccuracy may result. Even this list does not exhaust the possible causes of poor accuracy.

A continuous test program is employed to check on our production quality. Our laboratory is equipped with the finest test barrels available and with machine rests which eliminate human variables in shooting so that we can isolate shot-to-shot dispersion associated only with the bullets being tested.



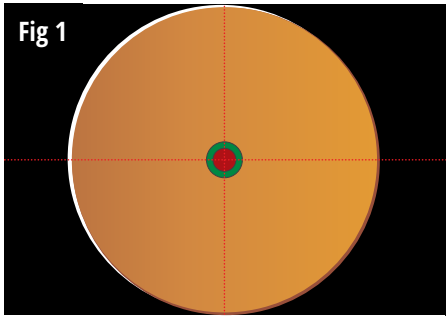
The two targets shown in the accompanying photograph were made firing the same bullets but tested on successive days. The small group met our accuracy standards and illustrates the kind of performance we demand of the product. The larger group was fired from bullets produced after the press making them developed only a few thousandths of an inch play in its cup feeding mechanism. This evidence of maladjustment brought the production to a halt so that the press's problem could be analyzed and corrected.

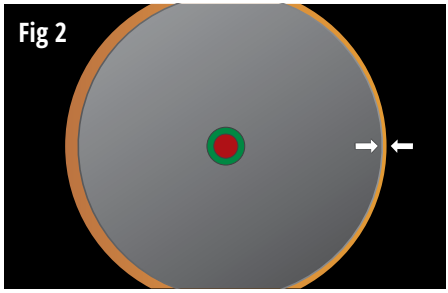


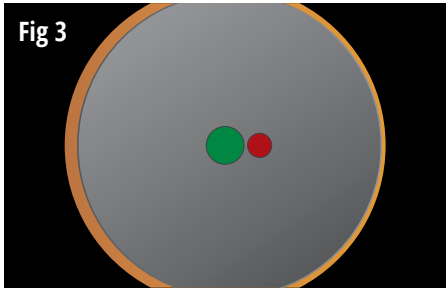
As we said earlier, accuracy doesn't just happen. You have to make it happen, by paying constant attention to these vital thousandths and ten thousandths of an inch. No matter how perfect the basic design of bullets may be, they aren't going to be consistently accurate unless we make them all to closer tolerances than, say, a Rolls Royce engine.

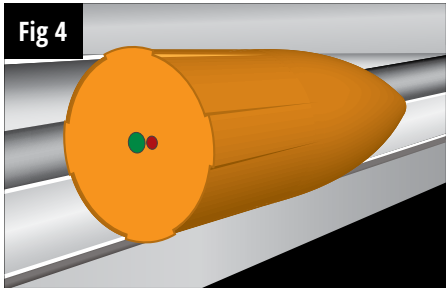
Perfect balance is perhaps the most critical factor in bullet accuracy. The attainment of this goal is the major responsibility of design engineers, tool makers, production personnel and plant management.

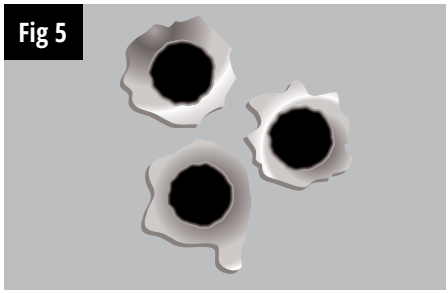
They have the task of designing production machinery which will maintain near-perfect concentricity in the copper cups from which our jackets are formed in various punch presses. Not only are there multiple steps through which our gilding metal must pass on its way to becoming a finished jacket, the concentricity problem is compounded by our need to internally shape the jacket to control expansion in our hunting bullets. If the finished jacket is not of uniform thickness around its entire circumference, if it varies by even so little as five ten thousandths of an inch, the resulting bullet may be unbalanced sufficiently to veer from its intended line of flight.











In the accompanying drawings, we will let the green dot represent the center of form of this bullet, a point at the actual dimensional center of the bullet. The red dot indicates the center of gravity of the bullet; both of these points should coincide exactly (Fig 1).

But, because the jacket of this bullet was made with a thinner wall on one side, there is more lead there (Fig 2) and the center of balance is moved ever so slightly in the direction of the heavier side, perhaps less than a thousandth of an inch (Fig 3).

As long as the bullet is in the barrel it rotates around its center of form (Fig 4). But, when it leaves the barrel, it spins around its center of gravity (Fig 5) and this causes it to veer slightly off its intended course at a tangent to the spiral described by its center of gravity as it went up the bore.

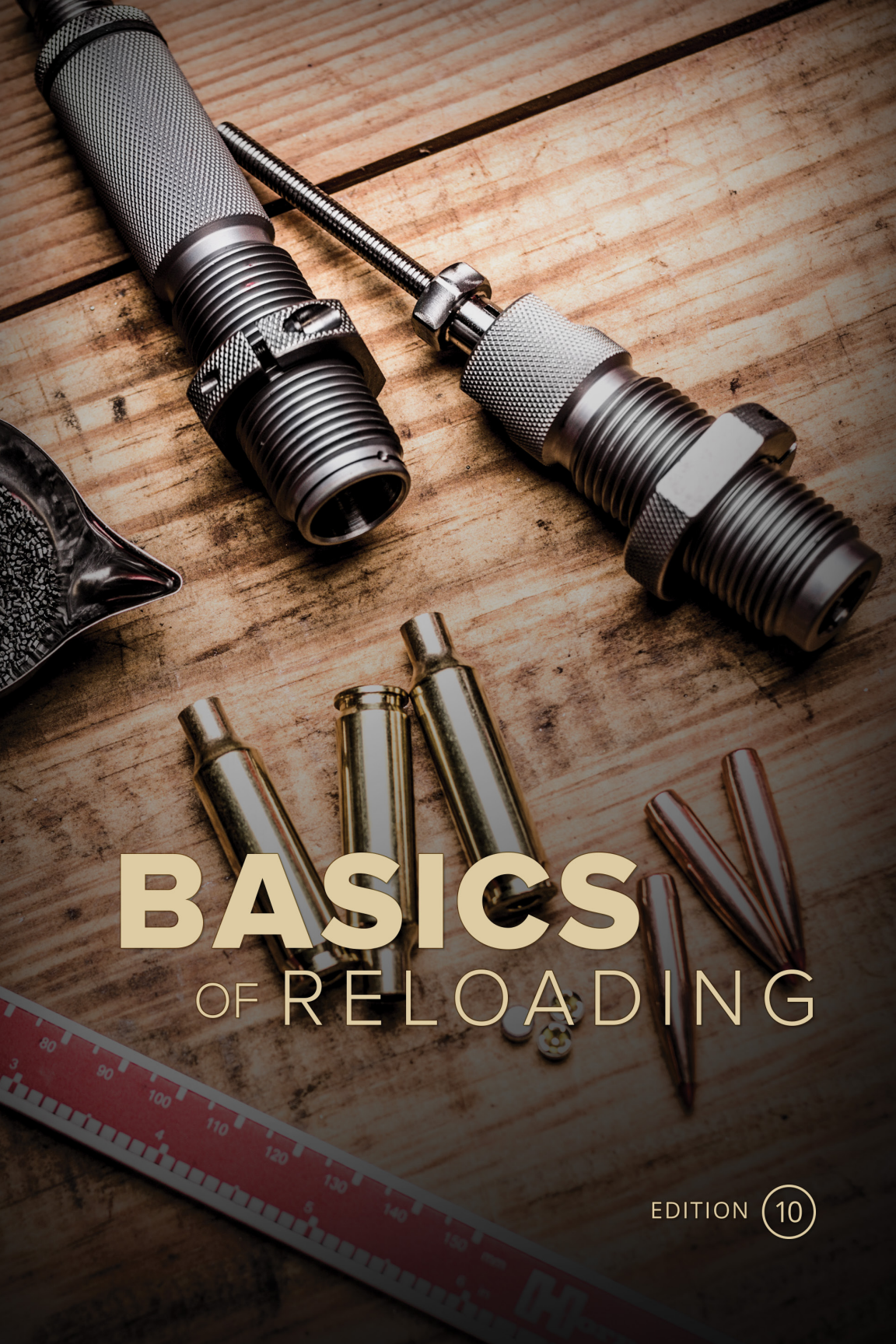
Less than half a thousandth of an inch in jacket concentricity can and does have a detrimental effect upon a bullet's course. And, because we cannot chamber each bullet with its center of gravity similarly aligned in the barrel, subsequent shots will diverge at arbitrary angles, slight though they may be. The final result is a group with more dispersion than we would like.

It is only by minding all those ten thousandths of an inch and tenths of grains in all stages of production that we are able to make millions of bullets capable of exceptional accuracy and in a variety of calibers having expansion characteristics suitable for target, varmint, and big game hunting.

We believe shooters need and want the kind of accuracy we've discussed in this short essay. That's why the people at Hornady Manufacturing take accuracy so seriously. The effort to produce accurate bullets, to make accuracy happen, is a joint effort involving many individuals, their skills, and their dedication to the final goal.

Doing your shooting with super accurate and effective cartridges which you yourself have loaded not only provides more shooting for your money, but better shooting. The accuracy factors that we discussed early in this section have indicated why it is possible to make better ammunition than you can buy.

And, reloading can also give the shooter an invaluable sense of pride in his own craftsmanship. It's the same pride that we at Hornady Manufacturing share in producing quality products which can be used confidently and effectively.


BASICS
OF RELOADING
EDITION 10

Introduction

Reloading reverses the process of firing a cartridge. How to do that is the subject of this book.

You will begin to see here all the various combinations of bullets and powders and cartridge cases and primers that reloaders can employ to gain even more from their shooting interests. For some reloaders, it is a hobby; for others it is a necessity; and for all, it can be a safe, enjoyable activity that will deepen your shooting competence and confidence whether you hunt game, knock down silhouette targets, shoot competitively, plink, or do all of the above. Just as there are standards of firearms safety and gun handling, so there are guidelines to keep your reloading safe, too. We'll cover them in the pages to follow.

The plan for this section of the *Hornady Handbook* is to introduce you to reloading as a fascinating topic, to take you through the process in step-by-step fashion using illustrations to explain what's required, and finally, to discuss some more advanced topics about reloading as a means to achieve maximum shooting effectiveness.

Why Reload?

Economy has always been an important justification for reloading. When you can cut your ammunition costs by up to half (or do twice as much shooting for the same outlay), there is a real economic advantage to becoming a reloader. Performance is another top reason for reloading. You can make ammunition that is customized for your firearm as opposed to factory loads you might otherwise use. You can shoot bullets of more different weights than available from the factory. If you would like to experiment with wildcats, or shoot firearms for which factory ammunition is no longer available, reloading is the answer.

There are a number of additional motivations for becoming a reloader, but we'll just mention the most important of them: personal satisfaction. People who've come to reloading for whatever reason or sets of reasons enjoy the pleasure reloading gives them.

Reloading and Accuracy

What reloaders begin to understand on taking up this pastime is that they can select the components of their reloads to achieve not just a "standard, one-size-fits-all" cartridge, but ammunition custom tailored to their rifle or handgun, their shooting conditions, and the special kinds of shooting they may want to do. Reloads are tailored to your firearm. The difference between them and factory loads manufactured to work well in many different firearms, barrels, and actions is accuracy. Factory ammo is very, very good these days, but as a reloader you can, with care, usually achieve an accuracy edge.

Special Cartridges and Uses

You have only to look at the table of contents to see the remarkable variety of rifle and handgun cartridges we deal with in the *Hornady Handbook*. Non-commercial cartridges (known as wildcats), proprietary cartridges, standard factory cartridges, obsolete cartridges, military cartridges, European cartridges, all different kinds are covered in these pages.

Using the ballistics calculator (hornady.com/ballistics) on the web will make it easy to compare the performance of one cartridge versus another. Exactly such a comparison might solve the question of what new rifle or handgun to purchase—or settle some arguments—or convince you to have your rifle rechambered for some promising recent wildcat development.

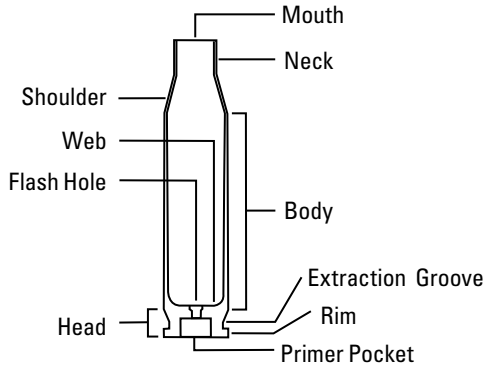
What Equipment is Needed

You are already reading the first piece of "equipment" you need to reload: this handbook. Then, whether you want to reload for rifle or handgun, essentially the same basic equipment is needed: (1) a reloading press, (2) shellhead holder, (3) a lubrication system (though cases needn't be lubed when using Hornady titanium nitride dies), (4) reloading dies, (5) a priming system, (6) a powder scale, and (7) a powder measure (certainly if you're going to be loading a lot of ammo). You'll quickly discover that your life will be easier if you also acquire a case trimmer, reloading trays, a primer turning plate, a powder trickler, a powder funnel, a chamfering/deburring tool, and primer pocket cleaner. In the step-by-step illustrations to follow you will see this equipment and more. A case tumbler and polishing media will shine your brass cases so that your finished ammunition will look as good as it will shoot. Hornady Manufacturing Company packages a set of basic equipment in our Classic Lock-N-Load® Reloading Kit, a convenient and economical starter kit. Add the dies you need and the right components and you'll be in business.

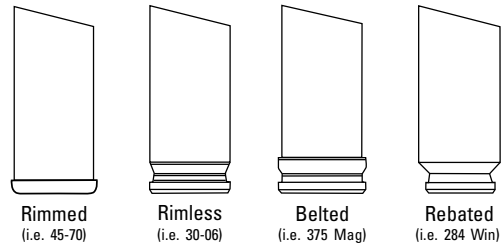
Cartridge Cases

Brass cartridge cases, approximately 70% copper and 30% zinc, are the fundamental reloading component. They are not consumed in firing, merely resized somewhat. What shooter hasn't looked at spent brass on the shooting range or in the field and not thought it was still valuable? That's the core of reloading—the usability of one of the most expensive components in a round of ammunition. Gases from burning gun powder press the body of the cartridge case against the chamber wall and open the neck and mouth of the cartridge to release the bullet. Resizing this spent case is essential to using it again in your firearm.

Shown here is a bottle neck cartridge with parts identified. Most rifle cases are bottle-necked and most pistol cases straight-walled although there are any number of exceptions to that rule. The 458 Winchester Magnum, for example, is a straight-walled rifle cartridge, while the 7mm Remington BR is a bottle-necked handgun cartridge.

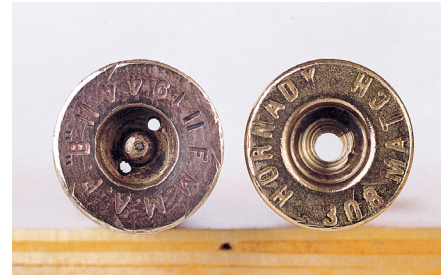


In addition to case shape, the means of headspacing and/or extracting the fired cartridge case from the chamber is another important differentiator among cases. Four different designs are shown in the adjacent illustrations. Rimmed, rimless, belted, and rebated are the four head types of cartridges.



Primers

Centerfire ammunition is so named because the primer and primer pocket are placed at the center of the case head. The types of primers used in American ammunition are Boxer primers, manufactured with an internal anvil which ignites the small amount of explosive in the primer cup to begin powder ignition. Flame from the primer goes through the flash hole in the cartridge head to set powder alight.



Berdan primed cartridge cases are based on an entirely different system. Berdan cases have the anvil built into the case head and feature two flash holes instead of one. Berdan primed ammunition is used, to some extent, in Europe. Considerable Berdan ammunition has reached the U. S. as military surplus. We offer two cautions about such ammunition. (1) Many Berdan primed cases are also corrosive; and (2) even those without corrosive priming compounds are difficult to reload. Conventional dies can be ruined in trying to deprime these cases. (There are, however, special Berdan depriming tools available.)

Boxer primers are manufactured in two different sizes and eight different magnitudes: small pistol, small pistol magnum, large pistol, large pistol magnum, small rifle, small rifle magnum, large rifle, and large rifle magnum as shown in the chart below. Magnum primers, as the name suggests, produce more intense heat useful in properly burning

BOXER PRIMER CHART**

	PISTOL PRIMERS				RIFLE PRIMERS					
Manufacturers	**Small Handgun**	**Small Handgun Magnum**	**Large Handgun**	**Large Handgun Magnum**	**Small Rifle**	**Small Rifle Magnum**	**Large Rifle**	**Large Rifle Magnum**	**50 BMG**	**6.8 SPC**
Federal	100	200	150	155	205 (205m*)		210 (210m*)	215 (215m*)		
Remington	1½	5½	2½		6½	7½*	9½	9½M		
Winchester	WSP	WSPM	WLP		WSR		WLR	WLRM		
CCI	500	550	300	350	400 (BR4*)	450	200 (BR2*)	250 & 251 MAG X	35	41
RWS/Sinoxid	4031	4047	5337		4033		5341	5333		

* These primers are designed and manufactured for bench rest/match shooters and are useful in similar applications as the standard primer.

** This chart is not intended as a substitution chart. It does not indicate primer intensity, merely a primer's physical dimensions.

large volumes of powder in the cartridge. Under no circumstances should one switch to a magnum primer with a load developed with a standard primer. Much higher pressures may be produced with the new combination. Indeed, the best rule is to back off a top load when changing any individual component. Nor should you substitute small pistol for small rifle primers (or any other similar switch) because they are made differently for their respective uses. Keep different types of primers separate.

Several manufacturers now produce match primers for use in competitive shooting. The difference between these and standard primers is the degree of testing and quality control used in their making. In our research match primers performed very, very consistently from load to load as measured by our pressure tests.

Powders

Smokeless powder, the propellant this handbook is concerned with, is a late 19th century French invention which over only a short period managed to displace its blackpowder predecessor in sporting and military uses. Two characteristics of this powder helped change the history of small arms. First, it was relatively smokeless. Second, and much more importantly, it could propel bullets at remarkably greater velocities—so much greater that jacketed bullets came into use to prevent metal fouling in the barrel caused by super heated lead bullets.

Made of nitrocellulous, or nitrocellulous with a small amount of nitroglycerine (single base and double base powders respectively), powder burning characteristics could be altered by shape and/or retarding agents mixed with them in manufacture.

The primary shapes a reloader will encounter are extruded or tubular, diamond shaped flat flakes, circular flat flakes, and ball or spherical powder. British cordite powder, long, pasta-like strands of powder that could be cut to the length of the cartridge, is rarely encountered any more.

The table of relative burning rates we present here is informational rather than prescriptive. It is definitely not a powder substitution chart. Not only do powders vary from lot to lot and from year to year of manufacture, their relative burning rates may vary from cartridge to cartridge.

A CHART OF POWDER BURNING RATE APPROXIMATIONS IN METALLIC CARTRIDGES, FROM FASTEST TO SLOWEST

Burning rates cannot be measured precisely in absolute or even relative terms when comparing one powder with all other powders. Rates may vary slightly from production lot to production lot of a powder or from year to year of its manufacture. Each variation can change a powder's relative position on the burning rate chart. There are other sources of burning rate variations, too. A powder may burn at different rates in a 308 Winchester as compared to a 243 Winchester or as compared to a 358 Winchester, even though each of these cartridges has the same approximate volume. In addition, burning rate intervals can also be variable. Burning rates between powders in the 23rd and 24th positions may be slight, while burning rates between other adjacent powders may be quite large. The list below is not a powder substitution chart. Always refer to specific cartridge reloading data for the firearm you are using.

Fastest:

1. VIHT N-310
2. BULLSEYE
3. TITEWAD
4. Vectan AS
5. RED DOT
6. Accurate No. 2
7. CLAYS
8. IMR 700 X
9. TITEGROUP
10. AMERICAN SELECT
11. SOLO 1000
12. VIHT N-320
13. GREEN DOT
14. INTERNATIONAL CLAYS
15. WIN 231
16. ZIP
17. Trail Boss
18. HP-38
19. Vectan AO
20. VIHT N-330
21. IMR PB
22. Accurate No. 5
23. Vectan A1
24. UNIQUE
25. POWER PISTOL
26. UNIVERSAL
27. REX-3
28. IMR SR-7625
29. IMR 800 X
30. HERCO
31. HS-6
32. SILHOUETTE
33. VIHT N-340
34. WIN AutoComp
35. WIN WSF
36. IMR SR-4756
37. VIHT N-540
38. Vectan SP 2
39. VIHT 3N37
40. VIHT N-350
41. LONGSHOT
42. True Blue
43. VIHT N-105
44. Accurate No. 7
45. BLUE DOT
46. Alliant 2400
47. Accurate No. 9
48. ENFORCER
49. VIHT N-110
50. WIN 296
51. H110
52. NORMA R-123
53. LIL' GUN
54. IMR SR-4759
55. Power Pro 300-MP
56. VIHT N-120
57. Accurate 5744
58. IMR 4227
59. Vectan SP 3
60. NORMA 200
61. Accurate 1680
62. VIHT N-130
63. VIHT N-133
64. Vectan 2000
65. IMR 4198
66. H4198
67. Accurate 2015
68. Alliant RL-7
69. Vectan 3000
70. IMR 3031
71. Benchmark
72. NORMA 201
73. Alliant RL-10X
74. H322
75. X-TERMINATOR
76. Accurate 2230
77. IMR 8208 XBR
78. IMR 4895
79. Accurate 2495
80. H4895
81. H335
82. Accurate 2460
83. Power Pro Varmint
84. Vectan SP 10
85. VIHT N-135
86. Vectan 5000
87. IMR 4166
88. IMR 4064
89. NORMA 202
90. TAC
91. AR-Comp
92. Alliant RL-15
93. Power Pro 2000 MR
94. VARGET
95. Accurate 2520
96. Accurate 4064
97. NORMA 203 B
98. IMR 4320
99. WIN 748
100. VIHT N-140
101. BL-C(2)
102. CFE 223
103. Accurate 2700
104. H380
105. IMR 4007 SSC
106. LEVERevolution
107. VIHT N-150
108. WIN 760
109. H414
110. SUPERFORMANCE
111. VIHT N-550
112. Accurate 4350
113. BIG GAME
114. Vectan 7000
115. NORMA URP
116. IMR 4350
117. NORMA 204
118. H4350
119. IMR 4451
120. Alliant RL-17
121. Hunter
122. Hybrid 100V
123. VIHT N-160
124. VIHT N-560
125. IMR 4831
126. MAGPRO
127. Alliant RL-19
128. Power Pro 4000 MR
129. H4831
130. H4831 SC
131. NORMA MRP
132. WIN Supreme 780
133. Alliant RL-22
134. VIHT N-165
135. Alliant RL-23
136. IMR 7828
137. IMR 7828 SSC
138. IMR 7977
139. H1000
140. MAGNUM
141. Alliant RL-25
142. VIHT N-170
143. RETUMBO
144. Alliant RL-33
145. H50BMG
146. Alliant RL-50
147. VIHT 24N41
148. US 869
149. VIHT 20N29

You will note in the loading tables that a number of different powders may be listed for a particular cartridge-bullet use. How are you to know which one to use? Occasionally the text will mention powders that performed very well for us in our research, and these might be a good place to start. Our general rule in data presentation is from the fastest burning powder (on the top) to the slowest (on the bottom), though often burning rates between two powders will "crossover" at certain velocities. But try these rules of thumb: faster burning powders generally have a smaller maximum charge and slower burning powders a larger maximum charge. You will read elsewhere in this book that best results were obtained with high powder weight to case volume loads—within safety constraints of course. That's a rule of thumb. There are always exceptions, from rifle to rifle, from bullet weight to bullet weight. The best powder in your gun is the powder that works best for you. It may take a bit of experimenting, but you'll know when you're working up truly accurate loads.

Bullets

This essential reloading component is something we know inside out, as they say. We've been making them better and better for over sixty years now, and there are still advances coming into use from new technology, much of our own development.

A quick glance at the complete Hornady Bullet Chart will rapidly display the range of calibers (bullet diameters), weights, shapes, tips, inner constructions, and designations applied to our bullet line. Why are there so many? How do you make decisions about bullet selection? What bullet is made for what purpose? Some general answers first and then some specific answers will follow. You absolutely must match the caliber of the bullet to the caliber of your rifle. The 30-06 is a 30 caliber rifle (.300"), but the grooves in it are .308". As the .308" bullet is propelled down a twisting bore, it acts as a piston sealing the gases behind from escape until sufficient pressure forces it from the barrel. What would it matter if you substituted a 303 British or 7.7mm Japanese bullet for the .308" 30 caliber? Plenty—and not the kinds of things you want to experience. The 303 British caliber has a bullet diameter of .312". Rest assured pressures will rise, possibly to lethal levels. The gun barrel may burst because of such pressures. Or the action of the rifle may give way to such pressures and send high pressure gases backward instead of forward. Smaller than required bullet diameters may not give such potentially dangerous results, but both velocity and accuracy will suffer. Now to some more general discussions about bullet choice.

ELD-X®

The ELD-X® (Extremely Low Drag - eXpanding) bullet is a technologically advanced, match accurate, all-range hunting bullet featuring highest-in-class ballistic coefficients and consistent, controlled expansion at all practical hunting distances.

All manufacturers' conventional polymer tips in high BC bullets melt in flight. Hornady® engineers discovered that conventional bullet tip materials in streamlined, high BC bullets melt and deform. Although not a significant issue affecting moderate BC conventional tipped varmint and hunting bullets, aerodynamic heating causes BC reduction and degradation of accuracy, particularly at extended ranges (400 yds +). To counter this effect, Hornady® identified a heat resistant polymer and developed the Heat Shield® tip. This revolutionary new tip creates the perfect meplat (tip) with exceptionally consistent results from bullet-to-bullet and lot-to-lot.

At conventional range (0-400 yards), the ELD-X® bullet is designed to continually expand throughout its penetration path. Upon impact, the thin nose section of the bullet peels back and sheds material until it reaches the thick shank of the bullet jacket where the InterLock® ring works to keep the core and jacket together. The remaining heavy shank of the bullet continues to drive forward and expand for extremely lethal results.

BEST-IN-CLASS BCS

Verified by Doppler radar, the Heat Shield® tip is immume to the effects of aerodynamic heating and retains its shape to maintain the highest-in-class BC over its entire trajectory.

MATCH ACCURATE HUNTING BULLET

Streamlined secant ogive with optimum boattail design + highly concentric AMP® bullet jackets + patent pending Heat Shield® tip combine for radically superior aerodynamic efficiency.

DEVASTATING CONVENTIONAL RANGE PERFORMANCE

With high velocity 0-400 yard impact, the bullet continually expands throughout its penetration path. The thick shank of the jacket and high InterLock® ring keep the core and jacket together providing 50-60% weight retention.

BEST EXTENDED RANGE TERMINAL PERFORMANCE AVAILABLE

Upon low velocity 400+ yard impacts, the Heat Shield® tip drives backward into the bullet to initiate expansion. Exhibiting conventional expansion with a large mushroom and 85-90% retained weight the bullet provides deep penetration and large wound cavities.

IMPACT VELOCITIES:
30 Cal. 200 gr. ELD-X®

2660 fps

1800 fps

ELD® Match

ELD® Match (Extremely Low Drag Match) bullets are technologically advanced, enhanced accuracy target bullets featuring Heat Shield® tips with the perfect meplat (tip point) combined with numerous design features that deliver the highest-in-class ballistic coefficients, superior accuracy and extreme consistency from bullet-to-bullet, lot-to-lot.

All manufacturers' conventional polymer tips in high BC bullets melt in flight. During testing of what would become the ELD-X® hunting bullet, Hornady® engineers, using Doppler radar, discovered that conventional bullet tip materials were melting and deforming in flight, resulting in BC reduction and degradation of accuracy, particularly at extended ranges (400 yards +). To counter this effect, Hornady® identified a heat resistant polymer and developed the Heat Shield® tip that resists aerodynamic heating and creates the perfect meplat (tip). This revolutionary new tip technology led to the creation of the most advanced match bullets on the market — ELD® Match.

Superior accuracy and industry leading ballistic design has been achieved with the ELD® Match bullet. An optimum secant ogive and boattail design along with the patent-pending Heat Shield® tip produce a bullet with the highest possible ballistic coefficient in its class. Verified by Doppler Radar, ELD® Match ballistic coefficients do not vary due to the integrity of the Heat Shield® tip. The bullets perform extraordinarily consistently with no BC degradation at extended range.

BEST-IN-CLASS BCS

The Heat Shield® tip is immume to the effects of aerodynamic heating and retains its shape to provide a perfect meplat (tip) that is always the same shape.

DELIVERS THE HIGHEST DEGREE OF ACCURACY AND BULLET-TO-BULLET/LOT-TO-LOT CONSISTENCY.

Streamlined secant ogive with optimum boattail design + highly concentric AMP® bullet jackets + patent pending Heat Shield® tip creates a supremely accurate, high BC match bullet.

ACCURATE, DOPPLER RADAR VERIFIED BCS

ELD® Match bullet BCs are measured with Doppler radar and corrected to standard atmospheric conditions.

GMX®

Hard-hitting and deep-penetrating, the GMX® bullet combines monolithic construction with pioneering ballistic design to meet the need for a premium, non-traditional bullet. Tougher than pure copper, the mono-metal copper alloy has been proven to shoot cleaner, foul less, and deliver consistent, even pressure curves. The tough alloy material routinely retains 95% or more of its original weight and expands up to 1.5 times its original diameter.

Featuring a long, sleek profile with cannelures, the design reduces overall bearing surface and drag, while achieving some of the highest ballistic coefficients from monolithic, non-traditional bullets. Initiating expansion upon impact, the hard polymer tip drives into the hollow cavity at the front of the bullet, creating a mushroom-style projectile as it travels through the animal. Fully California compatible and appropriate for use in areas requiring the use of non-traditional bullets, GMX® is ideal for any sized game, from antelope to moose.

COPPER ALLOY CONSTRUCTION

One-piece copper alloy won't separate and delivers devastating terminal performance, deep penetration, and 95% weight retention.

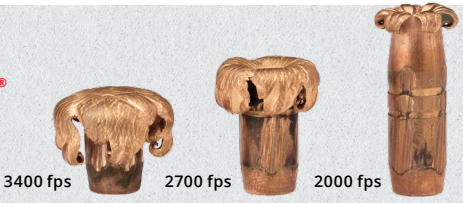
CRIMPING CANNELURE AND PRESSURE RELIEVING GROOVES

Reduces both bearing surface and fouling, and aids in consistent reloads.

HIGH WEIGHT-RETENTION

High weight retention is a significant benefit to the GMX® and monolithic family of bullets, routinely retaining 95% or more of their original weight.

IMPACT VELOCITIES: 30 CAL. 150 GR. GMX®



MonoFlex®

By combining the technologies of the GMX® and FTX® bullet design, the MonoFlex® bullet gives lever gun shooters another option. Constructed of a copper alloy, MonoFlex® bullets offer hunters a solid that won't separate, and when recovered, retains 95% of its original weight. Copper alloy differs from solid copper in that it is harder, tougher and does not foul or increase pressure the way solid copper bullets do.

Upon impact, the patented Flex Tip® design initiates immediate expansion, even at the lower velocities often encountered in mid to long range lever gun shooting situations. Its deep penetration and high weight retention combine to produce yet another accurate, deadly and dependable choice for lever gun hunters.

PATENTED FLEX TIP® DESIGN

Safe to use in all tubular magazines and initiates expansion, even at lower velocities.

COPPER ALLOY CONSTRUCTION

One-piece copper alloy won't separate and delivers devastating terminal performance, deep penetration and 95% weight retention.

BALLISTICALLY EFFICIENT SECANT OGIVE PROFILE

Delivers the flattest possible trajectories from lever guns.

FLEXTIP® TECHNOLOGY

IMPACT VELOCITIES: 30 CAL. 140 GR. MONOFLEX®

2426 fps 2089 fps 1852 fps

InterBond®

The Hornady® InterBond® bullet uses a proprietary bonding process that holds the core and jacket together. Unlike partitioned or dual-core bullets, where the front core can separate from the bullet mass, the InterBond® bullet holds together in a single destructive mass that delivers a deep, wide wound channel without over-penetrating.

The bonding process, along with a thicker, stiffer jacket, allows InterBond® bullets to retain more than 90% of their mass, even through tough hide and bones. Plus, they immediately expand to more than twice their diameter for maximum energy transfer.

POLYMER TIP

The sleek polymer tip improves ballistic performance, accuracy and initiation of expansion.

BONDED CORE

The bonded design ensures that the bullet achieves controlled expansion with virtually no fragmentation and the core will never separate from the jacket.

EXPANSION CONTROL RING

Controls expansion to form a large, flat mushroom and a wide wound channel over twice the bullet diameter.

THICK, TOUGH JACKET

Necessary to retain weight and contributes to expansion of over twice the bullet diameter.

IMPACT VELOCITIES: 30 CAL. 150 GR. INTERBOND®

2910 fps 2686 fps 2473 fps

SST®

Short for "Super Shock Tip,™" the Hornady® SST® is designed to deliver tremendous shock on impact while expanding quickly and reliably, particularly at higher velocities. Flat shooting and deadly accurate, it's an ideal bullet for whitetails, as well as most North American game animals from antelope to moose and similar-sized African plains game. The SST® creates a devastatingly large wound channel.

POLYMER TIP

The sleek polymer tip increases the ballistic coefficient, making it more efficient. Upon impact, the tip also initiates controlled expansion.

SECANT OGIVE, BOATTAIL PROFILE

It's a fact: bullets that travel faster hit harder. The Hornady® secant ogive gives hunters the speed, ballistic efficiency and downrange energy they're looking for.

CANNELURE

Provides accurate and consistent crimping, and also works with the InterLock® ring to control expansion.

INTERLOCK® RING

Ensures the core and jacket remain locked solid during expansion, so the SST® retains the mass and energy needed for dramatic wound channels.

IMPACT VELOCITIES:
30 CAL. 165 GR. SST®

2843 fps 2751 fps 2015 fps

FTX® Rifle

Hornady® FTX® bullets revolutionized lever gun ballistics, creating a new level of performance for these popular firearms. Lever gun enthusiasts can now harness the accuracy, power and long-range performance of a tipped bullet that's safe to load in tubular magazines.

The patented Flex Tip,® combined with its secant ogive design, creates an aerodynamic bullet with a thinner, tapered front section and extended bearing surface for much higher ballistic coefficients. The FTX® flies faster and flatter than traditional lever gun bullets, resulting in improved accuracy at ranges well beyond what was historically common.

The high antimony lead core is locked to the jacket with an InterLock® ring, resulting in reliable performance and deep penetration on large or heavy-bodied game animals. Designed to perform at muzzle velocities from 1,600 to 2,600 fps, FTX® bullets give lever guns new life!

PATENTED FLEX TIP® BULLET TECHNOLOGY

Upon impact, the soft tip compresses into the bullet, initiating immediate expansion across a wide range of velocities. Safe to shoot in tubular magazines as well as any other firearm.

INTERLOCK® RING

Mechanically locks the core and jacket together for maximum weight retention and deep penetration.

BALLISTICALLY EFFICIENT SECANT OGIVE

Pioneered by Hornady®, the secant ogive profile delivers stability, flat trajectories and amazing accuracy.

SPECIALLY ENGINEERED JACKET

The heavy jacket over the shank of the bullet combined with our proven InterLock® design controls expansion and enhances accuracy.

FLEXTIP® TECHNOLOGY

IMPACT VELOCITIES

30-30 cal.
160 gr.
2250 fps
75% Wt. Ret.
.550" Expanded

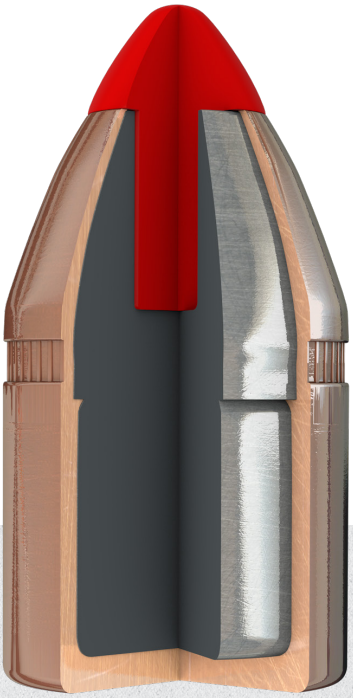
338 Marlin
200 gr.
2450 fps
72% Wt. Ret.
.625" Expanded

44 cal.
225 gr.
1650 fps
82% Wt. Ret.
.610" Expanded

FTX® Handgun

Hornady® offers the same Flex Tip® technology for handguns that revolutionized lever guns. Typical hollow point pistol bullets deliver good performance at modest velocities, but have a tendency to expand too quickly and sacrifice penetration at the higher velocities achieved with lever action guns.

Hornady® FTX® bullets achieve reliable expansion over a wide range of velocities. Upon impact, the patented FTX® tip is compressed into the front of the bullet, causing the bullet to expand and transfer immediate energy for a devastating temporary cavity — even at low velocity.



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SPECIALLY ENGINEERED JACKET

The heavy jacket over the shank of the bullet combined with our proven InterLock® design controls expansion and enhances accuracy.

FLEXTIP® TECHNOLOGY

IMPACT VELOCITIES

357 cal. 140 gr.
1500 fps
83% Wt. Ret.
.550" Expanded

44 cal. 225 gr.
1450 fps
85% Wt. Ret.
.625" Expanded

V-MAX®

The dramatic fragmentation of the V-MAX® bullet comes from a combination of the gilding metal jacket, specially designed core and polymer tip.

The industry's leading varmint bullet with polymer tip and streamlined design results in flat trajectories. The concentricity of the match grade jacket design provides maximum accuracy at all ranges as well as explosive expansion, even at velocities as low as 1600 fps.

V-MAX® bullets are also available in factory-loaded Varmint Express® and Superformance® Varmint™ ammo.

POLYMER TIP

The polymer tip increases the ballistic coefficient and also initiates dramatic expansion upon impact – even at velocities as low as 1600 fps.

HIGHER BALLISTIC COEFFICIENT

Hornady® combines the sharp, pointed polymer tip with the most aerodynamic profile for a high ballistic coefficient. The V-MAX® profile also provides the maximum bearing surface for added in-flight stability.

SWAGED LEAD CORE

The swaging process allows for precise formation of the core up and around the tip, with a cavity under the tip's stem. This allows the tip to build up energy before smashing into the core, causing dramatic fragmentation of the core and jacket.

PRECISE BOATTAIL & FLATBASE DESIGNS

Utilizing the proper base design provides incredible in-flight stability for long-range shooting.

NTX®

Hornady® NTX® bullets provide peerless performance with a non-traditional core material that combines accuracy, reliability and Hornady® quality for use in areas with restrictions on the use of traditional bullets.

Hornady® has made lead core bullets since 1949. Lead is, and always will be an excellent core material that provides density and hard-hitting energy to a vast array of bullets. However, there are regulations in some areas that restrict the use of lead in bullets. The NTX® is a phenomenal choice when a non-lead bullet is required.

SMALL GAME BULLET CHOICE

POLYMER TIP AND STREAMLINED DESIGN FOR ULTRA FLAT TRAJECTORIES

NON-TRADITIONAL CORE THAT IS CALIFORNIA COMPATIBLE

DEPENDABLY ACCURATE

FEATURING AMP Advanced Manufacturing Process® BULLET JACKETS

DGX®

In the most dangerous hunting situations, you need a bullet that performs every time, no matter the circumstance. Hornady® DGX® (Dangerous Game™ eXpanding) and DGS® (Dangerous Game™ Solid) bullets are constructed of copper clad steel and a high antimony lead core.

The DGX® bullet incorporates our patented InterLock® feature that locks the core and jacket together, improving retained weight of the expanded bullet. Each caliber utilizes the same profile for both the DGX® and DGS® bullets, offering uniformity, which is ideal when shooting both bullet types through the same firearm.

FLAT NOSE

The flat nose improves straight line penetration, reducing possible deflections.

SERRATED NOSE SECTION

Nose design provides the ultimate combination of controlled expansion, weight retention and depth of penetration.

COPPER CLAD STEEL JACKET

The heavy copper clad steel jacket is 0.098" thick and penetrates deeply through hide, muscle and bone.

INTERLOCK® RING

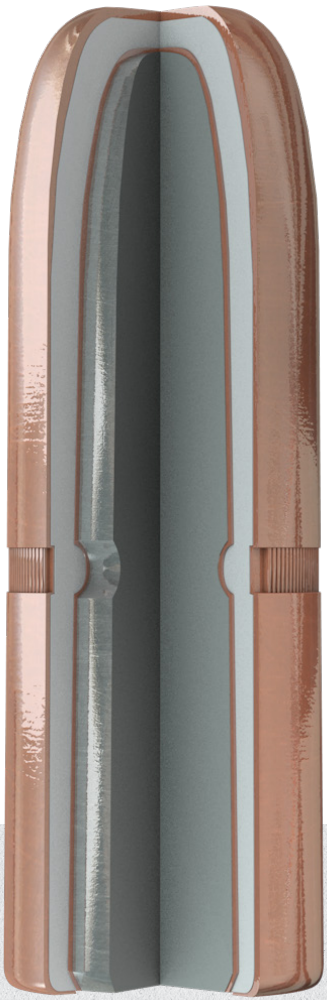
Patented InterLock® ring locks the core and jacket together, improving retained weight of the expanded bullet.

The DGX® bullet features a flat meplat for straight penetration, maximum energy transfer and devastating results.

DGS®

An aggressive, hard-hitting bullet with an attitude to match, Hornady® DGS® bullets feature an advanced profile built of the toughest materials that penetrate through thick hide, dense muscle and hard bone — delivering maximum stopping power.

The business end of the DGS® bullet features a wide, flat nose that delivers maximum energy upon impact, while resisting bullet deformation and deflection. Incorporating a very hard high antimony lead core with a copper-clad steel jacket, this bullet maintains integrity and overall weight retention when driving through even the toughest hide and bone. Uniform in shape and size to the DGX® (Dangerous Game™ eXpanding) bullet, you can reliably and accurately shoot both from the same firearm with little to no shift in point of aim or impact.



FLAT NOSE

The flat nose reduces possible deflections and resists deformation to achieve straight, deep penetration. The DGS® provides the perfect follow-up bullet when hunting dangerous game.

DGX®/DGS® UNIFORMITY

Each caliber utilizes the same profile for both the DGS® and DGX® bullets, offering the ultimate uniformity, which is ideal when shooting both bullet types through the same firearm.

COPPER CLAD STEEL JACKET

The heavy copper clad steel jacket and high antimony lead core penetrate deeply through hide, muscle and bone.

Constructed of copper-clad steel and a high antimony lead core, the DGS® bullet is tough enough for any dangerous game.

A-MAX®/BTHP Match™

All Hornady® Match™ and A-MAX® bullets now feature revolutionary AMP® (Advanced Manufacturing Process) bullet jackets. Developed by Hornady® engineers, these bullet jackets are a technological advancement in design, tooling and manufacturing that combine to produce the most consistently concentric bullet jackets available. These proven AMP® jackets are the foundation for exceptional bullet accuracy and have virtually zero runout and near zero wall thickness variation. Coupled with precision swaged cores and manufactured to the tightest standards in the industry, all Hornady® Match™ and A-MAX® bullets provide superior consistency, high ballistic coefficients and unprecedented levels of accuracy.

SECANT OGIVE PROFILE

The geometric profile works to produce low drag and flatter trajectories. The secant ogive design also provides the optimum bearing surface for stability in flight and the best ballistic coefficient possible.

SWAGED LEAD CORE

The swaging process provides excellent uniformity and balance for consistent performance and accuracy.

AMP® JACKET

The jacket has virtually zero runout and near zero wall thickness variation.

BOATTAIL

The angle and length of the boattail is unique and optimized for each caliber and weight of Match™ and A-MAX® bullet to maximize ballistic coefficient and performance.

FEATURING AMP® Advanced Manufacturing Process BULLET JACKETS

InterLock®

Our traditional line of bullets feature exposed lead tips for controlled expansion and hard-hitting terminal performance. Most have our pioneering secant ogive design — one of the most ballistically efficient profiles ever developed (see diagram to right). Most feature our exclusive InterLock® design — a raised ring inside the jacket that is embedded in the bullet's core that keeps the core and jacket locked together during expansion to retain mass and energy.

INNER GROOVES

Strategically weaken the upper section of the jacket, ensuring consistent, controlled expansion, even at long range.

TAPERED JACKET

Jacket thickness is precisely controlled for expansion at all velocities.

ONE-PIECE CORE

Does not separate like two-piece divided cores. The InterLock® retains more mass and energy for deep penetration and large, consistent wound channels that ensure quick, clean kills.

CANNELURE

Provides accurate and consistent crimping and also works with InterLock® ring to ensure the core and jacket remain locked during expansion.

INTERLOCK® RING

The raised InterLock® ring is embedded in the bullet's core, ensuring the core and jacket are locked in one piece during expansion to retain mass and energy.

IMPACT VELOCITIES

30 cal. 150 gr. SP
2700 fps
70% Wt. Ret.
.560" Expanded

30 cal. 190 gr. BTSP
2850 fps
75% Wt. Ret.
.550" Expanded

XTP®/ XTP® Mag

Designed for hunting, self-defense and law enforcement applications, the XTP® bullet demonstrates the kind of accuracy that led many competitive shooters to adopt it. Reliable performance makes the XTP® the most popular handgun bullet for both target shooters and hunters. But it's the stopping power of the XTP® bullet that has truly built its world-class reputation. From the onset, XTP® bullets were specifically designed to expand reliably at a wide range of handgun velocities to deliver deep penetration with every shot.

XTP® Mag™ bullets provide the same controlled expansion, accuracy and dependability as regular XTP®'s, but are built to withstand the higher velocities and impacts from ultra-powerful, magnum handguns.

CONTROLLED EXPANSION

Precise serrations divide the XTP® into symmetrical sections, strategically weakening the jacket and initiating controlled expansion even at low velocities.

NO EXPOSED LEAD

The gilding metal jacket protects the nose of the bullet, so the hollow cavity functions properly on impact and ensures proper feeding in semi-automatics.

SWAGED CORE

Total uniformity of core density ensures balanced expansion as well as in-flight stability.

DRAWN GILDING METAL JACKET

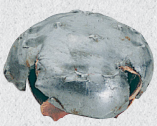
Expansion is controlled by varying jacket thickness down the length of the XTP®, providing a definite advantage over plated bullets which have a uniform jacket thickness over the entire bullet.

CANNELURE

On revolver bullets, the cannelure helps achieve accurate, consistent crimping. All cannelures are applied before the final forming process to eliminate any distortion to the finished bullet.

IMPACT VELOCITIES

.45 CALIBER
XTP® MAG™
240 gr.
1852 fps



HAP®

Gain the competitive edge with Hornady® HAP® (Hornady® Action Pistol) bullets. Modeled after the legendary XTP® bullet design, HAP® bullets are further refined into the perfect competition projectile. While XTP® bullets use serrations to aid in controlled expansion and terminal performance, we have eliminated these from HAP® bullets, creating a sleek and balanced projectile with a protected nose that aids in consistent and reliable feeding in auto loading pistols. Bullet jackets, featuring industry leading concentricity combined with precision swaged cores, deliver the very best in accuracy and performance

BUILT FOR COMPETITION

Expansion isn't an issue in action pistol shooting, so we removed the expansion-aiding skives. The result is a bullet that delivers the accuracy its sleek appearance promises.

NO EXPOSED LEAD

A jam can cost the match for a competitive shooter, and that's why our copper jacket protects the nose of our HAP® bullet.

SWAGED CORE

The core of the HAP® bullet is cold swaged from pure lead to deliver consistency, balance and stability in flight. It delivers pinpoint accuracy with every shot.

GILDING METAL JACKET

The gilding metal jacket protects the nose and ensures smooth feeding.

Frontier Lead®

Hornady® lead pistol bullets are pre-lubricated and cold-swaged for total uniformity and balance. Our exclusive knurling system retains lubricant over the entire bearing surface to reduce leading in your barrel.

For cowboy shooters, authenticity is a strict requirement. That's why we build our Cowboy™ bullets to SASS (Single Action Shooting Society) specifications while holding them to the same stringent production standards as all our products.

CLASSIC & CONVENTIONAL DESIGN

Traditional conical and flat designs have perfect symmetry when combined with knurling at the base of the bullet, which deliver increased stability and accuracy. This ensures proper positioning in authentic revolvers, with no unwanted nicking of primers as the cylinder turns.

SPECIAL KNURLING AND GREASE RING

The knurling system holds an even distribution of lubricating wax over the bearing surface of the Cowboy™ bullet, resulting in less leading.

Legend — Abbreviations Used

BT . . . . . .Boat Tail
BTHP . . . . . Boat Tail, Hollow Point
C/T . . . . . .Combat Target
DGS® . . . . . .Dangerous Game Solid
DGX® . . . . . Dangerous Game eXpanding
ELD® . . . . . Extremely Low Drag
ELD-X® . . . . . Extremely Low Drag eXpanding
FMJ . . . . . Full Metal Jacket
FP . . . . . Flat Point
FTX® . . . . . Flex Tip® eXpanding
GMX® . . . . . Copper Alloy eXpanding
HAP® . . . . . .Hornady Action Pistol®
HBWC . . . . . Hollow Base Wadcutter
HP . . . . . Hollow Point
IB . . . . . InterBond®
JFP . . . . . .Jacketed Flat Point
JHP . . . . . Jacketed Hollow Point
L-C/T . . . . . Lead Combat Target
LRN . . . . . .Lead Round Nose
NTX® . . . . . Non-Traditional eXpanding®
RN . . . . . Round Nose
SJ . . . . . .Short Jacket
SP . . . . . Spire Point
SST® . . . . . Super Shock Tip™
SP-RP . . . . . Spire Point-Recoil Proof
SP, SSP . . . . . Spire Point, Single Shot (Pistol)
SWC . . . . . .Semi-Wadcutter
SX . . . . . Super Explosive
W/C . . . . . With Cannelure
XTP® . . . . . eXtreme Terminal Performance

Bullet Choice

Generally speaking, rifles up to 30 caliber have lighter bullets for varmint hunting and heavier bullets for game. Beyond 30 caliber, there are no big bore varmint bullets. As another general rule of thumb, SST®, InterBond®, and GMX® Spire Points and Boat Tail Spire Points with InterLock® are preferred for longer range hunting and will deliver flatter trajectories than their Flat Point or Round Nose counterparts of the same weight.

Many reloaders when beginning this hobby start by duplicating factory loads they may have been using. This is surely an easy and appropriate way to begin. Most reloaders branch out, become more adventuresome in time, try out heavier or lighter bullets. Bullet selection for the reloader is partly science and partly an art. The reloader is in charge of the choices he or she makes. The brief tour of Hornady bullets and their purposes should get you started thinking about bullet choice parameters. The best advice we can leave you with at this point is to use the ballistics tables on the web along with the loading tables to see how trajectories and velocities will perform with a load. This is very good home work for any reloader, and especially one new to the hobby.

Reloading Step-by-Step

Check List

New reloaders are often told to inspect cases as the first reloading step. Actually, there's one before it. Get your reloading bench organized, neatened, ready for work. At a minimum, do a mental checkoff of what you'll need for the task at hand. (There's nothing worse than getting halfway into a project and not having a necessary component. Yes, there is something worse; doing all that with the stores closed!)

Case Examination

In rounding up these usual suspects we had to go through our trash bucket, but they'll help make a point. When you examine cases you should be looking for culprits like this—and getting rid of them. From left to right: a split neck (brass worn out from use); a separated case wall (excessive resizing, hot loads); head separation (a sure sign of a headspace problem); denting (a product of over zealous lubricating); and, finally, corrosion—a case left in the wrong place for too long a time.

You shouldn't inspect cases only when preparing to reload, but after you've gathered them up, too. Here may be the evidence of careless or even dangerous reloading practices; loading too hot a load; using the wrong powder; mistakes in powder charges. All this is a signal to find out what's going wrong.

Many reloaders like to separate their cases by manufacturer. That isolates one of the variables in reloading and can be very helpful when you're doing a great deal of reloading.

Case Cleaning

Cleaned cases are easier to work with, easier to lube, easier to handle, and more attractive in the finished product. Hornady offers a variety of case cleaning equipment. The Hornady Case Tumbler uses tumbling media to clean and polish cases to a like-new sheen. Hornady Sonic Cleaners, in combination with One Shot® Sonic Clean™ Solution, use ultrasonic technology to clean cartridge cases inside and out.

Cleaned and polished cases can help improve the accuracy of your reloaded cartridges. In addition, they will not scratch reloading dies, thus prolonging the life of your reloading equipment.

Case Length Measurement

Cases may stretch in time, depending on the action in your firearm and the amount and nature of resizing you subject cases to. Cases that "grow" too long will eventually not chamber in your firearm. If the cases you are reloading come from unnamed sources, or if you are shooting automatic or lever-action rifles, or if you consistently full length resize cases, measuring them before reloading is a great idea—unless you want to pull bullets, dump powder, and trim cases after "finishing" your reloading.

Case Trimming

Not all cases in a batch may need trimming, so they can be segregated and only those needing trimming worked on at this point. The shellhead holder that retains the case in the Power Case Prep Center is the same as that used in the reloading press. The Hornady Lock-N-Load® Power Case Prep Center makes easy work of any trimming task, it's easy to set up if there are only a few cases to trim but the Cam-Lock case retention system is quick and easy to use and large batch work can be completed in no time. The high torque motor runs effortlessly for hours at a time and the tool steel cutter has an indefinite lifespan.

Case Chamfering

Once you have trimmed cartridge brass, you will get not only a case of the right length, but burrs and other imperfections inside the case. You want the bullet to be able to seat easily when you come to that step. You certainly don't want to scratch it. That's where chamfering comes in. The tool shown here cleans the inside of the case mouth to make it easier to reload.

Case Deburring

The chamfering and deburring tools not only take care of the inside of the case mouth, but they remove burrs from the outside of it as well. You want to get cases into the smoothest, best functioning condition possible for the work to follow. Not only will you be resizing the cases, but you will be seating bullets as well. The chamfering and deburring steps shown here are very important after trimming.

Case Lubrication

You will soon be working brass through reloading dies, "machine tools," if you will, to form metal from one shape to another. Without lubrication, the friction between the brass and the die may be extreme, fostering a seize up of the case within the sizing die. Because you don't want or need that distraction, case lubrication is an important step, and you have options for how to do this.

Hornady One Shot is the most popular case lube on the market. Available as aerosol or pump spray, this non-petroleum lubricant will not contaminate powder or primers. This product can lubricate entire blocks of cases at a time and it dries in minutes (Fig 1).

A few drops of case sizing lubricant on the lube pad, a few rolls, and the job is done (Fig 2).

We'll note here, however, that too much of a good thing can be a problem. One should wipe off excess lubricant lest it dent cases in the sizing process.

Here's a third method (Fig3). Hornady's Case Sizing Wax is simple, and very easy to use. Just apply a little to the fingers and swipe the cases as you pick them up. For many this is the preferred way to accomplish the required lubrication process.

Fig 1

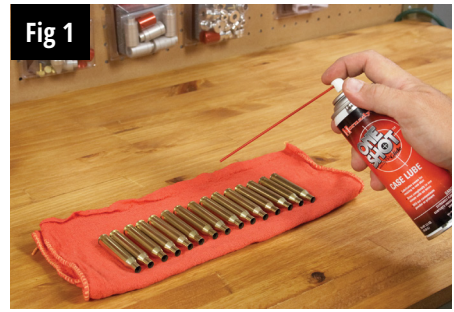


Fig 2

Fig 3

Don't over-lubricate cases.
A little lube can go a long way.

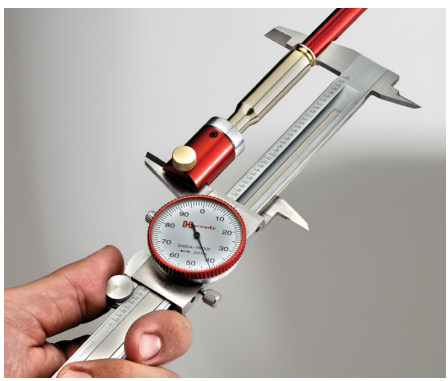
Resizing/Depriming

After cleaning, degreasing and dry lubricating the dieset with One Shot Gun Cleaner and Dry Lube, we are now ready for one of the most important steps in the reloading process, returning the cartridge case to proper dimensions for the firearm in which it will be used. “Resizing” can be a double step (resize/deprime) or a triple step (resize/deprime/reprime). At this point we will adjust the sizing die and set the press to size and deprime only.

We demonstrate here Hornady’s superior Lock-N-Load® system, one which permits nearly instantaneous change from loading one cartridge to another. The loading die is screwed into the Lock-N-Load® bushing and the bushing locked in place. Next both are locked into the press. Finally, the die is adjusted and locked into place.

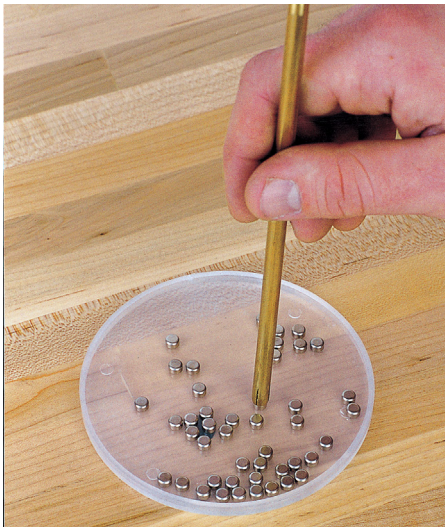
Once the adjustment is made, we are ready to both size and deprime cases. As cases are raised into the die, the spindle in the center of the die punches out the spent primer and as the case reaches the top of the press cycle, the case is resized.

The Hornady Lock-N-Load® Headspace Gauge should be used to precisely adjust headspace for an exact fit in the chamber.



Resize/Deprime/Reprime

Some reloaders prefer to load and use the optional automatic primer feeding tube. In this photo, primers are picked up from a primer flipper and captured in the tube.



When the automatic primer feeding tube is used, the reloader can reprime on the downstroke of the press cycle. Some find this a convenient process to follow. Three key reloading steps are completed with essentially one handling of the cartridge case. But in this step as in others, there are options.

Batch Repriming

This photo shows a hand-held priming tool. Its ergonomic design reduces strain and makes repriming as easy as opening and closing a pair of pliers. Primers flow over to be picked up, eliminating at least one handling of them versus the automatic primer feeding tube. The tool works with Hornady shell holders and thus can be employed in reloading all cartridge cases for which we make loading dies and shell holders.

Priming is a simple process but not one that's foolproof. As Murphy's Law holds, anything that can possibly go wrong will. Here are three examples: from left to right, a primer seated upside down; a primer seated sideways; a properly seated primer; and an insufficiently seated primer. Check your work. No one wants to take a reload that will misfire into the field.

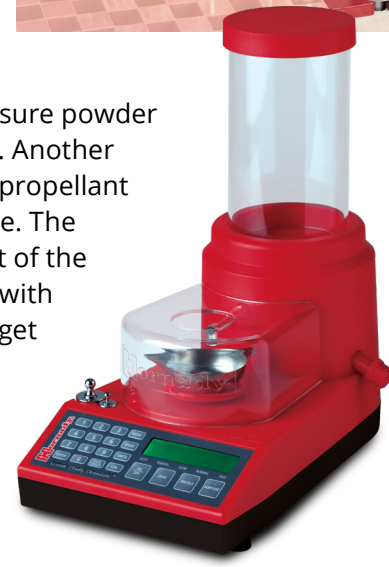
Powder Weighing

With our cases primed and sized, we are now ready to begin the powder charging process. Special care and attention at this point can go far to assure consistent, accurate loads. After selecting a particular load from the *Hornady Handbook*, it must be correctly weighed and the powder measure adjusted to throw that charge.

Successive charges are typically thrown until the powder measure is fully adjusted to drop the correct charge each time. In a small batch of reloads, this adjustment need only be done once. Many reloaders, though, may check the measure's accuracy by weighing a charge several times in the course of loading a large number of cases.

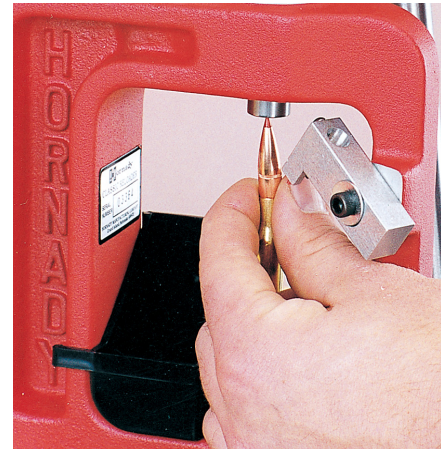
Powder Charging

Preparations for charging cases may often take more time than the powder charging process itself. Here the cartridge block is brought to the measure and moved—in a systematic way—to charge each case. We stress the word systematic. Some loads in some cases may take up so little volume that a double charge can be dropped if you are not very consistent in how you move cases to the charge tube. In any event, many reloaders routinely eyeball charged cases to make sure powder has dropped—but not too much powder. Another popular method for charging cases with propellant is the Hornady Lock-N-Load® Auto Charge. The Auto Charge takes all the set up work out of the process. Simply plug it in, fill the hopper with the appropriate propellant, enter the target weight and it will automatically dispense the propellant into the pan.



Bullet Seating

In the adjacent photo our seating die has been placed in the reloading press and adjusted. Once this is accomplished, ammo production shifts into full gear. The resized, reprimed, charged case is placed in the shellhead holder and as the press handle is moved with one hand the other guides a bullet directly over the case mouth until it enters the seating die. When the case is fully into the die the bullet is seated to the desired depth and given the crimp desired.

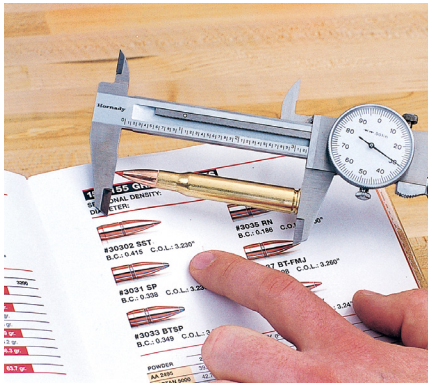


Nothing can go wrong now, can it? Yes, if seating adjustments are not properly made. In this illustration, from left to right: the seating die not only seated the bullet, it squashed the shoulder; next, the bullet is correctly seated to the cannelure and crimped; in the next case, the bullet is not seated quite deeply enough nor crimped; and finally, the bullet is seated so high that this round will not function through a magazine, let alone chamber.

Our adjustments, however, were correct and here is the result. The bullet has been seated to the correct depth, crimped, and is ready to use. All of the other steps have brought us to this point where we're in place to create our ammunition. For many reloaders pride in workmanship begins in earnest. It's very enjoyable to see the fruits of your labor.

But checking is important. In this illustration, the reloader is measuring the cartridge overall length (COL) listed for every bullet/cartridge combination in the *Hornady Handbook*.

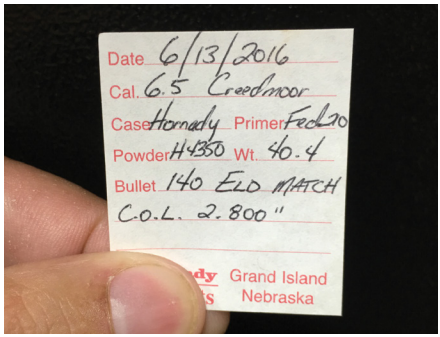
If the reloader wants to take bullet seating to the next level of precision then the Hornady Lock-N-Load® O.A.L. Gauge and Lock-N-Load® Bullet Comparator should be used. The O.A.L. Gauge uses a specially modified cartridge case that allows the reloader to determine EXACTLY where the bullet they are reloading meets the lands in the throat, as shown in the cut-away photo. Then the Bullet Comparator is used to



take a precise measurement off the ogive of the bullet which is then replicated by adjusting the seat or die accordingly.

If you don't have a vernier caliper, there is another test you can employ. Are the loads you're producing going to fit in the rifle you will use them in? Seat a bullet in a case *without powder or a primer* to create a dummy round and try it out. Does it chamber? Easily? Does it fit the magazine? When you've proved to your satisfaction that these reloads will not only fit your firearm but function easily in them, you can finish the rest of the loading process.

Note: Never use live ammunition to perform this test.



Labeling

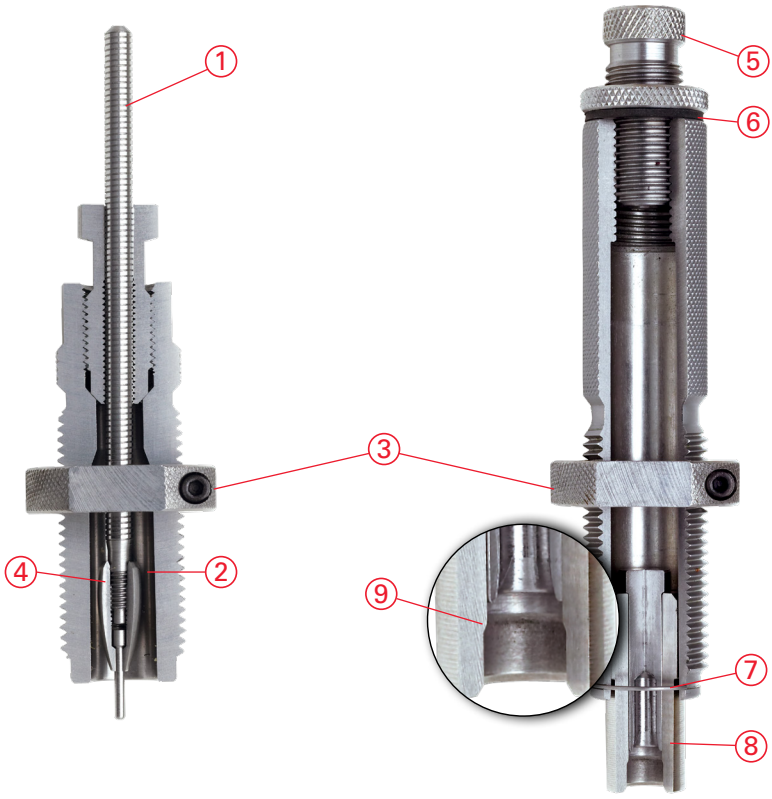
The next and extremely important step in the reloading process is simple—but not always observed when it should be. Label your loads. Identify the components. Date the reloading session. You should be able to pick up a box of any ammo you have made and know when and how it was made. Don't wait a day. Do it before finishing the session.

Cleaning Up

Now we're at the final step of the reloading process. Put things back where they belong. Immediately! Bullets, primers, powder should all be returned to their original containers. It can be dangerous to leave powder in your powder measure, not because anything will happen to it but because it may be mistakenly identified at some later time. So, too, with primers. Neatness and order are just as important at the end of the reloading process as at the beginning.

Reloading Dies

Full-Length Sizing Die **Standard Seating Die**



1. **Zip Spindle™ Design**
   A feature on all full length size dies, the Zip Spindle™ positively locks to eliminate slippage. A series of light threads cut on both the spindle and spindle collet allows incremental adjustments by turning the spindle or it can easily "zip" up or down for larger movements.

2. **Smooth Finish**
   Internal die profile is precision machined and polished to a smooth finish for reliable functioning without case sticking or excessive friction. Most of our pistol dies feature a titanium nitride "gold ring" finish that's harder than carbide and doesn't require lubrication. The super hard coating is perfect for resizing soft pistol brass and won't scratch cases.

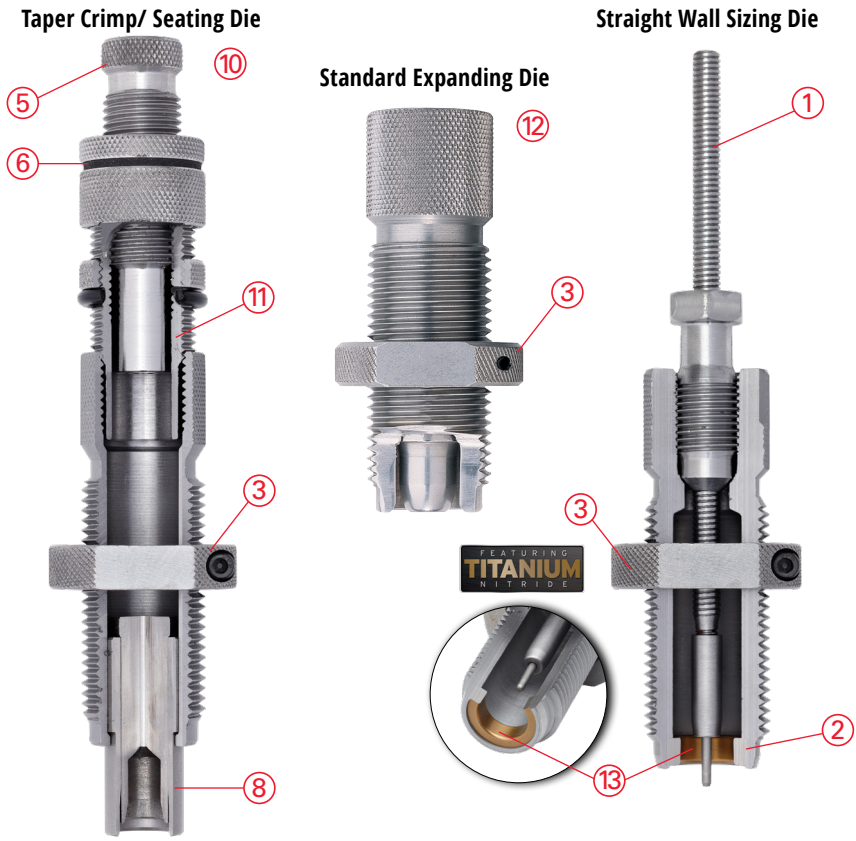
3. **Lock Rings with Wrench Flats**
   The Hornady Sure-Loc™ lock rings clamp around the entire die applying constant pressure to hold the ring in place. The locking screw tightens the ring without coming into contact with the threads, eliminating possible damage from pliers.

4. **Elliptical Expander**
   Superior to "ball expanders," this Hornady® exclusive provides extremely smooth neck sizing and significantly reduces friction and case neck stretch. Internal threading prevents it from pulling loose and the elliptical expander eliminates the need for a separate expander die for necking-up to the next caliber.

5. **Seater Adjustment Screw**
   Seater adjustment screw easily adjusts for bullet seating depths.

6. **Compression Lock**
   This o-ring provides the necessary tension to make fine adjustments easier, and keep the die set in place.

7. **Retainer Ring**
   Locking retainer ring removes in seconds for easy disassembly and cleaning of the die.



8. In-line Bullet Seating System
Our seating system holds the bullet, the case neck and the seating stem in perfect alignment in the sleeve BEFORE the bullet enters the neck of the case. The system includes a floating bullet alignment sleeve, a floating steel seating stem and a built-in crimper for benchrest precision. Bullets are aligned in the sleeve as they enter the die for optimum seating and enhanced accuracy.

9. Built-in Crimper
The built-in crimper allows roll crimping without the need for an extra crimp die, saving a station on your press.

10. Taper Crimp Seating Die
The intuitive design of this die allows seating and taper crimping to be completed in one step, eliminating the need for a separate taper crimp die. Available in 9MM, 40 S&W & 45 Auto.

11. Taper Crimp Adjust Screw
Easily adjusts amount of crimp on the cartridge without changing bullet seating depth or loosening the lock ring.

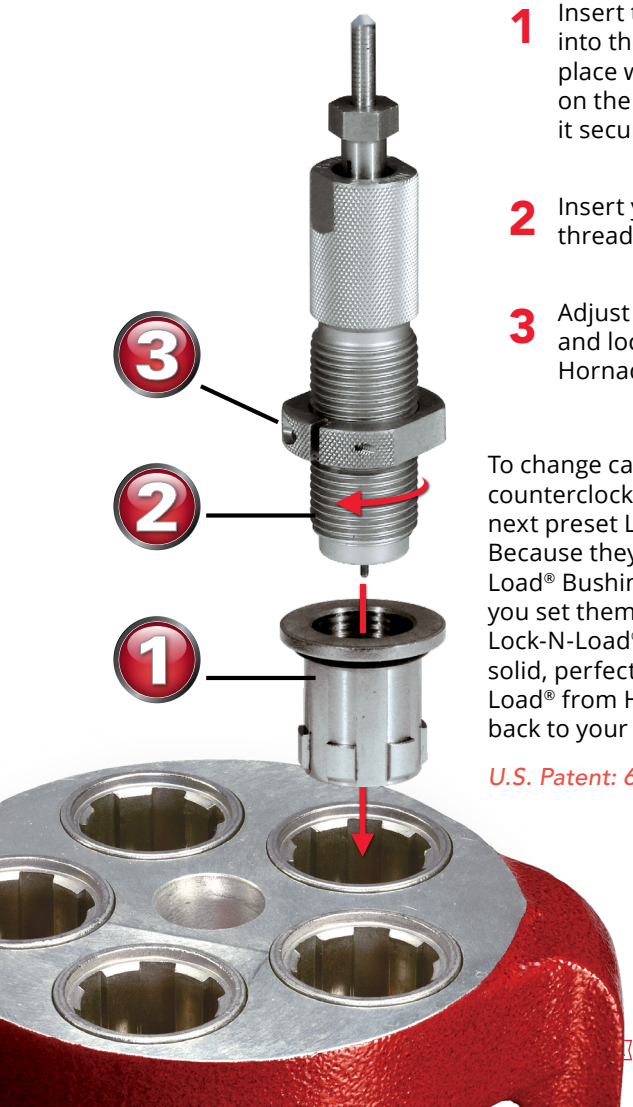
12. Expander Dies
These dies put a consistent slight "bell" or flare on straight-walled rifle or pistol case mouths. They prepare the case so powder and bullet insertion are smoother.

13. Straight Wall Sizing Dies
Most of our straight wall sizing dies feature a titanium coated sizing ring (gold ring). This eliminates case sticking and requires no lubrication. The super hard, smooth coating is used in high-pressure, high-wear tools to reduce abrasion, so it's perfect for resizing relatively soft pistol brass, and won't scratch your cases. Less friction means less wear on cases for longer case life. Spindle locks in place with collet lock for positive decap and easy adjustment.

How Lock-N-Load® Works:

The Hornady® Lock-N-Load® system features quick tool change technology that allows you to switch rifle and pistol dies, powder dies, check dies, bullet seaters or crimp dies without having to change the whole die head. This unique technology is featured on all Hornady® presses. In addition, Hornady® conversion bushings can convert other brands to the Lock-N-Load® system.

The Patented Hornady® Lock-N-Load® system is as easy as 1-2-3:



1 Insert the Lock-N-Load® die bushing into the press bushing and lock it into place with a twist. The six locking lugs on the die and press bushings will hold it securely in position.

2 Insert your standard die with 7/8"–14 threads into the Lock-N-Load® Bushing.

3 Adjust the die to the proper position and lock your setting into place with Hornady's unique Sure-Loc™lock ring.

To change calibers, simply twist the die counterclockwise, remove die and insert your next preset Lock-N-Load® die and bushing. Because they remain locked in their Lock-N-Load® Bushings, your dies will remain exactly as you set them. The positive locking action of the Lock-N-Load® Bushings holds the dies in rock solid, perfect alignment. Once you try Lock-N-Load® from Hornady,® you'll NEVER want to go back to your old system.

U.S. Patent: 6,481,916

TIPS &
TECHNIQUES
EDITION 10

Accuracy

Accuracy is every shooter's concern. That's obvious for competitive shooters. It's obvious, too, for anyone going on an expensive hunt. It's even obvious for the plinker. No one wants to shoot a firearm that can't hit the broadside of a barn, whatever the range. But accuracy is not a simple issue, and accuracy problems can often be extremely difficult to diagnose because they involve many factors. Let's begin this discussion by identifying several critical accuracy factors.

BARREL QUALITY: Barrels may differ from firearm to firearm in a manufacturing lot. Some can be inherently more accurate than others, better rifled, better finished, made with superior barrel steel. And barrels can obviously deteriorate over time with "barrel burner" loads or mistreatment.

BARREL AND ACTION BEDDING: How barrel and action are fitted to the stock can have important accuracy consequences. Stock binding, twisting, or variable pressure on barrel and action can produce shot-to-shot inconsistencies. Many barrels work best when they are "free floating," that is, not touched by the stock except immediately in front of the action. Incorrectly bedded actions may be pressured by high spots inside the stock or other interior wood constrictions. Removal of portions of the stock causing the binding can often correct the problem easily.

BULLET QUALITY: Hornady Manufacturing Company has accumulated thousands of person-years of experience on this single accuracy factor. Yes, some bullets are more accurate than others, generally as a consequence of manufacturing process and precision. Our company's goal from its beginning over 60 years ago has been to make bullets that are "accurate, deadly, and dependable." You might usefully review the essay, "Reloading and Bullet Accuracy" which appears earlier in this volume for more discussion of the topic.

TRIGGER QUALITY: This accuracy factor often requires a gunsmith (or new trigger or trigger parts) to correct. If a firearm's trigger will not function consistently, the shooter will be unable to squeeze off rounds consistently, either.

LOAD: Powder brand and powder charge can greatly influence attainable accuracy. In the new *Hornady Handbook* we have attempted with every cartridge/bullet combination to use only powders that are generally appropriate. As you will observe from time to time throughout the loading data, we have found particular combinations of powder, charge weight, and bullets to be especially accurate. Accuracy produced by this factor is a function of burn rate consistency in the cartridge/firearm combination used.

SIGHT QUALITY/SIGHT ADJUSTMENT: You can't hit what you don't see. You can't hit what you're not pointing at. Just as there are quality variations in barrels and triggers, so there can be quality variations in sights. Or there can be sights which simply aren't adjusted to give the shooter a correct aiming point.

BARREL CLEANLINESS: The barrel manufacturer is always responsible for initial barrel quality. The shooter is always responsible for keeping that barrel clean. Fouled barrels will never be as accurate as clean barrels. Both powder residue and metal fouling are cleanliness culprits, and once they get a good start, the rate of fouling increases. There are a host of commercial solvents, rods, brushes, and cleaning pads to clean barrels. Start with a brush and solvent (we'll name Shooter's Choice as an example). Apply solvent with the brush and remove metal residue with a pad. Leaving a solvent-wetted barrel to soak overnight is not too long a wait before getting on with the cleaning task. Shooters who are also impatient about cleaning often prefer Sweets 7.62 Solvent, an ammonia-based chemical. With extreme fouling, the full cleaning process may take several days for solvents to do their best work. Accuracy improvements will be well worth the effort.

TWIST RATE: It is possible to load a bullet in a firearm whose twist cannot stabilize it, that is, rotate it fast enough to keep it from yawing in flight. Longer bullets need faster barrel twist rates to stabilize them. You can determine the twist rate of your firearm by making a mark on a rod with a tight cleaning brush and noting how many inches it takes to revolve once.

BARREL TEMPERATURE: Barrels, especially those firing high intensity magnum loads, can be sensitive to heat. Even slight heat-induced barrel flexing can produce shot-to-shot inconsistencies. This is an accuracy factor easily remedied by allowing some barrel cooling between rounds.

Accuracy and Reloading Technique

We are not finished with diagnosis of accuracy problems. Assume all of the factors listed above are non-issues for your firearm but that accuracy still is not up to your standard. There are a number of reloading-specific accuracy factors that may cause problems.

CASES: Uniformity is critical to accuracy. Many reloaders segregate cartridge cases by manufacturer (and even by production lot), weigh them, deburr flash holes, discard cases with outsized flash holes, turn case necks to identical diameters, and invariably clean primer pockets. Your own handling of cartridge cases will depend on your accuracy requirements. The average hunter or casual shooter will not gain much by case neck turning or individual case weighing. All reloaders, however, will benefit by primer pocket cleaning and by using cases of the same manufacturer. Bench rest shooters may take all of these steps and more to assure the ultimate accuracy.

PRIMERS: As we stress often in the *Hornady Handbook*, when you have developed a suitable load with one set of components, you need to develop it again when changing any single component. This is as true of primers as it is of cases. Many reloaders find that one primer works best in their firearm and simply stick with it. Never, under any circumstances, substitute a magnum primer for a load developed with standard primers.

BULLETS: Bullet performance can vary between firearms, whether because of their weight, shape, amount of bearing surface, or length. This is true of bullets of the finest jacket uniformity and overall concentricity. The variability in accuracy of bullets results from their use in your firearm. There are thousands of Hornady Bullet users who have found the absolutely best combination of bullet and powder charge for their firearms and wouldn't think of changing a thing. So, if you want more accuracy than you're getting with one combination, try another bullet. Experimentation can help.

SEATING DEPTH: A bullet may not appear accurate simply because it is not seated to the depth most suited to the firearm in use. If bullets are seated too deeply, they have a longer distance to travel unsupported to reach the bore, and may enter it off-center. In general, the less distance to the bore, the greater the accuracy. The reloader has entire control over seating depth up to the physical limitations of action, magazine, or barrel. Experimentation with seating depths can help you achieve the best. In our loading data pages we list the maximum Cartridge

Overall Length (C.O.L.) according to SAAMI specifications. Differences in manufacturing tolerances mean that your most accurate C.O.L. may differ from those published here. Closely allied with the subject of seating depth is the subject of crimping. Recoil can jar bullets loose from their original seating if they are not correctly and sufficiently crimped in place to resist such movement. In large magnum cases, crimping can assure the proper pressure build up of slow burning powders for more consistent combustion and accuracy.

ADJUSTING FOR HEADSPACE: Headspace adjustments involve both accuracy and safety concerns. The Illustrated Glossary at the end of the *Hornady Handbook* does an excellent job describing headspace schemes. Essentially, headspace is the distance from the base of the cartridge case to that portion of the case that stops its forward movement when the round is fired. Straight-walled pistol cartridges, for example the 45 ACP, headspace on the mouth of the case. Excessive crimping (as in roll crimping) may lead to both pressure and accuracy problems. (Crimps for semi-automatic cartridges are most often taper crimps to facilitate proper functioning.) Belted cases headspace on the front edge of the belt. Rimmed cases headspace on the front of the rim. Each design has its particular advantages in particular applications. Accuracy and safety are concerns when case dimensions and headspace requirements are out of synch. Excessively short cases that headspace on the shoulder of the case may fire, but eventually may separate at the head. Many reloaders of rimless cases prefer to resize the case neck only, a technique that is fine for strong bolt actions but not useful for pumps, semi-autos, and lever-actions because they lack equally strong camming action.

RESIZING PROBLEMS: Many resizing problems result from improper or inadequate lubrication. We covered case lubrication in the illustrated Step-by-Step guide earlier in this volume and noted there that excessive lubrication could cause its own set of problems. We didn't mention the need for lube inside the necks of some cases (dry lubricant, powdered graphite, or Hornady One-Shot all work fine for the task). Remember, just a little and just inside the neck; you don't want to contaminate powder or primers. But suppose you manage to get a case stuck in your reloading die. What do you do? Buy a new die? Return the die with the stuck case to the factory for case removal? Or buy a stuck case remover? We make a 3-part remover consisting of a #7 drill bit, a 1⁄4"–20 tap, and a remover body that fits over the stuck case and on the base of the die. With this apparatus

1. Remove the resizing die (with stuck case) from the press.
2. Back the deprime spindle out as far as it will go.
3. Drill into the flash hole with the drill bit, then thread it with the tap.
4. Place the cap over the stuck case and thread the hex screw into the case.
5. Continue to tighten the screw until the stuck case comes out of the die.

The case is ruined, of course, but the lubrication lesson is undoubtedly learned.

CASE REFORMING: From time to time a reloader may wish to form one cartridge case from another. The typical steps in reforming, as you will read in the descriptions of many wildcat cartridges covered in the *Hornady Handbook*, are necking up, necking down, and fire-forming. (Case trimming will be involved in many situations as well.) Some case reforming is quite simple. You can run a 30-06 case through a 270 full length resizing die and have a new case. Other cases may require a few additional steps to reform without crumpling necks and folding shoulders. Making a 243 Winchester case directly from a 308 Winchester generally results in a very low yield. Inserting the intermediate step of running the 308 case through a 7mm-08 full length resizing die will greatly improve the yield. Necking cartridge cases down may produce some neck thickness problems not so troublesome in necking up operations when tapered expanders are employed. All reformed cases need to be checked for proper case length and trimmed. "Fireforming" involves firing the appropriate initial cartridge in the chamber of the firearm of the new caliber. Using the 7-30 Waters cartridge as an example, it is a simple matter to neck down the 30-30 to 7mm, but the reformed case will not have the dimensions of the 7-30. Fired in a 7-30 Waters chamber with a light load (never a strong one!) with the bullet seated out close to the rifling will produce the desired results.

CASE ANNEALING: Frequent "working" of brass cartridge case necks through firing and resizing causes the metal to become brittle and eventually split. By heating then cooling the necks of the cases, a process called annealing, this brittleness can be eliminated and the life of the cases prolonged. (Annealing is also useful when necking up cases.) Annealing is simple and safe. Re-annealing is generally not necessary for another 8 to 10 reloads.

PRIMING PROBLEMS: Priming was treated in some detail in our Step-by-Step reloading section, but the subject is worth a quick review. Most problems encountered in the priming process involve off-center flash holes (just discard the cases), oversized flash holes (throw them out, too, to avoid pressure problems), undersized flash holes (you can correct this problem with a drill), Berdan primers, and crimped primers. Military ammunition generally features crimped primers to assure they stay in place. They do make it more difficult to remove. After decapping, crimped primer pockets need to be reamed to remove the crimp. (We also make a primer pocket reamer, a great tool to acquire if you're going to reload a lot of military brass.) Berdan primers present so many problems that many reloaders just don't want to deal with them, period. There are Berdan decappers available, though carefully directed ice picks have been known to work in a pinch. While the repriming process is straightforward, Berdan primers come in sizes different from their Boxer primer counterparts and will not precisely fit Boxer-oriented equipment.

CASE TRIMMING: In the Step-by-Step section we showed a Hornady case trimmer in action, along with the dial caliper used to measure case length. Trimming can actually be accomplished in three different ways, with the trimmer device just noted or with the Hornady Case Prep Center and also with a file trim die, hacksaw, and finishing file. If you were forming 30 Herrett cases from 30-30 Winchester cases, you would be left after the first pass with a case 3/8" longer than needed. This is an ideal situation in which to use a file trim die to remove a large amount of metal at once. With whatever trimming method used, case mouths will be rough after the process and need to be chamfered and deburred before further steps in the reloading process.

BULLET PULLING: Suppose you make a mistake. Wrong bullet, uncertain powder, whatever problem has created an unshootable load, there is a way to correct it, generally while saving the case and bullet, too. There are three devices for doing this: an inertia bullet puller (which resembles a hammer); pliers type pullers; and collet type pullers. Inertia pullers require you to hold the cartridge case against the rim or extractor groove and hitting the inertial device against something solid. This will dislodge the bullet without damage, but it is slow and tedious if many bullets need to be pulled. Pliers type pullers grasp the bullet when the cartridge is loaded in a loading press and extract the bullet when the ram is lowered. Bullets with this system will generally be scored, and the system works best in fairly long cartridges with bullets extending far beyond the case. Collet type pullers consist of a die with a collet insert that can be tightened when the case is positioned in a reloading press

and raised into the die. The collet tightens and when the ram is lowered the bullet remains in the collet. Bullets may remain in good shape, but the process is slow—and wadcutter bullets can't be pulled.

Pressure Signs

Powder combustion sets off the chain of events that propel a bullet out the barrel of a firearm and into its trajectory. Gases—the products of combustion—expand rapidly within the cartridge case, pushing it against the breech and chamber walls and pushing the bullet forward. Pressure, measured in terms of force per unit area, accomplishes the work.

Pressure develops every time a round of ammunition is fired. The reloader must take care to develop loads that yield acceptable pressures for the firearm and cartridge to be used. Firearms are tested to maximum allowable pressures by their manufacturers, and these allowable pressures may vary greatly, depending on the design of the firearm and the specifications of the cartridge. Older firearms, such as the 45-70, may operate at a maximum of 15,000 pounds per square inch (psi). Modern cartridges, such as the 257 Weatherby Magnum, may operate safely at a level of 60,000 psi.

Although most people are concerned with the dangers of exceeding maximum pressure, excessively low pressures can cause their own set of problems. Low pressure symptoms may range from bullets stuck in the bore to backed out primers to sooty cases. (If a bullet sticks in the barrel, lubricate the barrel and, using a long wooden dowel or rod, gently tap the bullet out. Never fire another cartridge behind a stuck bullet as serious damage and injury can occur.) Fortunately, low pressure loads can usually be corrected by gradually increasing the powder charge.

Higher than normal or acceptable pressures can cause a variety of problems, even serious damage, injury, and at the extreme, death. The firearm chamber, cartridge, bullet, and barrel form a balanced "pressure vessel system." Excessive pressures may wreck that system by blowing up the action, exploding the barrel, or sending hot gases (and even rifle bolts) back into the shooter's face. Throughout this handbook we caution again and again to "start loads low and work up."

We never advise starting with maximum loads. You'll always be safe if you begin to load at the lowest load listed in the Hornady data and gradually work up (increase) your load. As you increase the powder

charge, you increase the pressures in the chamber and increase the bullet's velocity. As the pressure increases, there will be noticeable signs of this increase. You must stop with loads at, but not exceeding, maximum allowable charges.

These are signs that loads have become excessive:

1. An increase in case head expansion as measured by a very accurate micrometer.
2. Hard or sticky extraction from the chamber of the firearm.
3. Flattened primers (the rounded edges of the primer are now flattened, filling the gap between primer and case head.)
4. Cratered primers (primer cup material flowing into the firing pin hole.)
5. Ejector marks on the case head.
6. Sooty gas leakage around the primer.
7. Enlarged primer pockets — in the worst cases with the primer blown loose.

Should any of these signs show up, stop immediately and begin to look for the cause of these high pressure symptoms. Some common causes and solutions are:

1. You are using too much powder (check your scale and powder measure; reduce the powder charge.)
2. You have changed components (i.e., different cases, different primer) from a previously acceptable load. Reduce your load and re-establish a new maximum.
3. You are using the wrong data (check your reloading data).
4. You are using the wrong powder (check your reloading data).
5. You are using a heavier bullet than called for in the data (check your reloading data and weigh your bullets).
6. Your cases are too long (trim cases).
7. Your firearm has become overheated due to hot weather or repeated firing (allow firearm to cool or re-establish a new load for hot weather)

Occasionally, some of these symptoms may have other causes. Rarely, cratered primers can be caused by a firing pin hole that is too large, or a weak firing pin spring. These problems can be handled by a good gunsmith. Excessive case expansion, hard extraction, and loose primer pockets are occasionally due to soft brass. These cases should be discarded.

Pressure signs can sometimes be accurately estimated by appearance and physical measurements. Visual inspection can determine the difference between normal pressure (primers with rounded indentations from the firing pin), high pressure (flattened primers), and excessive pressures (enlarged primer pockets). Cases subjected to excessive pressures, certainly as in the last example, are candidates for the trash bin. The abuse to which they have been subjected may lead to head separation or cartridge wall rupturing. Excessively high pressures are not only bad for the firearm where they occur, they are bad for cartridge cases—and ultimately bad for the reloader, too.

An accurate blade micrometer can be a useful instrument for detecting excessive pressures. By measuring new case dimensions before and after firing, you will be able to note signs of excess pressure. On belted magnum cases you should measure the case belt. Careful measurement of this dimension of new cases before and after firing reflects chamber pressure. Measure rimless cases just in front of the extractor groove or rimmed cases immediately in front of the rim will reveal symptoms of excessive pressure in these cartridges. When these results are compared to similar measurements on factory rounds, a reloader can approximate a safe upper pressure limit.

Keep it Safe!

Reloading is so safe it doesn't show up on any national accident tabulations. We think there are two reasons for this.

- You need to work very hard to get into trouble reloading.

And

- Almost all reloaders are safe, cautious, sensible people to start with.

That said, let's review safety pointers for reloading. We'd be remiss if we didn't review safety procedures. One or two times though this checklist and it should become second nature to you.

BE NEAT. Don't start off in a clutter of open bullet boxes and powder containers. Or anything else for that matter. Your work will go faster and safer if you get out only the components you'll need for the job.

STAY ALERT. Reloading is safe and easy, but it still isn't a great idea to be tired, distracted, or mentally sluggish while doing it.

KEEP COMPONENTS FROM KIDS. Extend gun safety rules one more step. Bullets, powder, and primers are not playthings for children.

DON'T SMOKE. You shouldn't do it while filling up at the gas station, and you shouldn't do it while reloading, either. Keep matches and flames away from the bench.

READ THIS BOOK. Follow instructions. Loads are not recipes you can adjust at will. Adding a little more powder is not like adding a little more salt to the stockpot. Know the steps of reloading and follow the process carefully.

USE PROTECTIVE EYE WEAR. Safety-conscious shooters increasingly use protective eye wear while shooting. Do the same while reloading. The odds are very long that an accident will occur, but they're still not worth risking your eyes on.

HANDLE PRIMERS CAREFULLY. Primers are the most active, potentially dangerous component employed in reloading. You can get into trouble with them one of two ways: (a) by crushing, heating, or handling in such a way as to discharge them; or (b) by contaminating them with moisture, lubricant, or other material so they will misfire.

DON'T USE MYSTERY COMPONENTS. Unidentified powder or primers should not be used. If you put away components carefully after a reloading session, you'll never have to discard unmarked powder or primers.

DON'T START WITH MAXIMUM LOADS. Powder charges we label as maximum were safe in our test firearms and with our components. These loads may be more than maximum in your firearm. Start with loads, say, 10% below the maximum listed and work up. You're courting danger if you don't exercise care in load development.

REDEVELOP LOADS WHEN YOU CHANGE COMPONENTS. Change a primer? Change a cartridge case? Don't automatically assume an old load will work well with new components. Start low again and work up.

DON'T USE REDUCED LOADS OF SLOW BURNING POWDERS. Reduced loads can produce both high pressures and unpredictable results. Don't test your luck on the subject.

EAT AND DRINK AFTER RELOADING. Who needs load contamination or component contamination? Keep food and drink away from the reloading bench. Never ingest lead.

SWEEP UP SPILLED POWDER WITH A BROOM. Not a Dust Buster, not a Hoover, not a Shop-Vac. Use no machine with a danger of sparking. Sweeping is safest.

PUT COMPONENTS BACK IN THEIR ORIGINAL CONTAINERS. Make your reloading bench neat and safe for your next reloading session.

IDENTIFY YOUR LOADS. Record details of your loads before you finish and label the ammunition you've produced. Save yourself later puzzlement by noting powder charge, bullet weight, primer, and reloading session date before you finish up.

We note in conclusion that the firearm for which reloads are intended should be safe, reliable, and sufficiently strong to handle them. You will see cautions at many places in the text of this volume about matching loads to the actions they'll be fired in. Know the strength of your firearm and load accordingly is the final rule here.

Hornady Reloading Research

We have in general selected components that are readily available through commercial reloading supply dealers and firearms retailers. Cases are Hornady cases whenever possible. In calibers where we do not manufacture cases we have used Winchester, Remington, Federal, Weatherby or Norma factory brass. Some specialty calibers are restricted to proprietary cases, and still others have been formed from other cartridge cases as the wildcat cartridge originator specified.

Standard primers were used for most calibers with most powders. In larger cases with slower powders, magnum primers were used. They generally produce a hotter flame of longer duration and are useful for consistently igniting large charges of slow powders. Powders were selected using several criteria. One important criterion is burning rate. Although there can be several charges of certain powders that will work, we have chosen the most appropriate, as well as the most commonly available powders for each caliber. The powders listed are available to most reloaders all over the U.S. We have tried to be inclusive in powder

selection, using a powder from each major manufacturer. Where particular powders gave consistently superior performance in terms of both velocity and accuracy we have so noted.

Bullets, of course, are Hornady. We have chosen the most useful and optimum for each caliber. For instance, the 300 Savage could fire a 220 grain bullet. The usefulness of such a load, however, is limited. The velocity would be so slow that there would be little, if any expansion. To be safe, rifles with tubular magazines require flat nose, round nose or FTX® (Flex Tip) bullets, because a regular pointed bullet behind another cartridge could, during recoil, act as a firing pin causing the cartridge in front of it to discharge, resulting in damage or injury. Flat or round nose bullets have such a broad surface that an accidental discharge won't occur.

Bullets are seated to a depth to meet standard overall length as established by SAAMI, the Sporting Arms and Ammunition Manufacturers Institute. Bullets of different design, but the same weight, can generally be substituted for one another. Nevertheless, if a load is developed for one style of bullet in a particular weight, it is wise, and we recommend, reducing the powder charge slightly with a different style of bullet of the same weight. For example, if a maximum charge is developed with a 30 caliber 180 grain (.308" diameter) Boat Tail Spire Point bullet, it should be reduced 5-10% when using a 180 round nose flat base. The 180 round nose bullet has more jacket surface area touching the barrel, and therefore, slightly more friction which could cause higher pressures. It is always prudent to reduce an established charge, and gradually work to a new load with the new bullet.

When possible, loading data was fired in a special firearm designed to measure pressure. There is a description of a pressure gun in the Illustrated Glossary in of the *Hornady Handbook*. The barrel and chamber dimensions are carefully produced to exact SAAMI specifications. Data is generated until a maximum pressure, determined by SAAMI, is reached. These various loads are then test fired in commercially available firearms for velocity. The powder charge and velocity chart in the *Hornady Handbook* were derived from these test firings.

In some calibers and for some cartridges, pressure barrels were not available. We developed and tested loads in these situations by employing a factory or custom firearm and by examining the brass case and the fired case extracted from the chamber. The brass case will show several indications of increasing pressures. One is case head expansion as measured by a good micrometer and compared to a fired, factory loaded cartridge. Other pressure signs of significance were cratered or

flattened primers, brass flow into ejector slots, case head separations, as well as difficult case extraction.

We employed the procedures above only when we had no other options. The vast majority of the data in this book was derived from the use of strain gauges.

All testing of this reloading data was done at 70 degrees Fahrenheit. Higher temperatures usually increase pressure and velocity. Lower temperatures generally lower pressures and velocity.

Trajectory

Exterior ballistics deals with performance of Hornady bullets from the moment they exit the barrel until the moment that they arrive at the target. We are not concerned with internal ballistics, the province of the firearms engineer or powder chemist, nor with terminal ballistics, the province of the forensic pathologist or other scientific specialists.

Terminal ballistics is a very important concern to the military, to police, and to hunters. While there is no way to model the terminal behavior of all projectiles in all media at all velocities, we'll mention the subject briefly in the section entitled An Aside on Energy. For now we'll focus on exterior ballistics.

A trajectory is a description of the flight path of a projectile relative to some known and fixed points. Trajectories for BBs, field artillery projectiles, naval gun shells, mortar rounds, and small arms bullets are all parabolic in shape. In a barrel or mortar the motion of a projectile is both directed and entirely determined by the pressures of the gases behind it. But once the projectile leaves a barrel, two other forces begin to influence its flight. The first is air resistance. The second is gravity. Whatever its angle of departure and whatever its muzzle velocity, a shell or bullet will lose velocity from air resistance and lose height because of gravity. The parabolic shape of a trajectory is the result.

Narrowing our discussion to bullets only, we can provide illustrations of the parabolic curve of a trajectory and concepts related to it. In Figure A (exaggerated for purposes of illustration) we show a muzzle (left) and target (right) assumed to be horizontal on the same base line (for practical purposes the base line is equivalent to the line of sight). The firearm's barrel is elevated. The axis of the bore becomes the line of departure for a bullet leaving its muzzle. So rapidly do gravity and air resistance come into play that the bullet departure line is tangent to the trajectory only at the muzzle.

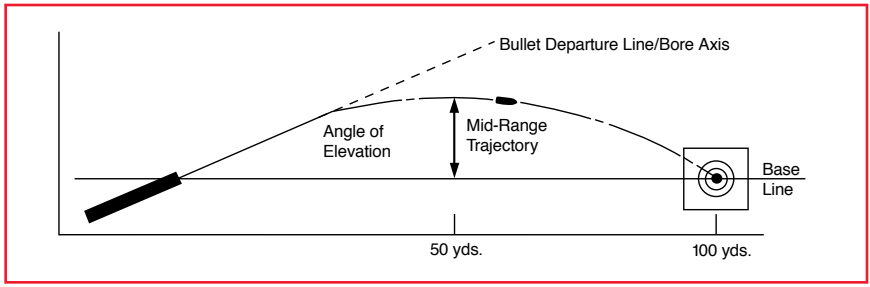


FIGURE A

The trajectory immediately begins to drop below the bore axis. The angle of departure (for small arms generally very small) is formed by the intersection of the line of departure and the base line. The midrange trajectory is the bullet's height above the base line halfway between the muzzle and the point of impact (here, the target).

Figure B uses the same firearm, bullet, and muzzle velocity to compare two different trajectories (the barrel is represented for simplicity in only one position). The difference between trajectories results from different angles of departure required to zero the firearm (change its point of impact) at two ranges; 100 yards and 200 yards. Trajectories fall below the base line (line of sight) in Figure B at zeros of 100 and 200 yards respectively. Bullet trajectories beyond their point of impact are described in terms of inches of drop.

While it makes sense to calculate trajectories for naval shells in terms of angles of departure and while one could do this for small arms trajectories as well, the shooter's primary reference in the field is the line of sight.

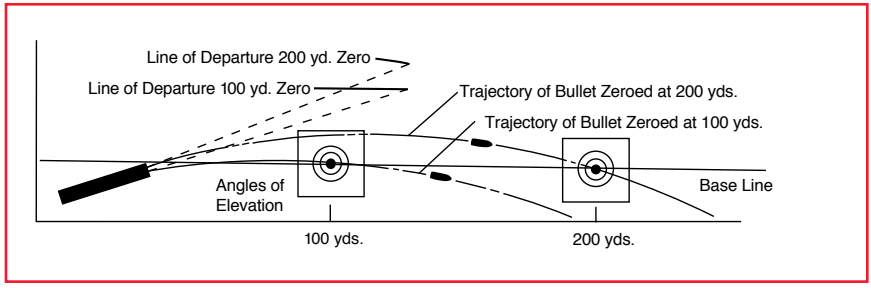


FIGURE B

The Ballistic Coefficient

Before discussing this topic in more detail, let's dispel some myths surrounding it. Whatever you may have heard before, these are the facts.

- There is no such thing as an absolute and invariable ballistic coefficient (B. C.)
- Ballistic coefficients are only one factor in bullet selection for different kinds of shooting.
- A ballistic coefficient can change with reference to (1) altitude, (2) temperature, (3) atmospheric pressure, and (4) relative humidity.
- Ballistic coefficients are measures of a bullet's relative efficiency.
- Ballistic coefficients are not measures of a bullet's "goodness."
- Higher B.C.s do not necessarily make a bullet "better."
- Lower B.C.s do not necessarily make a bullet "worse."

A ballistic coefficient is the measure of a bullet's relative ability to overcome air resistance. Each bullet can be assigned a numerical value expressing this efficiency. The basis of this value is a ratio comparing the performance characteristics of a particular bullet against the known trajectory characteristics of a standard projectile. The ratio compares the drag of a bullet (loss of velocity caused by air resistance encountered in flight) to the drag of the standard projectile. Expressed as a formula,

$$\text{B.C.} = \frac{\text{Drag of standard projectile}}{\text{Drag of test projectile}}$$

Observe that ballistic coefficients in this book are, with only one exception, less than unity [1.0], indicating that these test projectiles—bullets for small arms—encountered more resistance than the standard. The single exception in the entire line of Hornady bullets is our 50 caliber (.510" diameter) 750 grain A-MAX® Ultra High Coefficient. Its ballistic coefficient is 1.050.

The standard projectile on which most Hornady bullets were compared was the G1 Model, based on work begun in France and refined at the U. S. Army Ballistic Research Laboratories, Aberdeen Proving Ground, Maryland. Ballistic coefficients for most Hornady bullets were determined by computer calculations using data from test firing research performed in our 200 yard underground test range. New ELD-X® and ELD® Match bullets are measured with Doppler radar at extended distances.

Ballistic coefficient calculations combine both shape and sectional density factors. As a practical matter, most shooters understand that bullets with a pointed shape more easily retain their velocity than round nose or flat point bullets. This can be directly observed in the amount of drop bullets of the same weight but different shapes produce at the same target range. Expressed another way, round nose and pointed bullets will require different sight adjustments to attain the same zero over the same range. If more streamlined bullets maintain their velocity better, heavier streamlined bullets of the same shape will outperform lighter bullets at the same muzzle velocity.

The following examples quickly demonstrate the importance of shape to velocity retention and flat trajectory. We have chosen to compare in this example two bullets of identical caliber, weight, and sectional density fired at identical 3000 fps muzzle velocities. Shape is the only variable in this example; all other factors have been held constant. Observe the marked difference in bullet behavior over the ranges shown. The round nose bullet sheds its initial velocity faster than the spire point. Because energy is the product of mass x velocity squared, the round nose bullet's more rapid velocity loss produces an even faster loss of energy. Most dramatically, as the less efficient round nose shape loses its velocity, the effects of gravity show up in terms of greater bullet drop relative to the spire point bullet.

30 CAL. (.308" DIA.) 180 GRAIN SPIRE POINT

SECTIONAL DENSITY: 0.271 BALLISTIC COEFFICIENT: 0.425

RANGE (YARDS)	MUZZLE	50	100	200	300	400	500
VELOCITY (fps)	3000	2887	2777	2565	2362	2169	1985
ENERGY (ft.-lb.)	3597	3331	3082	2629	2230	1880	1574
100 YD. ZERO	-1.5"	-0.2"	0.0"	-3.0"	-11.3"	-25.9"	-47.8"

30 CAL. (.308" DIA.) 180 GRAIN ROUND NOSE

SECTIONAL DENSITY: 0.271 BALLISTIC COEFFICIENT: 0.241

RANGE (YARDS)	MUZZLE	50	100	200	300	400	500
VELOCITY (fps)	3000	2803	2614	2259	1933	1639	1385
ENERGY (ft.-lb.)	3597	3139	2731	2040	1493	1073	767
100 YD. ZERO	-1.5"	-0.2"	0.0"	-3.6"	-14.1"	-34.0"	-67.0"

Does this comparison argue entirely against using round nose bullets? By no means; over the 100 to 200 yard ranges typical of a great deal of hunting, the round nose holds its own. Moreover, many who hunt with them regard them as utterly reliable over their intended distances. Confidence counts more than a lower ballistic coefficient to these folk.

Correction Factors

Ballistic coefficients are calculated not only with reference to a standard projectile, but with reference to standard test conditions as well. All ballistic coefficients and ballistics tables in this book have been adjusted to standard conditions. Altitude=sea level. Temperature=59 degrees Fahrenheit. Atmospheric pressure=29.53" of Hg. Relative humidity=78%. These are standard conditions for the Aberdeen test site. What happens when the conditions are not standard? These four test examples will demonstrate changes in a calculated ballistic coefficient resulting from varying different test factors in turn.

TEST NO. 1: STANDARD CONDITIONS

CONDITIONS: Sea Level, Temperature = 59°F, Barometric Pressure 29.53", Relative Humidity 78%.

RANGE (YARDS)	MUZZLE	100	200	300	400	500
VELOCITY (fps)	2900	2627	2371	2129	1901	1690
TRAJECTORY–100 yd zero	-1.5"	0.0"	-3.6"	-13.3"	-30.8"	-57.9"

Results: Calculated ballistic coefficient = .338

TEST NO. 2: HIGHER TEMPERATURE

CONDITIONS: Sea Level, Temperature = 89°F, Barometric Pressure 29.53", Relative Humidity 78%.

RANGE (YARDS)	MUZZLE	100	200	300	400	500
VELOCITY (fps)	2900	2640	2395	2162	1943	1739
TRAJECTORY–100 yd zero	-1.5"	0.0"	-3.5"	-13.1"	-30.1"	-56.4"

Results: Due to less dense air (warmer temperatures) the calculated B.C. is .355.

TEST NO. 3: HIGHER BAROMETRIC PRESSURE

CONDITIONS: Sea Level, Temperature = 59°F, Barometric Pressure 31.00", Relative Humidity 78%.

RANGE (YARDS)	MUZZLE	100	200	300	400	500
VELOCITY (fps)	2900	2614	2346	2094	1858	1641
TRAJECTORY–100 yd zero	-1.5"	0.0"	-3.6"	-13.6"	-31.5"	-59.5"

Results: Due to denser air (higher barometric pressure) the calculated B.C. is .322.

TEST NO. 4: HIGHER ALTITUDE

CONDITIONS: 10,000', Temperature = 29°F, Barometric Pressure 21.00", Relative Humidity 78%.

RANGE (YARDS)	MUZZLE	100	200	300	400	500
VELOCITY (fps)	2900	2693	2495	2306	2124	1952
TRAJECTORY–100 yd zero	-1.5"	0.0"	-3.3"	-12.2"	-27.6"	-50.8"

Results: Due to less dense air (higher altitude) the calculated B.C. is .448.

The .338 calculated ballistic coefficient has ranged from .322 to .448 as conditions have varied. Common sense suggests that a bullet might perform better in higher temperatures (less dense air), at lower barometric pressures (less air pressure), and at higher altitudes (much lighter air). When there is less air to resist a bullet's flight, it will become more efficient—and conversely. How can you account for significantly non-standard conditions in preparing, say, for a major hunt? Assuming

that you know the temperature, barometric pressure, and ballistic coefficient of the bullet you will be shooting in non-standard conditions, you can calculate the apparent ballistic coefficient of the bullet and otherwise find the trajectory for your non-standard condition site.

The drag on a bullet is largely produced by the density of the air through which it travels. The first conversion factor to correct for changes in air density is the ratio of:

$$\frac{\text{Standard Pressure}}{\text{Shooting Site Pressure}}$$

which is used as a multiplier in the correction calculation.The correction factor for temperature is another ratio, but with a twist:

$$\frac{\text{Shooting Site Temperature} + 459.4}{\text{Standard Temperature} + 459.4}$$

The 459.4° addition to the site temperature and standard temperature is to place both in the absolute Rankine Scale. (Absolute zero is –459.4° Fahrenheit or 0° Rankine.) The resulting ratio is also a multiplier in the correction process.

Corrections can be made as well for relative humidity, but the correction process is tedious and the precision gained is negligible. At any rate, while we've seen barometers in camp and thermometers on the trail, we can't recall seeing hunters lugging hygrometers. Besides, we have already captured the primary factors requiring adjustment.

Assume that we encounter the following conditions on a hunt. The temperature is a chilly 29° Fahrenheit, the barometric pressure 21.00"Hg., and the relative humidity 85%. Think about this a minute and it seems we're on a mountain hunt in some very raw conditions. Relative humidity is very close to the standard 78%, so we'll not worry about adjustments there. But the temperature and atmospheric pressure are far from standard. What effect will they have on the ammunition we've loaded with a standard condition ballistic coefficient of .338?

$$\text{The temperature correction factor} = \frac{29 + 459.4}{59 + 459.4} = .942$$

$$\text{The barometric pressure correction factor} = \frac{29.53}{21.00} = 1.406$$

The Apparent Ballistic Coefficient = Temperature correction factor x Barometric pressure correction factor x Present ballistic coefficient = .942 x 1.406 x .338 = .448.

As a practical matter, the lower temperature alone would reduce the apparent ballistic coefficient, but in combination with the low barometric pressure correction the over all result will be flatter trajectories for the ammunition brought on this hunt.

Shooters who go from low altitudes to high altitudes or vice versa should bring along enough ammunition to sight in their firearms at the new location. The flat trajectories obtained with reloads in Fort Collins, Colorado may not be so flat on a hunt in the woods of Maine. Aiming higher over common ranges is the answer here. Conversely, taking tested loads from Mobile, Alabama to the mountains of British Columbia may require aiming lower than one might have back home.

For ranges up to and including 300 yards, ballistic coefficient corrections may not, practically speaking, be required. Steadiness of the shooting position and the aiming skills of the shooter may account for more difference between planned and actual trajectory than correction factors might require. If actual shooting conditions are going to be dramatically different from those at home, it's sound advice to take enough ammunition to re-zero your firearm at the shooting site.

An Aside on Energy

Over the years many writers have spent considerable time pursuing the concept of bullet performance. In match competition or target shooting, performance standards are simple and direct. Bullets for target shooting should be highly efficient (streamlined, possessing a high ballistic coefficient) in order to shoot as flat as possible and buck the effects of wind drift. Efficiency counts for naught, however, if these bullets are not accurate as well—made so carefully and precisely that they will routinely yield sub-minute-of-angle performance on targets.

Performance for hunting bullets, however, is a far more complex matter. Some have contended that you must expect to find your splendidly mushroomed bullet under the game animal's hide opposite the entry hole. Shame on you if it doesn't weigh used 95% of what it weighed new. Others have said it's fine if the bullet enters and exits its target as long as it does deadly damage on its way. Pragmatists are pleased with bullets that strike where aimed and drop and kill the game immediately. They are hunters, they argue, not forensic pathologists.

Is performance a matter of opinion only? Of conjecture? A subject like religion and politics on which there will always be disagreement?

The experienced hunter knows that he will never be presented only with perfect shots under ideal conditions with his equipment always in superb shape and his rifle zeroed at the absolutely correct range. That's why the experienced hunter loves his sport so much. His skill is involved, his judgment is required, his intelligence is always called for—and he will face real challenges in the field. His need is to prepare for those challenges, both in his selection of equipment and his preparation for the field.Any hunter's odds are greatly improved when he chooses the right gun, the right bullet, and the right load for the task at hand. As much as a shooter needs to understand such variables as trajectories, the effects of wind drift, and bullet velocities over anticipated hunting ranges, so, too, must he give thought to the energy that the bullet will generate upon impact.

A bullet's kinetic energy, measured in foot-pounds, is a proxy for what's generally termed "stopping power." The higher a bullet's energy at the point of impact, it has been assumed, the greater its "stopping power." There are some caveats here. A bullet completely releases its energy in the target only if it remains in the game animal. If it has more than adequate energy it may do its job and exit. This is certainly no cause for alarm. If it does not have sufficient energy to bring about a kill, whether through improper bullet choice or shots at excessive ranges, that is a cause for alarm. Responsible hunters make sure they can get the job done with the tools they have chosen. Taking shots at ranges where a bullet cannot reliably hit and kill a game animal is quite irresponsible behavior.

Hornady bullets for varminting are designed to fly fast and to release their high kinetic energy instantaneously and explosively. Should they be too powerful for a particular varmint and pass on through, the wound channel and exit hole will attest to their destructive power.

Hornady bullets for game hunting are designed for reliable, controlled expansion in all hunting bullet designs. No hunting bullet can be as effective as possible if it does not expand to a larger diameter than its caliber dimension. Expansion slows the bullet and allows it to shed kinetic energy as it does. GMX® bullets are expanding monolithic hunting bullets. Other Hornady bullets for hunting are made with the InterLock® or InterBond® features that bind jacket and core. This assures a heavier mass to penetrate the game animal and propagate shock waves within it. The higher the terminal velocity of the bullet, the higher its terminal

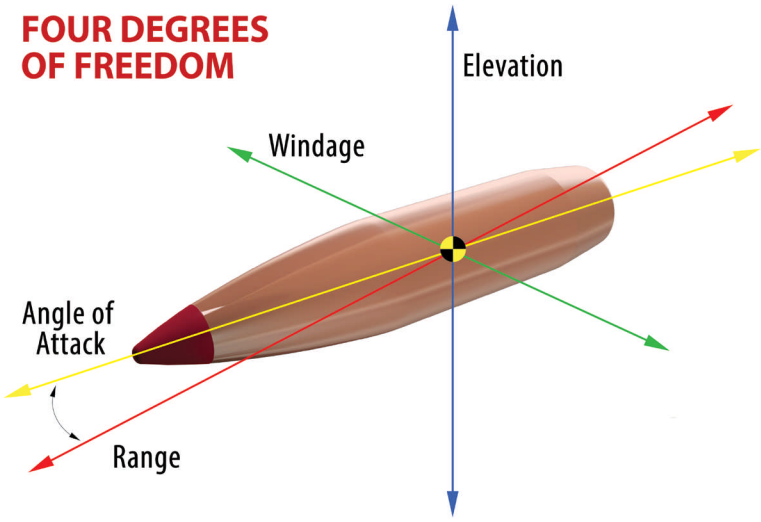
energy. Expansion and penetration insure energy release which in turn produces lethal results—and more certain kills.

This is not, nor is it intended to be, the final word on hunting bullet performance. Rather, we hope to stimulate your thinking about the subject and how important terminal bullet energies are to performance. Terminal energies and superior bullet expansion design permit the complete release of a bullet's remaining energy within the game animal. Hornady bullets are backed by over 60 years of expertise on the subject.

Online Ballistics Calculator

Hornady offers two different ballistics calculators on their website that can assist in determining the kind of performance to expect from a specific load. These web-based calculators allow you apply certain conditions like altitude, temperature, humidity, wind speed and shooting angle to determine the amount of drop to expect. The patent pending 4DOF™ Ballistic Calculator offers even more precision by applying "4 degrees of freedom" when calculating a projectile's flight.

The Hornady® 4DOF™ (Four Degrees Of Freedom) Ballistic Calculator determines trajectory solutions based on projectile Drag Coefficient (not Ballistic Coefficient), combined with exact physical modeling of the projectile and its mass and aerodynamic properties. Additionally, it is the first publicly available calculator that accurately determines the correct vertical shift a bullet experiences as it encounters a crosswind; referred to as Aerodynamic Jump (AJ).



WHY THE NAME, "4DOF" (4 DEGREES OF FREEDOM), AND WHAT IS A "DEGREE OF FREEDOM?"

Quite simply, "Degree or Degrees Of Freedom" is a physics term for actions or responses of an object that are independent of each other. Up to this point, all publicly offered small arms trajectory programs have treated a projectile as an inanimate lump using only three degrees of freedom to calculate trajectory (windage, elevation and range); the projectile's movement in relation to its line of flight isn't accounted for.

The trajectory solution provided by the Hornady 4DOF Calculator is calculated by incorporating the projectile's movement in the standard 3 degrees as well as its movement about its center of gravity and subsequent angle relative to its line of flight (angle of attack); aka the 4th Degree Of Freedom. A tremendous amount of the software as well as projectile properties goes into the calculation of this simple sounding angle of attack.

WHY DON'T WE USE A BALLISTIC COEFFICIENT (BC) FOR THIS CALCULATOR?

The question is probably best answered with a question: why calculate a trajectory using a mathematical comparison of your bullet to a "Standard Projectile" (oversimplification of BC) when you can use an exact model of the projectile in the trajectory calculation (Drag Coefficient)?

Using Doppler radar, Hornady ballisticians have calculated the exact drag versus velocity curve for each projectile in the 4DOF bullet database. Ballistic Coefficient can change as velocity changes. A drag curve doesn't change– the curve is specific to each projectile and is directly related to its trajectory.

The Hornady 4DOF Calculator accurately calculates the mass properties, aerodynamic properties and the responses of the projectile as it flies downrange as well as the movements of the projectile due to these responses, such as spin drift, accurate Gyroscopic Stability (Sg) and Aerodynamic Jump (AJ). There is no Ballistic Coefficient (BC) needed or used in 4DOF.

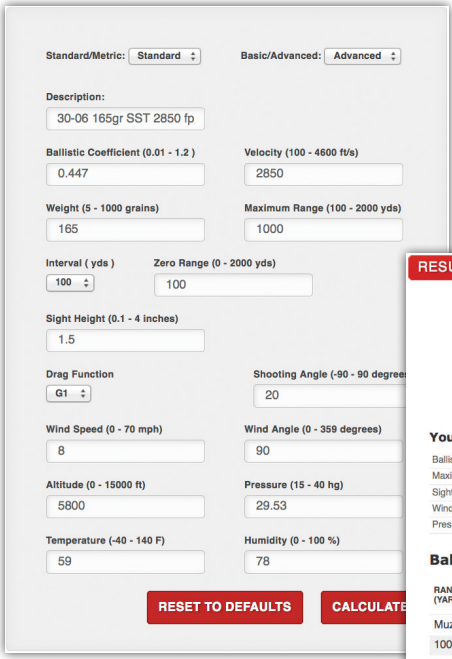
WHICH CALCULATOR SHOULD I USE?

The Hornady Standard Ballistics Calculator uses BCs (G1 or G7 ballistic coefficients) to calculate trajectory and is ideal for traditional hunting

and varmint bullets at close to moderate distance. For more precise long range calculations using select low-drag precision bullets, the Hornady 4DOF calculator will give you more accurate solutions.

The use of drag coefficients, projectile dynamics, aerodynamic jump and spin drift enable the Hornady® 4DOF™ Ballistic Calculator to accurately measure trajectories, even at extreme ranges. It is ideal for both long range and moderate distances and is available for the low-drag precision bullets listed in the drop down menu of the calculator. For calculating trajectories of traditional hunting and varmint bullets using BCs (ballistic coefficients), the Standard Ballistics Calculator is more applicable.

HORNADY.COM/BALLISTICS



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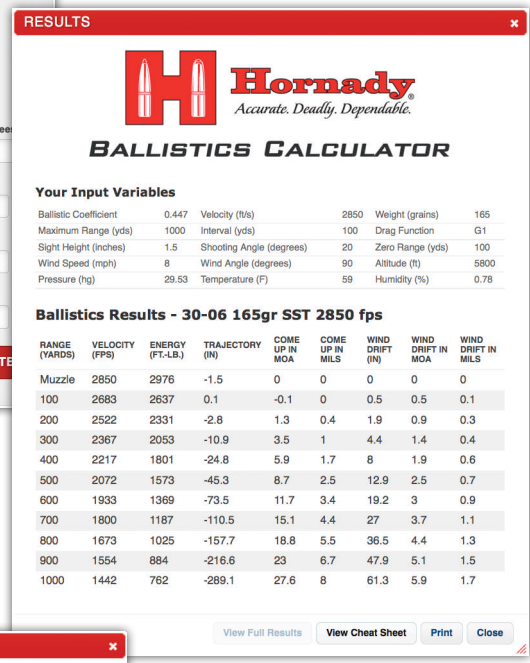
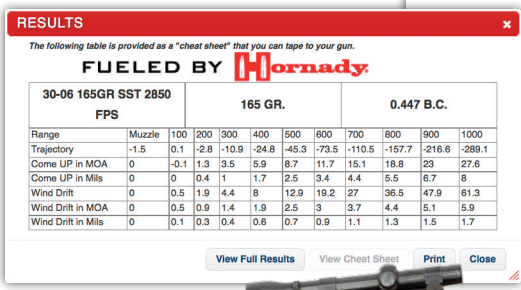
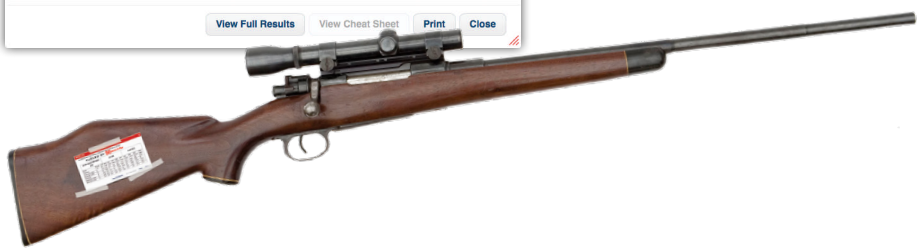
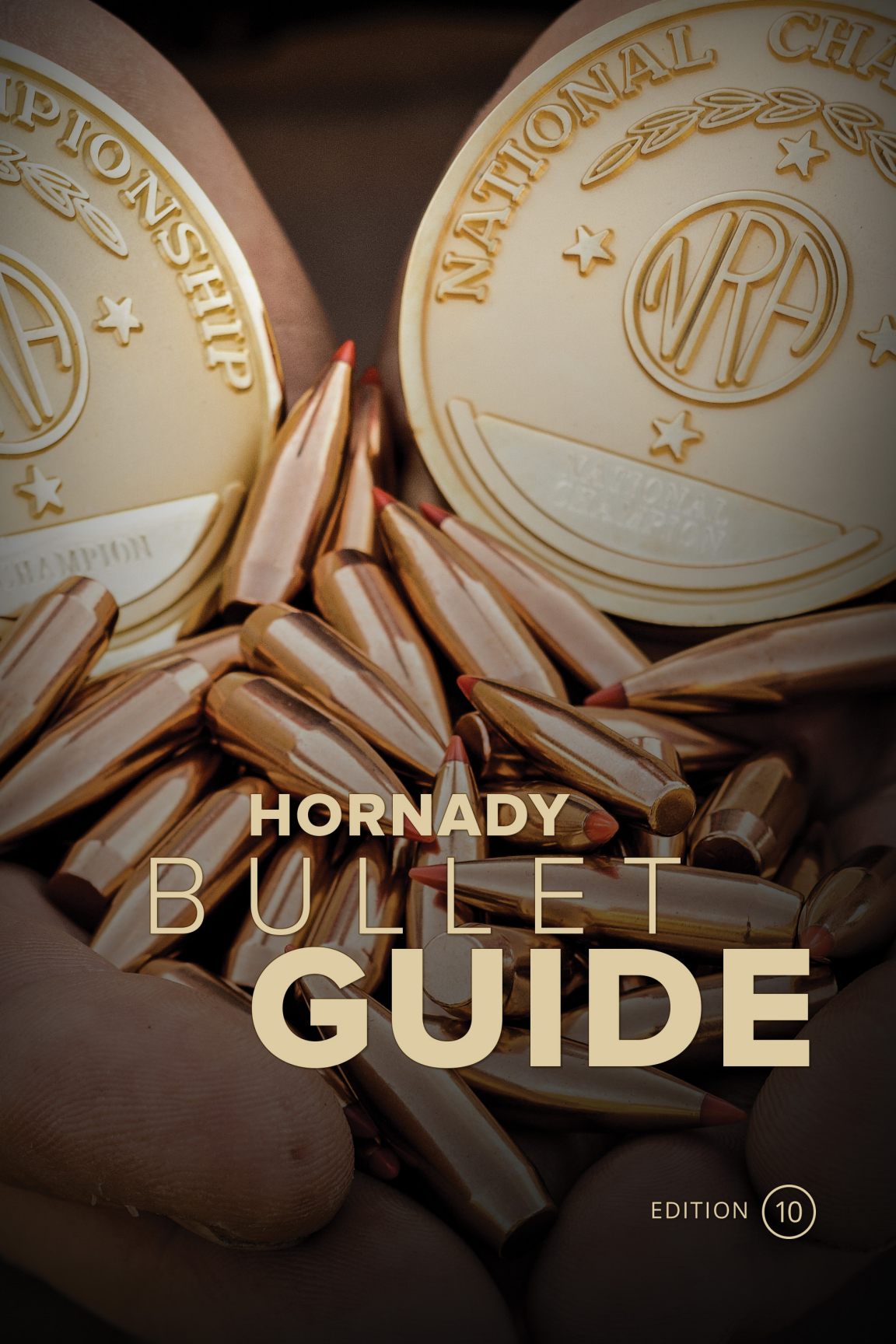


Once your variables are entered, an easy-to-read reference table is available to view and print.



You can also print a "cheat sheet" to tape to your gun or reference in the field.





HORNADY
BULLET
GUIDE

EDITION 10

Shooting Applications Legend

Varmint/Small Game
<50 lbs.

Medium Game
50-300 lbs.

Large Game
300-1500 lbs.

Dangerous Game

Target/Match

Personal Defense

Legend — Abbreviations Used

BT . . . . . Boat Tail
BTHP . . . . . Boat Tail, Hollow Point
C/T. . . . . Combat Target
DGS®. . . . . Dangerous Game Solid
DGX® . . . . Dangerous Game eXpanding
ELD® . . . . . Extremely Low Drag
ELD-X®. . Extremely Low Drag eXpanding
FMJ . . . . . Full Metal Jacket
FP . . . . . Flat Point
FTX® . . . . . Flex Tip® eXpanding
GMX® . . . . . Copper Alloy eXpanding
HAP® . . . . . Hornady Action Pistol®
HBWC . . . . . Hollow Base Wadcutter
HP . . . . . Hollow Point
IB. . . . . . InterBond®
JFP . . . . . Jacketed Flat Point
JHP. . . . . Jacketed Hollow Point
L-C/T . . . . . Lead Combat Target
LRN . . . . . Lead Round Nose
NTX®. . . . . Non-Traditional eXpanding®
RN . . . . . Round Nose
SJ. . . . . Short Jacket
SP . . . . . Spire Point
SST® . . . . . Super Shock Tip™
SP-RP . . . . . Spire Point-Recoil Proof
SP, SSP . . Spire Point, Single Shot (Pistol)
SWC . . . . . Semi-Wadcutter
SX . . . . . Super Explosive
W/C . . . . . With Cannelure
XTP®. . . eXtreme Terminal Performance

Long Range Ballistic Coeffecients

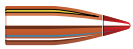
Traditionally, the industry standard for measuring BCs has been at 200 yards. A limited number of bullets are published with 400 to 600 yard BCs. Our new ELD-X® and ELD® Match bullets are published with 800 yard BCs measured with Doppler radar. It is important to note that as you calculate BCs at a further distance, the BC will go down slightly in value.

Many of our ELD-X® and ELD® Match offerings were developed just in time for this 10th Edition publication. Our ballisticians continue to work on the data for ELD-X® and ELD® Match bullets, as well as our BTHP Match™ bullets (currently published with 200 yard BCs) so we can publish BCs measured at varying distances on our website (Hornady.com/BC).

The data on our website includes 200 yard BCs which help with bullet to bullet comparisons, as well as 500, 600, even 1,000+ yards which offer more value for the long distance shooter. We will continually build our library of data and hope you find it useful in planning your shooting experience.

Rifle Bullets

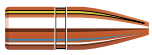
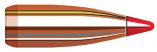
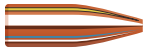
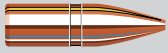
17 CALIBER *(.172")*		Shooting Applications	Muzzle Velocity Range (fps)
#21710 V-MAX®	.172" 20 gr. SD: .097 G1 BC: .185		2300-4400
#1710 HP	.172" 25 gr. SD: .121 G1 BC: .187		2300-4200
#17105 V-MAX®	.172" 25 gr. SD: .121 G1 BC: .230		2300-4200

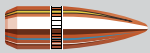
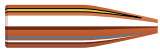
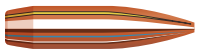
20 CALIBER *(.204")*		Shooting Applications	Muzzle Velocity Range (fps)
#22000 NTX®	.204" 24 gr. SD: .082 G1 BC: .170		2000-4400
 #22004/22406 V-MAX®	.204" 32 gr. SD: .110 G1 BC: .210		2000-4200
#22006/22606 V-MAX®	.204" 40 gr. SD: .137 G1 BC: .275		2000-4200
#22008 SP	.204" 45 gr. SD: .155 G1 BC: .245		2000-4000

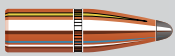
22 CALIBER *(.222")*		Shooting Applications	Muzzle Velocity Range (fps)
#2210 JET *(Discontinued)*	.222" 40 gr. SD: .116 G1 BC: .104		1500-2900

22 CALIBER *(.223")*		Shooting Applications	Muzzle Velocity Range (fps)
#2220 HORNET *(Discontinued)*	.223" 45 gr. SD: .129 G1 BC: .202		2100-3400

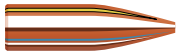
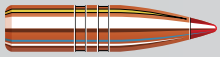
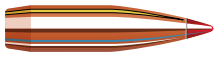
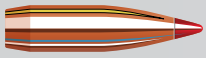
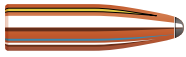
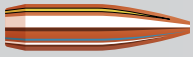
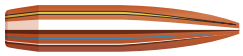
22 CALIBER *(.224")*		Shooting Applications	Muzzle Velocity Range (fps)
#22240 NTX®	.224" 35 gr. SD: .100 G1 BC: .177		2000-4500
#22252 V-MAX®	.224" 35 gr. SD: .100 G1 BC: .109		1500-4400
#22241/22416 V-MAX®	.224" 40 gr. SD: .114 G1 BC: .200		2000-4400
#2229 HP BEE	.224" 45 gr. SD: .128 G1 BC: .108		1500-3100

22 CALIBER *(.224")*		Shooting Applications	Muzzle Velocity Range (fps)
#2230 HORNET	.224" 45 gr. SD: .128 G1 BC: .202		2100-3400
#22261/22616 V-MAX®	.224" 50 gr. SD: .142 G1 BC: .242		2000-4200
#2240 SP SX™	.224" 50 gr. SD: .142 G1 BC: .214		2000-3400
 #22403 GMX®	.224" 50 gr. SD: .142 G1 BC: .215		2400-4000
#2245 SP	.224" 50 gr. SD: .142 G1 BC: .214		2000-4000
#2249 BTHP Match™	.224" 52 gr. SD: .148 G1 BC: .229		2000-4000
#22491 ELD® Match	.224" 52 gr. SD: .148 G1 BC: .247		2000-4200
 #22492 A-MAX® *(Discontinued)*	.224" 52 gr. SD: .148 G1 BC: .247		2000-4200
#22265 V-MAX®	.224" 53 gr. SD: .151 G1 BC: .290		2000-4000
 #2250 HP Match™	.224" 53 gr. SD: .151 G1 BC: .218		2000-4000
#22271/22716 V-MAX®	.224" 55 gr. SD: .157 G1 BC: .255		2000-4000
#22272 V-MAX® W/C	.224" 55 gr. SD: .157 G1 BC: .255		2400-4000
 #22273 GMX®	.224" 55 gr. SD: .157 G1 BC: .245		2000-3500
#2260 SP SX™	.224" 55 gr. SD: .157 G1 BC: .235		1800-3400
#2265 SP	.224" 55 gr. SD: .157 G1 BC: .235		1800-3900
#2266 SP W/C	.224" 55 gr. SD: .157 G1 BC: .235		1800-3900

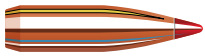
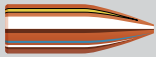
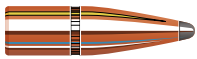
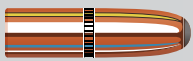
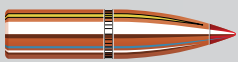
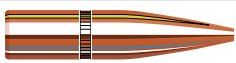
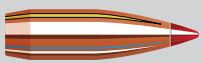
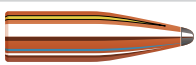
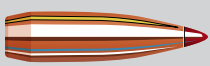
22 CALIBER *(.224")*		Shooting Applications	Muzzle Velocity Range (fps)
 #2267/2267B FMJ-BT W/C	.224" 55 gr. SD: .157 G1 BC: .243		1800-3900
#22281 V-MAX®	.224" 60 gr. SD: .171 G1 BC: .265		2000-4000
#2270 SP	.224" 60 gr. SD: .171 G1 BC: .264		1800-3800
 #2275 HP	.224" 60 gr. SD: .171 G1 BC: .271		1800-3800
#2278/22785 BTHP Match™	.224" 68 gr. SD: .194 G1 BC: .355		1600-3700
#2281 GMX®	.224" 70 gr. SD: .199 G1 BC: .350		2400-3600
*#22774 ELD® Match	.224" 73 gr. SD: .208 G1 BC: .360 G7 BC: .190		1600-3700
 ^#2279/22796 BTHP Match™	.224" 75 gr. SD: .214 G1 BC: .395		1600-3600
*#22791 ELD® Match	.224" 75 gr. SD: .214 G1 BC: .430 G7 BC: .221		1600-3700
#22792 A-MAX® *(Discontinued)*	.224" 75 gr. SD: .214 G1 BC: .435		1600-3700
*#22831 ELD® Match	.224" 80 gr. SD: .228 G1 BC: .457 G7 BC: .235		1600-3700
#22832 A-MAX® *(Discontinued)*	.224" 80 gr. SD: .228 G1 BC: .453		1600-3600

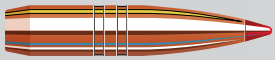
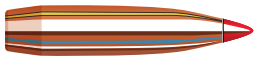
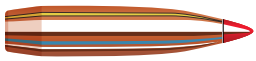
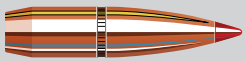
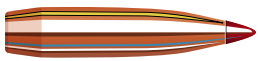
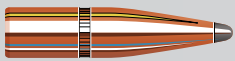
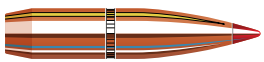
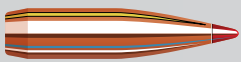
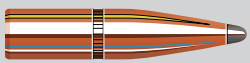
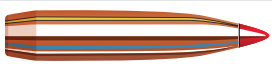
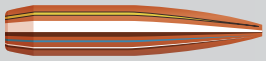
22 CALIBER *(.227")*		Shooting Applications	Muzzle Velocity Range (fps)
 #2280 SP W/C *(Discontinued)*	.227" 70 gr. SD: .194 G1 BC: .296		2500-3500

6MM *(.243")*		Shooting Applications	Muzzle Velocity Range (fps)
#22411 V-MAX®	.243" 58 gr. SD: .140 G1 BC: .250		2000-4100

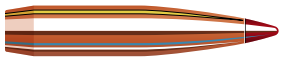
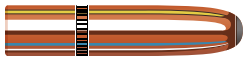
6MM *(.243")*		Shooting Applications	Muzzle Velocity Range (fps)
#22415 V-MAX®	.243" 65 gr. SD: .157 G1 BC: .280		2000-4000
#22420 V-MAX®	.243" 75 gr. SD: .181 G1 BC: .330		2000-3700
 #2420 HP *(Discontinued)*	.243" 75 gr. SD: .181 G1 BC: .294		2000-3700
 #24370 GMX®	.243" 80 gr. SD: .194 G1 BC: .300		2000-3700
 #24539 InterBond®	.243" 85 gr. SD: .206 G1 BC: .395		2000-3600
 #22440 V-MAX®	.243" 87 gr. SD: .210 G1 BC: .400		2000-3600
 #2440 SP	.243" 87 gr. SD: .210 G1 BC: .327		2000-3600
 #2442 BTHP	.243" 87 gr. SD: .210 G1 BC: .376		2000-3600
#24532 SST®	.243" 95 gr. SD: .230 G1 BC: .355		2000-3400
#2450 InterLock® SP *(Discontinued)*	.243" 100 gr. SD: .242 G1 BC: .381		2500-3400
#2453 InterLock® BTSP	.243" 100 gr. SD: .242 G1 BC: .405		2500-3400
#24562 A-MAX® *(Discontinued)*	.243" 105 gr. SD: .254 G1 BC: .500		2500-3500
 ^#2458/24585 BTHP Match™	.243" 105 gr. SD: .254 G1 BC: .530 G7 BC: .253		2500-3500
*#24561 ELD® Match	.243" 108 gr. SD: .261 G1 BC: .525 G7 BC: .264		2500-3400

25 CALIBER *(.257")*		Shooting Applications	Muzzle Velocity Range (fps)
#2510 FP	.257" 60 gr. SD: .130 G1 BC: .101		2000-3800

25 CALIBER *(.257")*		Shooting Applications	Muzzle Velocity Range (fps)
 #22520 V-MAX®	.257" 75 gr. SD: .162 G1 BC: .290		1600-4000
 #2520 HP *(Discontinued)*	.257" 75 gr. SD: .162 G1 BC: .257		2500-4000
#2530 SP *(Discontinued)*	.257" 87 gr. SD: .188 G1 BC: .290		2500-3800
#25410 GMX®	.257" 90 gr. SD: .195 G1 BC: .290		2000-3800
 #2540 InterLock® SP *(Discontinued)*	.257" 100 gr. SD: .216 G1 BC: .325		2000-3600
#25419 InterBond®	.257" 110 gr. SD: .238 G1 BC: .390		2000-3300
#2542 FTX®	.257" 110 gr. SD: .238 G1 BC: .340		2000-3300
 #2550 InterLock® RN	.257" 117 gr. SD: .253 G1 BC: .243		2000-3300
#2552 InterLock® BTSP	.257" 117 gr. SD: .253 G1 BC: .391		2000-3300
 #25522 SST®	.257" 117 gr. SD: .253 G1 BC: .390		2000-3300
 #2560 InterLock® HP *(Discontinued)*	.257" 120 gr. SD: .260 G1 BC: .394		2400-3200
6.5MM *(.264")*		Shooting Applications	Muzzle Velocity Range (fps)
 #22601 V-MAX®	.264" 95 gr. SD: .195 G1 BC: .365		1800-3800
 #2610 SP *(Discontinued)*	.264" 100 gr. SD: .205 G1 BC: .358		1800-3600
 *#26100 ELD® Match	.264" 100 gr. SD: .205 G1 BC: .371 G7 BC: .189		1800-3800
#26101 A-MAX® *(Discontinued)*	.264" 100 gr. SD: .205 G1 BC: .390		1800-3800

6.5MM *(.264")*		Shooting Applications	Muzzle Velocity Range (fps)
 #26110 GMX®	.264" 120 gr. SD: .246 G1 BC: .450		1800-3600
 #26172 A-MAX® *(Discontinued)*	.264" 120 gr. SD: .246 G1 BC: .465		1600-3300
*#26175 ELD® Match	.264" 120 gr. SD: .246 G1 BC: .458 G7 BC: .233		1600-3300
 #26171 A-MAX® *(Discontinued)*	.264" 123 gr. SD: .252 G1 BC: .510		1600-3300
 #26173 SST®	.264" 123 gr. SD: .252 G1 BC: .510		1600-3300
 *#26176 ELD® Match	.264" 123 gr. SD: .252 G1 BC: .461 G7 BC: .233		1600-3300
 #2620 InterLock® SP	.264" 129 gr. SD: .264 G1 BC: .445		1600-3300
 #26202 SST®	.264" 129 gr. SD: .264 G1 BC: .485		1600-3300
 #26209 InterBond®	.264" 129 gr. SD: .264 G1 BC: .485		1500-3300
*#26177 ELD® Match	.264" 130 gr. SD: .266 G1 BC: .549 G7 BC: .277		1600-3300
 #2630 InterLock® SP	.264" 140 gr. SD: .287 G1 BC: .465		1500-3200
#26302 SST®	.264" 140 gr. SD: .287 G1 BC: .520		1500-3200
*#26331 ELD® Match	.264" 140 gr. SD: .287 G1 BC: .620 G7 BC: .312		2000-3200
 #26332 A-MAX® *(Discontinued)*	.264" 140 gr. SD: .287 G1 BC: .585		2100-3200
 ^#26335/263355 BTHP Match™	.264" 140 gr. SD: .287 G1 BC: .580		2100-3200

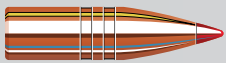
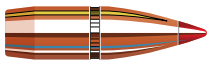
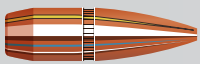
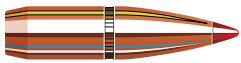
6.5MM *(.264")*

		Shooting Applications	Muzzle Velocity Range (fps)
 *#2635 ELD-X®	.264" 143 gr. SD: .293 G1 BC: .625 G7 BC: .315		2000-3200
*#26333 ELD® Match	.264" 147 gr. SD: .000 G1 BC: .653 G7 BC: .329		2000-3200
 #2640 InterLock® RN	.264" 160 gr. SD: .328 G1 BC: .283		2000-2900

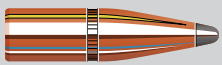
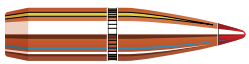
6.5MM CARCANO *(.267")*

		Shooting Applications	Muzzle Velocity Range (fps)
#2645 RN	.267" 160 gr. SD: .321 G1 BC: .275		1900-2200

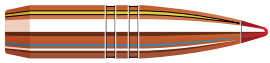
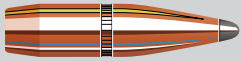
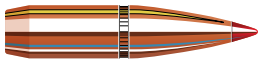
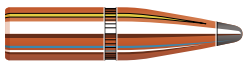
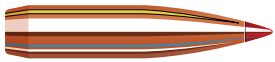
6.8MM *(.277")*

		Shooting Applications	Muzzle Velocity Range (fps)
 #27190 GMX®	.277" 100 gr. SD: .186 G1 BC: .274		2400-3400
 #22721 V-MAX® W/C	.277" 110 gr. SD: .205 G1 BC: .370		2300-3500
 #27200 BTHP W/C	.277" 110 gr. SD: .205 G1 BC: .360		2300-3500
 #2716 SST®	.277" 120 gr. SD: .223 G1 BC: .400		2400-3400

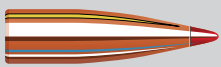
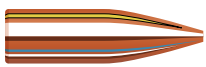
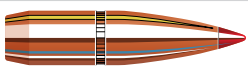
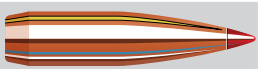
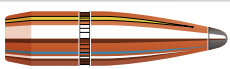
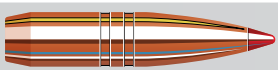
270 CALIBER *(.277")*

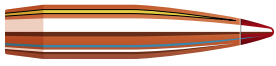
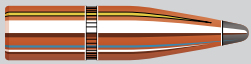
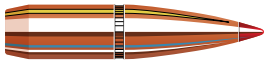
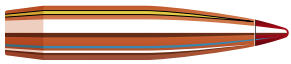
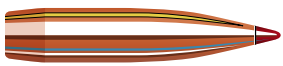
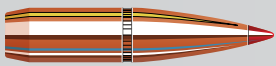
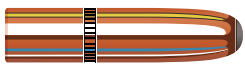
		Shooting Applications	Muzzle Velocity Range (fps)
#2710 SP *(Discontinued)*	.277" 100 gr. SD: .186 G1 BC: .307		3000-3800
#2720 HP *(Discontinued)*	.277" 110 gr. SD: .205 G1 BC: .352		2900-3500
 #2730 InterLock® SP	.277" 130 gr. SD: .242 G1 BC: .409		2800-3400
 #27302 SST®	.277" 130 gr. SD: .242 G1 BC: .460		2800-3400
#27309 InterBond®	.277" 130 gr. SD: .242 G1 BC: .460		2800-3400

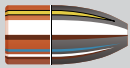
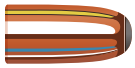
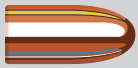
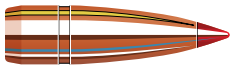
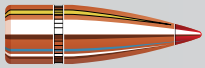
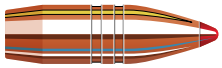
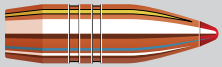
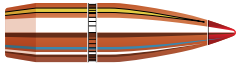
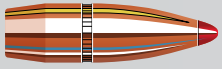
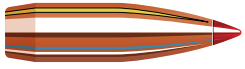
270 CALIBER *(.277")*

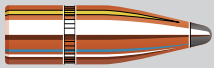
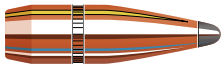
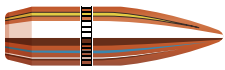
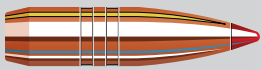
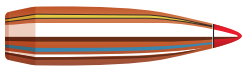
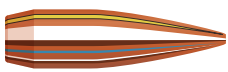
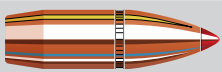
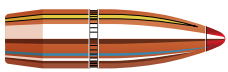
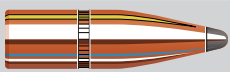
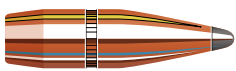
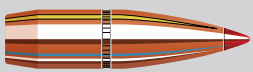
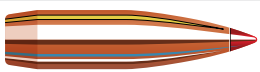
		Shooting Applications	Muzzle Velocity Range (fps)
 #27370 GMX®	.277" 130 gr. SD: .242 G1 BC: .460		2400-3600
 #2735 InterLock® BTSP	.277" 140 gr. SD: .261 G1 BC: .486		2700-3300
 #27352 SST®	.277" 140 gr. SD: .261 G1 BC: .495		2700-3300
*#27356 ELD-X®	.277" 145 gr. SD: .284 G1 BC: .485 G7 BC: .244		2000-3200
 #2740 InterLock® SP	.277" 150 gr. SD: .279 G1 BC: .462		2600-3200
#27402 SST®	.277" 150 gr. SD: .279 G1 BC: .525		2600-3200
 #27409 InterBond®	.277" 150 gr. SD: .279 G1 BC: .525		2600-3200

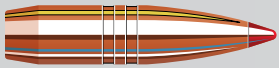
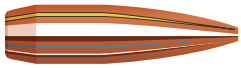
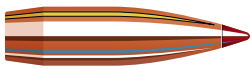
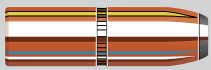
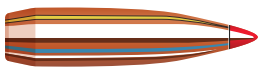
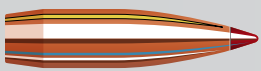
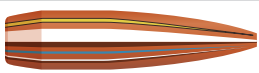
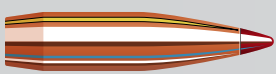
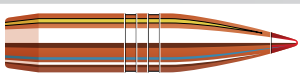
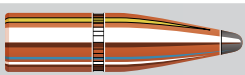
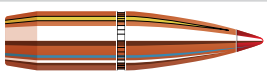
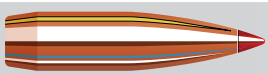
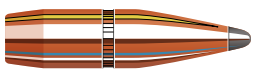
7MM *(.284")*

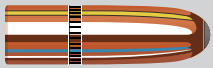
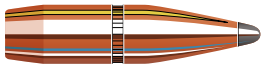
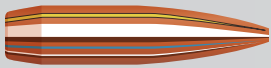
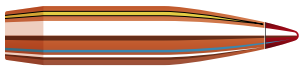
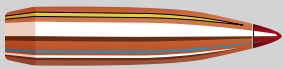
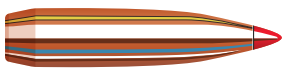
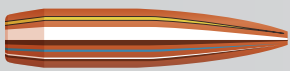
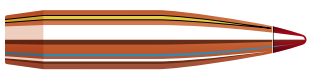
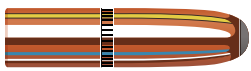
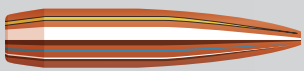
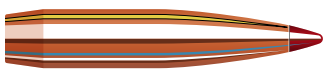
		Shooting Applications	Muzzle Velocity Range (fps)
 #22810 V-MAX®	.284" 120 gr. SD: .213 G1 BC: .365		2600-3600
 #2815 HP *(Discontinued)*	.284" 120 gr. SD: .213 G1 BC: .334		2600-3600
#2820 InterLock® SP	.284" 139 gr. SD: .246 G1 BC: .392		2300-3500
 #28202 SST®	.284" 139 gr. SD: .246 G1 BC: .486		2300-3500
 #28209 InterBond®	.284" 139 gr. SD: .246 G1 BC: .486		2300-3500
 #2825 InterLock® BTSP	.284" 139 gr. SD: .246 G1 BC: .453		2300-3500
 #28270 GMX®	.284" 139 gr. SD: .246 G1 BC: .486		2300-3600

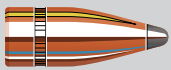
7MM *(.284")*		Shooting Applications	Muzzle Velocity Range (fps)
 *#2826 ELD-X®	.284" 150 gr. SD: .266 G1 BC: .555 G7 BC: .280		2000-3200
 #2830 InterLock® SP	.284" 154 gr. SD: .273 G1 BC: .433		2300-3300
 #28302 SST®	.284" 154 gr. SD: .273 G1 BC: .525		2300-3300
#28309 InterBond®	.284" 154 gr. SD: .273 G1 BC: .525		2300-3300
 *#2840 ELD-X®	.284" 162 gr. SD: .287 G1 BC: .630 G7 BC: .315		2000-3200
#28402 A-MAX® *(Discontinued)*	.284" 162 gr. SD: .287 G1 BC: .625		2300-3300
 *#28403 ELD® Match	.284" 162 gr. SD: .287 G1 BC: .652 G7 BC: .329		2300-3300
^#28405 BTHP Match™	.284" 162 gr. SD: .287 G1 BC: .610		2300-3300
#2845 InterLock® BTSP	.284" 162 gr. SD: .287 G1 BC: .514		2300-3300
 #28452 SST®	.284" 162 gr. SD: .287 G1 BC: .550		2300-3300
*#2841 ELD-X®	.284" 175 gr. SD: .310 G1 BC: .675 G7 BC: .340		2000-3100
#2850 InterLock® SP	.284" 175 gr. SD: .310 G1 BC: .462		2300-3100
 #2855 InterLock® RN *(Discontinued)*	.284" 175 gr. SD: .310 G1 BC: .285		2300-3100
*#28503 ELD® Match	.284" 180 gr. SD: .000 G1 BC: .712 G7 BC: .357		2000-3200

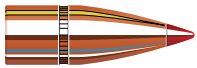
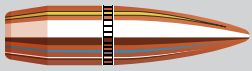
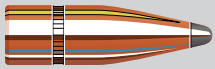
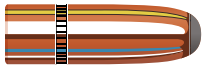
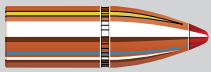
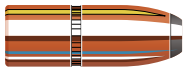
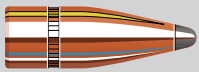
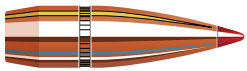
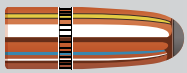
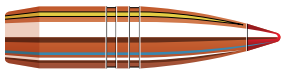
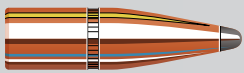
30 CALIBER *(.308")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3005 Short Jacket	.308" 100 gr. SD: .151 G1 BC: .152		1800-3100
#23010 V-MAX®	.308" 110 gr. SD: .166 G1 BC: .290		1800-3900
#3010 SP	.308" 110 gr. SD: .166 G1 BC: .256		1800-3900
 #3015 RN	.308" 110 gr. SD: .166 G1 BC: .150		1800-3100
 #3017/3017B FMJ-RN	.308" 110 gr. SD: .166 G1 BC: .178		1800-3100
 #30191 GMX®	.308" 110 gr. SD: .166 G1 BC: .305		2000-3200
 #3019 SST®	.308" 125 gr. SD: .188 G1 BC: .305		2400-3200
#30192 HP	.308" 125 gr. SD: .188 G1 BC: .320		1800-3000
#3020 SP	.308" 130 gr. SD: .196 G1 BC: .295		2500-3700
 #30310 MonoFlex® (30-30 Win)	.308" 140 gr. SD: .211 G1 BC: .277		1550-2550
 #30311 MonoFlex® (Marlin Express)	.308" 140 gr. SD: .211 G1 BC: .335		1650-2800
 #30302 SST®	.308" 150 gr. SD: .226 G1 BC: .415		2700-3600
 #30303 SST® (300 Savage)	.308" 150 gr. SD: .226 G1 BC: .370		2200-3000
 #30309 InterBond®	.308" 150 gr. SD: .226 G1 BC: .415		2700-3600

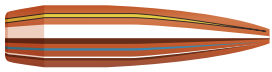
30 CALIBER *(.308")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3031 InterLock® SP	.308" 150 gr. SD: .226 G1 BC: .338		2700-3600
 #3033 InterLock® BTSP	.308" 150 gr. SD: .226 G1 BC: .349		2700-3600
#3035 InterLock® RN	.308" 150 gr. SD: .226 G1 BC: .186		1800-2500
 #3037/3037B FMJ-BT	.308" 150 gr. SD: .226 G1 BC: .398		2200-3600
 #30370 GMX®	.308" 150 gr. SD: .226 G1 BC: .415		2300-3600
 #30312 A-MAX®	.308" 155 gr. SD: .233 G1 BC: .435		2200-3600
*#30313 ELD® Match	.308" 155 gr. SD: .233 G1 BC: .439 G7 BC: .223		2200-3600
 ^#3039 BTHP Match™	.308" 155 gr. SD: .233 G1 BC: .405		2200-3600
 #30395 FTX® (30-30)	.308" 160 gr. SD: .241 G1 BC: .330		1800-2600
 #30396 FTX® (Marlin Express)	.308" 160 gr. SD: .241 G1 BC: .395		2000-2800
 #3040 InterLock® SP	.308" 165 gr. SD: .248 G1 BC: .387		2200-3400
 #3045 InterLock® BTSP	.308" 165 gr. SD: .248 G1 BC: .435		2200-3400
 #30452 SST®	.308" 165 gr. SD: .248 G1 BC: .447		2200-3400
 #30459 InterBond®	.308" 165 gr. SD: .248 G1 BC: .447		2200-3400

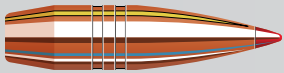
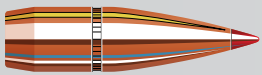
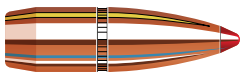
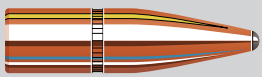
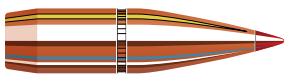
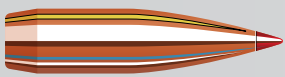
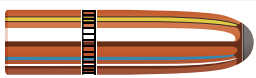
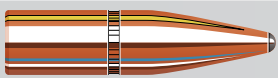
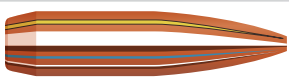
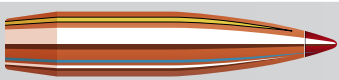
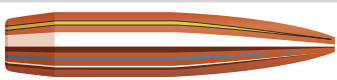
30 CALIBER *(.308")*		Shooting Applications	Muzzle Velocity Range (fps)
 #30470 GMX®	.308" 165 gr. SD: .248 G1 BC: .447		2300-3600
 ^#30501/305015 BTHP Match™	.308" 168 gr. SD: .253 G1 BC: .450		2300-3400
#30502/305026 A-MAX®	.308" 168 gr. SD: .253 G1 BC: .475		2300-3400
 *#30506 ELD® Match	.308" 168 gr. SD: .253 G1 BC: .490 G7 BC: .250		2300-3400
 #3060 InterLock® FP	.308" 170 gr. SD: .256 G1 BC: .189		2000-2500
 #30712 A-MAX® *(Discontinued)*	.308" 178 gr. SD: .268 G1 BC: .495		2200-3400
 *#30713 ELD® Match	.308" 178 gr. SD: .271 G1 BC: .515 G7 BC: .259		2200-3400
 ^#30715 BTHP Match™	.308" 178 gr. SD: .268 G1 BC: .530		2200-3400
 *#3074 ELD-X®	.308" 178 gr. SD: .268 G1 BC: .545 G7 BC: .275		2000-3100
 #30193 GMX®	.308" 180 gr. SD: .271 G1 BC: .485		2300-3500
 #3070 InterLock® SP	.308" 180 gr. SD: .271 G1 BC: .425		2400-3400
 #30702 SST®	.308" 180 gr. SD: .271 G1 BC: .480		2400-3400
 #30709 InterBond®	.308" 180 gr. SD: .271 G1 BC: .480		2400-3400
 #3072 InterLock® BTSP	.308" 180 gr. SD: .271 G1 BC: .452		2400-3400

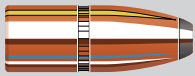
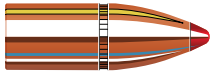
30 CALIBER *(.308")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3075 InterLock® RN	.308" 180 gr. SD: .271 G1 BC: .241		2400-3400
 #3085 InterLock® BTSP *(Discontinued)*	.308" 190 gr. SD: .286 G1 BC: .491		2200-3300
 ^#3095 BTHP Match™	.308" 195 gr. SD: .294 G1 BC: .550 G7 BC: .311		2200-3400
 *#3076 ELD-X®	.308" 200 gr. SD: .301 G1 BC: .626 G7 BC: .315		2000-3100
 *#30731 ELD® Match	.308" 208 gr. SD: .313 G1 BC: .670 G7 BC: .335		2200-3400
 ^#30732 A-MAX® *(Discontinued)*	.308" 208 gr. SD: .313 G1 BC: .648 G7 BC: .325		2200-3400
 ^#30733 BTHP Match™	.308" 208 gr. SD: .313 G1 BC: .620 G7 BC: .311		2200-3400
 *#3077 ELD-X®	.308" 212 gr. SD: .319 G1 BC: .673 G7 BC: .336		2000-3100
*#3078 ELD-X®	.308" 220 gr. SD: .331 G1 BC: .650 G7 BC: .325		2000-3100
 #3090 InterLock® RN	.308" 220 gr. SD: .331 G1 BC: .300		1600-3100
 ^#30903 BTHP Match™	.308" 225 gr. SD: .339 G1 BC: .670 G7 BC: .336		2200-3400
 *#30904 ELD® Match	.308" 225 gr. SD: .339 G1 BC: .730 G7 BC: .367		2200-3400

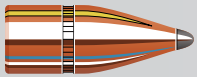
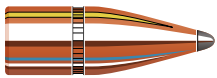
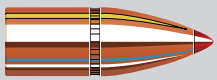
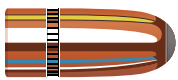
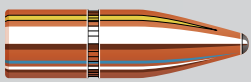
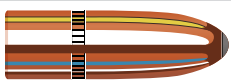
7.62 X 39 MM *(.310")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3140 InterLock® SP	.310" 123 gr. SD: .183 G1 BC: .252		1900-2500

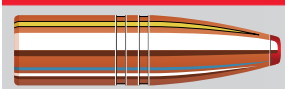
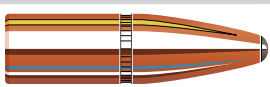
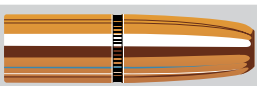
7.62 X 39 MM *(.310")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3142 SST®	.310" 123 gr. SD: .183 G1 BC: .295		1900-2500
303 CALIBER *(.311")*		**Shooting Applications**	**Muzzle Velocity Range** (fps)
 #3131 FMJ-BT	.311" 174 gr. SD: .258 G1 BC: .470		2200-2600
303 CALIBER *(.312")*		**Shooting Applications**	**Muzzle Velocity Range** (fps)
 #3120 InterLock® SP	.312" 150 gr. SD: .220 G1 BC: .361		2300-2700
 #3130 InterLock® RN	.312" 174 gr. SD: .255 G1 BC: .262		2200-2600
32 CALIBER *(.321")*		**Shooting Applications**	**Muzzle Velocity Range** (fps)
 #32005 FTX® (32 Win)	.321" 165 gr. SD: .229 G1 BC: .310		1800-2600
 #3210 InterLock® FP	.321" 170 gr. SD: .236 G1 BC: .249		1900-2200
8MM *(.323")*		**Shooting Applications**	**Muzzle Velocity Range** (fps)
 #3232 InterLock® SP	.323" 150 gr. SD: .205 G1 BC: .290		2500-3400
 #3233 SST®	.323" 170 gr. SD: .233 G1 BC: .445		2400-3200
 #3235 InterLock® RN	.323" 170 gr. SD: .233 G1 BC: .217		2400-3200
 #3234 GMX®	.323" 180 gr. SD: .246 G1 BC: .420		2400-3100
 #3236 InterLock® SP	.323" 195 gr. SD: .267 G1 BC: .410		2100-2900

8MM *(.323")*		Shooting Applications	Muzzle Velocity Range (fps)
 ^#3237 BTHP Match™	.323" 196 gr. SD: .268 G1 BC: .525		2200-3400

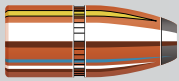
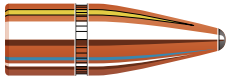
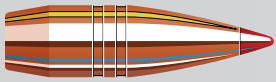
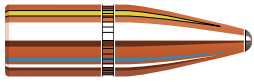
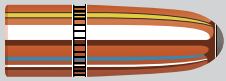
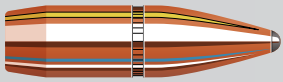
338 CALIBER *(.338")*		Shooting Applications	Muzzle Velocity Range (fps)
 #33270 GMX®	.338" 185 gr. SD: .231 G1 BC: .420		2500-3300
#3310 InterLock® SP-RP *(Discontinued)*	.338" 200 gr. SD: .250 G1 BC: .361		2500-3400
 #33102 SST®	.338" 200 gr. SD: .250 G1 BC: .455		2500-3300
 #33104 FTX® (Marlin Express)	.338" 200 gr. SD: .250 G1 BC: .430		1800-2800
 #3320 InterLock® SP-RP	.338" 225 gr. SD: .281 G1 BC: .397		2500-3200
 #33202 SST®	.338" 225 gr. SD: .281 G1 BC: .515		2500-3200
 #33209 InterBond®	.338" 225 gr. SD: .281 G1 BC: .515		2500-3200
 #3330 InterLock® RN	.338" 250 gr. SD: .313 G1 BC: .291		2400-3000
 #3335 InterLock® SP-RP	.338" 250 gr. SD: .313 G1 BC: .431		2400-3000
 ^#33361 BTHP Match™	.338" 250 gr. SD: .313 G1 BC: .670		2500-3200
 *#33381 ELD® Match	.338" 285 gr. SD: .356 G1 BC: .789 G7 BC: .395		2500-3200
 ^#3339 BTHP Match™	.338" 285 gr. SD: .356 G1 BC: .756 G7 BC: .356		2500-3200

348 CALIBER *(.348")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3410 InterLock® FP	.348" 200 gr. SD: .236 G1 BC: .246		2200-2500
 #3415 FTX®	.348" 200 gr. SD: .236 G1 BC: .320		2200-2500

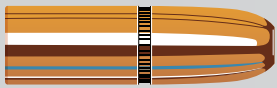
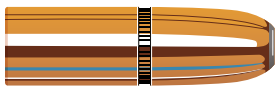
35 CALIBER *(.358")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3505 InterLock® SP-SSP *(Discontinued)*	.358" 180 gr. SD: .201 G1 BC: .248		1600-2400
 #3510 InterLock® SP	.358" 200 gr. SD: .223 G1 BC: .282		1800-2900
 #35105 FTX®	.358" 200 gr. SD: .223 G1 BC: .300		1800-2600
 #3515 InterLock® RN	.358" 200 gr. SD: .223 G1 BC: .195		1800-2900
 #3520 InterLock® SP-RP	.358" 250 gr. SD: .279 G1 BC: .375		2300-2800
 #3525 InterLock® RN *(Discontinued)*	.358" 250 gr. SD: .279 G1 BC: .271		2300-2800

9.3MM *(.366")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3562 GMX®	.366" 250 gr. SD: .267 G1 BC: .360		2200-2500
 #3560 InterLock® SP-RP	.366" 286 gr. SD: .305 G1 BC: .400		2300-2800
 #3565 DGS®	.366" 300 gr. SD: .320 G1 BC: .280		2300-2600

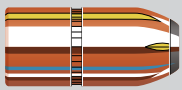
375 CALIBER *(.375")*

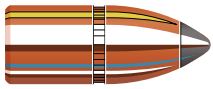
		Shooting Applications	Muzzle Velocity Range (fps)
 #3705 InterLock® FP *(Discontinued)*	.375" 220 gr. SD: .223 G1 BC: .217		1700-2200
 #3706 InterLock® SP-RP *(Discontinued)*	.375" 225 gr. SD: .229 G1 BC: .320		2400-3100
 #3708 GMX®	.375" 250 gr. SD: .254 G1 BC: .430		2300-2900
 #3711 InterLock® SP-RP	.375" 270 gr. SD: .274 G1 BC: .380		2400-3100
 #3720 InterLock® RN *(Discontinued)*	.375" 300 gr. SD: .305 G1 BC: .250		2300-2900
#3721 DGX®	.375" 300 gr. SD: .305 G1 BC: .275		2300-2900
 #3725 InterLock® BTSP *(Discontinued)*	.375" 300 gr. SD: .305 G1 BC: .460		2300-2900
#3727 DGS®	.375" 300 gr. SD: .305 G1 BC: .275		2300-2900

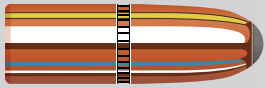
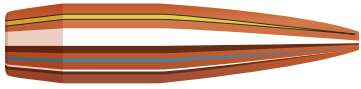
400 CALIBER *(.410")*

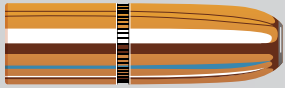
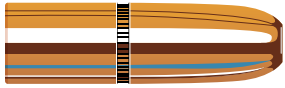
		Shooting Applications	Muzzle Velocity Range (fps)
 #4103 DGS®	.410" 400 gr. SD: .340 G1 BC: .325		1800-2600
 #4104 DGX®	.410" 400 gr. SD: .340 G1 BC: .325		1800-2600

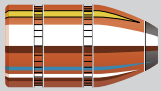
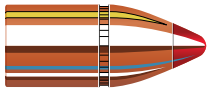
405 CALIBER *(.411")*

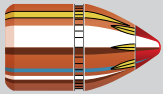
		Shooting Applications	Muzzle Velocity Range (fps)
 #41050 InterLock® FP *(Discontinued)*	.411" 300 gr. SD: .254 G1 BC: .215		1800-2300

405 CALIBER *(.411")*		Shooting Applications	Muzzle Velocity Range (fps)
 #41051 InterLock® SP	.411" 300 gr. SD: .254 G1 BC: .250		1800-2300

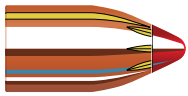
416 CALIBER *(.416")*		Shooting Applications	Muzzle Velocity Range (fps)
 #4165 InterLock® RN *(Discontinued)*	.416" 400 gr. SD: .330 G1 BC: .311		1800-2400
#4167 DGS®	.416" 400 gr. SD: .330 G1 BC: .319		1800-2600
#4169 DGX®	.416" 400 gr. SD: .330 G1 BC: .319		1800-2600
 #41691 BTHP Match™ *(Discontinued)*	.416" 450 gr. SD: .371 G1 BC: .720		2500-3200

423 CALIBER *(.423")*		Shooting Applications	Muzzle Velocity Range (fps)
 #4240 DGX®	.423" 400 gr. SD: .319 G1 BC: .315		1800-2600
 #4241 DGS®	.423" 400 gr. SD: .319 G1 BC: .315		1800-2600

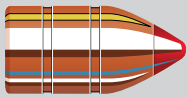
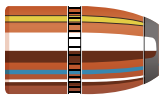
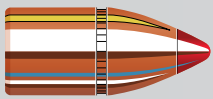
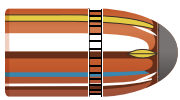
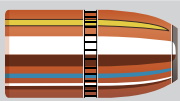
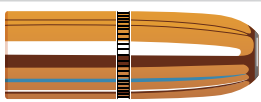
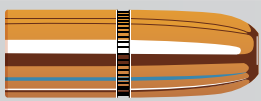
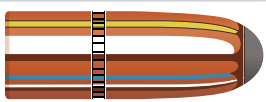
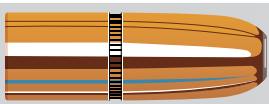
44 CALIBER *(.430")*		Shooting Applications	Muzzle Velocity Range (fps)
 #4300 InterLock® FP	.430" 265 gr. SD: .205 G1 BC: .189		1500-2200
 #4305 FTX® (444 Marlin)	.430" 265 gr. SD: .205 G1 BC: .225		1300-2300

45 CALIBER *(.452")*		Shooting Applications	Muzzle Velocity Range (fps)
 #45218 FTX® (45 Colt)	.452" 225 gr. SD: .157 G1 BC: .140		600-1800

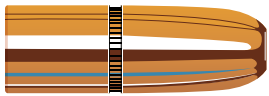
45 CALIBER *(.452")*

		Shooting Applications	Muzzle Velocity Range (fps)
 #45201 FTX® (450 Bushmaster)	.452" 250 gr. SD: .175 G1 BC: .210		900-2200

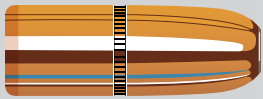
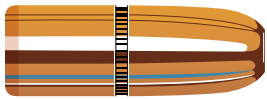
45 CALIBER *(.458")*

		Shooting Applications	Muzzle Velocity Range (fps)
 #45010 MonoFlex®	.458" 250 gr. SD: .170 G1 BC: .175		1400-2500
 #4500 HP	.458" 300 gr. SD: .204 G1 BC: .197		1600-2100
 #45015 FTX®	.458" 325 gr. SD: .221 G1 BC: .230		1300-2300
 #4502 InterLock® RN	.458" 350 gr. SD: .238 G1 BC: .189		1800-2900
 #4503 InterLock® FP	.458" 350 gr. SD: .238 G1 BC: .195		1800-2900
 #45032 DGX® (450 Nitro Express 3¼")	.458" 480 gr. SD: .327 G1 BC: .285		1600-2600
 #45033 DGS® (450 Nitro Express 3¼")	.458" 480 gr. SD: .327 G1 BC: .285		1600-2600
 #4504 InterLock® RN *(Discontinued)*	.458" 500 gr. SD: .341 G1 BC: .287		1600-2600
 #4505 DGX®	.458" 500 gr. SD: .341 G1 BC: .295		1600-2600

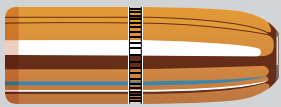
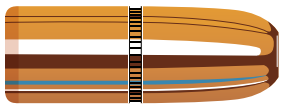
45 CALIBER *(.458")*

	Shooting Applications	Muzzle Velocity Range (fps)
 #4507 DGS®	.458" 500 gr. SD: .341 G1 BC: .295	1600-2600

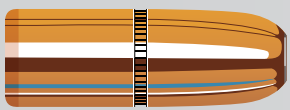
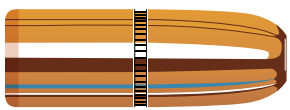
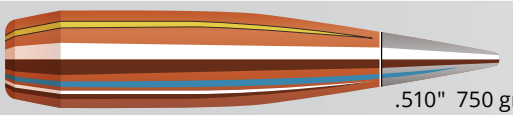
470 CALIBER *(.474")*

	Shooting Applications	Muzzle Velocity Range (fps)
 #4747 DGX®	.474" 500 gr. SD: .316 G1 BC: .290	1600-2400
 #4748 DGS®	.474" 500 gr. SD: .316 G1 BC: .290	1600-2400

50 CALIBER *(.505")*

	Shooting Applications	Muzzle Velocity Range (fps)
 #5050 DGX® (505 Gibbs)	.505" 525 gr. SD: .294 G1 BC: .270	1600-2400
 #5051 DGS® (505 Gibbs)	.505" 525 gr. SD: .294 G1 BC: .270	1600-2400

50 CALIBER *(.510")*

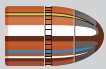
	Shooting Applications	Muzzle Velocity Range (fps)
 #5150 DGX®	.510" 570 gr. SD: .313 G1 BC: .295	1600-2400
 #5155 DGS®	.510" 570 gr. SD: .313 G1 BC: .295	1600-2400
 ^#5165 A-MAX®	.510" 750 gr. SD: .412 G1 BC: 1.050 G7 BC: .451	2400-2850

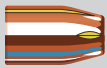
***NOTE:** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^NOTE: *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

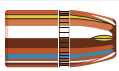
Handgun Bullets

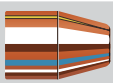
25 CALIBER *(.251")*		Shooting Applications	Muzzle Velocity Range (fps)
#35450 XTP® *(Discontinued)*	.251" 35 gr. SD: .079 G1 BC: .072		600-1000
#3545 FMJ-RN *(Discontinued)*	.251" 50 gr. SD: .113 G1 BC: .116		600-850

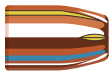
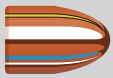
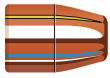
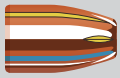
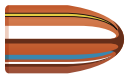
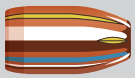
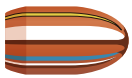
30 CALIBER *(.308")*		Shooting Applications	Muzzle Velocity Range (fps)
 #3100 RN	.308" 86 gr. SD: .130 G1 BC: .105		1000-1600

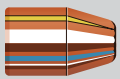
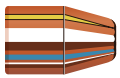
30 CALIBER *(.309")*		Shooting Applications	Muzzle Velocity Range (fps)
 #31000 XTP®	.309" 90 gr. SD: .136 G1 BC: .115		800-2200

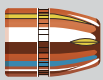
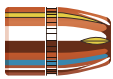
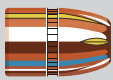
32 CALIBER *(.311")*		Shooting Applications	Muzzle Velocity Range (fps)
#32010 XTP®	.311" 60 gr. SD: .088 G1 BC: .090		750-1000

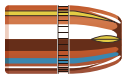
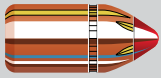
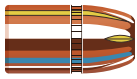
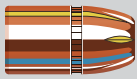
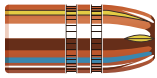
32 CALIBER *(.312")*		Shooting Applications	Muzzle Velocity Range (fps)
#32050 XTP®	.312" 85 gr. SD: .125 G1 BC: .145		750-1550
 #32070 XTP®	.312" 100 gr. SD: .147 G1 BC: .170		750-1550

9MM *(.355")*		Shooting Applications	Muzzle Velocity Range (fps)
#35500 XTP®	.355" 90 gr. SD: .102 G1 BC: .099		800-1500
#35527B FMJ-RN	.355" 100 gr. SD: .113 G1 BC: .115		750-1300
 #355281/35528B HAP®	.355" 115 gr. SD: .130 G1 BC: .129		800-1400

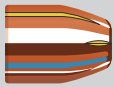
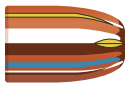
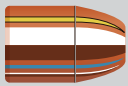
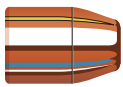
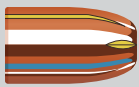
9MM *(.355")*		Shooting Applications	Muzzle Velocity Range (fps)
 #35540 XTP®	.355" 115 gr. SD: .130 G1 BC: .129		800-1400
 #35557/35557B FMJ-RN	.355" 115 gr. SD: .130 G1 BC: .140		900-1300
 #35567B FMJ-FP *(Discontinued)*	.355" 124 gr. SD: .141 G1 BC: .160		900-1200
 #35571 XTP®	.355" 124 gr. SD: .141 G1 BC: .165		750-1200
 #355771/35577B FMJ-RN *(Discontinued)*	.355" 124 gr. SD: .141 G1 BC: .145		900-1200
 #35580 XTP®	.355" 147 gr. SD: .167 G1 BC: .212		750-1200
 #35597B FMJ-RN-BT	.355" 147 gr. SD: .167 G1 BC: .212		800-1200

9MM *(.356")*		Shooting Applications	Muzzle Velocity Range (fps)
 #35530B HAP® *(Discontinued)*	.356" 121 gr. SD: .136 G1 BC: .147		1000-1300
 #35572B HAP®	.356" 125 gr. SD: .141 G1 BC: .158		900-1200

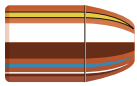
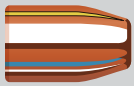
38 CALIBER *(.357")*		Shooting Applications	Muzzle Velocity Range (fps)
 #35700 XTP®	.357" 110 gr. SD: .123 G1 BC: .131		900-1400
 #35710 XTP®	.357" 125 gr. SD: .140 G1 BC: .151		850-1600
 #35730 FP-XTP®	.357" 125 gr. SD: .140 G1 BC: .148		1200-1700

38 CALIBER *(.357")*		Shooting Applications	Muzzle Velocity Range (fps)
 #35740 XTP®	.357" 140 gr. SD: .157 G1 BC: .169		850-1600
 #35745 FTX®	.357" 140 gr. SD: .157 G1 BC: .160		850-1600
 #35750 XTP®	.357" 158 gr. SD: .177 G1 BC: .206		700-1400
 #35780 FP-XTP®	.357" 158 gr. SD: .177 G1 BC: .199		1150-1800
 #35771 XTP®	.357" 180 gr. SD: .202 G1 BC: .230		900-1700

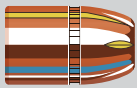
9 X 18MM *(.365")*		Shooting Applications	Muzzle Velocity Range (fps)
#36500 Makarov XTP®	.365" 95 gr. SD: .102 G1 BC: .127		750-1000

10MM *(.400")*		Shooting Applications	Muzzle Velocity Range (fps)
 #40000 XTP®	.400" 155 gr. SD: .138 G1 BC: .137		850-1300
 #40040 XTP®	.400" 180 gr. SD: .161 G1 BC: .164		750-1450
 #400421/40042B HAP®	.400" 180 gr. SD: .161 G1 BC: .164		750-1450
 #400471 FMJ-FP *(Discontinued)*	.400" 180 gr. SD: .161 G1 BC: .188		750-1450
 #40060 XTP®	.400" 200 gr. SD: .179 G1 BC: .199		700-1200

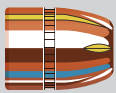
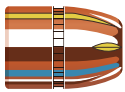
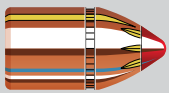
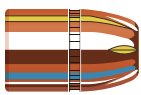
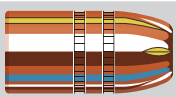
10MM *(.400")*

		Shooting Applications	Muzzle Velocity Range (fps)
 #40061B HAP®	.400" 200 gr. SD: .179 G1 BC: .199		700-1200
 #40077B FMJ-FP *(Discontinued)*	.400" 200 gr. SD: .179 G1 BC: .182		700-1200

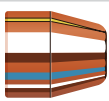
41 CALIBER *(.410")*

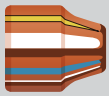
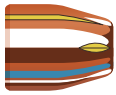
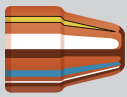
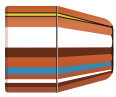
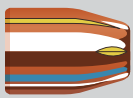
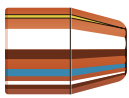
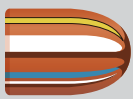
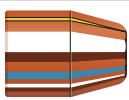
		Shooting Applications	Muzzle Velocity Range (fps)
 #41000 XTP®	.410" 210 gr. SD: .178 G1 BC: .182		1000-1450

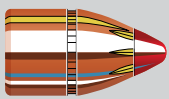
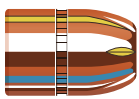
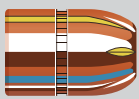
44 CALIBER *(.430")*

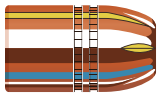
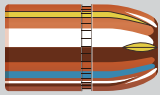
		Shooting Applications	Muzzle Velocity Range (fps)
 #44050 XTP®	.430" 180 gr. SD: .139 G1 BC: .138		750-1400
 #44100 XTP®	.430" 200 gr. SD: .155 G1 BC: .170		750-1650
 #44105 FTX®	.430" 225 gr. SD: .174 G1 BC: .150		900-2200
 #44200 XTP®	.430" 240 gr. SD: .185 G1 BC: .205		900-2200
 #44280 XTP®	.430" 300 gr. SD: .232 G1 BC: .245		850-1900

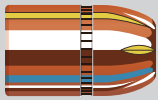
45 CALIBER *(.451")*

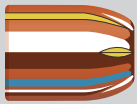
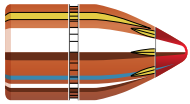
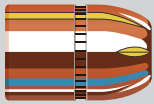
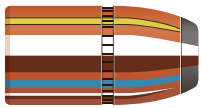
		Shooting Applications	Muzzle Velocity Range (fps)
#45100 XTP®	.451" 185 gr. SD: .130 G1 BC: .139		750-1450
 #45105B HAP®	.451" 185 gr. SD: .130 G1 BC: .139		750-1450

45 CALIBER *(.451")*		Shooting Applications	Muzzle Velocity Range (fps)
 #45137 SWC Target *(Discontinued)*	.451" 185 gr. SD: .130 G1 BC: .068		700-1100
 #45140 XTP®	.451" 200 gr. SD: .140 G1 BC: .151		700-1100
 #45157B FMJ-C/T	.451" 200 gr. SD: .140 G1 BC: .115		700-1100
 #45159B HAP®	.451" 200 gr. SD: .140 G1 BC: .151		700-1100
 #45160 XTP®	.451" 230 gr. SD: .162 G1 BC: .188		600-1650
 #451611/45161B HAP®	.451" 230 gr. SD: .162 G1 BC: .188		600-1650
 #45177/451771 FMJ-RN	.451" 230 gr. SD: .162 G1 BC: .184		600-1650
 #451871 FMJ-FP *(Discontinued)*	.451" 230 gr. SD: .162 G1 BC: .168		600-1650

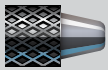
45 CALIBER *(.452")*		Shooting Applications	Muzzle Velocity Range (fps)
 #45215 FTX® (460 S&W)	.452" 200 gr. SD: .149 G1 BC: .145		900-2200
 #45220 XTP® Mag	.452" 240 gr. SD: .168 G1 BC: .160		1100-2200
 #45200 XTP®	.452" 250 gr. SD: .175 G1 BC: .146		800-1600

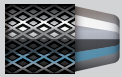
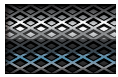
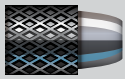
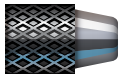
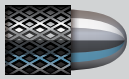
45 CALIBER *(.452")*		Shooting Applications	Muzzle Velocity Range (fps)
 #45230 XTP®	.452" 300 gr. SD: .210 G1 BC: .180		800-1700
 #45235 XTP® Mag	.452" 300 gr. SD: .210 G1 BC: .200		1200-2200

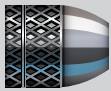
475 CALIBER *(.475")*		Shooting Applications	Muzzle Velocity Range (fps)
 #47500 XTP® Mag	.475" 325 gr. SD: .206 G1 BC: .150		1100-1600

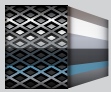
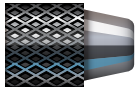
50 CALIBER *(.500")*		Shooting Applications	Muzzle Velocity Range (fps)
 #50101 XTP® Mag	.500" 300 gr. SD: .171 G1 BC: .120		800-1400
 #50102 FTX®	.500" 300 gr. SD: .171 G1 BC: .200		900-2200
 #50100 XTP® Mag	.500" 350 gr. SD: .200 G1 BC: .145		1200-1800
 #50105 FP	.500" 500 gr. SD: .286 G1 BC: .185		1000-1400

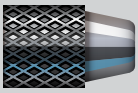
Lead Handgun Bullets

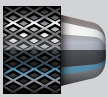
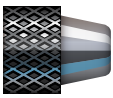
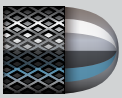
32 CALIBER *(.314")*		Shooting Applications	Muzzle Velocity Range (fps)
 #10008 SWC *(Discontinued)*	.314" 90 gr. SD: .130 G1 BC: .096		700-900
#10028 HBWC *(Discontinued)*	.314" 90 gr. SD: .130 G1 BC: .040		700-900

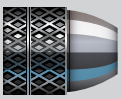
38 CALIBER *(.358")*		Shooting Applications	Muzzle Velocity Range (fps)
 #10078 COWBOY™	.358" 140 gr. SD: .157 G1 BC: .127		650-1100
 #10208 HBWC	.358" 148 gr. SD: .165 G1 BC: .047		700-900
 #10408 SWC	.358" 158 gr. SD: .176 G1 BC: .135		650-1100
 #10428 SWC-HP	.358" 158 gr. SD: .176 G1 BC: .139		650-1100
 #10508 LRN	.358" 158 gr. SD: .176 G1 BC: .159		650-1100

44 CALIBER *(.427")*		Shooting Applications	Muzzle Velocity Range (fps)
 #11208 COWBOY™ *(Discontinued)*	.427" 205 gr. SD: .161 G1 BC: .123		650-1100

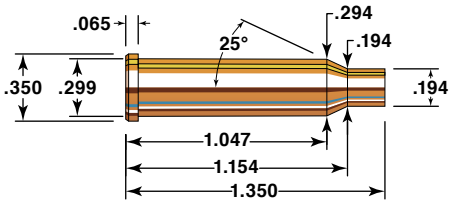
44 CALIBER *(.430")*		Shooting Applications	Muzzle Velocity Range (fps)
 #11058 COWBOY™	.430" 180 gr. SD: .139 G1 BC: .114		650-1100
 #11108 SWC	.430" 240 gr. SD: .185 G1 BC: .182		650-1100

44 CALIBER *(.430")*		Shooting Applications	Muzzle Velocity Range (fps)
 #11118 SWC-HP	.430" 240 gr. SD: .185 G1 BC: .204		650-1100

45 CALIBER *(.452")*		Shooting Applications	Muzzle Velocity Range (fps)
 #12108 SWC	.452" 200 gr. SD: .140 G1 BC: .070		650-1100
 #12208 C/T	.452" 200 gr. SD: .140 G1 BC: .081		650-1100
 #12308 LRN	.452" 230 gr. SD: .162 G1 BC: .207		650-1100

45 CALIBER *(.454")*		Shooting Applications	Muzzle Velocity Range (fps)
 #12458 FP COWBOY™	.454" 255 gr. SD: .177 G1 BC: .117		650-1100

RIFLE
RELOADING
DATA
EDITION 10



17 Hornet

Rifle: . . . . . Savage Model 25
Barrel: . . . . . 24", 1 in 9" Twist
Case: . . . . . Hornady
Primer: . . . . . WSR
Bullet Diameter: . . . . . .0.172"
Maximum COL: . . . . . .1.720"
Max. Case Length: . . . . . 1.350"
Case Trim Length: . . . . . 1.340"

Different variations of 22 Hornet wildcats have existed for many decades. P.O. Ackley developed the 17 Ackley Hornet in the 1950s. Hornady engineers developed the standardized 17 Hornet by removing some of the case taper and sharpening the shoulder of the case. The result is an efficient, economical, reloadable cartridge that has the same C.O.L as the 22 Hornet – meaning it can utilize the same size rifle actions.

With the felt recoil of a 22 WMR, the trajectory of a 55gr 223 Remington and only using half the powder of a 17 Remington, the 17 Hornet is a fun and economical cartridge for varmint hunting, target practice or simply plinking.

The 17 Hornet is a great option for varminters who want more terminal performance than rimfires offer but don't want their scope's reticle bounced off-target by recoil. With a 1,000 fps advantage over the 17 HMR, the 17 Hornet carries nearly 300 ft/lbs of energy at 200 yards.

20 GRAIN BULLETS

SECTIONAL DENSITY: 0.097
DIAMETER: 0.172"

20 gr. V-MAX®
Item No. 21710
C.O.L.: 1.710"
G1 B.C.: 0.185

	VELOCITY (FPS – feet per second)						
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**	**3750**
Alliant 2400	7.8 gr.	8.1 gr.	8.5 gr.	8.8 gr.			
H110	7.9 gr.	8.3 gr.	8.7 gr.	9.1 gr.	9.5 gr.		
WIN 296	8.2 gr.	8.6 gr.	9.0 gr.	9.3 gr.	9.7 gr.		
VIHT N-120	9.7 gr.	10.0 gr.	10.3 gr.	10.6 gr.	10.8 gr.		
Accurate 1680	10.3 gr.	10.7 gr.	11.1 gr.	11.5 gr.	11.8 gr.	12.2 gr.	12.4 gr.

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25 GRAIN BULLETS

SECTIONAL DENSITY: 0.121
DIAMETER: 0.172"

25 gr. V-MAX®
Item No. 17105
C.O.L.: 1.710"
G1 B.C.: 0.230

25 gr. HP
Item No. 1710
C.O.L.: 1.675"
G1 B.C.: 0.187

	VELOCITY (FPS – feet per second)			
POWDER	**2900**	**3000**	**3100**	**3200**
IMR 4227	8.8 gr.	9.2 gr.	9.5 gr.	
VIHT N-120	9.3 gr.	9.6 gr.	10.0 gr.	
IMR 4198	9.6 gr.	9.9 gr.	10.1 gr.	
Accurate 1680	9.7 gr.	10.1 gr.	10.5 gr.	10.9 gr.
H4198	10.1 gr.	10.4 gr.	10.7 gr.	11.0 gr.
VIHT N-130	10.2 gr.	10.6 gr.	11.0 gr.	
NORMA 200	10.5 gr.	10.8 gr.		

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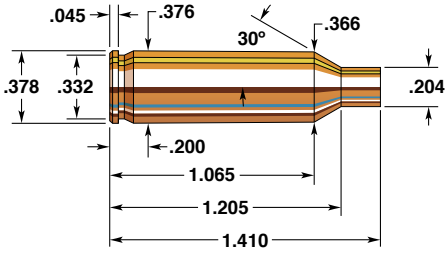

17 Remington Fireball

Rifle:	Remington 700	**Bullet Diameter:**	.0.172"
Barrel:	26", 1 in 9" Twist	**Maximum COL:**	1.830"
Case:	Remington	**Max. Case Length:**	.1.410"
Primer:	Remington 7½	**Case Trim Length:**	1.400"

When Remington introduced the .17 Fireball in 2008, a group of established .17 caliber fans cheered, and a new audience of varmint shooters rubbed their hands together in glee. The .17 Fireball is very similar to the well known .17 Mach IV wildcat, made famous by Vern O'Brien in the 1960s. Unlike the 1960s, however, today's cartridge benefits from quantum leaps in propellants and bullets. In the true small calibers, Hornady has led the way, and this cartridge benefits mightily. For prairie dogs, ground squirrels and crows, run a 20 grain V-MAX® at 4000 FPS and watch the fireworks. If you're a predator hunter, the 25 grain hollow point shoots extremely well, penetrates deep, and rarely exits. For slightly larger varmints, like rock chucks or ground hogs, and for windy days, try the 25 grain V-MAX® and you will buck the wind surprisingly well and shoot as flat as a .22-250. For best results, powders like H-335, H-322, H-4198, VV N-130 and AA-2015 deliver fantastic accuracy at peak velocity. Best of all, any of these versatile Hornady bullets loaded in this cartridge deliver minimal recoil and report. You can watch the action in your scope and call your own shots in a busy prairie dog town—-without offending your hunting buddies with onerous noise. Finally, modern barrels don't foul like the barrels of the 1960s, so you can shoot longer strings between cleaning. Give the .17 Fireball a try and you will quickly understand why this cartridge is such an excellent addition to any varmint battery.

20 GRAIN BULLETS

SECTIONAL DENSITY: 0.097
DIAMETER: 0.172"

20 gr. V-MAX®
Item No. 21710
C.O.L.: 1.810"
G1 B.C.: 0.185

	VELOCITY (FPS – feet per second)					
POWDER	**3600**	**3700**	**3800**	**3900**	**4000**	**4050**
IMR 4198	14.4 gr.	14.9 gr.	15.4 gr.	15.8 gr.	16.3 gr.	
Alliant RL-7	14.8 gr.	15.3 gr.	15.8 gr.	16.2 gr.	16.7 gr.	
Accurate 2015	16.2 gr.	16.6 gr.	16.9 gr.	17.3 gr.	17.6 gr.	
Accurate 2230	16.3 gr.	16.9 gr.	17.6 gr.	18.2 gr.	18.8 gr.	
H322	17.2 gr.	17.7 gr.	18.1 gr.	18.5 gr.	18.9 gr.	
X-TERMINATOR	17.3 gr.	17.8 gr.	18.3 gr.	18.8 gr.	19.3 gr.	19.5 gr.
Benchmark	17.7 gr.	18.1 gr.	18.6 gr.	19.1 gr.	19.5 gr.	
H335	18.0 gr.	18.5 gr.	18.9 gr.	19.4 gr.	19.9 gr.	

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25 GRAIN BULLETS

SECTIONAL DENSITY: 0.121
DIAMETER: 0.172"

25 gr. V-MAX®
Item No. 17105
C.O.L.: 1.770"
G1 B.C.: 0.230

25 gr. HP
Item No. 1710
C.O.L.: 1.770"
G1 B.C.: 0.187

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3750**
IMR 4198	13.8 gr.	14.3 gr.	14.7 gr.	15.2 gr.	15.7 gr.	15.9 gr.
Alliant RL-7	13.6 gr.	14.1 gr.	14.7 gr.	15.3 gr.	15.8 gr.	
Accurate 2015	14.8 gr.	15.3 gr.	15.8 gr.	16.3 gr.	16.8 gr.	
Accurate 2230	15.4 gr.	16.0 gr.	16.6 gr.	17.2 gr.	17.8 gr.	18.0 gr.
H322	15.0 gr.	15.8 gr.	16.5 gr.	17.3 gr.	18.0 gr.	
X-TERMINATOR	15.7 gr.	16.3 gr.	17.0 gr.	17.6 gr.	18.3 gr.	
Benchmark	16.3 gr.	16.8 gr.	17.3 gr.	17.9 gr.	18.4 gr.	18.7 gr.
H335	16.0 gr.	16.6 gr.	17.3 gr.	17.9 gr.	18.6 gr.	18.9 gr.
WIN 748	18.2 gr.	18.6 gr.	19.1 gr.	19.5 gr.	19.9 gr.	

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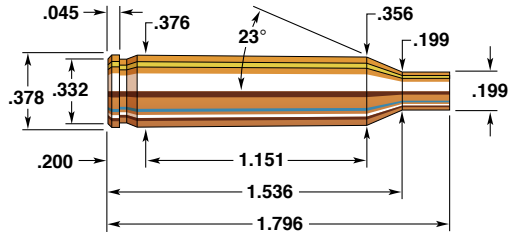

17 Remington

Rifle: . . . . . Remington 700
Barrel: . . . . . .24", 1 in 10" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 7½
Bullet Diameter: . . . . . .0.172"
Maximum COL: . . . . . .2.150"
Max. Case Length: . . . . . .1.796"
Case Trim Length: . . . . . .1.786"

Seventeen caliber popularity led Hornady Manufacturing to introduce its 17 caliber 25 grain Hollow Point at the beginning of the trend. By 1971 Remington recognized that this popularity had grown large enough to support a market for a commercial 17 caliber cartridge and thus standardized one in the 17 Remington, the first 17 caliber cartridge ever available in both factory rifles and commercial ammunition. Popularity of the new commercial 17 Remington quickly led to the rapid loss of interest in a number of 17 caliber wildcats, such as the 17-222 and the 17-223.

The 17 Remington is an excellent cartridge for varmint hunting in more settled areas. Its flat trajectory, its minimum recoil, and its lower probability of ricochet are all positives. They are, however, offset by two notable disadvantages. Barrel fouling must be eliminated very frequently, and small powder charge variations can produce wide swings in both velocity and pressure. We have known many reloaders who derive great pleasure loading this diminutive caliber and using it to advantage.

In our testing, we achieved the best performance with our 20 grain V-MAX® with VARGET and VIHT N-140.

20 GRAIN BULLETS

SECTIONAL DENSITY: 0.097
DIAMETER: 0.172"

20 gr. V-MAX®
Item No. 21710
C.O.L.: 2.150"
G1 B.C.: 0.185

	VELOCITY (FPS – feet per second)				
POWDER	**3900**	**4000**	**4100**	**4200**	**4300**
VIHT N-133	19.9 gr.	20.5 gr.	21.2 gr.	21.8 gr.	22.4 gr.
Accurate 2460	20.1 gr.	20.9 gr.	21.6 gr.	22.3 gr.	23.1 gr.
H322	20.4 gr.	21.0 gr.	21.7 gr.	22.4 gr.	23.1 gr.
Accurate 2520	21.8 gr.	22.4 gr.	22.9 gr.	23.5 gr.	24.1 gr.
IMR 4895	22.5 gr.	23.0 gr.	23.6 gr.	24.1 gr.	24.6 gr.
IMR 4320	22.8 gr.	23.4 gr.	24.0 gr.	24.5 gr.	
VARGET	23.0 gr.	23.6 gr.	24.2 gr.	24.8 gr.	25.4 gr.
VIHT N-140	23.0 gr.	23.6 gr.	24.2 gr.	24.9 gr.	25.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

25 GRAIN BULLETS

SECTIONAL DENSITY: 0.121
DIAMETER: 0.172"

25 gr. V-MAX®
Item No. 17105
C.O.L.: 2.150"
G1 B.C.: 0.230

25 gr. HP
Item No. 1710
C.O.L.: 2.150"
G1 B.C.: 0.187

	VELOCITY (FPS – feet per second)					
POWDER	**3600**	**3700**	**3800**	**3900**	**4000**	**4100**
Accurate 2520	20.9 gr.	21.5 gr.	22.2 gr.	22.8 gr.		
VIHT N-140	21.6 gr.	22.1 gr.	22.7 gr.	23.3 gr.	23.9 gr.	
IMR 4895	21.3 gr.	22.0 gr.	22.7 gr.	23.4 gr.	24.1 gr.	
IMR 4320	21.8 gr.	22.4 gr.	23.0 gr.	23.7 gr.	24.3 gr.	
WIN 748	22.0 gr.	22.6 gr.	23.3 gr.	24.0 gr.	24.7 gr.	
VARGET	22.4 gr.	23.1 gr.	23.8 gr.	24.5 gr.		
WIN 760	24.6 gr.	25.3 gr.	26.0 gr.	26.7 gr.	27.4 gr.	28.1 gr.
Accurate 2700	24.5 gr.	25.4 gr.	26.3 gr.	27.2 gr.		

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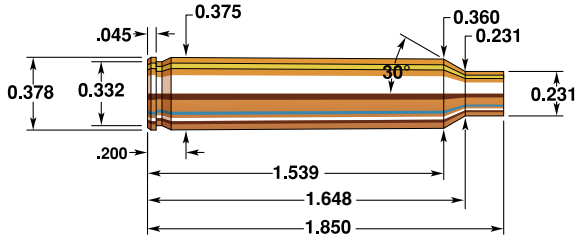

204 Ruger

Rifle:	Ruger M77	**Bullet Diameter:**	0.204"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	2.260"
Case:	Hornady	**Max. Case Length:**	1.850"
Primer:	Remington 7½	**Case Trim Length:**	1.840"

The .204 Ruger burst onto the varminting scene with all the subtlety of a Coney Island Fireworks display. Varminters had been yearning for ever flatter trajectories with less recoil for decades, and the .204 immediately quenched the thirst of even the most dedicated varminter.

With either a 32 grain V-MAX® started at over 4,100 fps or a 40 grain V-MAX® running at 3,800, the .204 shoots remarkably flat and retains enough energy to dispatch most varmints with aplomb. When the 45 grain SP is added to the mix, at a muzzle velocity of over 3,600 fps, shooters get a great option for tougher, harder to kill varmints like coyotes.

The .204 does very well with medium burn rate propellants, such as RL-15, Benchmark, H 4895, IMR 4064, VihtN-140 and W 748. With judicious component selection, reloaders will be rewarded with long case life, great accuracy and minimal recoil.

24 GRAIN BULLETS

SECTIONAL DENSITY: 0.082
DIAMETER: 0.204"

24 gr. NTX®
Item No. 22000
C.O.L.: 2.230"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)						
POWDER	**3900**	**4000**	**4100**	**4200**	**4300**	**4400**	**4500**
Accurate 2015	20.5 gr.	21.4 gr.	22.4 gr.	23.4 gr.	24.4 gr.	25.4 gr.	
NORMA 200	21.9 gr.	22.6 gr.	23.3 gr.	24.1 gr.	24.8 gr.	25.5 gr.	
Alliant RL-10X	23.2 gr.	23.8 gr.	24.4 gr.	25.1 gr.	25.7 gr.		
VIHT N-133	22.9 gr.	23.7 gr.	24.5 gr.	25.3 gr.	26.1 gr.		
Accurate 2230	23.6 gr.	24.3 gr.	25.1 gr.	25.8 gr.	26.5 gr.		
Benchmark	24.8 gr.	25.5 gr.	26.2 gr.	26.9 gr.	27.6 gr.	28.3 gr.	
X-TERMINATOR	25.4 gr.	26.0 gr.	26.7 gr.	27.4 gr.	28.1 gr.	28.7 gr.	29.4 gr.
WIN 748	26.2 gr.	27.1 gr.	28.0 gr.	29.0 gr.			

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32 GRAIN BULLETS

SECTIONAL DENSITY: 0.110
DIAMETER: 0.204"

32 gr. V-MAX®
Item No. 22004
C.O.L.: 2.245"
G1 B.C.: 0.210

	VELOCITY (FPS – feet per second)					
POWDER	**3700**	**3800**	**3900**	**4000**	**4100**	**4200**
TAC	24.5 gr.	25.2 gr.	25.9 gr.	26.7 gr.	27.4 gr.	
Benchmark	25.1 gr.	25.8 gr.	26.5 gr.	27.2 gr.	28.0 gr.	
H4895	25.9 gr.	26.5 gr.	27.2 gr.	27.8 gr.	28.4 gr.	
VIHT N-140	25.9 gr.	26.6 gr.	27.2 gr.	27.9 gr.	28.5 gr.	29.2 gr.
IMR 4064	26.2 gr.	26.9 gr.	27.5 gr.	28.2 gr.		
Alliant RL-15	26.3 gr.	27.1 gr.	27.8 gr.	28.5 gr.	29.3 gr.	
WIN 748	27.0 gr.	27.7 gr.	28.3 gr.	29.0 gr.	29.6 gr.	
VIHT N-540	28.1 gr.	28.5 gr.	28.8 gr.	29.2 gr.	29.6 gr.	
VARGET	27.0 gr.	27.8 gr.	28.5 gr.	29.3 gr.		
Accurate 2520	26.7 gr.	27.7 gr.	28.6 gr.	29.6 gr.	30.5 gr.	
CFE 223	28.8 gr.	29.4 gr.	30.0 gr.	30.6 gr.	31.2 gr.	

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.137
DIAMETER: 0.204"

40 gr. V-MAX®
Item No. 22006
C.O.L.: 2.245"
G1 B.C.: 0.275

	VELOCITY (FPS – feet per second)					
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**	**3850**
TAC	23.2 gr.	24.0 gr.	24.9 gr.	25.8 gr.		
Benchmark	23.6 gr.	24.4 gr.	25.2 gr.	26.0 gr.		
H4895	24.5 gr.	25.1 gr.	25.6 gr.	26.2 gr.	26.7 gr.	
VIHT N-140	25.0 gr.	25.6 gr.	26.1 gr.	26.7 gr.	27.3 gr.	
Alliant RL-15	25.0 gr.	25.6 gr.	26.2 gr.	26.7 gr.	27.3 gr.	
VIHT N-540	25.9 gr.	26.3 gr.	26.8 gr.	27.2 gr.	27.7 gr.	
WIN 748	26.0 gr.	26.5 gr.	27.0 gr.	27.5 gr.	28.0 gr.	28.3 gr.
VARGET	25.2 gr.	26.0 gr.	26.9 gr.	27.8 gr.		
Accurate 2520	24.9 gr.	25.9 gr.	27.0 gr.	28.0 gr.	29.0 gr.	29.6 gr.
CFE 223	27.1 gr.	27.7 gr.	28.4 gr.	29.0 gr.	29.7 gr.	

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.204"

45 gr. SP
Item No. 22008
C.O.L.: 2.245"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
H4895	21.1 gr.	22.0 gr.	22.9 gr.	23.8 gr.	24.8 gr.	
TAC	21.0 gr.	22.0 gr.	23.1 gr.	24.1 gr.	25.1 gr.	
Alliant RL-15	21.3 gr.	22.4 gr.	23.4 gr.	24.5 gr.	25.5 gr.	26.5 gr.
VIHT N-140	22.1 gr.	23.0 gr.	23.8 gr.	24.7 gr.		
VARGET	22.4 gr.	23.3 gr.	24.2 gr.	25.0 gr.	25.9 gr.	26.7 gr.
WIN 748	23.2 gr.	24.0 gr.	24.9 gr.	25.7 gr.	26.5 gr.	27.3 gr.
IMR 4320	23.4 gr.	24.2 gr.	25.0 gr.	25.8 gr.	26.5 gr.	
Accurate 2520	23.0 gr.	24.0 gr.	25.0 gr.	26.0 gr.	27.0 gr.	

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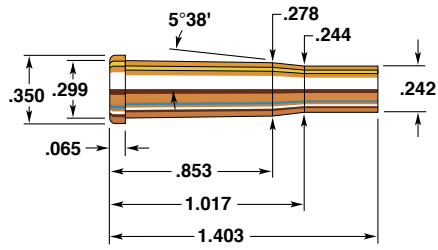

22 Hornet

Rifle:	Ruger #3	**Bullet Diameter:**	0.224"
Barrel:	22", 1 in 16" Twist	**Maximum COL:**	1.723"
Case:	Winchester	**Max. Case Length:**	1.403"
Primer:	Winchester WSR	**Case Trim Length:**	1.393"

The 22 Hornet has had an illustrious career. It was the pioneer small-bore high velocity cartridge for varminting and small game hunting. Its popularity rose during the 1920s, was challenged by the slightly more powerful 218 Bee in the 1930s, and went into a decline with the advent of the much more potent 222 and 223 Remingtons in the 1950s. Now, like an old trouper back on stage, its performance is once more being appreciated.

The Hornet came out of work at the Springfield Armory by the notable Col. Townsend Whelen, Capt. G. L. Woytkins, and others. Based on the blackpowder 22 WCF, it was originally chambered in Springfield and Martini single shot action rifles. Bolt action rifles from Winchester and Savage followed in the decade of the 1930s, and the cartridge was adapted for military use in WW II in survival firearms.

Some old cartridges never die, and the Hornet is one great example. The Hornet's renewed popularity owes much to the interest paid to it by Anschutz, Ruger, Ultra Light Arms, and Thompson/Center, all of whom offer excellent rifles chambered for the round. The Hornet performs very well with lighter 22 caliber bullets, including the Hornady 35 and 40 grain V-MAX® Bullets. Hornady factory ammunition is available as well with the 35 grain V-MAX® as standard. H 110 and WIN 296 provide the best all around performance in this cartridge. Hodgdon "Lil-Gun" is excellent with heavier bullets.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. V-MAX®
Item No. 22252
C.O.L.: 1.715"
G1 B.C.: 0.109

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
Alliant 2400	8.9 gr.	9.5 gr.	10.0 gr.	10.6 gr.		
H110	9.9 gr.	10.4 gr.	10.9 gr.	11.4 gr.	11.9 gr.	12.3 gr.
WIN 296	9.9 gr.	10.4 gr.	10.9 gr.	11.5 gr.	12.0 gr.	

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 1.810"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
Alliant 2400	8.4 gr.	8.7 gr.	8.9 gr.	9.2 gr.	9.5 gr.	
WIN 296	8.2 gr.	8.8 gr.	9.5 gr.	10.1 gr.	10.8 gr.	11.4 gr.
H110	8.6 gr.	9.2 gr.	9.8 gr.	10.5 gr.	11.1 gr.	11.8 gr.
IMR 4227	9.7 gr.	10.2 gr.	10.8 gr.	11.3 gr.		
LIL' GUN		11.7 gr.	12.2 gr.	12.7 gr.	13.2 gr.	
Accurate 1680	11.1 gr.	11.7 gr.	12.2 gr.	12.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 1.750"
G1 B.C.: 0.202

45 gr. HP BEE
Item No. 2229
C.O.L.: 1.665"
G1 B.C.: 0.108

	VELOCITY (FPS – feet per second)			
POWDER	**2300**	**2400**	**2500**	**2600**
H110	8.4 gr.	8.8 gr.	9.2 gr.	9.7 gr.
Alliant 2400	8.6 gr.	9.0 gr.	9.3 gr.	
IMR 4227	9.8 gr.	10.3 gr.	10.8 gr.	
LIL' GUN	9.5 gr.	10.2 gr.	11.0 gr.	11.7 gr.
Accurate 1680	10.9 gr.	11.3 gr.	11.8 gr.	12.2 gr.

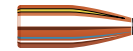
Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 1.780"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 1.780"
G1 B.C.: 0.214



50 gr. SP SX™
Item No. 2240
C.O.L.: 1.780"
G1 B.C.: 0.214

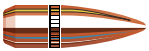
	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
H110	7.5 gr.	8.0 gr.	8.5 gr.			
Alliant 2400	7.7 gr.	8.2 gr.	8.7 gr.			
IMR 4227	9.2 gr.	9.7 gr.	10.2 gr.			
LIL' GUN	9.4 gr.	10.0 gr.	10.6 gr.	11.3 gr.		
Accurate 1680	9.5 gr.	10.1 gr.	10.7 gr.	11.2 gr.	11.8 gr.	12.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

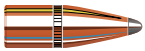
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 1.780"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 1.780"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 1.780"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 1.780"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 1.780"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
H110	7.0 gr.	7.6 gr.	8.2 gr.			
Alliant 2400	7.8 gr.	8.2 gr.	8.5 gr.			
LIL' GUN	8.2 gr.	8.8 gr.	9.4 gr.	10.1 gr.	10.7 gr.	
IMR 4227	8.5 gr.	9.1 gr.	9.7 gr.			
Accurate 1680	9.1 gr.	9.6 gr.	10.1 gr.	10.5 gr.	11.0 gr.	11.5 gr.

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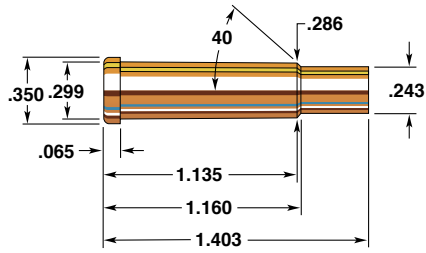
***NOTE:** The 55 grain V-MAX® bullet will not stabilize in a 1-16" and slower twist Bbls.*



22 K Hornet

Rifle:	T/C Encore	**Bullet Diameter:**	0.224"
Barrel:	24", 1 in 16" Twist	**Maximum COL:**	1.723"
Case:	Hornady/Frontier	**Max. Case Length:**	1.403"
Primer:	Winchester WSR	**Case Trim Length:**	1.393"

Most authorities credit the 22 Hornet with ushering in the modern era of small-bore, high velocity varmint hunting. Its light report, mild recoil, and low incidence of ricochet made it a very popular choice for varmint and small game hunting in settled areas. It could be chambered in a wide variety of actions, it performed well in all of them, and its rapid rise to popularity was both understandable and well deserved.

With all the attention the 22 Hornet received, it is not surprising that wildcatters were not far behind. By “improving” the 22 Hornet (fireforming it in a chamber of new dimensions), the original cartridge was given a sharper shoulder and considerably more powder capacity. The improved version allowed the K-Hornet to boost velocities of all bullets appropriate to the Hornet and to carry them a bit farther.

The 22 K-Hornet, originated by Lysle Kilbourn in 1940, is one of the most popular wildcats ever to be introduced. 22 K-Hornets with .224" barrels are especially effective on varmints with the Hornady 35 grain, 40 grain, and 50 grain V-MAX® bullets. The Hornady 55 grain spire point is a fine choice for small game hunting. In one of the vagaries of cartridge popularity, a very large population of modern shooters have returned to the original Hornet, not its zippier wildcat progeny. The 22 K-Hornet is still a fine cartridge.

There are several different versions of this wildcat that vary in the amount the shoulder is moved forward. This can effect case capacity significantly, always work up to maximum loads with care.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. V-MAX®
Item No. 22252
C.O.L.: 1.715"
G1 B.C.: 0.109

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
H110	8.7 gr.	9.5 gr.	10.3 gr.	11.2 gr.	12.0 gr.	
Alliant 2400	9.5 gr.	10.2 gr.	10.9 gr.	11.5 gr.		
WIN 296	10.0 gr.	10.7 gr.	11.3 gr.	11.9 gr.	12.5 gr.	13.2 gr.
LIL' GUN	10.2 gr.	10.9 gr.	11.7 gr.	12.5 gr.	13.2 gr.	14.0 gr.
Accurate 1680	13.3 gr.	13.9 gr.	14.4 gr.	15.0 gr.	15.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 1.810"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
VIHT N-110	9.0 gr.	9.7 gr.	10.4 gr.			
WIN 296	9.6 gr.	10.3 gr.	10.9 gr.	11.5 gr.		
Alliant 2400	9.2 gr.	10.1 gr.	11.0 gr.			
H110	10.0 gr.	10.5 gr.	11.0 gr.	11.5 gr.	11.9 gr.	
LIL' GUN	10.0 gr.	10.7 gr.	11.4 gr.	12.1 gr.	12.8 gr.	13.5 gr.
Accurate 1680	12.9 gr.	13.5 gr.	14.0 gr.	14.6 gr.	15.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 1.750"
G1 B.C.: 0.202

45 gr. HP BEE
Item No. 2229
C.O.L.: 1.665"
G1 B.C.: 0.108

	VELOCITY (FPS – feet per second)							
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
LIL' GUN			7.8 gr.	8.7 gr.	9.6 gr.	10.5 gr.	11.5 gr.	
WIN 296	8.0 gr.	8.6 gr.	9.3 gr.	9.9 gr.				
H110	8.0 gr.	8.6 gr.	9.3 gr.	10.0 gr.				
Alliant 2400	8.1 gr.	8.8 gr.	9.4 gr.	10.1 gr.				
Accurate 1680			12.0 gr.	12.6 gr.	13.2 gr.	13.9 gr.	14.5 gr.	15.1 gr.

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 1.830"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 1.780"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 1.780"
G1 B.C.: 0.214

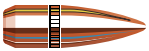
	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
LIL' GUN	7.1 gr.	7.7 gr.	8.3 gr.	8.9 gr.			
WIN 296	7.4 gr.	8.0 gr.	8.5 gr.	9.0 gr.			
H110	7.7 gr.	8.2 gr.	8.7 gr.	9.1 gr.			
Alliant 2400	7.3 gr.	8.0 gr.	8.7 gr.	9.4 gr.			
Accurate 1680		10.5 gr.	11.1 gr.	11.7 gr.	12.3 gr.	12.9 gr.	13.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

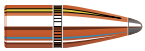
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 1.830"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 1.780"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 1.780"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 1.780"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 1.780"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)						
POWDER	**1950**	**2050**	**2150**	**2250**	**2350**	**2450**	**2550**
H110	7.2 gr.	7.6 gr.	8.1 gr.	8.5 gr.			
Alliant 2400	7.4 gr.	7.8 gr.	8.2 gr.	8.6 gr.			
WIN 296	7.5 gr.	7.8 gr.	8.2 gr.	8.6 gr.			
LIL' GUN	6.9 gr.	7.5 gr.	8.1 gr.	8.7 gr.	9.3 gr.	9.9 gr.	
IMR 4227	7.8 gr.	8.5 gr.	9.1 gr.	9.8 gr.			
Accurate 1680			10.8 gr.	11.2 gr.	11.7 gr.	12.1 gr.	12.6 gr.

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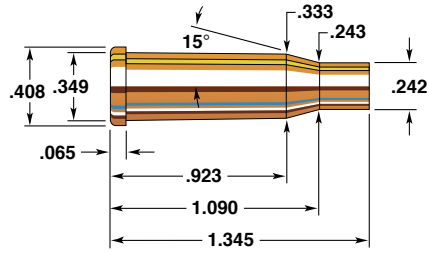

218 Bee

Rifle: . . . . . Marlin 1894 CL
Barrel: . . . . . .22", 1 in 16" Twist
Case: . . . . . .Hornady/Frontier
Primer: . . . . . Winchester WSR
Bullet Diameter: . . . . . 0.222 – 0.224"
Maximum COL: . . . . . 1.680"
Max. Case Length: . . . . . 1.345"
Case Trim Length: . . . . . .1.335"

Introduced by Winchester in 1938 and received with enthusiasm by performance minded varminters, the 218 Bee holds comparative advantages in powder capacity, powder choice, velocity, range, and heavier bullet accommodation over its predecessor. Yet the Bee never surpassed the Hornet's popularity.

Winchester originally chambered its Model 65 lever action for this necked-down 25-20 cartridge. While there is nothing inherently inaccurate about the 218 Bee (compare Hornet performance in good bolt action or single shot rifles), its accuracy potential in the lever action was not all that varminters desired. When, after WW II, Winchester chambered its Model 43 bolt action for the Bee, it still failed to gain great favor. Browning and Marlin's introduction of lever actions for the 218 Bee didn't spur acceptance. Pointed bullets can be used only in a single shot mode, loaded one by one into the chamber. Loaded with Hornady 22 caliber bullets, whether the 45 grain Bee (for lever guns), the 45 grain Spire Point, or the 50 grain SX (Super explosive), the 218 Bee will produce good results on most varmints out to 150-200 yards. It is neither as flat-shooting nor as potent as the 222 Remington.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. V-MAX®
Item No. 22252
C.O.L.: 1.650"
G1 B.C.: 0.109

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
H110	9.0 gr.	9.6 gr.	10.2 gr.	10.8 gr.	11.4 gr.	12.0 gr.
VIHT N-110	9.2 gr.	9.8 gr.	10.3 gr.	10.8 gr.		
Alliant 2400	9.5 gr.	10.0 gr.	10.5 gr.	11.0 gr.	11.5 gr.	
WIN 296	9.7 gr.	10.2 gr.	10.7 gr.	11.2 gr.	11.7 gr.	
IMR 4227	10.6 gr.	11.1 gr.	11.5 gr.	12.0 gr.		
VIHT N-120	12.2 gr.	12.7 gr.	13.3 gr.	13.8 gr.	14.4 gr.	14.9 gr.
Accurate 1680	11.2 gr.	12.1 gr.	13.0 gr.	13.9 gr.		

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114-0.116
DIAMETER: 0.222-0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 1.770"
G1 B.C.: 0.200

40 gr. JET *(Discontinued)*
Item No. 2210
C.O.L.: 1.615"
G1 B.C.: 0.104

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
Alliant 2400	9.3 gr.	9.7 gr.	10.1 gr.	10.5 gr.	
H110	9.7 gr.	10.2 gr.	10.6 gr.	11.1 gr.	11.6 gr.
WIN 296	9.8 gr.	10.4 gr.	10.9 gr.	11.5 gr.	12.0 gr.
IMR 4227	11.1 gr.	11.7 gr.			
VIHT N-120	11.9 gr.	12.4 gr.	13.0 gr.	13.5 gr.	14.0 gr.
Accurate 1680	13.3 gr.	13.8 gr.	14.3 gr.	14.7 gr.	
H4198	13.7 gr.	14.1 gr.	14.6 gr.	15.0 gr.	
Alliant RL-7	14.2 gr.	14.9 gr.	15.5 gr.	16.2 gr.	

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 1.610"
G1 B.C.: 0.202

45 gr. HP BEE
Item No. 2229
C.O.L.: 1.610"
G1 B.C.: 0.108

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
Alliant 2400	8.9 gr.	9.5 gr.	10.1 gr.	10.6 gr.	11.2 gr.
H110	9.1 gr.	9.8 gr.	10.5 gr.	11.2 gr.	11.9 gr.
Accurate 1680	12.2 gr.	12.7 gr.	13.2 gr.	13.7 gr.	14.1 gr.
VIHT N-120	12.6 gr.	13.0 gr.	13.5 gr.	14.0 gr.	14.5 gr.
Alliant RL-7	12.5 gr.	13.1 gr.	13.7 gr.	14.2 gr.	14.5 gr.
H4198	12.8 gr.	13.4 gr.	13.9 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 1.770"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 1.700"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 1.700"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)			
POWDER	**2300**	**2400**	**2500**	**2600**
Alliant 2400	8.5 gr.	9.1 gr.	9.7 gr.	
H110	8.8 gr.	9.4 gr.	10.1 gr.	10.8 gr.
WIN 296		9.8 gr.	10.5 gr.	11.2 gr.
IMR 4227	10.7 gr.	11.3 gr.	11.8 gr.	
VIHT N-120	11.2 gr.	11.9 gr.	12.5 gr.	13.2 gr.
Accurate 1680	11.9 gr.	12.5 gr.	13.1 gr.	13.7 gr.
Alliant RL-7	12.2 gr.	12.9 gr.	13.6 gr.	14.3 gr.
H4198	12.5 gr.	13.1 gr.	13.6 gr.	14.1 gr.

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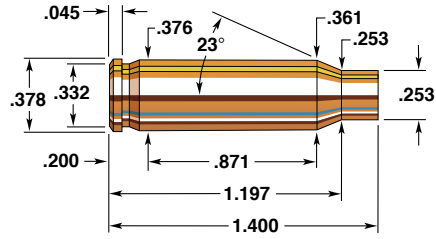

221 Remington Fireball

Rifle:	Remington Model 700 Classic	**Bullet Diameter:**	0.224"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	1.830"
Case:	Remington	**Max. Case Length:**	1.400"
Primer:	Remington 7½	**Case Trim Length:**	1.390"

Originally developed as a pistol cartridge for Remington's XP-100 the 221 Fireball has proven itself a versatile cartridge. This shortened version of the 222 Remington has served as the parent cartridge for a number of wildcats, many of them developed by J.D. Jones. The Fireball is an efficient cartridge; while physically smaller than the 222 it's top velocities are within 100–200 fps of the 222 Remington, this being true only when they are fired from firearms with barrels of equal length. Due in part to the fact that the 221 Fireball's maximum average pressure is 55,000 psi whereas the 222 Remington's is 50,000 psi.

The 221 Fireball is an excellent choice for varmints from prairie dogs to coyotes. It can be fired for extended periods of time with reduced concern of overheating the barrel. It is also an economical cartridge to reload with the average charge weight in the neighborhood of 17.0 grains; a pound of powder goes a long way. (411 cartridges to be exact)

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. V-MAX®
Item No. 22252
C.O.L.: 1.750"
G1 B.C.: 0.109

	VELOCITY (FPS – feet per second)			
POWDER	**3200**	**3300**	**3400**	**3500**
LIL' GUN	13.3 gr.	14.0 gr.	14.7 gr.	15.4 gr.
IMR 4227	14.8 gr.	15.6 gr.	16.3 gr.	
VIHT N-120	16.8 gr.	17.3 gr.	17.7 gr.	18.1 gr.
Accurate 1680	17.0 gr.	17.7 gr.	18.3 gr.	19.0 gr.

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 1.830"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
Alliant 2400	12.5 gr.	13.2 gr.	14.0 gr.	14.7 gr.	15.4 gr.
IMR 4227	13.7 gr.	14.4 gr.	15.0 gr.	15.6 gr.	
VIHT N-120	15.7 gr.	16.3 gr.	16.9 gr.	17.4 gr.	18.0 gr.
IMR 4198	15.8 gr.	16.4 gr.	16.9 gr.	17.5 gr.	18.0 gr.
Accurate 1680	15.9 gr.	16.5 gr.	17.1 gr.	17.7 gr.	18.3 gr.
H4198	16.4 gr.	16.9 gr.	17.4 gr.	17.9 gr.	18.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 1.825"
G1 B.C.: 0.202

45 gr. HP BEE
Item No. 2229
C.O.L.: 1.740"
G1 B.C.: 0.108

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 1680	15.3 gr.	16.1 gr.	16.9 gr.		
VIHT N-120	16.0 gr.	16.7 gr.	17.3 gr.		
IMR 4198	16.4 gr.	16.9 gr.	17.4 gr.		
H4198	16.4 gr.	17.1 gr.	17.8 gr.		
Alliant RL-7	17.3 gr.	17.8 gr.	18.4 gr.	18.9 gr.	19.5 gr.
VIHT N-130	17.1 gr.	17.8 gr.	18.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 1.830"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 1.825"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 1.825"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4227	12.6 gr.	13.3 gr.	14.1 gr.	14.8 gr.		
Accurate 1680	13.8 gr.	14.7 gr.	15.5 gr.	16.4 gr.		
H4198	14.4 gr.	15.1 gr.	15.9 gr.	16.6 gr.		
IMR 4198	14.8 gr.	15.4 gr.	16.0 gr.	16.6 gr.		
Alliant RL-7		16.3 gr.	16.9 gr.	17.5 gr.	18.1 gr.	18.6 gr.
VIHT N-130	15.7 gr.	16.3 gr.	16.9 gr.	17.6 gr.	18.2 gr.	
Accurate 2015	17.2 gr.	17.7 gr.	18.2 gr.	18.7 gr.		

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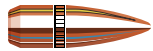
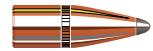
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 1.830"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 1.830"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 1.825"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 1.825"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 1.825"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4227	12.3 gr.	13.1 gr.	13.9 gr.		
Accurate 1680	13.0 gr.	14.1 gr.	15.2 gr.		
H4198	14.2 gr.	14.9 gr.	15.6 gr.	16.3 gr.	
IMR 4198	14.0 gr.	14.9 gr.	15.8 gr.		
Alliant RL-7	14.6 gr.	15.4 gr.	16.2 gr.	17.0 gr.	17.7 gr.
VIHT N-130	14.8 gr.	15.6 gr.	16.4 gr.	17.2 gr.	
Accurate 2015	16.4 gr.	17.0 gr.	17.7 gr.	18.3 gr.	

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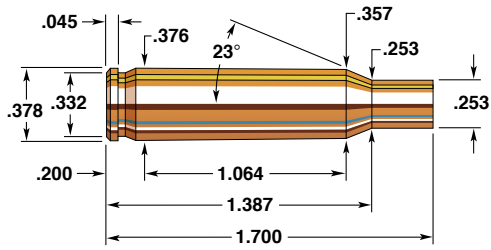

222 Remington

Rifle: . . . . . Remington 700
Barrel: . . . . . 24", 1 in 14" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 7½
Bullet Diameter: . . . . . 0.224"
Maximum COL: . . . . . 2.130"
Max. Case Length: . . . . . 1.700"
Case Trim Length: . . . . . 1.690"

Remington introduced this cartridge in 1950 in the Model 722 and since then, it has been chambered in nearly every possible action. The 222 is an original design, one not based on any other cartridge. Its inherent accuracy has accounted for countless varmints and numerous records by the bench rest fraternity. The effective varminting range of the 222 is about 250 yards.

Hornady ultra-thin SX bullets were introduced in 1958 expressly for the purpose of creating the explosiveness found in the larger 22 calibers, but at 222 velocities. The 222 is effective with bullet weights ranging from the 40 grain V-MAX® to the 60 grain Spire Point. Hornady 40, 50, and 55 grain V-MAX® bullets were introduced in the 1990s for even more remarkable effect. Care should be taken when using the 60-grain Hollow Points in the 222 Remington to see that these bullets are stabilizing properly. The 60 grain HP is intended for the use in the faster 22 calibers and many times a 1:14" twist and 3000 fps will not stabilize this bullet.

The powders that gave the most uniform velocities and best accuracy throughout the range of 22 caliber bullets were IMR 4198, VIHT N-130, VIHT N-135, and H 322. The cartridge has been a favorite of varmint hunters and benchrest shooters alike because of its excellent performance characteristics. It will enjoy a very long life.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. NTX®
Item No. 22240
C.O.L.: 2.130"
G1 B.C.: 0.177

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
VIHT N-120	19.0 gr.	19.6 gr.	20.2 gr.	20.9 gr.		
Accurate 1680	18.1 gr.	19.1 gr.	20.1 gr.	21.0 gr.	22.0 gr.	23.0 gr.
VIHT N-130	20.9 gr.	21.5 gr.	22.1 gr.	22.7 gr.		
Alliant RL-7	20.9 gr.	21.6 gr.	22.2 gr.	22.9 gr.	23.5 gr.	
Accurate 2230	22.7 gr.	23.6 gr.	24.5 gr.	25.4 gr.	26.3 gr.	

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.130"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
VIHT N-120	17.5 gr.	18.2 gr.	18.9 gr.	19.6 gr.		
IMR 4198	17.6 gr.	18.3 gr.	19.1 gr.	19.8 gr.	20.5 gr.	
Alliant RL-7	18.4 gr.	19.1 gr.	19.8 gr.	20.5 gr.	21.2 gr.	
Accurate 2015	20.2 gr.	20.8 gr.	21.5 gr.	22.2 gr.	22.9 gr.	23.6 gr.
VIHT N-130	20.2 gr.	20.9 gr.	21.5 gr.	22.2 gr.	22.9 gr.	
Alliant RL-10X	21.2 gr.	21.8 gr.	22.4 gr.	23.0 gr.	23.5 gr.	
Accurate 2230	22.1 gr.	22.8 gr.	23.5 gr.	24.3 gr.	25.0 gr.	
H335	23.0 gr.	23.7 gr.	24.4 gr.	25.1 gr.	25.8 gr.	26.6 gr.

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.130"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)			
POWDER	**3000**	**3100**	**3200**	**3300**
VIHT N-120	16.3 gr.	17.2 gr.	18.2 gr.	
VIHT N-130	18.3 gr.	19.3 gr.	20.3 gr.	21.3 gr.
Alliant RL-7	19.7 gr.	20.4 gr.	21.1 gr.	
IMR 4198	21.3 gr.	21.9 gr.	22.6 gr.	
Accurate 2230	22.0 gr.	22.7 gr.	23.4 gr.	24.1 gr.
H322	22.5 gr.	23.1 gr.	23.7 gr.	24.3 gr.
Accurate 2460	22.6 gr.	23.4 gr.	24.1 gr.	
H335	23.8 gr.	24.6 gr.	25.3 gr.	26.1 gr.
BL-C(2)	24.2 gr.	24.9 gr.	25.5 gr.	26.2 gr.
WIN 748	25.0 gr.	25.8 gr.	26.6 gr.	27.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.130"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.130"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.130"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
VIHT N-130	17.9 gr.	18.7 gr.	19.5 gr.	20.4 gr.	21.2 gr.
IMR 4198	19.0 gr.	19.7 gr.	20.3 gr.	21.0 gr.	
Alliant RL-10X	20.1 gr.	20.7 gr.	21.3 gr.	22.0 gr.	22.6 gr.
VIHT N-135	21.1 gr.	21.8 gr.	22.6 gr.	23.4 gr.	
X-TERMINATOR	21.0 gr.	21.9 gr.	22.7 gr.	23.6 gr.	24.5 gr.
Accurate 2230	21.5 gr.	22.1 gr.	22.7 gr.	23.3 gr.	
H322	21.6 gr.	22.4 gr.	23.1 gr.	23.9 gr.	
Accurate 2460	22.2 gr.	23.1 gr.	24.0 gr.		
H335	23.1 gr.	23.8 gr.	24.6 gr.	25.4 gr.	
IMR 4895	23.3 gr.	24.0 gr.	24.8 gr.	25.5 gr.	
BL-C(2)	23.9 gr.	24.6 gr.	25.3 gr.	26.0 gr.	
WIN 748	24.5 gr.	25.2 gr.	25.9 gr.	26.6 gr.	27.4 gr.

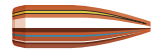
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.180"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.180"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.120"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.200"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.120"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
VIHT N-130	17.7 gr.	18.7 gr.	19.8 gr.	20.8 gr.	
IMR 4198	18.6 gr.	19.3 gr.	19.9 gr.	20.5 gr.	
Accurate 2230	21.0 gr.	21.5 gr.	22.1 gr.	22.6 gr.	
VIHT N-135	20.8 gr.	21.6 gr.	22.4 gr.		
H322	21.1 gr.	21.8 gr.	22.5 gr.		
IMR 3031	21.3 gr.	21.9 gr.	22.6 gr.		
Accurate 2460	21.5 gr.	22.3 gr.	23.0 gr.		
H335	22.5 gr.	23.2 gr.	24.0 gr.	24.7 gr.	
IMR 4895	22.8 gr.	23.6 gr.	24.4 gr.	25.1 gr.	
BL-C(2)	23.4 gr.	24.2 gr.	25.0 gr.	25.8 gr.	
WIN 748	24.1 gr.	24.8 gr.	25.5 gr.	26.2 gr.	26.9 gr.

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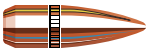
***NOTE:** 53 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*

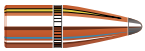
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.130"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.160"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.130"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.130"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.130"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
VIHT N-130	17.3 gr.	18.2 gr.	19.1 gr.	20.1 gr.	21.0 gr.
IMR 4198	18.0 gr.	18.6 gr.	19.3 gr.	20.0 gr.	20.6 gr.
Alliant RL-10X	19.3 gr.	19.9 gr.	20.5 gr.	21.1 gr.	21.7 gr.
X-TERMINATOR	19.1 gr.	20.3 gr.	21.4 gr.	22.5 gr.	23.7 gr.
Accurate 2230	20.2 gr.	20.9 gr.	21.6 gr.	22.3 gr.	
IMR 3031	20.6 gr.	21.2 gr.	21.8 gr.	22.4 gr.	
Accurate 2460	20.7 gr.	21.3 gr.	22.0 gr.	22.7 gr.	
VIHT N-135	20.7 gr.	21.4 gr.	22.2 gr.	22.9 gr.	
H322	20.8 gr.	21.5 gr.	22.2 gr.		
Benchmark	20.9 gr.	21.6 gr.	22.4 gr.	23.1 gr.	23.8 gr.
H335	21.7 gr.	22.5 gr.	23.3 gr.	24.1 gr.	24.9 gr.
IMR 8208 XBR	22.2 gr.	22.7 gr.	23.5 gr.		
IMR 4895	22.1 gr.	22.9 gr.	23.7 gr.	24.6 gr.	25.4 gr.
IMR 4064	22.6 gr.	23.3 gr.	24.0 gr.		
IMR 4320	23.2 gr.	23.9 gr.	24.6 gr.	25.4 gr.	
WIN 748		24.1 gr.	24.9 gr.	25.7 gr.	26.4 gr.
BL-C(2)	23.8 gr.	24.5 gr.	25.3 gr.		

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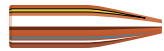
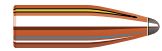
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.160"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.130"
G1 B.C.: 0.271



60 gr. SP
Item No. 2270
C.O.L.: 2.130"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4198	17.6 gr.	18.3 gr.	18.9 gr.	19.6 gr.	
VIHT N-130	17.2 gr.	18.3 gr.	19.4 gr.		
Accurate 2230	19.9 gr.	20.6 gr.	21.4 gr.	22.1 gr.	
IMR 3031	20.1 gr.	20.8 gr.	21.5 gr.	22.1 gr.	
Accurate 2460	19.9 gr.	20.8 gr.	21.7 gr.		
VIHT N-135	20.0 gr.	20.8 gr.	21.7 gr.	22.5 gr.	
H322	20.4 gr.	21.1 gr.	21.8 gr.		
H335	21.0 gr.	21.9 gr.	22.8 gr.	23.6 gr.	24.5 gr.
IMR 4895	21.6 gr.	22.3 gr.	23.1 gr.	23.8 gr.	24.5 gr.
IMR 4064	22.1 gr.	22.7 gr.	23.3 gr.		
BL-C(2)	22.3 gr.	23.1 gr.	23.8 gr.	24.6 gr.	
IMR 4320	22.6 gr.	23.4 gr.	24.1 gr.	24.8 gr.	
WIN 748	22.6 gr.	23.4 gr.	24.3 gr.	25.1 gr.	25.9 gr.

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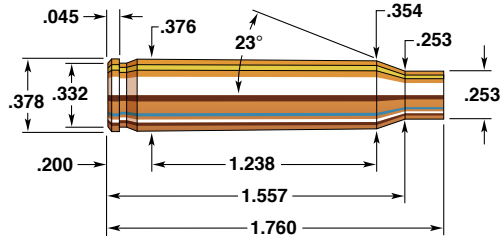
NOTE: *60 grain V-MAX® and Hollow point bullets will not stabilize in 1-14" and slower twist Bbls.*



223 Remington

Rifle:	Remington 700	**Bullet Diameter:**	0.224"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	2.260"
Case:	Winchester	**Max. Case Length:**	1.760"
Primer:	Winchester WSR	**Case Trim Length:**	1.750"

The 223 Remington began as a military cartridge in 1957 and was later introduced by Remington as a commercial round. The cartridge is now chambered by numerous manufacturers in a wide variety of firearms. Ready availability of inexpensive military surplus brass contributed greatly to the 223's popularity. It easily surpassed the 222 Magnum's following, and its acceptance is still growing.

When comparing the 222 Magnum and the 223 Remington, the case size appears to be nearly identical. However, the 222 Magnum is about one tenth of an inch longer and holds ½ to 1 grain more powder. 223 Remington cartridges should not be fired in a 222 Magnum as the case dimensions are different and the cases are likely to rupture, possibly causing injury.

The 223 Remington is an excellent choice for varmint hunters. Couple the wide assortment of firearms with Hornady's superb selection of 22 caliber bullets and the 223 is adequate for any 22 caliber use. Varminters are encouraged to try the 22 caliber Hornady V-MAX® bullets. These polymer-tipped bullets have been designed not only for their explosive performance on impact, they are very efficient ballistically and highly accurate.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. NTX®
Item No. 22240
C.O.L.: 2.240"
G1 B.C.: 0.177

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 4198	20.0 gr.	20.6 gr.	21.1 gr.	21.6 gr.	22.2 gr.	
H4198	20.9 gr.	21.5 gr.	22.0 gr.	22.6 gr.		
NORMA 200	22.2 gr.	22.9 gr.	23.6 gr.			
Accurate 2230	21.7 gr.	22.8 gr.	23.9 gr.	24.9 gr.	26.0 gr.	
Alliant RL-10X	22.7 gr.	23.4 gr.	24.1 gr.	24.8 gr.		
VIHT N-133	23.0 gr.	23.6 gr.	24.2 gr.			
H322	24.0 gr.	24.6 gr.	25.1 gr.	25.7 gr.		
Accurate 2460	23.9 gr.	24.6 gr.	25.3 gr.	26.0 gr.	26.7 gr.	
Benchmark	24.4 gr.	25.0 gr.	25.7 gr.	26.3 gr.	26.9 gr.	
TAC	24.3 gr.	25.1 gr.	25.9 gr.	26.8 gr.	27.6 gr.	
X-TERMINATOR	24.4 gr.	25.2 gr.	26.0 gr.	26.8 gr.	27.6 gr.	28.4 gr.

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.200"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 4198	19.3 gr.	20.0 gr.	20.7 gr.	21.5 gr.	22.2 gr.	
VIHT N-120	19.5 gr.	20.3 gr.	21.0 gr.			
VIHT N-130	21.6 gr.	22.3 gr.	23.0 gr.	23.8 gr.	24.5 gr.	
Accurate LT-30	22.2 gr.	22.9 gr.	23.6 gr.	24.2 gr.		
Alliant RL-10X	23.0 gr.	23.6 gr.	24.1 gr.	24.6 gr.	25.2 gr.	
Accurate LT-32	23.3 gr.	24.0 gr.	24.7 gr.	25.3 gr.		
Accurate 2460	24.1 gr.	24.9 gr.	25.6 gr.	26.4 gr.	27.1 gr.	27.8 gr.
H335	24.3 gr.	25.1 gr.	25.9 gr.	26.6 gr.	27.4 gr.	
TAC	24.3 gr.	25.1 gr.	25.9 gr.	26.7 gr.	27.5 gr.	
Benchmark	24.7 gr.	25.6 gr.	26.4 gr.			
IMR 8208 XBR	26.2 gr.	26.7 gr.	27.0 gr.			

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.200"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
VIHT N-130	20.0 gr.	20.8 gr.	21.6 gr.	22.5 gr.	23.3 gr.
IMR 4198	20.6 gr.	21.3 gr.	22.0 gr.	22.7 gr.	
VIHT N-133	21.1 gr.	21.9 gr.	22.8 gr.	23.7 gr.	24.6 gr.
Alliant RL-10X	21.6 gr.	22.4 gr.	23.2 gr.	24.0 gr.	
H322	23.3 gr.	23.9 gr.	24.5 gr.	25.1 gr.	
VIHT N-135	22.8 gr.	23.6 gr.	24.5 gr.	25.3 gr.	
TAC	22.9 gr.	23.7 gr.	24.6 gr.	25.4 gr.	26.2 gr.
IMR 3031		23.8 gr.	24.6 gr.	25.5 gr.	
Benchmark	23.7 gr.	24.4 gr.	25.1 gr.	25.7 gr.	26.4 gr.
H335	23.0 gr.	24.0 gr.	25.0 gr.	26.1 gr.	27.1 gr.
Accurate 2460	23.9 gr.	24.6 gr.	25.4 gr.	26.1 gr.	26.9 gr.
BL-C(2)	24.9 gr.	25.6 gr.	26.3 gr.	27.0 gr.	27.7 gr.
WIN 748	25.5 gr.	26.5 gr.	27.5 gr.	28.6 gr.	

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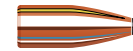
50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.240"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.200"
G1 B.C.: 0.214



50 gr. SP SX™
Item No. 2240
C.O.L.: 2.200"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4198	19.5 gr.	20.2 gr.	20.9 gr.	21.6 gr.	22.2 gr.	
VIHT N-130	19.6 gr.	20.4 gr.	21.2 gr.	22.1 gr.	22.9 gr.	
VIHT N-133	19.8 gr.	20.6 gr.	21.4 gr.	22.1 gr.	22.9 gr.	23.7 gr.
Alliant RL-10X	20.0 gr.	20.9 gr.	21.8 gr.	22.6 gr.	23.5 gr.	
H322	21.9 gr.	22.6 gr.	23.2 gr.	23.9 gr.	24.5 gr.	25.2 gr.
IMR 3031	22.5 gr.	23.2 gr.	23.8 gr.	24.4 gr.	25.1 gr.	25.7 gr.
TAC	22.3 gr.	23.1 gr.	23.8 gr.	24.5 gr.	25.2 gr.	25.9 gr.
H335	21.8 gr.	22.7 gr.	23.7 gr.	24.7 gr.	25.7 gr.	
Benchmark	21.5 gr.	22.6 gr.	23.7 gr.	24.8 gr.	25.8 gr.	
SW Tactical Rifle	22.3 gr.	23.2 gr.	24.1 gr.	24.9 gr.	25.8 gr.	26.7 gr.
Accurate 2460	22.4 gr.	23.3 gr.	24.3 gr.	25.2 gr.	26.2 gr.	27.1 gr.
IMR 8208 XBR	23.5 gr.	24.2 gr.	24.9 gr.	25.6 gr.	26.5 gr.	
BL-C(2)	22.9 gr.	23.9 gr.	24.8 gr.	25.8 gr.	26.7 gr.	
IMR 4895	24.3 gr.	25.0 gr.	25.7 gr.	26.3 gr.	27.0 gr.	
Power Pro Varmint	24.3 gr.	25.0 gr.	25.7 gr.	26.5 gr.	27.2 gr.	
WIN 748	24.5 gr.	25.1 gr.	25.9 gr.	26.7 gr.	27.5 gr.	28.3 gr.
IMR 4320	25.0 gr.	25.7 gr.	26.5 gr.	27.2 gr.	27.9 gr.	
H380	25.3 gr.	26.2 gr.	27.2 gr.	28.1 gr.	29.0 gr.	

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INDICATES MAXIMUM LOAD — USE WITH CAUTION

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. GMX®
Item No. 22403
C.O.L.: 2.165"
G1 B.C.: 0.215

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
VIHT N-135	22.3 gr.	22.9 gr.	23.6 gr.	24.2 gr.		
Benchmark	23.0 gr.	23.5 gr.	24.1 gr.	24.6 gr.		
AR-Comp	22.5 gr.	23.3 gr.	24.2 gr.	25.0 gr.		
IMR 8208 XBR	23.5 gr.	24.1 gr.	24.7 gr.	25.3 gr.		
TAC	23.6 gr.	24.2 gr.	24.8 gr.	25.4 gr.	26.0 gr.	
WIN 748	24.3 gr.	24.9 gr.	25.5 gr.	26.1 gr.		
Power Pro Varmint	23.3 gr.	24.3 gr.	25.3 gr.	26.3 gr.	27.2 gr.	
Accurate 2520	24.3 gr.	25.0 gr.	25.6 gr.	26.3 gr.	26.9 gr.	
CFE 223	24.4 gr.	25.3 gr.	26.1 gr.	27.0 gr.	27.9 gr.	28.8 gr.

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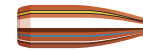
52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.230"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.230"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.230"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.240"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.230"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4198	19.2 gr.	20.1 gr.	21.0 gr.	21.9 gr.		
VIHT N-130	19.3 gr.	20.3 gr.	21.3 gr.	22.2 gr.		
Alliant RL-10X	20.4 gr.	21.3 gr.	22.1 gr.	23.0 gr.		
VIHT N-133	20.6 gr.	21.4 gr.	22.2 gr.	23.0 gr.		
IMR 3031	22.2 gr.	22.9 gr.	23.5 gr.	24.2 gr.	24.8 gr.	25.5 gr.
H322	22.2 gr.	22.9 gr.	23.6 gr.	24.3 gr.	25.0 gr.	
VIHT N-135	22.0 gr.	22.9 gr.	23.7 gr.	24.5 gr.		
TAC	22.4 gr.	23.2 gr.	24.1 gr.	24.9 gr.	25.8 gr.	
Benchmark	22.1 gr.	23.1 gr.	24.0 gr.	25.0 gr.		
AR-Comp	23.5 gr.	24.1 gr.	24.6 gr.	25.2 gr.		
H335	22.3 gr.	23.3 gr.	24.3 gr.	25.4 gr.		
Accurate 2460	22.6 gr.	23.5 gr.	24.5 gr.	25.4 gr.	26.3 gr.	27.3 gr.
BL-C(2)	22.5 gr.	23.5 gr.	24.5 gr.	25.5 gr.	26.5 gr.	27.4 gr.
IMR 8208 XBR	23.7 gr.	24.4 gr.	25.1 gr.	25.7 gr.	26.2 gr.	
VARGET	23.3 gr.	24.2 gr.	25.1 gr.	26.0 gr.		
IMR 4895	24.1 gr.	24.9 gr.	25.6 gr.	26.4 gr.	27.1 gr.	
Power Pro Varmint	24.5 gr.	25.2 gr.	26.0 gr.	26.7 gr.		
WIN 748	23.8 gr.	24.8 gr.	25.8 gr.	26.9 gr.	27.9 gr.	28.9 gr.
IMR 4320	24.8 gr.	25.6 gr.	26.4 gr.	27.2 gr.	27.9 gr.	
CFE 223	25.6 gr.	26.2 gr.	26.8 gr.	27.4 gr.	28.0 gr.	

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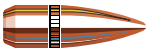
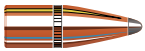
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.250"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.200"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.200"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.200"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.200"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4198	17.4 gr.	18.2 gr.	19.1 gr.	20.0 gr.		
Alliant RL-10X	19.5 gr.	20.4 gr.	21.3 gr.	22.2 gr.		
VIHT N-133	19.8 gr.	20.8 gr.	21.8 gr.	22.7 gr.		
H322	19.5 gr.	20.7 gr.	21.9 gr.	23.1 gr.		
IMR 3031	20.5 gr.	21.2 gr.	22.0 gr.	22.8 gr.		
VIHT N-135	20.5 gr.	21.5 gr.	22.4 gr.	23.4 gr.		
H335	20.8 gr.	21.6 gr.	22.4 gr.	23.2 gr.		
TAC	21.5 gr.	22.3 gr.	23.1 gr.	23.9 gr.	24.7 gr.	
Accurate 2460	21.2 gr.	22.2 gr.	23.2 gr.	24.2 gr.		
Benchmark	21.6 gr.	22.6 gr.	23.5 gr.	24.5 gr.		
AR-Comp	22.7 gr.	23.4 gr.	24.1 gr.	24.8 gr.		
SW Tactical Rifle	22.4 gr.	23.3 gr.	24.2 gr.			
IMR 4895	22.7 gr.	23.5 gr.	24.3 gr.	25.1 gr.		
IMR 8208 XBR	22.8 gr.	23.6 gr.	24.4 gr.	25.1 gr.	25.8 gr.	
WIN 748	22.7 gr.	23.7 gr.	24.6 gr.	25.5 gr.	26.4 gr.	
VARGET	22.8 gr.	23.7 gr.	24.6 gr.	25.5 gr.	26.4 gr.	
VIHT N-140	22.8 gr.	23.8 gr.	24.7 gr.	25.7 gr.		
NORMA 201	23.4 gr.	24.1 gr.	24.7 gr.	25.4 gr.		
Power Pro Varmint	24.0 gr.	24.7 gr.	25.4 gr.	26.1 gr.	26.8 gr.	
BL-C(2)	24.4 gr.	25.1 gr.	25.9 gr.	26.6 gr.	27.4 gr.	28.1 gr.
CFE 223	24.8 gr.	25.5 gr.	26.1 gr.	26.7 gr.	27.4 gr.	

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55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. GMX®
Item No. 22273
C.O.L.: 2.185"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
AR-Comp	20.4 gr.	21.4 gr.	22.4 gr.	23.5 gr.		
VIHT N-135	20.6 gr.	21.5 gr.	22.4 gr.	23.3 gr.		
Benchmark	21.7 gr.	22.3 gr.	23.0 gr.	23.7 gr.		
TAC	21.7 gr.	22.4 gr.	23.2 gr.	23.9 gr.		
Accurate 2520	21.5 gr.	22.5 gr.	23.5 gr.	24.4 gr.	25.4 gr.	
IMR 8208 XBR	22.1 gr.	22.8 gr.	23.5 gr.			
Power Pro Varmint	22.7 gr.	23.4 gr.	24.2 gr.	24.9 gr.	25.6 gr.	26.3 gr.
WIN 748	22.9 gr.	23.7 gr.	24.4 gr.	25.2 gr.	25.9 gr.	
CFE 223	23.5 gr.	24.2 gr.	24.9 gr.	25.7 gr.	26.4 gr.	27.1 gr.

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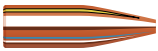
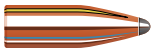
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.250"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.200"
G1 B.C.: 0.271



60 gr. SP
Item No. 2270
C.O.L.: 2.200"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4198	17.2 gr.	18.1 gr.	19.1 gr.			
Alliant RL-10X	19.0 gr.	19.9 gr.	20.9 gr.	21.8 gr.		
VIHT N-133	19.5 gr.	20.4 gr.	21.3 gr.	22.2 gr.		
VIHT N-135	19.6 gr.	20.6 gr.	21.7 gr.	22.7 gr.		
H335	20.1 gr.	21.0 gr.	22.0 gr.	22.9 gr.		
IMR 3031	20.3 gr.	21.2 gr.	22.0 gr.	22.8 gr.		
Accurate 2460	20.2 gr.	21.2 gr.	22.1 gr.	23.0 gr.		
H322	20.7 gr.	21.5 gr.	22.3 gr.	23.1 gr.		
TAC	21.6 gr.	22.3 gr.	23.1 gr.	23.9 gr.	24.7 gr.	
Benchmark	21.7 gr.	22.5 gr.	23.4 gr.	24.2 gr.	25.0 gr.	
AR-Comp	22.2 gr.	22.8 gr.	23.4 gr.			
VIHT N-140	21.5 gr.	22.6 gr.	23.7 gr.	24.8 gr.		
VARGET	21.7 gr.	22.7 gr.	23.8 gr.	24.9 gr.		
WIN 748	22.1 gr.	23.0 gr.	23.8 gr.	24.7 gr.	25.5 gr.	
NORMA 201	22.8 gr.	23.5 gr.	24.2 gr.			
IMR 8208 XBR	23.0 gr.	23.7 gr.	24.3 gr.	25.3 gr.		
Power Pro Varmint	23.6 gr.	24.2 gr.	24.8 gr.	25.5 gr.	26.1 gr.	
BL-C(2)	23.1 gr.	24.0 gr.	24.9 gr.	25.9 gr.	26.8 gr.	27.7 gr.
CFE 223	24.5 gr.	25.1 gr.	25.7 gr.	26.2 gr.	26.8 gr.	27.4 gr.

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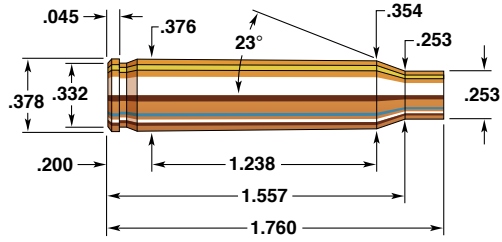

223 Remington Service Rifle Data

Rifle:	Colt AR-15, Citadel Bbl	**Bullet Diameter:**	0.224"
Barrel:	20", 1 in 9" Twist	**Maximum COL:**	2.250"
Case:	Winchester	**Max. Case Length:**	1.760"
Primer:	Winchester WSR	**Case Trim Length:**	1.750"

The 5.56 x 45mm cartridge was intended for military use from its inception. The Armalite AR-15 rifle for which it was developed, after evolving into the selective fire M-16 and undergoing several years of Army testing, was adopted by the U. S. military and first saw action in the Vietnam War.

Acceptance of the AR-15 as a service match rifle began in the 1980s. Army Marksmanship units decided to use the M-16, the military equivalent of the AR-15, as their service match rifle in the 1990s. Both developments spurred demand for excellent long-range bullets for the AR-15 shooter.

The Hornady 68 grain BTHP has been a mainstay of the AR-15 shooter for some time and is excellent for 200 and 300 yard shooting. The Hornady 73 grain ELD® Match and 75 grain BTHP can be loaded to function at magazine length and compete well at 600+ yards. The Hornady 75 grain ELD® Match bullet is an excellent choice over 600 yard ranges in single shot shooting. (This bullet cannot be loaded to magazine length.)

Our best results were obtained with VIHT N-140. VIHT N-135 and A 2495 gave excellent results but did not match VIHT N-140. Reloaders, especially former M1A/308 shooters, are cautioned not to load the 5.56 x 45mm beyond the AR-15's operating range lest case, barrel, and receiver life will be sacrificed.

68 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.224"

68 gr. BTHP Match™
Item No. 2278
C.O.L.: 2.250"
G1 B.C.: 0.355

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
AR-Comp	20.4 gr.	21.4 gr.	22.3 gr.	23.2 gr.	
VIHT N-135	21.3 gr.	22.0 gr.	22.7 gr.	23.4 gr.	
H322	21.6 gr.	22.3 gr.	23.0 gr.		
NORMA 201	21.7 gr.	22.5 gr.	23.4 gr.	24.2 gr.	
H335	21.3 gr.	22.6 gr.	23.8 gr.		
Power Pro Varmint	21.6 gr.	22.8 gr.	24.1 gr.	25.4 gr.	
Accurate 2230	21.8 gr.	23.0 gr.	24.2 gr.		
VIHT N-140	22.4 gr.	23.3 gr.	24.2 gr.	25.1 gr.	
IMR 4895	22.6 gr.	23.4 gr.	24.2 gr.	24.9 gr.	
VARGET	22.7 gr.	23.4 gr.	24.2 gr.	24.9 gr.	
CFE 223	22.5 gr.	23.5 gr.	24.4 gr.	25.4 gr.	26.3 gr.
BL-C(2)	22.9 gr.	23.8 gr.	24.7 gr.	25.6 gr.	
WIN 748	23.4 gr.	24.2 gr.	25.0 gr.	25.8 gr.	
Power Pro 2000 MR	24.3 gr.	25.2 gr.	26.2 gr.	27.1 gr.	

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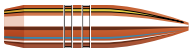
70 GRAIN BULLETS

SECTIONAL DENSITY: 0.199
DIAMETER: 0.224"



70 gr. GMX®
Item No. 2281
C.O.L.: 2.235"
G1 B.C.: 0.350

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
AR-Comp	16.8 gr.	18.0 gr.	19.1 gr.	20.3 gr.	21.5 gr.
Alliant RL-15	17.8 gr.	19.1 gr.	20.4 gr.	21.7 gr.	23.1 gr.
NORMA 203 B	17.8 gr.	19.4 gr.	21.0 gr.	22.6 gr.	24.0 gr.
CFE 223	17.8 gr.	19.5 gr.	21.1 gr.	22.8 gr.	24.4 gr.
VIHT N-140	18.0 gr.	19.5 gr.	21.1 gr.		
TAC	19.3 gr.	20.4 gr.	21.5 gr.	22.6 gr.	
Accurate 2520	19.4 gr.	20.6 gr.	21.8 gr.	22.9 gr.	24.1 gr.
Power Pro Varmint	19.5 gr.	20.7 gr.	22.0 gr.	23.2 gr.	24.5 gr.
WIN 748	20.0 gr.	21.2 gr.	22.3 gr.	23.5 gr.	
VARGET	20.3 gr.	21.3 gr.	22.4 gr.	23.5 gr.	

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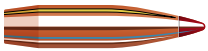
***NOTE:** 70 grain GMX® bullet will not stabilize in 1-8" and slower twist Bbls.*

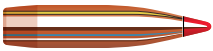
***NOTE:** 70 grain GMX® was shot using a 20" Bushmaster AR-15, 1-7" twist, WSR primers and a C.O.L. of 2.235".*

73-75 GRAIN BULLETS

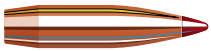
SECTIONAL DENSITY: 0.208-0.214
DIAMETER: 0.224"



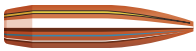
***73 gr. ELD® Match**
Item No. 22774
C.O.L.: 2.250"
G1 B.C.: 0.360
G7 B.C.: 0.190



75 gr. A-MAX® *(Discontinued)*
Item No. 22792
C.O.L.: 2.390"
G1 B.C.: 0.435



***75 gr. ELD® Match**
Item No. 22791
C.O.L.: 2.390"
G1 B.C.: 0.430
G7 B.C.: 0.221



^75 gr. BTHP Match™
Item No. 2279
C.O.L.: 2.250"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	18.6 gr.	19.2 gr.	19.9 gr.	20.5 gr.	21.2 gr.	
AR-Comp	17.1 gr.	18.2 gr.	19.4 gr.	20.5 gr.	21.7 gr.	
Accurate 2495	18.2 gr.	19.1 gr.	20.0 gr.	20.9 gr.	21.8 gr.	
VIHT N-135	19.8 gr.	20.3 gr.	20.8 gr.	21.3 gr.	21.8 gr.	
Accurate 2520	18.6 gr.	19.6 gr.	20.5 gr.	21.5 gr.	22.5 gr.	
H4895	19.3 gr.	20.1 gr.	20.9 gr.	21.7 gr.	22.5 gr.	23.3 gr.
SW Tactical Rifle	19.0 gr.	19.9 gr.	20.9 gr.	21.8 gr.	22.8 gr.	23.8 gr.
Power Pro Varmint	19.4 gr.	20.4 gr.	21.3 gr.	22.3 gr.	23.3 gr.	24.2 gr.
Alliant RL-15	20.0 gr.	20.8 gr.	21.7 gr.	22.5 gr.	23.3 gr.	24.1 gr.
WIN 748	20.2 gr.	20.9 gr.	21.7 gr.	22.5 gr.	23.3 gr.	24.0 gr.
NORMA 203 B	19.8 gr.	20.7 gr.	21.6 gr.	22.5 gr.	23.4 gr.	
VARGET	19.4 gr.	20.4 gr.	21.5 gr.	22.5 gr.	23.5 gr.	
VIHT N-140	20.0 gr.	20.9 gr.	21.8 gr.	22.7 gr.	23.6 gr.	
VIHT N-540	20.6 gr.	21.4 gr.	22.1 gr.	22.9 gr.	23.6 gr.	
CFE 223	20.2 gr.	21.2 gr.	22.1 gr.	23.0 gr.	24.0 gr.	24.9 gr.
BL-C(2)	21.2 gr.	22.0 gr.	22.8 gr.	23.6 gr.	24.4 gr.	25.2 gr.
Power Pro 2000 MR	21.5 gr.	22.5 gr.	23.4 gr.	24.3 gr.	25.3 gr.	26.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

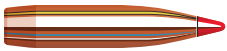
***NOTE:** It is recommended to use a 1-8" twist barrel or faster for #22791 and #22792.*

NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

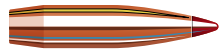
*^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.228
DIAMETER: 0.224"



80 gr. A-MAX® *(Discontinued)*
Item No. 22832
C.O.L.: 2.390"
G1 B.C.: 0.453



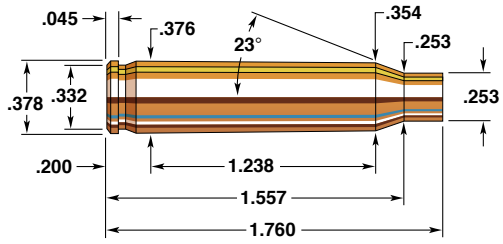
***80 gr. ELD® Match**
Item No. 22831
C.O.L.: 2.390"
G1 B.C.: 0.457
G7 B.C.: 0.235

	VELOCITY (FPS – feet per second)						
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**	**2750**
H4895	19.4 gr.	20.4 gr.	21.3 gr.	22.3 gr.			
TAC	20.1 gr.	21.0 gr.	22.0 gr.	22.9 gr.	23.3 gr.		
NORMA 203 B	20.1 gr.	21.1 gr.	22.0 gr.	23.0 gr.	23.4 gr.	23.9 gr.	
VIHT N-140	20.4 gr.	21.3 gr.	22.1 gr.	23.0 gr.			
Power Pro Varmint	19.9 gr.	21.0 gr.	22.0 gr.	23.1 gr.			
Alliant RL-15	20.4 gr.	21.3 gr.	22.2 gr.	23.1 gr.	23.5 gr.		
CFE 223	20.2 gr.	21.4 gr.	22.5 gr.	23.6 gr.	24.1 gr.	24.7 gr.	
WIN 748	21.0 gr.	21.9 gr.	22.7 gr.	23.6 gr.			
VARGET	20.8 gr.	21.8 gr.	22.8 gr.	23.8 gr.			
Accurate 2520	21.2 gr.	22.3 gr.	23.4 gr.	24.5 gr.	25.1 gr.		
IMR 4007 SSC	21.5 gr.	22.5 gr.	23.6 gr.	24.6 gr.	25.1 gr.	25.6 gr.	26.3 gr.
BL-C(2)	21.7 gr.	22.7 gr.	23.7 gr.	24.7 gr.			
Power Pro 2000 MR	22.7 gr.	23.7 gr.	24.7 gr.	25.6 gr.	26.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** It is recommended to use a 1-8" twist barrel or faster for #22831 and #22832.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



5.56mm NATO

Rifle:	Bushmaster XM15-E25	**Bullet Diameter:**	0.224"
Barrel:	20", 1 in 7" Twist	**Maximum COL:**	2.250"
Case:	Hornady	**Max. Case Length:**	1.760"
Primer:	WSR	**Case Trim Length:**	1.750"

The 5.56 NATO cartridge (5.56 x 45mm) was derived from the 223 Remington for use in the US Military M-16 rifle. The original 55 grain bullet has been replaced over the years and the current bullet is 62 grains. Original rifles started with 20", 1:14" and later 1:12" twist barrels. Today, most military rifles are the shorter M4 design with a 14.5" barrel with a 1:7" twist rate. The faster twist rate is important for a variety of military bullet weights from 62 to 77 grains.

The main differences between the 5.56 NATO and the 223 Remington is the operating pressure and chamber throat. SAAMI (Sporting Arms and Ammunition Manufacturers Institute) maximum pressure for the 223 Remington is 55,000 psi. The 5.56 NATO is loaded to 60,000 psi. Chamber throat for the 223 Remington is shorter than 5.56 NATO chambers as well.

Firing 223 Remington ammunition in a 5.56 NATO chamber is common though the longer throat length of the 5.56 may cause some pressure degradation. On rare occurrence, particularly with light for caliber bullets a failure to cycle may occur in an MSR (Modern Sporting Rifle). It is not recommended to shoot 5.56 NATO ammunition in a 223 Remington chamber. Firing 5.56 NATO (higher pressure) in a 223 Remington (shorter throat) rifle can cause pressure related damage that could lead to injury.

The loads presented in this Handbook are intended specifically for 5.56 NATO chambers. If you are unsure whether your rifle is chambered in 223 Remington or 5.56 NATO please contact the manufacturer. Note: with modular AR-15 style rifles, the lower receiver's cartridge designation may not match the upper receiver's chambering. Many times the chambering and barrel twist rate is marked on the barrel itself.

55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. GMX®
Item No. 22273
C.O.L.: 2.200"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3250**
AR-Comp	19.8 gr.	20.9 gr.	22.1 gr.	23.3 gr.	24.4 gr.	
Accurate 2230	20.5 gr.	21.5 gr.	22.5 gr.	23.5 gr.	24.5 gr.	
H4895	21.1 gr.	22.1 gr.	23.1 gr.	24.1 gr.	25.1 gr.	
NORMA 201	21.8 gr.	22.6 gr.	23.4 gr.	24.2 gr.	25.1 gr.	25.5 gr.
IMR 8208 XBR	20.2 gr.	21.6 gr.	23.1 gr.	24.5 gr.		
TAC	21.5 gr.	22.5 gr.	23.5 gr.	24.5 gr.	25.6 gr.	
BL-C(2)	22.3 gr.	23.4 gr.	24.6 gr.	25.7 gr.	26.9 gr.	27.5 gr.
WIN 748	22.7 gr.	23.7 gr.	24.7 gr.	25.7 gr.	26.6 gr.	
Accurate 2520	22.3 gr.	23.5 gr.	24.6 gr.	25.8 gr.	26.9 gr.	27.5 gr.
CFE 223	22.8 gr.	23.9 gr.	24.9 gr.	25.9 gr.	27.0 gr.	27.5 gr.
Power Pro Varmint	22.7 gr.	23.8 gr.	24.9 gr.	26.0 gr.	27.1 gr.	

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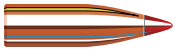
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"



60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.250"
G1 B.C.: 0.265

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3150**
AR-Comp	17.6 gr.	19.3 gr.	21.1 gr.	22.8 gr.	24.6 gr.	
Accurate 2230	20.5 gr.	21.5 gr.	22.5 gr.	23.6 gr.		
IMR 8208 XBR	21.8 gr.	22.6 gr.	23.5 gr.	24.4 gr.		
TAC	21.4 gr.	22.5 gr.	23.6 gr.	24.7 gr.		
NORMA 201	21.9 gr.	22.8 gr.	23.7 gr.	24.7 gr.	25.6 gr.	
Accurate 2520	21.7 gr.	22.9 gr.	24.1 gr.	25.3 gr.	26.5 gr.	27.1 gr.
Power Pro Varmint	22.9 gr.	23.8 gr.	24.7 gr.	25.6 gr.	26.5 gr.	26.9 gr.
WIN 748	22.5 gr.	23.6 gr.	24.7 gr.	25.7 gr.		
CFE 223	23.5 gr.	24.5 gr.	25.4 gr.	26.3 gr.	27.2 gr.	27.7 gr.
BL-C(2)	23.6 gr.	24.6 gr.	25.5 gr.	26.5 gr.	27.4 gr.	27.9 gr.

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INDICATES MAXIMUM LOAD — USE WITH CAUTION

68 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.224"

68 gr. BTHP Match™
Item No. 2278
C.O.L.: 2.250"
G1 B.C.: 0.355

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3050**
VIHT N-135	20.1 gr.	21.1 gr.	22.1 gr.	23.1 gr.		
AR-Comp	20.4 gr.	21.4 gr.	22.5 gr.	23.5 gr.		
IMR 8208 XBR	21.3 gr.	22.2 gr.	23.1 gr.	24.1 gr.		
NORMA 201	21.4 gr.	22.3 gr.	23.2 gr.	24.1 gr.	25.1 gr.	
H4895	20.8 gr.	21.9 gr.	23.1 gr.	24.3 gr.		
VARGET	21.8 gr.	22.9 gr.	24.0 gr.	25.1 gr.		
BL-C(2)	22.7 gr.	23.6 gr.	24.5 gr.	25.4 gr.	26.3 gr.	26.8 gr.
WIN 748	22.7 gr.	23.6 gr.	24.5 gr.	25.4 gr.		
Power Pro Varmint	22.6 gr.	23.6 gr.	24.6 gr.	25.6 gr.	26.6 gr.	
CFE 223	23.3 gr.	24.2 gr.	25.1 gr.	26.0 gr.	26.9 gr.	
Accurate 2520	21.6 gr.	23.2 gr.	24.9 gr.	26.6 gr.		

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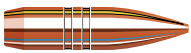
70 GRAIN BULLETS

SECTIONAL DENSITY: 0.199
DIAMETER: 0.224"



70 gr. GMX®
Item No. 2281
C.O.L.: 2.250"
G1 B.C.: 0.350

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
IMR 8208 XBR	22.1 gr.	23.1 gr.	24.2 gr.			
H4895	22.1 gr.	23.2 gr.				
NORMA 201	22.4 gr.	23.3 gr.	24.2 gr.			
Accurate 2520	22.9 gr.	24.1 gr.	25.4 gr.			
VIHT N-140	23.0 gr.	24.1 gr.				
VARGET	23.0 gr.	24.1 gr.				
WIN 748	23.4 gr.	24.4 gr.	25.5 gr.			
Power Pro Varmint	23.5 gr.	24.5 gr.	25.4 gr.	25.9 gr.	26.4 gr.	
CFE 223	23.6 gr.	24.6 gr.	25.6 gr.	26.1 gr.	26.6 gr.	27.1 gr.
BL-C(2)	23.7 gr.	25.1 gr.	26.4 gr.	27.0 gr.		

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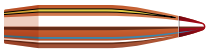
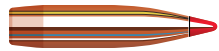
***NOTE:** #2281 will not stabilize in 1-8" and slower twist barrels.*

73-75 GRAIN BULLETS

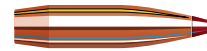
SECTIONAL DENSITY: 0.208-0.214
DIAMETER: 0.224"



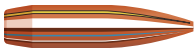
***73 gr. ELD® Match**
Item No. 22774
C.O.L.: 2.250"
G1 B.C.: 0.360
G7 B.C.: 0.190



75 gr. A-MAX® *(Discontinued)*
Item No. 22792
C.O.L.: 2.390"
G1 B.C.: 0.435



***75 gr. ELD® Match**
Item No. 22791
C.O.L.: 2.390"
G1 B.C.: 0.430
G7 B.C.: 0.221



^75 gr. BTHP Match™
Item No. 2279
C.O.L.: 2.250"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
TAC		20.3 gr.	22.1 gr.	23.8 gr.		
IMR 8208 XBR	20.9 gr.	21.9 gr.	22.8 gr.			
Alliant RL-15	20.7 gr.	21.9 gr.	23.1 gr.	24.3 gr.	24.9 gr.	
Accurate 2520	21.2 gr.	22.3 gr.	23.5 gr.	24.6 gr.		
NORMA 203 B	21.6 gr.	22.5 gr.	23.5 gr.	24.4 gr.	24.9 gr.	
VARGET	21.8 gr.	22.8 gr.	23.7 gr.	24.6 gr.		
VIHT N-140	21.7 gr.	22.7 gr.	23.8 gr.	24.8 gr.		
Power Pro Varmint	22.0 gr.	23.0 gr.	23.9 gr.	24.9 gr.	25.4 gr.	
WIN 748	22.4 gr.	23.3 gr.	24.2 gr.	25.1 gr.	25.5 gr.	
CFE 223	22.2 gr.	23.2 gr.	24.3 gr.	25.4 gr.	25.9 gr.	26.5 gr.
BL-C(2)	22.5 gr.	23.5 gr.	24.5 gr.	25.5 gr.	26.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

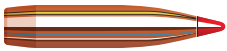
NOTE: *It is recommended to use a 1-8" twist barrel or faster for #22791 and #22792.*

**NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

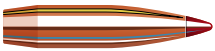
^NOTE: This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.228
DIAMETER: 0.224"



80 gr. A-MAX® *(Discontinued)*
Item No. 22832
C.O.L.: 2.390"
G1 B.C.: 0.453



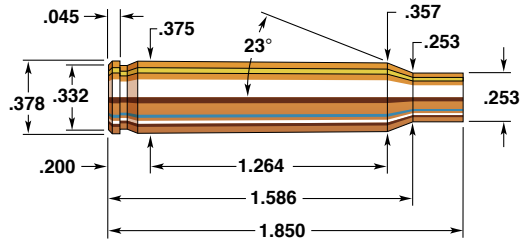
***80 gr. ELD® Match**
Item No. 22831
C.O.L.: 2.390"
G1 B.C.: 0.457
G7 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**	**2800**
AR-Comp		19.9 gr.	21.2 gr.	22.5 gr.	23.2 gr.	
H4895	20.3 gr.	21.1 gr.	22.0 gr.	22.8 gr.		
Alliant RL-15	20.1 gr.	21.3 gr.	22.4 gr.	23.6 gr.	24.1 gr.	
Accurate 2520	20.4 gr.	21.5 gr.	22.6 gr.	23.7 gr.	24.2 gr.	
NORMA 203 B	20.8 gr.	21.8 gr.	22.8 gr.	23.7 gr.	24.2 gr.	24.7 gr.
VARGET	20.8 gr.	21.9 gr.	22.9 gr.	23.9 gr.	24.4 gr.	
VIHT N-140	20.9 gr.	22.0 gr.	23.1 gr.	24.1 gr.	24.7 gr.	
Power Pro Varmint	21.5 gr.	22.5 gr.	23.4 gr.	24.4 gr.	24.9 gr.	25.4 gr.
WIN 748	21.9 gr.	22.8 gr.	23.7 gr.	24.5 gr.	25.0 gr.	
CFE 223	21.7 gr.	22.7 gr.	23.7 gr.	24.8 gr.	25.3 gr.	25.9 gr.
BL-C(2)	22.4 gr.	23.2 gr.	24.1 gr.	24.9 gr.	25.3 gr.	25.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** It is recommended to use a 1-8" twist barrel or faster for #22831 and #22832.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



222 Remington Magnum

Rifle:	T/C Encore	**Bullet Diameter:**	0.224"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	2.280"
Case:	Remington	**Max. Case Length:**	1.850"
Primer:	Remington 7½	**Case Trim Length:**	1.840"

Between 1955 and 1964, twenty-six new rifle and pistol cartridges were introduced by arms manufacturers to American shooters. Exactly half of them were magnums. The 222 Remington Magnum came on the scene in 1958, along with three other entries in the Great Magnum Race: the 264 Winchester Magnum, the 7mm Remington Magnum, and the 460 Weatherby Magnum.

A lengthened version of the 222 Remington, this cartridge was originally an experimental design for the U.S. military (which ultimately adopted a variation known as the 5.56mm NATO or commercially as the 223 Remington). The 222 Remington Magnum has greater case capacity than the 222 and thus somewhat more velocity and range potential. In performance terms it falls midway between the 222 and such venerable cartridges as the 219 Donaldson Wasp and Winchester's 219 Zipper. Top velocities with the 222 magnum, however, fall 300-400 fps below those possible with such high performance 22s as the 22-250 Remington and the 220 Swift.

The 222 Remington Magnum holds an advantage over its parent because it handles heavier bullets somewhat more easily. It is thus slightly superior to the 222 when wind is an important factor or when a lot of shooting must be done at ranges from 225 to 275 yards.

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.325"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
VIHT N-120	20.5 gr.	21.4 gr.			
IMR 4198	21.5 gr.	22.3 gr.	23.1 gr.		
Alliant RL-7	22.2 gr.	22.9 gr.			
VIHT N-130	23.3 gr.	23.9 gr.	24.5 gr.		
H322	24.1 gr.	25.2 gr.	26.2 gr.	27.3 gr.	
Accurate 2230	25.7 gr.	26.4 gr.	27.0 gr.	27.7 gr.	28.4 gr.
H335	25.8 gr.	26.6 gr.	27.4 gr.	28.2 gr.	
Accurate 2460	26.3 gr.	27.0 gr.	27.6 gr.	28.3 gr.	28.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.290"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
H4198	20.0 gr.	20.8 gr.	21.6 gr.	22.3 gr.	
IMR 3031	23.9 gr.	24.4 gr.	24.9 gr.	25.3 gr.	
VIHT N-135	23.7 gr.	24.4 gr.	25.2 gr.	26.0 gr.	26.8 gr.
Accurate 2460	24.1 gr.	24.8 gr.	25.4 gr.	26.1 gr.	26.8 gr.
H4895	24.8 gr.	25.6 gr.	26.4 gr.	27.2 gr.	28.0 gr.
WIN 748	24.8 gr.	25.7 gr.	26.5 gr.	27.3 gr.	
IMR 4320	25.2 gr.	26.3 gr.	27.3 gr.	28.3 gr.	

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.325"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.305"
G1 B.C.: 0.214

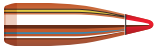
50 gr. SP SX™
Item No. 2240
C.O.L.: 2.305"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
H4198	19.4 gr.	20.3 gr.	21.2 gr.	22.1 gr.	23.0 gr.
IMR 3031	22.9 gr.	23.6 gr.	24.2 gr.	24.9 gr.	25.6 gr.
VIHT N-135	23.5 gr.	24.3 gr.	25.0 gr.	25.8 gr.	
Accurate 2460	23.0 gr.	24.0 gr.	25.0 gr.	26.0 gr.	27.1 gr.
H4895	24.3 gr.	25.1 gr.	25.8 gr.	26.5 gr.	27.2 gr.
WIN 748	24.4 gr.	25.3 gr.	26.1 gr.	27.0 gr.	
IMR 4320	25.1 gr.	25.9 gr.	26.7 gr.	27.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

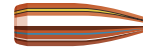
52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"



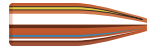
52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.325"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.325"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.325"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.325"
G1 B.C.: 0.290



53 gr. HP Match™
Item No. 2250
C.O.L.: 2.325"
G1 B.C.: 0.218

NOTE: USE 55 GRAIN POWDER DATA FOR LOADING THESE BULLETS

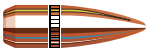
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

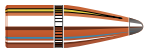
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.325"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.325"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.310"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.310"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.310"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 3031	22.3 gr.	23.1 gr.	23.9 gr.		
Accurate 2460	23.2 gr.	23.9 gr.	24.5 gr.	25.2 gr.	
VIHT N-135	23.1 gr.	23.8 gr.	24.6 gr.		
H4895	23.8 gr.	24.4 gr.	25.0 gr.	25.6 gr.	26.2 gr.
WIN 748	24.3 gr.	25.2 gr.	26.0 gr.		
IMR 4064	25.2 gr.	25.7 gr.	26.2 gr.		
IMR 4320	25.0 gr.	25.7 gr.	26.4 gr.	27.1 gr.	

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60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.325"
G1 B.C.: 0.265

60 gr. HP
Item No. 2275
C.O.L.: 2.310"
G1 B.C.: 0.271

60 gr. SP
Item No. 2270
C.O.L.: 2.310"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)			
POWDER	**2800**	**2900**	**3000**	**3100**
IMR 3031	22.4 gr.	23.0 gr.	23.6 gr.	
Accurate 2460	22.3 gr.	23.2 gr.	24.1 gr.	
VIHT N-135	22.6 gr.	23.4 gr.	24.2 gr.	
H4895	23.2 gr.	24.0 gr.	24.7 gr.	25.4 gr.
IMR 4064	23.7 gr.	24.3 gr.	24.9 gr.	25.4 gr.
IMR 4320		24.9 gr.	25.7 gr.	
WIN 748	23.8 gr.	24.7 gr.	25.7 gr.	
BL-C(2)	24.2 gr.	25.2 gr.	26.2 gr.	

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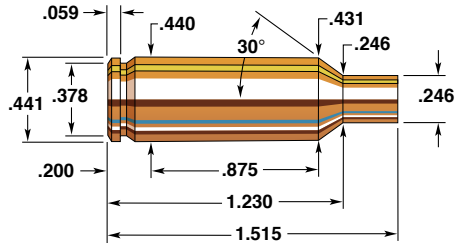
***NOTE:** The 60 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*



22 PPC

Rifle: . . . . . .Wichita Mini
Barrel: . . . . . .24", 1 in 14" Twist
Case: . . . . Sako 6mm PPC Reformed
Primer: . . . . . Remington 7½
Bullet Diameter: . . . . . 0.224"
Maximum COL: . . . . . .2.193"
Max. Case Length: . . . . . .1.515"
Case Trim Length: . . . . . .1.505"

The 22 PPC cartridge was designed by Dr. Louis Palmisano and Ferris Pindell in 1974. Their evident intention was to create an extremely efficient bench rest cartridge. The cartridge is based on the 220 Russian case which itself is based on the 7.62 x 39mm Soviet military cartridge. The 22 PPC has a smaller head size than the 308 and uses a small rifle primer, which purportedly enhances accuracy. The fact that the PPC cartridges are steadily winning bench rest matches across the country supports the theory of efficient case structure. Indeed, many bench rest shooters are also using the 6mm PPC and are enjoying equal success.

One unique aspect of the 22 PPC is that while it was an American development, Sako and Norma quickly recognized its potential and supported it with commercial rifles and ammunition.

Our particular test rifle was built by Ferris Pindell and gave very fine results. All the powders listed performed admirably, but H-322 showed the best uniformity from shot to shot, and also produced the best accuracy. With the Hornady 53 grain Match Hollow Point and the 52 grain Match Boat Tail Hollow Point, five shot groups measuring .250" or less were easily obtained provided the shooter did his part. If you're an avid target shooter, the 22 PPC certainly deserves your consideration.

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.035"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
Alliant RL-7	20.5 gr.	21.2 gr.	21.9 gr.	22.6 gr.	23.3 gr.	
H4198	21.5 gr.	22.2 gr.	23.0 gr.	23.8 gr.	24.5 gr.	
Accurate 2015	23.5 gr.	24.3 gr.	25.0 gr.	25.8 gr.	26.5 gr.	
VIHT N-133	23.9 gr.	24.5 gr.	25.2 gr.	25.8 gr.	26.5 gr.	
IMR 3031	24.1 gr.	24.8 gr.	25.5 gr.	26.2 gr.	26.9 gr.	
H322	24.4 gr.	25.1 gr.	25.8 gr.	26.4 gr.	27.1 gr.	27.7 gr.
Accurate 2230	23.5 gr.	24.4 gr.	25.4 gr.	26.3 gr.	27.2 gr.	
WIN 748	26.2 gr.	27.2 gr.	28.1 gr.	29.1 gr.	30.1 gr.	31.1 gr.
BL-C(2)	28.4 gr.	29.3 gr.	30.2 gr.	31.0 gr.	31.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.060"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.040"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.040"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
Alliant RL-7	18.4 gr.	19.4 gr.	20.4 gr.	21.4 gr.		
H4198	19.7 gr.	20.5 gr.	21.3 gr.	22.1 gr.		
Accurate 2015	21.0 gr.	21.8 gr.	22.6 gr.	23.5 gr.		
VIHT N-133	21.6 gr.	22.4 gr.	23.2 gr.	24.1 gr.	24.9 gr.	
Accurate 2230	21.2 gr.	22.2 gr.	23.2 gr.	24.3 gr.	25.3 gr.	
H322	22.0 gr.	22.7 gr.	23.5 gr.	24.3 gr.		
IMR 3031	22.0 gr.	22.8 gr.	23.6 gr.	24.3 gr.		
WIN 748	24.5 gr.	25.4 gr.	26.3 gr.	27.2 gr.	28.1 gr.	29.0 gr.

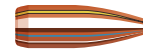
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.060"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.060"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.010"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.060"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.010"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
IMR 4198	18.8 gr.	19.6 gr.	20.5 gr.	21.3 gr.		
Accurate 2015	20.8 gr.	21.8 gr.	22.7 gr.	23.7 gr.	24.6 gr.	
Accurate 2230	21.2 gr.	22.1 gr.	22.9 gr.	23.7 gr.	24.6 gr.	
VIHT N-133	20.7 gr.	21.8 gr.	22.8 gr.	23.8 gr.	24.9 gr.	
H322	21.9 gr.	22.9 gr.	23.9 gr.	24.9 gr.	25.9 gr.	
WIN 748	24.2 gr.	25.2 gr.	26.2 gr.	27.1 gr.	28.1 gr.	29.1 gr.
BL-C(2)	26.0 gr.	27.1 gr.	28.2 gr.	29.3 gr.	30.4 gr.	

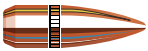
Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

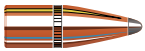
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.060"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.035"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.035"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.035"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.035"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
Accurate 2015	19.7 gr.	20.6 gr.	21.5 gr.	22.4 gr.		
Accurate 2230	20.4 gr.	21.2 gr.	22.1 gr.	22.9 gr.		
VIHT N-133	19.7 gr.	20.8 gr.	22.0 gr.	23.2 gr.		
H322	20.9 gr.	21.8 gr.	22.6 gr.	23.4 gr.		
VIHT N-135	21.5 gr.	22.5 gr.	23.6 gr.	24.6 gr.		
WIN 748	23.3 gr.	24.4 gr.	25.4 gr.	26.5 gr.	27.5 gr.	28.5 gr.
BL-C(2)	24.6 gr.	25.8 gr.	27.0 gr.	28.2 gr.		

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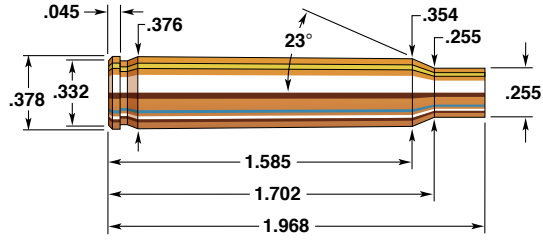


5.6 X 50mm Magnum

Rifle:	Krico	**Bullet Diameter:**	0.224"
Barrel:	23⅝", 1 in 13" Twist	**Maximum COL:**	2.413"
Case:	RWS	**Max. Case Length:**	1.968"
Primer:	Federal 205	**Case Trim Length:**	1.958"

The 5.6 x 50mm Magnum evolved during 1966 and 1967 from a rimmed version of DWM's 222 Magnum (5.6 x 47mm R). In 1968 DWM, working with gunmaker Friedrick Wilhelm Heym, introduced the 5.6 x 50mm R Magnum. This cartridge, .118" longer than the 222 Magnum, provided greater powder capacity and more down range energy. The primary reason for the development of the cartridge was to have a 22 caliber capable of enough remaining energy at 200 meters to legally take the small European Reh deer. The rimmed version was introduced first because of the popularity of break open guns for hunting in Europe. A rimless version for bolt actions was introduced in 1970.

In the U.S. the 5.6 x 50mm Magnum is better suited as a varmint cartridge. For this purpose, Hornady offers the 50 and 55-grain SX (Super Explosive) bullets as well as the 22 caliber V-MAX®s. Add to this the rest of the 22 caliber Hornady Bullets and the 5.6 x 50mm Magnum is an excellent small game and varmint round.

The powders that performed best in our test weapon were IMR 4064 and WIN 748. It is important to note that highest velocity and greatest accuracy do not always co-exist in a single load. Best accuracy was obtained using IMR 4064. WIN 748 achieved the highest velocities of those powders tested. These are clearly the preferred powders for this cartridge.

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.400"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
IMR 3031	25.0 gr.	25.6 gr.	26.1 gr.	26.6 gr.	
IMR 4064	26.2 gr.	26.8 gr.	27.4 gr.	28.0 gr.	
WIN 748	26.4 gr.	27.2 gr.	28.0 gr.	28.7 gr.	29.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.400"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.400"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.400"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
IMR 3031	25.1 gr.	25.7 gr.	26.3 gr.	26.8 gr.	
IMR 4064	26.2 gr.	26.8 gr.	27.5 gr.	28.1 gr.	
WIN 748	26.4 gr.	27.2 gr.	28.1 gr.	28.9 gr.	29.8 gr.

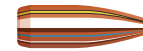
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.400"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.400"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.400"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.400"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.400"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 3031	23.7 gr.	24.3 gr.	24.9 gr.	25.5 gr.	
IMR 4064	24.7 gr.	25.4 gr.	26.1 gr.	26.8 gr.	27.5 gr.
WIN 748	24.8 gr.	25.7 gr.	26.7 gr.	27.7 gr.	28.6 gr.

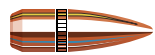
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

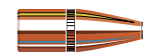
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

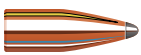
55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.400"
G1 B.C.: 0.255



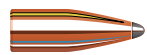
55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.400"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.400"
G1 B.C.: 0.235



55 gr. SP
Item No. 2265
C.O.L.: 2.400"
G1 B.C.: 0.235



55 gr. SP SX™
Item No. 2260
C.O.L.: 2.400"
G1 B.C.: 0.235

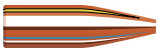
	VELOCITY (FPS – feet per second)			
POWDER	**2900**	**3000**	**3100**	**3200**
IMR 3031	23.7 gr.	24.3 gr.	24.9 gr.	
IMR 4064	24.7 gr.	25.4 gr.	26.1 gr.	26.8 gr.
WIN 748	24.8 gr.	25.7 gr.	26.7 gr.	27.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

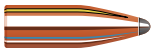
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.400"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.400"
G1 B.C.: 0.271

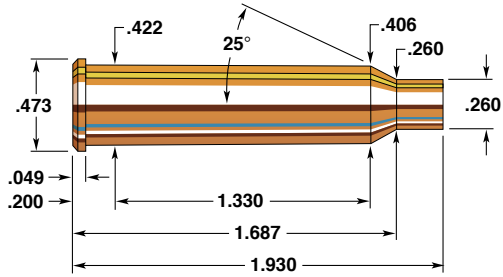


60 gr. SP
Item No. 2270
C.O.L.: 2.400"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 3031	23.6 gr.	24.2 gr.	24.9 gr.	25.5 gr.	
IMR 4064	24.9 gr.	25.6 gr.	26.4 gr.	27.1 gr.	27.8 gr.
WIN 748	25.2 gr.	26.1 gr.	27.0 gr.	27.8 gr.	28.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *The 60 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*



225 Winchester

Rifle: . . . . . Winchester 70
Barrel: . . . . . 24", 1 in 14" Twist
Case: . . . . . Winchester
Primer: . . . . . Winchester WLR

Bullet Diameter: . . . . . 0.224"
Maximum COL: . . . . . 2.500"
Max. Case Length: . . . . . 1.930"
Case Trim Length: . . . . . 1.920"

After 6mm's gained a foothold as dual purpose varminting/ hunting cartridges, the 220 Swift's popularity declined seriously and Winchester ceased producing rifles for it. Not to be left without a high performance entry in 22 caliber, however, it introduced a replacement for the Swift in 1964; the 225 Winchester.

Less potent than the 220 Swift, whose place it preempted in the Model 70, the case of the 225 Winchester is termed "semi-rimmed", a design which makes it quite adaptable to single shot actions. The cartridge nevertheless headspaces on the shoulder in the fashion of rimless cases.

Over the 15 year period beginning in 1950, 22 caliber was the scene of intense development activity and considerable jockeying for position among the arms companies. Remington introduced the 222, 222 Magnum, 223, and 221 cartridges in its line-up; Winchester, formerly the leader in the development of 22 caliber varmint cartridges, saw old favorites wither and die. Its 225 came on the scene just as Weatherby entered the fray and as Remington began commercial production of the 22-250, a cartridge rivaling the Swift in performance. Although an excellent cartridge, the 225 Winchester has not become popular and currently no large firearms company chambers a rifle for it. Winchester has thus been nudged out of its former position of 22 caliber innovation and leadership.

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.425"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**3500**	**3600**	**3700**	**3800**	**3900**
H4198	25.8 gr.	26.8 gr.	27.8 gr.	28.8 gr.	29.8 gr.
IMR 3031	29.3 gr.	30.3 gr.	31.2 gr.	32.2 gr.	33.2 gr.
Accurate 2520	29.6 gr.	30.4 gr.	31.3 gr.	32.2 gr.	33.1 gr.
IMR 4320	31.0 gr.	32.2 gr.	33.4 gr.	34.6 gr.	35.8 gr.
VIHT N-140	32.3 gr.	33.2 gr.	34.1 gr.	35.0 gr.	35.8 gr.
Alliant RL-15	32.5 gr.	33.4 gr.	34.3 gr.	35.2 gr.	36.1 gr.
BL-C(2)	35.1 gr.	36.0 gr.	36.8 gr.	37.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.425"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)			
POWDER	**3400**	**3500**	**3600**	**3700**
H4198	25.4 gr.	26.4 gr.	27.4 gr.	
IMR 3031	29.5 gr.	30.3 gr.	31.1 gr.	31.9 gr.
WIN 748		31.4 gr.	32.6 gr.	33.9 gr.
IMR 4064	31.4 gr.	32.0 gr.	32.6 gr.	33.1 gr.
H4895	31.6 gr.	32.2 gr.	32.8 gr.	33.4 gr.
BL-C(2)	30.7 gr.	31.9 gr.	33.1 gr.	
IMR 4320	31.3 gr.	32.2 gr.	33.2 gr.	34.1 gr.
H380	33.6 gr.	34.4 gr.	35.2 gr.	36.0 gr.
WIN 760	36.1 gr.	37.1 gr.	38.0 gr.	39.0 gr.

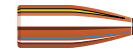
Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.420"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.420"
G1 B.C.: 0.214



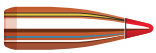
50 gr. SP SX™
Item No. 2240
C.O.L.: 2.420"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)			
POWDER	**3300**	**3400**	**3500**	**3600**
IMR 3031	29.0 gr.	29.8 gr.	30.5 gr.	31.2 gr.
Accurate 2520	29.8 gr.	30.8 gr.	31.8 gr.	
BL-C(2)		30.4 gr.	32.1 gr.	33.8 gr.
IMR 4064	30.6 gr.	31.4 gr.	32.2 gr.	33.0 gr.
H4895	30.9 gr.	31.7 gr.	32.4 gr.	33.2 gr.
VIHT N-140	30.4 gr.	31.5 gr.	32.7 gr.	
IMR 4320	30.8 gr.	31.8 gr.	32.7 gr.	33.7 gr.
H380	32.9 gr.	34.0 gr.	35.9 gr.	36.1 gr.
WIN 760		36.3 gr.	37.4 gr.	38.4 gr.

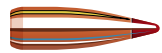
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"



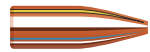
52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.420"
G1 B.C.: 0.247



52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.420"
G1 B.C.: 0.247

52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.420"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.420"
G1 B.C.: 0.290



53 gr. HP Match™
Item No. 2250
C.O.L.: 2.420"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 3031	28.5 gr.	29.3 gr.	30.0 gr.	30.8 gr.	31.6 gr.
BL-C(2)		29.8 gr.	31.1 gr.	32.3 gr.	33.5 gr.
IMR 4064	29.6 gr.	30.4 gr.	31.3 gr.	32.1 gr.	32.9 gr.
H4895	30.0 gr.	30.8 gr.	31.7 gr.	32.5 gr.	33.4 gr.
IMR 4320	29.6 gr.	30.7 gr.	31.8 gr.	32.9 gr.	
VIHT N-140	30.2 gr.	31.4 gr.	32.5 gr.		
H380	32.0 gr.	33.1 gr.	34.2 gr.	35.2 gr.	36.3 gr.
WIN 760	35.6 gr.	36.4 gr.	37.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

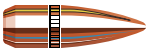
***NOTE:** The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

INDICATES MAXIMUM LOAD — USE WITH CAUTION

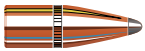
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.420"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.420"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.420"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.420"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.420"
G1 B.C.: 0.235

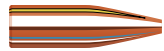
	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 3031	28.5 gr.	29.3 gr.	30.0 gr.	30.8 gr.	
BL-C(2)		29.8 gr.	31.1 gr.	32.3 gr.	33.5 gr.
IMR 4064	29.6 gr.	30.4 gr.	31.3 gr.	32.1 gr.	32.9 gr.
Accurate 2520	29.4 gr.	30.4 gr.	31.5 gr.		
H4895	30.0 gr.	30.8 gr.	31.7 gr.	32.5 gr.	33.4 gr.
IMR 4320	29.6 gr.	30.7 gr.	31.8 gr.	32.9 gr.	
VIHT N-140	30.5 gr.	31.7 gr.	32.9 gr.		
H380	32.0 gr.	33.1 gr.	34.2 gr.	35.2 gr.	36.3 gr.
WIN 760	35.6 gr.	36.4 gr.	37.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

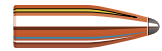
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.420"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.410"
G1 B.C.: 0.271

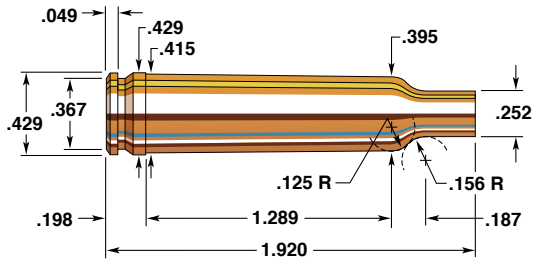


60 gr. SP
Item No. 2270
C.O.L.: 2.410"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
H4198	25.0 gr.	26.0 gr.	27.0 gr.		
IMR 3031	27.5 gr.	28.3 gr.	29.0 gr.	29.8 gr.	
IMR 4064	29.0 gr.	29.7 gr.	30.4 gr.	31.1 gr.	
H4895	28.8 gr.	29.6 gr.	30.5 gr.	31.3 gr.	
BL-C(2)	28.3 gr.	29.5 gr.	30.6 gr.	31.8 gr.	
IMR 4320	29.3 gr.	30.0 gr.	30.8 gr.	31.5 gr.	
Alliant RL-15	28.7 gr.	29.9 gr.	31.1 gr.	32.3 gr.	
VIHT N-150	29.4 gr.	30.6 gr.	31.8 gr.		
WIN 748	30.1 gr.	31.1 gr.	32.1 gr.		
H380	31.0 gr.	32.0 gr.	33.0 gr.	34.0 gr.	35.0 gr.
WIN 760	33.8 gr.	34.8 gr.	35.7 gr.	36.7 gr.	37.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *The 60 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*



224 Weatherby Magnum

Rifle:	.Weatherby	**Bullet Diameter:**	0.224"
Barrel:	.26", 1 in 14" Twist	**Maximum COL:**	2.360"
Case:	.Weatherby	**Max. Case Length:**	.1.920"
Primer:	Federal 210	**Case Trim Length:**	.1.910"

The 224 Weatherby made its debut in 1963 in a scaled down Mark V action. The cartridge rounded out the complete line of Weatherby Magnums at that time. Capable of 22-250 Remington ballistics it was one of the better high performance varmint rounds available. Its popularity as a varmint round might have been higher had it been based on a conventional instead of a belted case. Weatherby re-introduced the 224 in 2002.

As is readily noticeable, the data for the 45 grain Spire Point shows lower maximum velocity than the 50 grain Spire Point. The 45 grain bullet was designed expressly for 22 Hornet velocities, and this Spire Point comes apart or keyholes when fired at velocities exceeding 3600 fps. Also note the thin jacket of SX bullets limits them to velocities of 3400 fps, beyond which they disintegrate in flight. Hornady V-MAX® Bullets are an excellent choice when higher velocities are desired.

When loading for any of the Weatherby cartridges, accuracy can sometimes be improved by seating the bullet farther out of the case. Most Weatherbys incorporate a great deal of freebore and by seating the bullet closer to the rifling, the bullet has less chance of yawing before engaging the rifling. Accuracy thus improves. IMR 3031 and IMR 4064 showed excellent shot to shot uniformity.

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.375"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
Alliant RL-7	24.9 gr.	25.6 gr.	26.3 gr.	26.9 gr.	27.6 gr.
IMR 3031	27.2 gr.	27.8 gr.	28.5 gr.	29.1 gr.	29.8 gr.
IMR 4895	28.1 gr.	28.8 gr.	29.5 gr.	30.2 gr.	30.9 gr.
H335	28.3 gr.	29.0 gr.	29.8 gr.	30.6 gr.	31.3 gr.
IMR 4064	29.0 gr.	29.6 gr.	30.1 gr.	30.7 gr.	31.3 gr.
WIN 760	32.4 gr.	33.3 gr.	34.2 gr.	35.1 gr.	36.1 gr.

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.375"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.375"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.375"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)						
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**	**3900**
Alliant RL-7	25.8 gr.	26.6 gr.	27.3 gr.	28.1 gr.	28.9 gr.	29.6 gr.	
IMR 3031	28.0 gr.	28.8 gr.	29.5 gr.	30.3 gr.	31.1 gr.	31.9 gr.	
IMR 4895	28.7 gr.	29.5 gr.	30.4 gr.	31.3 gr.	32.1 gr.	33.0 gr.	
IMR 4064	29.6 gr.	30.2 gr.	30.9 gr.	31.5 gr.	32.1 gr.	32.8 gr.	
H335	29.3 gr.	30.1 gr.	31.0 gr.	31.9 gr.	32.7 gr.	33.6 gr.	34.5 gr.
WIN 748	31.6 gr.	32.2 gr.	32.9 gr.	33.6 gr.	34.2 gr.	34.9 gr.	35.6 gr.
WIN 760	33.6 gr.	34.7 gr.	35.8 gr.	36.9 gr.	38.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.375"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.375"
G1 B.C.: 0.247

52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.375"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.375"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.375"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
Alliant RL-7	25.0 gr.	25.9 gr.	26.7 gr.	27.6 gr.	
IMR 3031	28.2 gr.	28.9 gr.	29.6 gr.	30.3 gr.	31.0 gr.
IMR 4895	28.7 gr.	29.5 gr.	30.3 gr.	31.1 gr.	31.9 gr.
IMR 4064	28.8 gr.	29.6 gr.	30.4 gr.	31.3 gr.	32.1 gr.
H335	29.1 gr.	29.9 gr.	30.8 gr.	31.6 gr.	
WIN 748	30.7 gr.	31.5 gr.	32.2 gr.	33.0 gr.	33.8 gr.
WIN 760	33.1 gr.	34.2 gr.	35.3 gr.	36.4 gr.	37.5 gr.

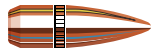
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

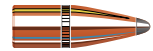
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.350"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.375"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.375"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.375"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.375"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
Alliant RL-7	25.0 gr.	25.9 gr.	26.7 gr.	27.6 gr.	28.4 gr.	
IMR 3031	28.2 gr.	28.9 gr.	29.6 gr.	30.3 gr.	31.0 gr.	31.7 gr.
IMR 4895	28.7 gr.	29.5 gr.	30.3 gr.	31.1 gr.	31.9 gr.	32.7 gr.
IMR 4064	28.8 gr.	29.6 gr.	30.4 gr.	31.3 gr.	32.1 gr.	32.9 gr.
H335	29.1 gr.	29.9 gr.	30.8 gr.	31.6 gr.	32.4 gr.	
WIN 748	30.7 gr.	31.5 gr.	32.2 gr.	33.0 gr.	33.8 gr.	34.5 gr.
WIN 760	33.1 gr.	34.2 gr.	35.3 gr.	36.4 gr.	37.5 gr.	38.6 gr.

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60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.375"
G1 B.C.: 0.265

60 gr. HP
Item No. 2275
C.O.L.: 2.375"
G1 B.C.: 0.271

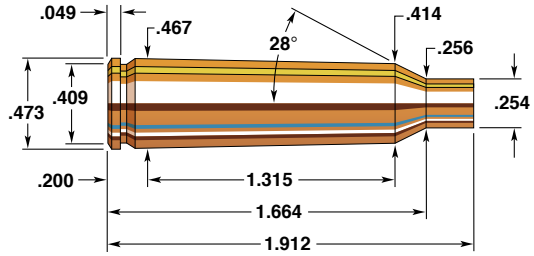
60 gr. SP
Item No. 2270
C.O.L.: 2.375"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
Alliant RL-7	34.5 gr.	25.4 gr.	26.4 gr.	27.3 gr.	28.2 gr.	
IMR 3031	27.3 gr.	28.1 gr.	28.9 gr.	29.6 gr.	30.4 gr.	
IMR 4064	28.1 gr.	28.9 gr.	29.7 gr.	30.5 gr.	31.3 gr.	32.1 gr.
IMR 4895	27.8 gr.	28.7 gr.	29.6 gr.	30.6 gr.	31.5 gr.	32.4 gr.
H335	28.4 gr.	29.2 gr.	30.1 gr.	31.0 gr.	31.9 gr.	
WIN 748	30.3 gr.	31.1 gr.	31.8 gr.	32.6 gr.	33.4 gr.	
WIN 760	32.5 gr.	33.6 gr.	34.7 gr.	36.9 gr.	38.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *The 60 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

INDICATES MAXIMUM LOAD — USE WITH CAUTION



22-250 Remington

Rifle: 35gr-60gr: . . . . Remington 700
68gr-80gr: . . . .Browning X-Bolt
Barrel: 35gr-60gr: . . 26", 1 in 14" Twist
68gr-80gr: . . .24", 1 in 9" Twist
Case:. . . . . .Hornady/Frontier
Primer: 35gr-60gr: . Winchester WLR
68gr-80gr: CCI

Bullet Diameter:. . . . . 0.224"
Maximum COL: . . . . . 2.350"
Max. Case Length:. . . . . .1.912"
Case Trim Length: . . . . . .1.902"

The 22-250 Remington is based on the necked down 250-3000 case with the shoulder angle changed to 28 degrees. In 1967, thirty years after the original wildcat versions, Remington began production of this cartridge in their Model 700 Series rifles.

The 22-250 is only slightly less powerful than the 220 Swift and yet is more versatile. It readily handles reduced loads and has been used for a great variety of hunting, from varmints to deer. The 22-250 stands out as a potent cartridge best suited for varminting.

Varget gives excellent accuracy throughout the full range of Hornady Bullets. Shooters using the 45 grain Hornet bullet should note that the maximum velocity listed is 3600 fps. It is designed to expand at 22 Hornet velocities and therefore has too thin a jacket to be fired at velocities higher than 3600 fps. At velocities exceeding 3400 fps, bullets sometimes come apart before they reach the target. Also, note the thin jacket of SX bullets limits them to velocities of 3400 fps. As in many of the larger 22s, the heavier bullets are normally the best choice for optimum performance. The Hornady line offers an excellent number of choices, including the spectacular 22 V-MAX® bullets. The Hornady 40 grain V-MAX® loaded with Varget makes a spectacular combination for prairie dogs!

Some current rifle manufacturers and many custom rifle builders offer fast-twist barrel options in 22-250. We used such a rifle for the 68-80 grain data in this section. A 75 grain ELD® Match bullet at or above 3,300 fps gives the long range varmint shooter endless possibilities.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. NTX®
Item No. 22240
C.O.L.: 2.350"
G1 B.C.: 0.177

	VELOCITY (FPS – feet per second)					
POWDER	**3900**	**4000**	**4100**	**4200**	**4300**	**4400**
IMR 3031	33.7 gr.	34.4 gr.	35.0 gr.	35.6 gr.	36.3 gr.	36.9 gr.
VIHT N-135	34.8 gr.	35.6 gr.	36.4 gr.	37.2 gr.	38.0 gr.	
IMR 8208 XBR	35.6 gr.	36.3 gr.	37.0 gr.	37.7 gr.	38.4 gr.	39.1 gr.
Benchmark	34.9 gr.	35.8 gr.	36.7 gr.	37.6 gr.	38.5 gr.	39.4 gr.
H4895	35.6 gr.	36.4 gr.	37.1 gr.	37.8 gr.	38.5 gr.	39.2 gr.
Accurate 2520	35.5 gr.	36.4 gr.	37.3 gr.	38.3 gr.	39.2 gr.	
NORMA 202	37.0 gr.	37.7 gr.	38.4 gr.	39.2 gr.	39.9 gr.	
WIN 748	37.4 gr.	38.2 gr.	38.9 gr.	39.7 gr.	40.4 gr.	41.1 gr.
Alliant RL-15	37.7 gr.	38.5 gr.	39.3 gr.	40.1 gr.	40.9 gr.	
VARGET	37.9 gr.	38.7 gr.	39.4 gr.	40.2 gr.	40.9 gr.	
Power Pro 2000 MR	38.7 gr.	39.8 gr.	40.8 gr.	41.8 gr.	42.8 gr.	43.8 gr.

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40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.350"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**3600**	**3700**	**3800**	**3900**	**4000**	**4100**
IMR 3031	30.7 gr.	31.5 gr.	32.3 gr.	33.0 gr.	33.8 gr.	
VIHT N-135	32.1 gr.	32.8 gr.	33.5 gr.	34.2 gr.	34.9 gr.	35.6 gr.
H335	30.9 gr.	32.0 gr.	33.2 gr.	34.3 gr.	35.4 gr.	36.5 gr.
Accurate 2460	31.8 gr.	32.9 gr.	34.0 gr.	35.1 gr.	36.1 gr.	
H4895	32.9 gr.	33.7 gr.	34.5 gr.	35.3 gr.	36.1 gr.	
IMR 4064	33.7 gr.	34.3 gr.	35.0 gr.	35.7 gr.	36.4 gr.	37.0 gr.
IMR 8208 XBR	32.5 gr.	33.5 gr.	34.5 gr.	35.5 gr.	36.5 gr.	
IMR 4320	33.6 gr.	34.5 gr.	35.3 gr.	36.2 gr.	37.0 gr.	37.9 gr.
Alliant RL-15	34.3 gr.	35.1 gr.	35.8 gr.	36.5 gr.	37.2 gr.	37.9 gr.
VARGET	33.3 gr.	34.3 gr.	35.3 gr.	36.4 gr.	37.4 gr.	38.4 gr.
VIHT N-140	34.1 gr.	35.0 gr.	35.8 gr.	36.7 gr.	37.6 gr.	38.4 gr.
WIN 748	34.4 gr.	35.3 gr.	36.1 gr.	37.0 gr.	37.9 gr.	38.7 gr.

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INDICATES MAXIMUM LOAD — USE WITH CAUTION

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.350"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 3031	27.9 gr.	28.7 gr.	29.4 gr.	30.2 gr.	31.0 gr.	31.8 gr.
Accurate 2460	27.5 gr.	28.4 gr.	29.4 gr.	30.3 gr.	31.3 gr.	32.2 gr.
H4895	27.5 gr.	28.5 gr.	29.5 gr.	30.5 gr.	31.5 gr.	32.5 gr.
VIHT N-135	27.0 gr.	28.1 gr.	29.2 gr.	30.4 gr.	31.5 gr.	32.6 gr.
VARGET	29.6 gr.	30.5 gr.	31.4 gr.	32.4 gr.	33.3 gr.	34.2 gr.
IMR 4320	30.1 gr.	30.9 gr.	31.8 gr.	32.6 gr.	33.4 gr.	34.3 gr.
IMR 4064	30.2 gr.	31.0 gr.	31.9 gr.	32.7 gr.	33.6 gr.	34.4 gr.
VIHT N-140	29.3 gr.	30.4 gr.	31.4 gr.	32.4 gr.	33.5 gr.	34.5 gr.
Alliant RL-15	29.2 gr.	30.3 gr.	31.4 gr.	32.5 gr.	33.6 gr.	34.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.350"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.350"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.350"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
VIHT N-135	30.1 gr.	31.1 gr.	32.1 gr.	33.0 gr.	34.0 gr.	
Accurate 2460	29.8 gr.	30.9 gr.	32.1 gr.	33.2 gr.	34.3 gr.	
H4895	30.0 gr.	31.1 gr.	32.1 gr.	33.2 gr.	34.3 gr.	35.4 gr.
H335	30.2 gr.	31.3 gr.	32.5 gr.	33.6 gr.	34.7 gr.	
IMR 8208 XBR	29.3 gr.	30.6 gr.	31.9 gr.	33.3 gr.	35.0 gr.	
IMR 4064	31.8 gr.	32.6 gr.	33.5 gr.	34.3 gr.	35.1 gr.	35.9 gr.
Accurate 2520	31.1 gr.	32.1 gr.	33.2 gr.	34.2 gr.	35.3 gr.	36.3 gr.
VARGET	31.8 gr.	32.7 gr.	33.7 gr.	34.6 gr.	35.5 gr.	36.4 gr.
IMR 4320	31.7 gr.	32.7 gr.	33.7 gr.	34.6 gr.	35.6 gr.	36.6 gr.
Alliant RL-15	32.1 gr.	33.0 gr.	33.9 gr.	34.7 gr.	35.6 gr.	36.5 gr.
WIN 748	32.2 gr.	33.2 gr.	34.2 gr.	35.1 gr.	36.1 gr.	37.0 gr.
VIHT N-140	32.1 gr.	33.1 gr.	34.1 gr.	35.2 gr.	36.2 gr.	37.2 gr.
WIN 760	36.2 gr.	37.2 gr.	38.2 gr.	39.2 gr.	40.2 gr.	41.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. GMX®
Item No. 22403
C.O.L.: 2.340"
G1 B.C.: 0.215

	VELOCITY (FPS – feet per second)				
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 8208 XBR	30.9 gr.	32.1 gr.	33.2 gr.		
H335	30.7 gr.	32.0 gr.	33.3 gr.		
Accurate 2520	31.2 gr.	32.5 gr.	33.7 gr.	35.0 gr.	
H4895	31.7 gr.	32.7 gr.	33.8 gr.	34.9 gr.	36.0 gr.
Alliant RL-15	32.1 gr.	33.4 gr.	34.7 gr.	35.9 gr.	
VIHT N-140	32.0 gr.	33.5 gr.	35.0 gr.		
VARGET	32.6 gr.	33.8 gr.	35.1 gr.	36.3 gr.	
WIN 748	33.1 gr.	34.2 gr.	35.4 gr.	36.5 gr.	
CFE 223	33.5 gr.	34.8 gr.	36.0 gr.	37.3 gr.	38.6 gr.

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52-53 GRAIN BULLETS

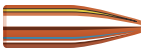
SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.350"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.350"
G1 B.C.: 0.247

52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.350"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.350"
G1 B.C.: 0.290



53 gr. HP Match™
Item No. 2250
C.O.L.: 2.350"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
Accurate 2460	28.2 gr.	29.5 gr.	30.9 gr.	32.2 gr.	33.6 gr.	
H4895	29.5 gr.	30.6 gr.	31.6 gr.	32.7 gr.	33.8 gr.	
IMR 8208 XBR	27.8 gr.	29.5 gr.	31.3 gr.	33.1 gr.		
Accurate 2520	30.4 gr.	31.5 gr.	32.5 gr.	33.6 gr.	34.6 gr.	35.7 gr.
VARGET	30.7 gr.	31.7 gr.	32.7 gr.	33.7 gr.	34.7 gr.	35.7 gr.
IMR 4320	30.9 gr.	31.9 gr.	32.8 gr.	33.8 gr.	34.8 gr.	35.7 gr.
IMR 4064	31.3 gr.	32.2 gr.	33.0 gr.	33.8 gr.	34.6 gr.	35.5 gr.
Alliant RL-15	31.0 gr.	32.0 gr.	32.9 gr.	33.9 gr.	34.8 gr.	35.8 gr.
WIN 748	30.8 gr.	31.9 gr.	33.0 gr.	34.1 gr.	35.2 gr.	36.3 gr.
VIHT N-150	30.9 gr.	32.0 gr.	33.1 gr.	34.2 gr.	35.3 gr.	36.4 gr.
VIHT N-140	31.4 gr.	32.5 gr.	33.6 gr.	34.6 gr.	35.7 gr.	
CFE 223	34.1 gr.	35.2 gr.	36.3 gr.	37.4 gr.	38.5 gr.	
IMR 4007 SSC	35.4 gr.	36.2 gr.	37.0 gr.	37.9 gr.		
WIN 760	35.5 gr.	36.5 gr.	37.4 gr.	38.4 gr.	39.4 gr.	40.4 gr.

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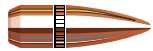
***NOTE:** The 53 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

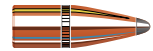
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.350"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.350"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.350"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.350"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.350"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 8208 XBR	30.3 gr.	31.2 gr.	32.1 gr.	33.1 gr.		
VARGET	30.8 gr.	31.7 gr.	32.7 gr.	33.6 gr.	34.6 gr.	
IMR 4320	31.0 gr.	32.0 gr.	32.9 gr.	33.9 gr.	34.9 gr.	
IMR 4064	31.3 gr.	32.2 gr.	33.1 gr.	34.0 gr.	34.9 gr.	
VIHT N-150	30.5 gr.	31.8 gr.	33.0 gr.	34.2 gr.	35.4 gr.	
Alliant RL-15	31.0 gr.	32.1 gr.	33.2 gr.	34.2 gr.	35.3 gr.	
WIN 748	30.5 gr.	31.8 gr.	33.1 gr.	34.3 gr.	35.6 gr.	
Accurate 2520	30.3 gr.	31.7 gr.	33.2 gr.	34.6 gr.		
VIHT N-140	31.5 gr.	32.6 gr.	33.6 gr.	34.7 gr.		
IMR 4007 SSC	35.5 gr.	36.3 gr.	37.1 gr.	37.8 gr.		
CFE 223	34.4 gr.	35.7 gr.	36.9 gr.	38.1 gr.		
WIN 760	35.4 gr.	36.4 gr.	37.4 gr.	38.5 gr.	39.5 gr.	
H380	35.0 gr.	36.4 gr.	37.8 gr.	39.2 gr.	40.6 gr.	
H414	36.4 gr.	37.4 gr.	38.3 gr.	39.3 gr.	40.2 gr.	41.2 gr.

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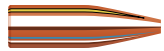
INDICATES MAXIMUM LOAD — USE WITH CAUTION

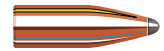
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.350"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.350"
G1 B.C.: 0.271



60 gr. SP
Item No. 2270
C.O.L.: 2.350"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
Accurate 2520	29.7 gr.	30.7 gr.	31.8 gr.	32.9 gr.		
VARGET	29.5 gr.	30.7 gr.	31.8 gr.	33.0 gr.	34.1 gr.	
IMR 4064	29.9 gr.	31.0 gr.	32.1 gr.	33.3 gr.	34.4 gr.	
IMR 4320	30.3 gr.	31.3 gr.	32.3 gr.	33.3 gr.	34.3 gr.	
VIHT N-150	29.8 gr.	31.1 gr.	32.4 gr.	33.7 gr.	35.0 gr.	
Alliant RL-15	30.4 gr.	31.5 gr.	32.7 gr.	33.8 gr.	34.9 gr.	
VIHT N-140	30.5 gr.	31.8 gr.	33.1 gr.	34.3 gr.		
Power Pro 2000 MR	33.3 gr.	34.4 gr.	35.5 gr.	36.6 gr.		
CFE 223	33.8 gr.	34.9 gr.	36.0 gr.	37.2 gr.		
IMR 4007 SSC	34.7 gr.	35.7 gr.	36.8 gr.	37.7 gr.		
H380	34.1 gr.	35.4 gr.	36.6 gr.	37.9 gr.	39.1 gr.	
WIN 760	34.5 gr.	35.6 gr.	36.7 gr.	37.9 gr.	39.0 gr.	40.1 gr.
H414	35.4 gr.	36.5 gr.	37.6 gr.	38.7 gr.	39.8 gr.	40.9 gr.
SUPERFORMANCE	38.5 gr.	39.7 gr.	40.9 gr.	42.1 gr.	43.0 gr.	

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***NOTE:** The 60 grain V-MAX® bullet will not stabilize in a 1-14" and slower twist Bbls.*

68 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.224"

68 gr. BTHP Match™
Item No. 2278
C.O.L.: 2.390"
G1 B.C.: 0.355

	VELOCITY (FPS – feet per second)						
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3450**	**3500**
IMR 4895	28.9 gr.	30.4 gr.	31.9 gr.	33.4 gr.			
VARGET	29.2 gr.	30.6 gr.	32.0 gr.	33.4 gr.	34.8 gr.		
Alliant RL-15	30.1 gr.	31.4 gr.	32.6 gr.	33.9 gr.	35.1 gr.		
IMR 4064	30.4 gr.	31.8 gr.	33.3 gr.	34.7 gr.			
Power Pro 2000 MR	32.6 gr.	33.7 gr.	34.9 gr.	36.1 gr.			
Alliant RL-17	33.5 gr.	34.6 gr.	35.7 gr.	36.8 gr.	37.9 gr.	38.5 gr.	
IMR 4007 SSC	33.9 gr.	35.0 gr.	36.1 gr.	37.1 gr.			
H414	33.7 gr.	34.9 gr.	36.1 gr.	37.2 gr.	38.4 gr.		
Accurate 2700	34.3 gr.	35.5 gr.	36.7 gr.	37.9 gr.	39.0 gr.		
Hybrid 100V	35.0 gr.	36.0 gr.	36.9 gr.	37.9 gr.			
SUPERFORMANCE	36.8 gr.	37.9 gr.	38.9 gr.	39.9 gr.	40.9 gr.	41.5 gr.	42.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

70 GRAIN BULLETS

SECTIONAL DENSITY: 0.199
DIAMETER: 0.224"

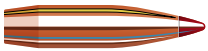
70 gr. GMX®
Item No. 2281
C.O.L.: 2.400"
G1 B.C.: 0.350

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
H4895	26.5 gr.	27.7 gr.	28.9 gr.	30.1 gr.		
IMR 4064	27.7 gr.	28.9 gr.	30.1 gr.	31.3 gr.	32.4 gr.	
VARGET	27.1 gr.	28.5 gr.	30.0 gr.	31.4 gr.	32.8 gr.	
Alliant RL-15	28.1 gr.	29.4 gr.	30.7 gr.	32.1 gr.	33.4 gr.	
Power Pro 2000 MR	27.6 gr.	29.2 gr.	30.8 gr.	32.5 gr.	34.1 gr.	
IMR 4007 SSC	29.8 gr.	31.2 gr.	32.6 gr.	34.0 gr.	35.3 gr.	
Alliant RL-17	30.4 gr.	31.7 gr.	32.9 gr.	34.2 gr.	35.4 gr.	36.7 gr.
Hybrid 100V	31.1 gr.	32.4 gr.	33.6 gr.	34.9 gr.	36.2 gr.	37.5 gr.
Accurate 2700	31.0 gr.	32.3 gr.	33.7 gr.	35.0 gr.	36.3 gr.	
H414	31.4 gr.	32.7 gr.	34.0 gr.	35.3 gr.	36.5 gr.	37.8 gr.
SUPERFORMANCE	33.5 gr.	34.7 gr.	36.0 gr.	37.3 gr.	38.5 gr.	39.8 gr.

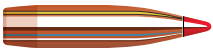
Create custom ballistic tables using our online calculators at hornady.com/ballistics

73-75 GRAIN BULLETS

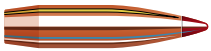
SECTIONAL DENSITY: 0.208-0.214
DIAMETER: 0.224"



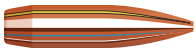
***73 gr. ELD® Match**
Item No. 22774
C.O.L.: 2.490"
G1 B.C.: 0.360
G7 B.C.: 0.190



75 gr. A-MAX® *(Discontinued)*
Item No. 22792
C.O.L.: 2.490"
G1 B.C.: 0.435



***75 gr. ELD® Match**
Item No. 22791
C.O.L.: 2.400"
G1 B.C.: 0.430
G7 B.C.: 0.221



^75 gr. BTHP Match™
Item No. 2279
C.O.L.: 2.490"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3350**
IMR 4895	28.5 gr.	30.1 gr.	31.7 gr.	33.4 gr.		
VARGET	29.3 gr.	30.7 gr.	32.0 gr.	33.4 gr.		
Alliant RL-15	29.7 gr.	30.9 gr.	32.2 gr.	33.4 gr.		
IMR 4064	30.1 gr.	31.5 gr.	32.8 gr.			
Power Pro 2000 MR	31.7 gr.	32.9 gr.	34.2 gr.	35.4 gr.		
IMR 4007 SSC	33.3 gr.	34.3 gr.	35.4 gr.	36.5 gr.	37.6 gr.	
Alliant RL-17	33.6 gr.	34.7 gr.	35.8 gr.	36.8 gr.	37.9 gr.	
H414	33.6 gr.	34.7 gr.	35.8 gr.	36.9 gr.	37.9 gr.	
Accurate 2700	33.7 gr.	34.9 gr.	36.0 gr.	37.1 gr.		
Hybrid 100V	34.4 gr.	35.6 gr.	36.7 gr.	37.9 gr.		
SUPERFORMANCE	36.3 gr.	37.3 gr.	38.4 gr.	39.4 gr.	40.4 gr.	41.0 gr.

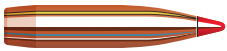
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

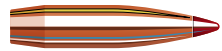
*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.228
DIAMETER: 0.224"



80 gr. A-MAX® *(Discontinued)*
Item No. 22832
C.O.L.: 2.500"
G1 B.C.: 0.453

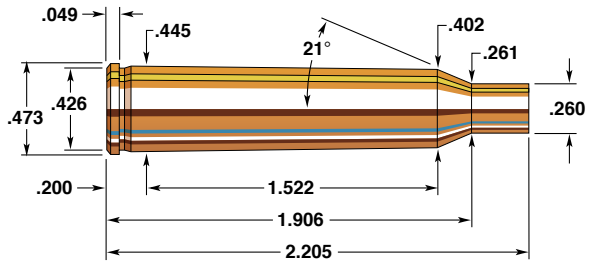


***80 gr. ELD® Match**
Item No. 22831
C.O.L.: 2.500"
G1 B.C.: 0.457
G7 B.C.: 0.235

	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3150**	**3200**
VARGET	27.6 gr.	28.9 gr.	30.2 gr.	31.4 gr.			
IMR 4895	27.5 gr.	28.8 gr.	30.1 gr.	31.5 gr.			
Alliant RL-15	28.1 gr.	29.3 gr.	30.5 gr.	31.7 gr.			
IMR 4064	28.0 gr.	29.4 gr.	30.9 gr.	32.3 gr.			
Power Pro 2000 MR	29.1 gr.	30.6 gr.	32.1 gr.	33.6 gr.	35.1 gr.		
IMR 4007 SSC	31.1 gr.	32.3 gr.	33.5 gr.	34.7 gr.	35.9 gr.		
Alliant RL-17	31.2 gr.	32.3 gr.	33.5 gr.	34.7 gr.	35.8 gr.	36.5 gr.	
H414	31.5 gr.	32.6 gr.	33.7 gr.	34.7 gr.	35.8 gr.		
Hybrid 100V	31.7 gr.	33.0 gr.	34.2 gr.	35.5 gr.	36.7 gr.	37.4 gr.	38.0 gr.
Accurate 2700	32.0 gr.	33.1 gr.	34.3 gr.	35.5 gr.	36.7 gr.		
SUPERFORMANCE	33.6 gr.	34.7 gr.	35.9 gr.	37.0 gr.	38.2 gr.	38.7 gr.	39.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



220 Swift

Rifle:	Ruger 77 Mark II	**Bullet Diameter:**	0.224"
Barrel:	26", 1 in 14" Twist	**Maximum COL:**	2.680"
Case:	Hornady/Frontier	**Max. Case Length:**	2.205"
Primer:	Winchester WLR	**Case Trim Length:**	2.195"

In 1935 Winchester introduced the 220 Swift in their Model 54 bolt action rifle. The Swift is based on the semi-rimmed 6mm Lee Navy case necked down to 22 caliber with less body taper and a sharper shoulder.

Because of bad publicity as a barrel burner, the popularity of the cartridge gradually faded. This ill-fame stemmed mainly from the extreme pressures at which it originally operated. Modern barrel steel and newer cleaning techniques have substantially improved barrel life. Also, with loads reduced slightly (c. 100 fps), case and barrel life compare to any cartridge of equivalent powder capacity.

The 220 Swift has been used to hunt everything from varmints to deer, but is best suited as a varmint cartridge. Using Hornady varmint bullets, the Swift is an excellent 300-400 yard varminter.

Ruger and Sako helped revive the popularity of the Swift by chambering rifles for this venerable round. Best overall reloading results in our rifle were obtained with VIHT N-140, H 4895, and Varget, and the heavier 55 and 60 grain bullets. Contrary to popular belief, we encountered no loading problems, along with completely normal case life.

When using ball powders, use extra care in storing and shooting the ammunition. Ball powders are subject to wide pressure excursions with temperature changes. Do not leave ammunition in hot vehicles or the sun for any great length of time or shoot it in a very hot gun.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.100
DIAMETER: 0.224"

35 gr. NTX®
Item No. 22240
C.O.L.: 2.670"
G1 B.C.: 0.177

	VELOCITY (FPS – feet per second)					
POWDER	**4000**	**4100**	**4200**	**4300**	**4400**	**4500**
VIHT N-135	35.6 gr.	36.4 gr.	37.1 gr.	37.9 gr.	38.7 gr.	
IMR 8208 XBR	36.1 gr.	37.0 gr.	37.9 gr.	38.7 gr.	39.7 gr.	40.5 gr.
Accurate 2520	36.3 gr.	37.2 gr.	38.1 gr.	39.0 gr.	39.9 gr.	40.8 gr.
H4895	37.3 gr.	38.1 gr.	39.0 gr.	39.8 gr.	40.7 gr.	41.5 gr.
WIN 748	38.4 gr.	39.2 gr.	40.1 gr.	40.9 gr.	41.8 gr.	42.6 gr.
VARGET	38.6 gr.	39.5 gr.	40.4 gr.	41.4 gr.	42.3 gr.	
Alliant RL-15	39.0 gr.	39.9 gr.	40.7 gr.	41.5 gr.		
IMR 4064	38.9 gr.	39.9 gr.	40.9 gr.	42.0 gr.		
Power Pro 2000 MR	39.0 gr.	40.1 gr.	41.3 gr.	42.4 gr.	43.6 gr.	44.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.670"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**3800**	**3900**	**4000**	**4100**	**4200**	**4300**
IMR 3031	33.3 gr.	34.3 gr.	35.3 gr.	36.3 gr.	37.3 gr.	38.3 gr.
VIHT N-135	34.9 gr.	35.6 gr.	36.3 gr.	37.0 gr.	37.7 gr.	
H4895	34.2 gr.	35.4 gr.	36.5 gr.	37.6 gr.	38.7 gr.	39.9 gr.
Accurate 2520	34.4 gr.	35.8 gr.	37.1 gr.	38.5 gr.		
Accurate 2460	35.1 gr.	36.3 gr.	37.4 gr.	38.6 gr.		
IMR 4064	36.5 gr.	37.4 gr.	38.4 gr.	39.3 gr.	40.2 gr.	
Alliant RL-15	37.0 gr.	37.8 gr.	38.5 gr.	39.3 gr.	40.1 gr.	40.8 gr.
VARGET	36.8 gr.	37.8 gr.	38.8 gr.	39.8 gr.	40.9 gr.	
IMR 4320	36.8 gr.	37.9 gr.	39.0 gr.	40.1 gr.		
VIHT N-140	37.3 gr.	38.2 gr.	39.2 gr.	40.2 gr.	41.2 gr.	

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.670"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
H4895	28.1 gr.	28.9 gr.	29.8 gr.	30.7 gr.	31.6 gr.	32.4 gr.
IMR 4320	29.4 gr.	30.3 gr.	31.2 gr.	32.1 gr.	33.0 gr.	33.9 gr.
IMR 4064	29.8 gr.	30.8 gr.	31.8 gr.	32.9 gr.	33.9 gr.	34.9 gr.
VARGET	30.0 gr.	31.0 gr.	32.0 gr.	33.0 gr.	33.9 gr.	34.9 gr.
VIHT N-140	28.9 gr.	30.2 gr.	31.5 gr.	32.8 gr.	34.1 gr.	35.4 gr.
Alliant RL-15	29.8 gr.	31.0 gr.	32.2 gr.	33.4 gr.	34.7 gr.	35.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.680"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.680"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.680"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**	**3900**
H4895	31.0 gr.	32.2 gr.	33.3 gr.	34.5 gr.	35.7 gr.	36.9 gr.
Accurate 2520	31.4 gr.	32.7 gr.	34.1 gr.	35.5 gr.		
IMR 4320	32.4 gr.	33.7 gr.	34.9 gr.	36.2 gr.	37.5 gr.	
IMR 4064	33.1 gr.	34.1 gr.	35.1 gr.	36.2 gr.	37.2 gr.	38.2 gr.
WIN 748	33.4 gr.	34.4 gr.	35.3 gr.	36.3 gr.	37.2 gr.	
VARGET	33.2 gr.	34.3 gr.	35.4 gr.	36.5 gr.	37.6 gr.	38.7 gr.
Alliant RL-15	33.4 gr.	34.6 gr.	35.8 gr.	37.0 gr.	38.2 gr.	
VIHT N-140	33.5 gr.	34.7 gr.	35.8 gr.	37.0 gr.		
IMR 4007 SSC	38.5 gr.	39.3 gr.	40.0 gr.	40.8 gr.		
WIN 760	38.1 gr.	39.0 gr.	40.0 gr.	41.0 gr.	41.9 gr.	42.9 gr.
H414	38.9 gr.	39.9 gr.	40.9 gr.	41.9 gr.	42.9 gr.	43.9 gr.

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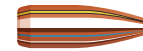
52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.680"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.680"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.680"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.680"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.680"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
Accurate 2520	30.1 gr.	31.4 gr.	32.8 gr.	34.1 gr.		
IMR 4064	32.7 gr.	33.6 gr.	34.6 gr.	35.5 gr.	36.5 gr.	37.5 gr.
IMR 4320	32.6 gr.	33.6 gr.	34.6 gr.	35.7 gr.	36.7 gr.	
VARGET	32.2 gr.	33.4 gr.	34.6 gr.	35.8 gr.	37.0 gr.	
VIHT N-140	32.5 gr.	33.8 gr.	35.1 gr.	36.4 gr.	37.7 gr.	
Alliant RL-15	32.4 gr.	33.8 gr.	35.2 gr.	36.6 gr.	38.0 gr.	
IMR 4007 SSC	37.7 gr.	38.5 gr.	39.2 gr.	40.0 gr.	40.7 gr.	
WIN 760	37.1 gr.	38.2 gr.	39.3 gr.	40.5 gr.	41.6 gr.	
H414	38.5 gr.	39.5 gr.	40.4 gr.	41.3 gr.	42.3 gr.	43.2 gr.

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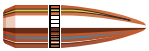
NOTE: *The 53 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*

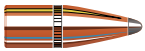
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.680"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.680"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.680"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.680"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.680"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
H4895	29.9 gr.	31.1 gr.	32.4 gr.	33.6 gr.	34.8 gr.	
Accurate 2520	30.1 gr.	31.5 gr.	32.9 gr.	34.3 gr.		
Alliant RL-15	31.7 gr.	32.8 gr.	34.0 gr.	35.1 gr.	36.3 gr.	
IMR 4320	31.7 gr.	32.8 gr.	34.0 gr.	35.1 gr.	36.3 gr.	
IMR 4064	31.8 gr.	32.9 gr.	34.1 gr.	35.2 gr.	36.4 gr.	
VARGET	31.9 gr.	33.1 gr.	34.3 gr.	35.5 gr.	36.6 gr.	
VIHT N-140	32.0 gr.	33.3 gr.	34.6 gr.	36.0 gr.		
WIN 760	37.0 gr.	38.0 gr.	39.1 gr.	40.1 gr.	41.1 gr.	
IMR 4350	37.1 gr.	38.1 gr.	39.1 gr.	40.2 gr.	41.2 gr.	42.2 gr.
IMR 4007 SSC	37.8 gr.	38.6 gr.	39.5 gr.	40.3 gr.		
H414	38.3 gr.	39.3 gr.	40.3 gr.	41.3 gr.	42.3 gr.	43.3 gr.
Alliant RL-19	40.3 gr.	41.2 gr.	42.1 gr.	43.0 gr.	43.9 gr.	

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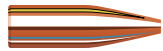
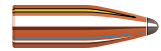
60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.680"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.680"
G1 B.C.: 0.271

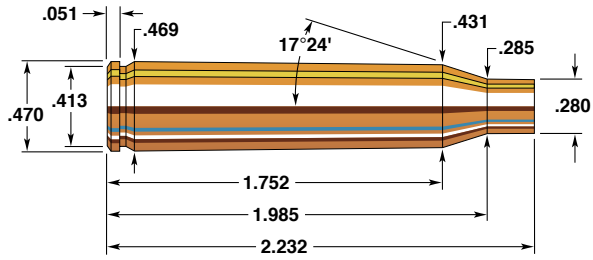


60 gr. SP
Item No. 2270
C.O.L.: 2.680"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 4064	30.1 gr.	31.1 gr.	32.2 gr.	33.2 gr.	34.2 gr.	
Alliant RL-15	30.1 gr.	31.4 gr.	32.7 gr.	34.0 gr.	35.3 gr.	
VARGET	30.3 gr.	31.6 gr.	32.9 gr.	34.1 gr.		
VIHT N-140	30.5 gr.	31.7 gr.	32.9 gr.	34.1 gr.	35.3 gr.	
H380	33.3 gr.	34.7 gr.	36.0 gr.	37.4 gr.	38.7 gr.	40.1 gr.
WIN 760	33.7 gr.	35.0 gr.	36.4 gr.	37.7 gr.	39.1 gr.	
IMR 4350	34.8 gr.	35.9 gr.	36.9 gr.	38.0 gr.	39.1 gr.	40.1 gr.
IMR 4007 SSC	35.9 gr.	36.7 gr.	37.6 gr.	38.5 gr.	39.3 gr.	
Hybrid 100V	35.9 gr.	36.8 gr.	37.7 gr.	38.6 gr.	39.5 gr.	
H414	35.4 gr.	36.6 gr.	37.9 gr.	39.1 gr.	40.3 gr.	41.5 gr.
Alliant RL-19	37.8 gr.	39.0 gr.	40.2 gr.	41.3 gr.	42.5 gr.	43.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 60 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*



5.6 X 57mm RWS

Rifle:	Mauser 66	**Bullet Diameter:**	0.224"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	.2.715"
Case:	RWS	**Max. Case Length:**	2.232"
Primer:	Federal 210	**Case Trim Length:**	2.222"

The 5.6 x 57mm was designed in Germany by RWS in the years 1963-1964 expressly for hunting the small European Reh deer and Gams (Chamois). In Germany there is a range limit at which game can be taken, plus a minimum remaining energy level. The 5.6 x 57mm was designed to meet these standards. Its cartridge case has very thick neck walls, necessary to handle the physical size of popular 22 WMR and 22 LR adapter units.

The extra thickness of the brass in this particular cartridge presented a slight problem with reloading. During testing the case neck did not expand to fill the chamber until the powder charge was within 3 grains of maximum. Powder residue was present on the exterior of the cases up to that point, but accuracy and uniformity were not affected.

Because of the fast 1 in 10" twist, 22 caliber Hornady SX bullets should not be used. Due to the high rotational speed, these very thin jacketed bullets blow up before they reach the target. All regular V-MAX® Spire Point bullets work very well, with the best results obtained from the heavier 55 grain and 60 grain Spire Points. Best results were obtained with the Hornady 55 grain Spire Point and IMR 4320. This cartridge gives excellent ballistic performance.

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.715"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.715"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)				
POWDER	**3500**	**3600**	**3700**	**3800**	**3900**
IMR 4320		36.9 gr.	38.0 gr.	39.1 gr.	40.1 gr.
IMR 4350		40.0 gr.	41.1 gr.	42.3 gr.	43.5 gr.
WIN 760	39.6 gr.	40.4 gr.	41.3 gr.		

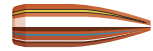
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.715"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.715"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.715"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.715"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.715"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 4320	35.9 gr.	36.8 gr.	37.7 gr.	38.5 gr.	39.4 gr.
IMR 4350	38.5 gr.	39.5 gr.	40.4 gr.	41.3 gr.	
WIN 760	38.8 gr.	39.8 gr.	40.8 gr.	41.9 gr.	42.9 gr.

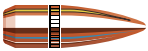
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 53 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*

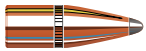
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.715"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.715"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.715"
G1 B.C.: 0.235

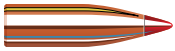
55 gr. SP
Item No. 2265
C.O.L.: 2.715"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 4320	35.9 gr.	36.8 gr.	37.7 gr.	38.5 gr.	39.4 gr.
IMR 4350	38.5 gr.	39.5 gr.	40.4 gr.	41.3 gr.	
WIN 760	38.8 gr.	39.8 gr.	40.8 gr.	41.9 gr.	42.9 gr.

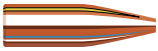
Create custom ballistic tables using our online calculators at hornady.com/ballistics

60 GRAIN BULLETS

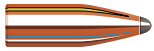
SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"



60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.715"
G1 B.C.: 0.265



60 gr. HP
Item No. 2275
C.O.L.: 2.715"
G1 B.C.: 0.271

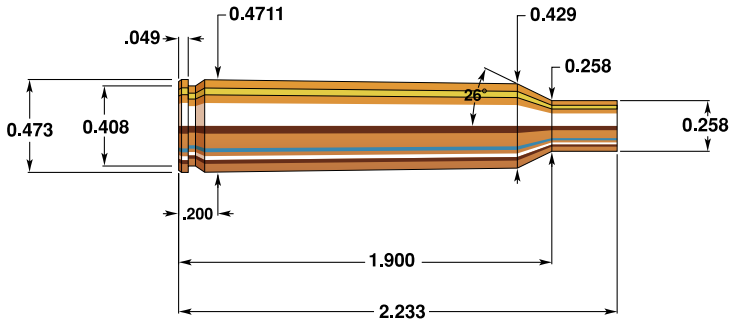


60 gr. SP
Item No. 2270
C.O.L.: 2.715"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)				
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 4320	34.8 gr.	35.4 gr.	36.6 gr.	37.7 gr.	38.8 gr.
IMR 4350	37.9 gr.	38.7 gr.	39.5 gr.	40.4 gr.	41.2 gr.
WIN 760	37.3 gr.	38.4 gr.	39.6 gr.	40.7 gr.	41.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 60 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*



22-6mm

Rifle:	Savage-Rebarrelled	**Bullet Diameter:**	0.224"
Barrel:	26" 1 in 9" twist	**Maximum COL:**	2.950"
Case:	Hornady (Reformed)	**Max. Case Length:**	2.233"
Primer:	Federal 210	**Case Trim Length:**	2.223"

When loaded with an 80 grain ELD® Match, the .22–6mm looks a little bit like something that NASA would have used to launch a space capsule in the 1960s. Long, lean and boasting incredible power for a varmint cartridge, the .22–6mm has been around in one form or another for decades.

With the introduction of the .224" 75 and 80 grain ELD® Match bullets, and the 75 grain hollow point, all with excellent ballistic coefficient, the .22–6mm gains a new lease on life as a long range varminter and competition caliber. Burning large amounts of slow burning propellant, the .22–6mm needs a long barrel and a fast twist barrel to reach its maximum potential—and what an impressive performer it can be.

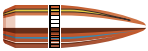
Launch an 80 grain ELD® Match at 3,500 fps, or a 75 at 3,600 fps, and you have a long range round that shoots flat, drifts minimally and recoils much less than many other common competition and varmint cartridges with exceptional accuracy.

Our 22- 6mm preferred medium slow to slow burning propellants such as VIHT N-165, RL-22 and RL-25, these propellants delivered excellent velocities and exceptional accuracy.

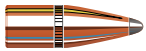
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.790"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.790"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.790"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.790"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)				
POWDER	**3500**	**3600**	**3700**	**3800**	**3900**
Accurate 4064	39.1 gr.	40.0 gr.	41.2 gr.	42.5 gr.	
Alliant RL-15	38.5 gr.	39.7 gr.	41.2 gr.	42.9 gr.	43.8 gr.
VIHT N-150	39.3 gr.	40.5 gr.	41.9 gr.	43.3 gr.	43.9 gr.
IMR 4350	42.8 gr.	44.4 gr.	45.6 gr.	46.2 gr.	46.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.224"

60 gr. V-MAX®
Item No. 22281
C.O.L.: 2.840"
G1 B.C.: 0.265

60 gr. HP
Item No. 2275
C.O.L.: 2.840"
G1 B.C.: 0.271

60 gr. SP
Item No. 2270
C.O.L.: 2.840"
G1 B.C.: 0.264

	VELOCITY (FPS – feet per second)			
POWDER	**3500**	**3600**	**3700**	**3800**
Alliant RL-15	38.4 gr.	39.6 gr.	41.1 gr.	41.9 gr.
VIHT N-150	38.6 gr.	39.8 gr.	41.2 gr.	42.5 gr.
IMR 4350	42.1 gr.	43.4 gr.	44.7 gr.	45.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 60 grain V-MAX® bullet will not stabilize in 1-14" and slower twist Bbls.*

68 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.224"

68 gr. BTHP Match™
Item No. 2278
C.O.L.: 2.840"
G1 B.C.: 0.355

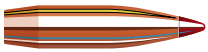
	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 4350	39.5 gr.	40.6 gr.	42.1 gr.	43.3 gr.	44.3 gr.
VIHT N-160	41.1 gr.	42.9 gr.	44.2 gr.	45.1 gr.	
IMR 4831	42.8 gr.	43.8 gr.	44.5 gr.	45.9 gr.	46.8 gr.
Alliant RL-19	42.9 gr.	44.0 gr.	45.1 gr.	46.4 gr.	47.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

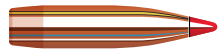
***NOTE:** The 68 grain Tail Hollow Point bullets will not stabilize in 1-12" and slower twist Bbls.*

73-75 GRAIN BULLETS

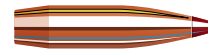
SECTIONAL DENSITY: 0.208-0.214
DIAMETER: 0.224"



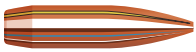
***73 gr. ELD® Match**
Item No. 22774
C.O.L.: 2.870"
G1 B.C.: 0.360
G7 B.C.: 0.190



75 gr. A-MAX® *(Discontinued)*
Item No. 22792
C.O.L.: 2.870"
G1 B.C.: 0.435



***75 gr. ELD® Match**
Item No. 22791
C.O.L.: 2.870"
G1 B.C.: 0.430
G7 B.C.: 0.221



^75 gr. BTHP Match™
Item No. 2279
C.O.L.: 2.870"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)			
POWDER	**3200**	**3300**	**3400**	**3500**
H4831	44.1 gr.	45.1 gr.	46.5 gr.	47.8 gr.
Alliant RL-22	44.7 gr.	45.8 gr.	47.0 gr.	47.9 gr.
IMR 7828	44.8 gr.	45.9 gr.	47.1 gr.	48.3 gr.
VIHT N-165	45.3 gr.	46.6 gr.	48.1 gr.	
H1000	47.6 gr.	49.0 gr.	50.1 gr.	
Alliant RL-25	47.0 gr.	48.6 gr.	50.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

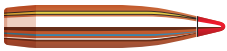
***NOTE:** #22791 and #22792 will not stabilize in 1-10" and slower twist Bbls.*

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

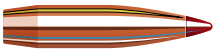
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.228
DIAMETER: 0.224"



80 gr. A-MAX® *(Discontinued)*
Item No. 22832
C.O.L.: 2.870"
G1 B.C.: 0.453



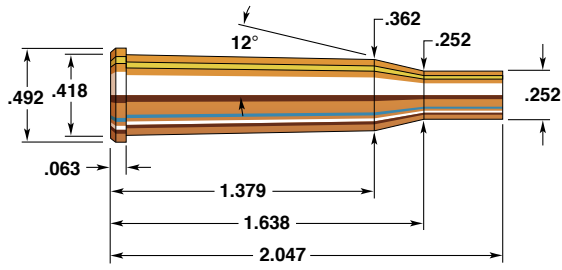
***80 gr. ELD® Match**
Item No. 22831
C.O.L.: 2.870"
G1 B.C.: 0.457
G7 B.C.: 0.235

	VELOCITY (FPS – feet per second)			
POWDER	**3100**	**3200**	**3300**	**3400**
Alliant RL-22	43.7 gr.	44.6 gr.	45.8 gr.	47.1 gr.
VIHT N-165	43.6 gr.	44.9 gr.	46.3 gr.	
IMR 7828	44.1 gr.	45.3 gr.	46.4 gr.	47.6 gr.
Alliant RL-25	45.2 gr.	46.9 gr.	47.9 gr.	49.2 gr.
H1000	45.2 gr.	47.0 gr.	48.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** The 80 grain A-MAX® and ELD® Match bullets will not stabilize in 1-10" and slower twist Bbls.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



5.6 X 52mm (22 Savage High Power)

Rifle:	Mauser 66	**Bullet Diameter:**	0.227"
Barrel:	1 in 10⅝" Twist	**Maximum COL:**	.2.510"
Case:	RWS	**Max. Case Length:**	2.047"
Primer:	Federal 210	**Case Trim Length:**	2.037"

The 5.6 x 52mm R, as it is designated in Europe, or 22 Savage High Power in the U.S., was designed by Charles Newton and was introduced commercially by Savage Arms Company in 1912. The case is based on the 25-35 Winchester necked down to 22 caliber. The cartridge has long been obsolete in the U.S. and Europe. Our test rifle, a Mauser Model 66, was a special order.

The 5.6 x 52mm R uses the Hornady .227" diameter 70 grain Spire Point bullet. Note: Do not use this 22 caliber bullet in other 22's as dangerous pressures will occur due to its larger diameter (.227" as opposed to standard .224"). Some users have nevertheless reported useful accuracy in the .227" bore with .224" bullets. "Useful" should not necessarily be considered "optimum."

The 22 Savage High Power was originally intended as a varmint and deer sized cartridge, but it was soon evident that it was better for varmint than game hunting. Its use should remain primarily as a varmint and very small game round.

Best results in the area of accuracy and uniformity were obtained with IMR 3031. Note that this data was developed in a modern bolt action rifle. If these loads are intended for use in lever action or combination guns the maximum loads should be dropped at least 10%. It is better to back off and work up to maximum loads carefully than to risk damage to rifle and shooter both!

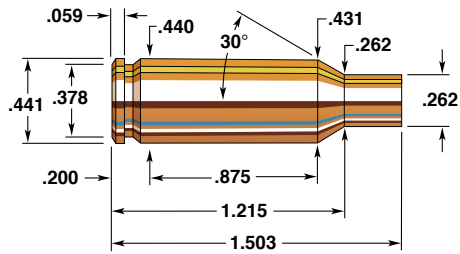
70 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.227"

70 gr. SP W/C *(Discontinued)*
Item No. 2280
C.O.L.: 2.510"
G1 B.C.: 0.296

	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4198			20.2 gr.	21.1 gr.	22.1 gr.	23.1 gr.	
Alliant RL-7	19.8 gr.	20.5 gr.	21.3 gr.	22.1 gr.	22.9 gr.	23.6 gr.	
IMR 3031	22.1 gr.	23.0 gr.	23.8 gr.	24.7 gr.	25.6 gr.	26.5 gr.	27.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6mm PPC

Rifle: . . . . . Nesika Bay 17
Barrel: . . . . . 19½", 1 in 14" Twist
Case: . . . . . Sako
Primer: . . . . . Federal 205
Bullet Diameter: . . . . . 0.243"
Maximum COL: . . . . . .2.193"
Max. Case Length: . . . . . 1.503"
Case Trim Length: . . . . . .1.493"

Few rifle experimenters achieve such success as did R. Lou Palmisano and Ferris Pindell. Their goal was to develop the most accurate cartridge known, and perhaps they did. The 6mm PPC is a popular 6mm cartridge among today's competitive bench rest shooters, and it makes an excellent varmint round.

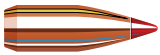
The cartridge was derived from the 22 PPC for bench rest shooters who wanted a cartridge with a heavier, larger bullet. The 22 PPC itself is derived from the 7.62 x 39mm cartridge. Not only is 6mm PPC reshaped to its new 6mm form, it utilizes small rifle primers and has smaller than normal flash holes, both thought to be conducive to accuracy.

Since many of the rifles are custom made guns, the chamber dimensions, especially the neck diameter, are variable (usually of minimum dimension). Some rifles have very tight necks and some cartridges may either not fit or fit so closely that unusually high pressures could result.

Because of its slow rate of twist we have listed four weights of bullets. Very flat trajectories can be achieved with the top loads listed here. Accuracy and flat trajectories are qualities bench rest shooters and varminters seek. The 6mm PPC delivers both.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.105"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
Alliant RL-7	19.2 gr.	20.1 gr.	20.9 gr.	21.8 gr.	22.7 gr.	
H4198	19.8 gr.	20.8 gr.	21.8 gr.	22.7 gr.		
VIHT N-130	20.4 gr.	21.3 gr.	22.2 gr.	23.2 gr.		
Accurate 2015	21.1 gr.	22.5 gr.	23.3 gr.	24.1 gr.	24.9 gr.	25.7 gr.
VIHT N-133	21.8 gr.	22.6 gr.	23.5 gr.	24.3 gr.		
Accurate 2230	21.6 gr.	22.7 gr.	23.8 gr.	24.9 gr.	26.0 gr.	
IMR 3031	22.7 gr.	23.4 gr.	24.2 gr.	24.9 gr.		
VIHT N-135	22.6 gr.	23.4 gr.	24.2 gr.	25.0 gr.	25.8 gr.	
H322	22.8 gr.	23.7 gr.	24.7 gr.	25.6 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"

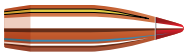
65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.105"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Alliant RL-7	17.8 gr.	18.7 gr.	19.6 gr.	20.5 gr.	21.4 gr.	22.3 gr.
H4198	18.0 gr.	19.0 gr.	19.9 gr.	20.9 gr.	21.8 gr.	
VIHT N-130	18.7 gr.	19.6 gr.	20.6 gr.	21.5 gr.	22.5 gr.	
Accurate 2015	19.9 gr.	20.8 gr.	21.7 gr.	22.5 gr.	23.4 gr.	24.2 gr.
VIHT N-133	19.6 gr.	20.6 gr.	21.7 gr.	22.7 gr.	23.7 gr.	
Accurate 2230	19.8 gr.	20.9 gr.	22.1 gr.	23.2 gr.	24.4 gr.	25.5 gr.
VIHT N-135	20.3 gr.	21.4 gr.	22.4 gr.	23.4 gr.	24.4 gr.	25.4 gr.
IMR 3031	21.0 gr.	21.8 gr.	22.7 gr.	23.5 gr.		
H322	21.0 gr.	22.0 gr.	23.0 gr.	24.1 gr.		

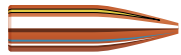
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



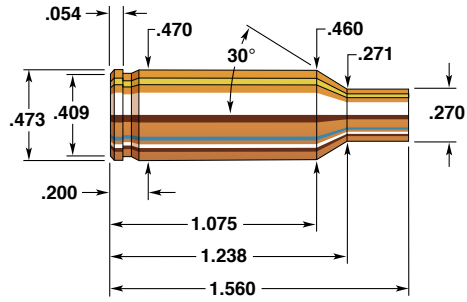
75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.105"
G1 B.C.: 0.330



75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.105"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
Alliant RL-7	17.4 gr.	18.5 gr.	19.6 gr.	20.7 gr.	21.8 gr.	
H4198	17.9 gr.	19.0 gr.	20.2 gr.	21.3 gr.		
VIHT N-130	18.9 gr.	19.9 gr.	20.8 gr.	21.8 gr.		
Accurate 2015	19.7 gr.	20.6 gr.	21.5 gr.	22.4 gr.	23.2 gr.	24.1 gr.
VIHT N-133	19.3 gr.	20.4 gr.	21.5 gr.	22.6 gr.	23.7 gr.	24.7 gr.
IMR 3031	20.8 gr.	21.7 gr.	22.6 gr.	23.4 gr.	24.3 gr.	
VIHT N-135	20.4 gr.	21.4 gr.	22.5 gr.	23.5 gr.	24.5 gr.	25.5 gr.
Accurate 2230	20.9 gr.	21.9 gr.	22.9 gr.	24.0 gr.	25.0 gr.	
H322	21.5 gr.	22.4 gr.	23.4 gr.	24.3 gr.		
H335	21.5 gr.	22.6 gr.	23.7 gr.	24.8 gr.	25.9 gr.	
WIN 748	22.8 gr.	24.1 gr.	25.4 gr.	26.7 gr.	28.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6mm Bench Rest Remington

Rifle:	40x Custom	**Bullet Diameter:**	0.243"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	2.200"
Case:	Remington	**Max. Case Length:**	1.560"
Primer:	Remington 7½	**Case Trim Length:**	1.550"

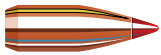
In the late 70's, Remington introduced a 308 case with a small primer pocket and walls designed for reforming to smaller cartridges. Many shooters first favored the 7mm Bench Rest, especially in bolt action pistols for silhouette shooting. Some opted for a similar cartridge with a 6mm bullet, the 6mm Bench Rest. Remington offered factory loaded ammunition as well as empty cases in 6mm BR in 1989. The factory ammunition and firearms have a neck .04" longer than many older custom firearms. If in doubt about your chamber, have your firearm checked by a competent gunsmith. The neck dimension of the chamber can be altered or the factory cases trimmed to the shorter dimension.

The 6mm BR was designed both for target shooting and varmint hunting. Our firearm was ordered with a 1 in 14" twist intended for shooting only lighter 6mm bullets. Firearms with a 1 in 10" twist would be more suitable for big game and will stabilize heavier bullets.

In either rifles or handguns loaded with appropriate bullets, the 6mm BR is adequate for deer sized game as well as for varminting. In our testing, VIHT N-135 performed well with all bullets and A 2015 worked well with the lighter bullet weights.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.140"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
Alliant RL-7	24.0 gr.	24.8 gr.	25.7 gr.	26.5 gr.	27.4 gr.
H4198	24.5 gr.	25.4 gr.	26.4 gr.		
VIHT N-130	24.9 gr.	26.2 gr.	27.4 gr.		
Accurate 2015	26.2 gr.	27.1 gr.	27.9 gr.	28.8 gr.	29.6 gr.
VIHT N-133	25.9 gr.	27.0 gr.	28.1 gr.	29.3 gr.	
IMR 3031	27.3 gr.	28.1 gr.	28.9 gr.	29.7 gr.	
Accurate 2230	26.8 gr.	28.0 gr.	29.2 gr.	30.4 gr.	31.6 gr.
VIHT N-135	27.7 gr.	28.6 gr.	29.5 gr.	30.5 gr.	31.4 gr.
H322	28.0 gr.	28.9 gr.	29.9 gr.	30.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"

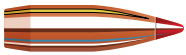
65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.150"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
Alliant RL-7	23.2 gr.	24.2 gr.	25.1 gr.	26.0 gr.	
H4198	23.8 gr.	24.7 gr.	25.6 gr.		
VIHT N-130	24.2 gr.	25.3 gr.	26.5 gr.		
Accurate 2015	25.1 gr.	26.1 gr.	27.1 gr.	28.1 gr.	29.1 gr.
VIHT N-133	25.5 gr.	26.7 gr.	27.9 gr.		
IMR 3031	26.5 gr.	27.3 gr.	28.2 gr.	29.0 gr.	
VIHT N-135	26.3 gr.	27.4 gr.	28.5 gr.	29.6 gr.	
Accurate 2230	26.1 gr.	27.3 gr.	28.6 gr.	29.8 gr.	31.1 gr.
H322	27.1 gr.	28.0 gr.	29.0 gr.	29.9 gr.	

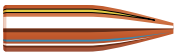
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



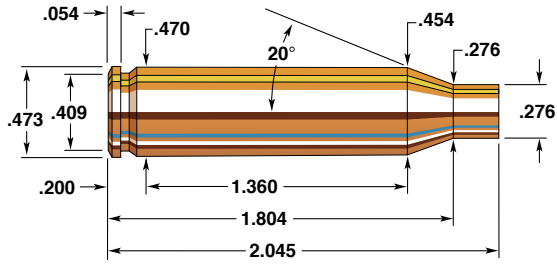
75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.160"
G1 B.C.: 0.330



75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.160"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 2015		24.9 gr.	25.9 gr.	26.9 gr.	28.0 gr.
IMR 3031	24.3 gr.	25.2 gr.	26.2 gr.	27.1 gr.	28.1 gr.
VIHT N-133	23.8 gr.	25.0 gr.	26.1 gr.	27.2 gr.	
H322	24.8 gr.	25.8 gr.	26.8 gr.	27.7 gr.	28.7 gr.
VIHT N-135	24.2 gr.	25.4 gr.	26.6 gr.	27.8 gr.	29.0 gr.
Accurate 2460		26.3 gr.	27.5 gr.	28.6 gr.	29.7 gr.
Accurate 2230		26.8 gr.	27.9 gr.	28.9 gr.	30.0 gr.
VARGET	26.4 gr.	27.5 gr.	28.6 gr.	29.8 gr.	30.9 gr.
WIN 748		28.9 gr.	30.0 gr.	31.1 gr.	32.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



243 Winchester

Rifle: . . . . . Winchester Model 70
Barrel: . . . . . .24", 1 in 10" Twist
Case: . . . . . .Hornady/Frontier
Primer: . . . . . Federal 210
Bullet Diameter: . . . . . 0.243"
Maximum COL: . . . . . .2.710"
Max. Case Length: . . . . . 2.045"
Case Trim Length: . . . . . .2.035"

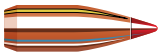
The 243, a 6mm cartridge necked down from the 308 case, was introduced by Winchester in 1955. The versatility and accuracy of the 243 Winchester soon gained it popularity unsurpassed by any other round in its class. Much of the original acclaim about the all-around capabilities of the 243 can be credited to the late Warren Page, shooting editor of Field & Stream magazine.

This potent 6mm cartridge is suitable for game ranging from prairie dogs to deer. Hornady offers many explosive varmint bullets for all phases of varminting, from the 58 grain V-MAX® to the 87 grain BTHP or 87 grain V-MAX®. The 80 grain GMX®, 100 grain Spire Point, 100 grain Boat Tail Spire Point, 100 grain Round Nose, and 95 grain SST® were constructed to give good penetration and controlled expansion in deer sized game.

During our testing, several powders performed very well, especially VIHT N-140, IMR 4064, and VIHT N-160. Slow burning powders used with long bullets behave differently when loaded with reduced charges. These lighter charges may cause unexpectedly high pressure. On occasion primers are blown, bolts stick, or even stocks are splintered. This only occurs with lower charges of slow burning propellants and we definitely do not recommend such use in the 243 Winchester.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.600"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 3031	35.1 gr.	36.2 gr.	37.2 gr.	38.2 gr.	39.2 gr.	40.3 gr.
VIHT N-135	34.8 gr.	36.2 gr.	37.6 gr.	39.0 gr.	40.3 gr.	
H4895	35.9 gr.	37.1 gr.	38.3 gr.	39.5 gr.	40.7 gr.	
Accurate 2520	35.3 gr.	37.0 gr.	38.6 gr.	40.3 gr.		
IMR 4320	36.8 gr.	38.3 gr.	39.7 gr.	41.2 gr.	42.6 gr.	
VARGET	37.5 gr.	38.9 gr.	40.2 gr.	41.5 gr.	42.9 gr.	44.2 gr.
IMR 4064	38.5 gr.	39.5 gr.	40.5 gr.	41.6 gr.	42.6 gr.	43.6 gr.
Alliant RL-15	38.9 gr.	39.8 gr.	40.7 gr.	41.6 gr.	42.5 gr.	43.4 gr.
VIHT N-140	38.8 gr.	39.8 gr.	40.9 gr.	41.9 gr.	43.0 gr.	44.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"

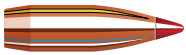
65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.600"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 3031	32.1 gr.	33.4 gr.	34.7 gr.	36.0 gr.	37.3 gr.	38.6 gr.
H4895	32.5 gr.	34.0 gr.	35.4 gr.	36.9 gr.	38.4 gr.	
Accurate 2520	34.0 gr.	35.4 gr.	36.8 gr.	38.2 gr.	39.6 gr.	
IMR 4064	35.4 gr.	36.6 gr.	37.7 gr.	38.9 gr.	40.0 gr.	41.2 gr.
IMR 4320	34.3 gr.	35.8 gr.	37.3 gr.	38.8 gr.	40.3 gr.	41.8 gr.
VARGET	35.1 gr.	36.5 gr.	37.8 gr.	39.1 gr.	40.4 gr.	41.7 gr.
Alliant RL-15	35.5 gr.	36.8 gr.	38.0 gr.	39.2 gr.	40.5 gr.	41.7 gr.
VIHT N-140	35.9 gr.	37.2 gr.	38.4 gr.	39.7 gr.	41.0 gr.	42.3 gr.
VIHT N-160	42.6 gr.	43.9 gr.	45.3 gr.	46.6 gr.	47.9 gr.	

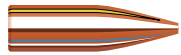
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.640"
G1 B.C.: 0.330



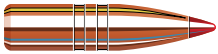
75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.640"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
H4895	31.4 gr.	32.8 gr.	34.2 gr.	35.5 gr.	36.9 gr.	
Accurate 2520	31.1 gr.	33.0 gr.	35.0 gr.	36.9 gr.		
IMR 4064	33.0 gr.	34.5 gr.	35.9 gr.	37.4 gr.	38.9 gr.	
IMR 4320	33.1 gr.	34.6 gr.	36.0 gr.	37.4 gr.	38.8 gr.	
Alliant RL-15	33.2 gr.	34.7 gr.	36.2 gr.	37.8 gr.	39.3 gr.	
VIHT N-140	33.4 gr.	35.1 gr.	36.8 gr.	38.5 gr.		
VIHT N-160			41.5 gr.	43.3 gr.	45.1 gr.	
IMR 4831			42.1 gr.	43.4 gr.	44.7 gr.	46.1 gr.
WIN 760	39.6 gr.	40.9 gr.	42.3 gr.	43.6 gr.	45.0 gr.	46.3 gr.
H4350			42.9 gr.	44.1 gr.	45.4 gr.	46.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.243"



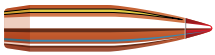
80 gr. GMX®
Item No. 24370
C.O.L.: 2.640"
G1 B.C.: 0.300

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3150**	**3200**
WIN 760	36.8 gr.	38.4 gr.	39.9 gr.	41.5 gr.	42.3 gr.	
Alliant RL-17	37.3 gr.	38.7 gr.	40.0 gr.	41.4 gr.	42.1 gr.	
H4350	37.1 gr.	38.7 gr.	40.2 gr.	41.8 gr.		
Hunter	36.3 gr.	38.4 gr.	40.6 gr.	42.8 gr.	43.9 gr.	45.0 gr.
Hybrid 100V	38.4 gr.	39.6 gr.	40.7 gr.	41.9 gr.	42.4 gr.	
VIHT N-160	36.7 gr.	39.0 gr.	41.4 gr.	43.7 gr.		
SUPERFORMANCE	38.9 gr.	40.5 gr.	42.2 gr.	43.8 gr.	44.6 gr.	45.4 gr.
IMR 4831	39.2 gr.	41.0 gr.	42.8 gr.			
Alliant RL-19	39.2 gr.	41.3 gr.	43.4 gr.	45.5 gr.	46.5 gr.	

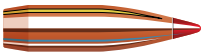
Create custom ballistic tables using our online calculators at hornady.com/ballistics

85-87 GRAIN BULLETS

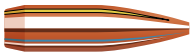
SECTIONAL DENSITY: 0.206-0.210
DIAMETER: 0.243"



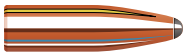
85 gr. InterBond®
Item No. 24539
C.O.L.: 2.640"
G1 B.C.: 0.395



87 gr. V-MAX®
Item No. 22440
C.O.L.: 2.640"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 2.640"
G1 B.C.: 0.376



87 gr. SP
Item No. 2440
C.O.L.: 2.640"
G1 B.C.: 0.327

	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
H4895	28.7 gr.	30.0 gr.	31.4 gr.	32.7 gr.	34.0 gr.	35.3 gr.	
Accurate 2520	28.3 gr.	30.0 gr.	31.7 gr.	33.4 gr.	35.1 gr.		
IMR 4320	29.5 gr.	30.9 gr.	32.4 gr.	33.9 gr.	35.4 gr.	36.9 gr.	
IMR 4064	29.7 gr.	31.2 gr.	32.6 gr.	34.1 gr.	35.6 gr.	37.1 gr.	
Alliant RL-15	29.1 gr.	30.8 gr.	32.5 gr.	34.1 gr.	35.8 gr.	37.5 gr.	
VIHT N-140	29.6 gr.	31.3 gr.	33.1 gr.	34.8 gr.	36.6 gr.		
WIN 760	33.1 gr.	35.0 gr.	36.9 gr.	38.8 gr.	40.7 gr.	42.5 gr.	
H4350				39.8 gr.	41.6 gr.	43.4 gr.	
VIHT N-160				40.1 gr.	41.8 gr.	43.6 gr.	
IMR 4831				40.8 gr.	42.3 gr.	43.8 gr.	
Alliant RL-17				41.1 gr.	42.5 gr.	44.0 gr.	
Alliant RL-19				42.2 gr.	43.6 gr.	45.0 gr.	
Power Pro 4000 MR	39.5 gr.	40.8 gr.	42.1 gr.	43.4 gr.	44.7 gr.	46.0 gr.	47.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 2.630"
G1 B.C.: 0.355

100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 2.630"
G1 B.C.: 0.405

100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 2.630"
G1 B.C.: 0.381

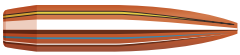
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	31.0 gr.	32.6 gr.	34.2 gr.		
WIN 760	35.3 gr.	37.1 gr.	39.0 gr.	40.9 gr.	
H4350		37.4 gr.	39.1 gr.	40.8 gr.	
IMR 4831		38.0 gr.	39.5 gr.	41.0 gr.	42.5 gr.
Alliant RL-17	36.7 gr.	38.1 gr.	39.6 gr.	41.0 gr.	42.5 gr.
Hybrid 100V	37.1 gr.	38.5 gr.	39.9 gr.	41.3 gr.	42.6 gr.
Alliant RL-19		39.5 gr.	41.0 gr.	42.5 gr.	44.0 gr.
SUPERFORMANCE		39.7 gr.	41.3 gr.	42.8 gr.	44.4 gr.
Alliant RL-22			41.8 gr.	43.6 gr.	45.3 gr.
Power Pro 4000 MR	39.4 gr.	40.7 gr.	41.9 gr.	43.2 gr.	44.6 gr.
H4831			42.0 gr.	43.8 gr.	45.5 gr.
VIHT N-165			43.3 gr.	45.3 gr.	47.2 gr.
IMR 7828		41.6 gr.	43.3 gr.	45.0 gr.	
WIN Supreme 780	41.1 gr.	42.7 gr.	44.4 gr.	46.1 gr.	48.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

105 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.243"

105 gr. A-MAX®
(Discontinued)
Item No. 24562
C.O.L.: 2.630"
G1 B.C.: 0.500



^105 gr. BTHP Match™
Item No. 2458
C.O.L.: 2.630"
G1 B.C.: 0.530
G7 B.C.: 0.253

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Alliant RL-17	35.9 gr.	37.3 gr.	38.7 gr.	40.1 gr.	41.5 gr.	
Hybrid 100V	36.3 gr.	37.6 gr.	38.9 gr.	40.3 gr.	41.6 gr.	
WIN 760	35.9 gr.	37.5 gr.	39.0 gr.	40.5 gr.		
IMR 4831	36.9 gr.	38.2 gr.	39.5 gr.			
H4350		38.3 gr.	39.7 gr.	41.0 gr.		
Alliant RL-19			40.7 gr.	41.9 gr.	43.1 gr.	
Power Pro 4000 MR	38.0 gr.	39.4 gr.	40.9 gr.	42.3 gr.	43.8 gr.	
Alliant RL-22		40.2 gr.	41.9 gr.	43.5 gr.		
VIHT N-165		40.3 gr.	42.0 gr.	43.7 gr.		
H4831		40.7 gr.	42.1 gr.	43.5 gr.		
IMR 7828	39.9 gr.	41.5 gr.	43.0 gr.			
WIN Supreme 780	42.5 gr.	43.4 gr.	44.3 gr.	45.3 gr.	46.2 gr.	47.0 gr.

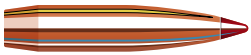
Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *Hornady recommends a 1:9" or faster twist barrel to stabilize these bullets.*

^NOTE: *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

108 GRAIN BULLETS

SECTIONAL DENSITY: 0.261
DIAMETER: 0.243"



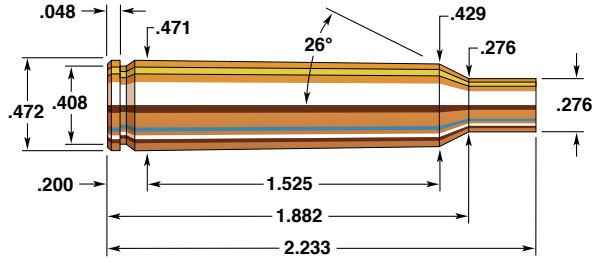
***108 gr. ELD® Match**
Item No. 24561
C.O.L.: 2.700"
G1 B.C.: 0.525
G7 B.C.: 0.264

	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**
Hybrid 100V	35.3 gr.	36.9 gr.	38.3 gr.	39.9 gr.	41.4 gr.	42.1 gr.	42.9 gr.
Alliant RL-17	35.5 gr.	37.0 gr.	38.5 gr.	40.0 gr.	41.5 gr.	42.3 gr.	
H4350	34.8 gr.	36.6 gr.	38.5 gr.	40.3 gr.	42.1 gr.		
IMR 4350	35.3 gr.	37.0 gr.	38.6 gr.	40.3 gr.	41.9 gr.		
IMR 4831	37.9 gr.	39.3 gr.	40.8 gr.	42.3 gr.	43.7 gr.	44.4 gr.	
Power Pro 4000 MR	38.2 gr.	39.6 gr.	41.0 gr.	42.4 gr.	43.8 gr.	44.5 gr.	
SUPERFORMANCE	38.2 gr.	39.7 gr.	41.1 gr.	42.6 gr.	44.1 gr.		
Alliant RL-19	39.3 gr.	40.8 gr.	42.2 gr.	43.7 gr.	45.2 gr.	45.9 gr.	
IMR 7828 SSC	39.9 gr.	41.3 gr.	42.8 gr.	44.3 gr.	45.7 gr.		
Alliant RL-22	41.0 gr.	42.4 gr.	43.8 gr.	45.2 gr.			
H4831 SC	40.1 gr.	41.8 gr.	43.6 gr.	45.3 gr.	47.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8" or faster twist barrel to stabilize this bullet.*

**NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



6mm Remington

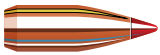
Rifle:	Remington 700	**Bullet Diameter:**	0.243"
Barrel:	22", 1 in 9" Twist	**Maximum COL:**	2.825"
Case:	Hornady/Frontier	**Max. Case Length:**	2.233"
Primer:	Winchester WLR	**Case Trim Length:**	2.223"

The 6mm Remington was introduced by Remington in 1963 to replace the original 1955 version, the 244. The two cartridges are identical in every way and are based on the 7 x 57mm case necked down with the shoulder angle increased by about 5 degrees. The 244, as it was introduced, had a twist rate of 1 in 12", which left it unable to stabilize long 100-grain Spire Point bullets and thereby reduced the versatility of the round. As a result, the 243 Winchester gained all the fame and glory in the 6mm caliber. When Remington finally changed to a 1:9" twist and renamed the cartridge, the shooting public became interested. Ballistically speaking, the 6mm Remington has a slight advantage over the 243 Winchester, but the difference is not enough to show a significant advantage on game and varmints.

As with the 243, the popularity of this round is based on its ability to perform both as a medium game and varmint cartridge. With the wide range of Hornady Bullets and a wide variety of powders from which to choose, the 6mm Remington is an exciting and effective round. IMR 4064 and VIHT N-160 produced the best groups and gave the most uniform results during our testing.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.775"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**	**3800**
IMR 3031	36.8 gr.	37.9 gr.	39.0 gr.	40.1 gr.	41.2 gr.	
H4895	37.4 gr.	38.6 gr.	39.9 gr.	41.2 gr.	42.4 gr.	43.7 gr.
VIHT N-135	37.7 gr.	38.9 gr.	40.2 gr.	41.4 gr.		
Accurate 2520	38.4 gr.	39.7 gr.	41.1 gr.	42.4 gr.		
Accurate 2495	39.1 gr.	40.2 gr.	41.3 gr.	42.4 gr.	43.5 gr.	
IMR 4320	38.4 gr.	39.9 gr.	41.3 gr.	42.8 gr.	44.2 gr.	
VARGET	39.2 gr.	40.5 gr.	41.8 gr.	43.1 gr.	44.5 gr.	45.8 gr.
IMR 4064	40.1 gr.	41.2 gr.	42.3 gr.	43.4 gr.	44.6 gr.	
Alliant RL-15	40.9 gr.	41.8 gr.	42.8 gr.	43.8 gr.	44.7 gr.	45.7 gr.
VIHT N-140	41.4 gr.	42.4 gr.	43.3 gr.	44.3 gr.	45.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"

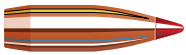
65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.780"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 3031	34.3 gr.	35.6 gr.	36.9 gr.	38.1 gr.	39.4 gr.	
H4895	34.4 gr.	35.9 gr.	37.4 gr.	38.8 gr.	40.3 gr.	41.8 gr.
Accurate 2495	36.4 gr.	37.7 gr.	38.9 gr.	40.2 gr.	41.5 gr.	
IMR 4064	37.3 gr.	38.4 gr.	39.6 gr.	40.8 gr.	42.0 gr.	43.2 gr.
VARGET	36.4 gr.	37.9 gr.	39.4 gr.	41.0 gr.	42.5 gr.	
IMR 4320	36.9 gr.	38.3 gr.	39.7 gr.	41.2 gr.	42.6 gr.	
Alliant RL-15	38.3 gr.	39.4 gr.	40.5 gr.	41.6 gr.	42.7 gr.	
VIHT N-140	38.4 gr.	39.6 gr.	40.8 gr.	42.0 gr.	43.2 gr.	
Accurate 4350	44.4 gr.	45.4 gr.	46.4 gr.	47.4 gr.	48.5 gr.	

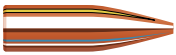
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.825"
G1 B.C.: 0.330



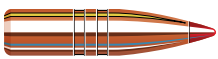
75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.825"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
H4895	33.6 gr.	35.0 gr.	36.4 gr.	37.7 gr.	39.1 gr.	40.5 gr.
VARGET	34.5 gr.	36.0 gr.	37.5 gr.	39.0 gr.	40.5 gr.	
IMR 4320	35.1 gr.	36.5 gr.	38.0 gr.	39.4 gr.	40.9 gr.	42.4 gr.
IMR 4064	35.2 gr.	36.7 gr.	38.1 gr.	39.6 gr.	41.1 gr.	42.5 gr.
Alliant RL-15	36.1 gr.	37.7 gr.	39.2 gr.	40.8 gr.	42.4 gr.	
VIHT N-140	37.0 gr.	38.5 gr.	40.1 gr.	41.7 gr.		
Accurate 4350	42.0 gr.	43.2 gr.	44.4 gr.	45.6 gr.	46.8 gr.	
WIN 760	42.0 gr.	43.2 gr.	44.5 gr.	45.7 gr.	46.9 gr.	48.2 gr.
VIHT N-160	43.4 gr.	44.6 gr.	45.8 gr.	47.0 gr.	48.3 gr.	
IMR 4831	42.8 gr.	44.3 gr.	45.7 gr.	47.1 gr.		
Alliant RL-19	45.5 gr.	46.6 gr.	47.8 gr.	49.0 gr.	50.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.243"



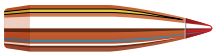
80 gr. GMX®
Item No. 24370
C.O.L.: 2.825"
G1 B.C.: 0.300

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
Alliant RL-15	35.9 gr.	37.3 gr.	38.7 gr.	40.0 gr.	
VARGET	36.2 gr.	37.6 gr.	39.0 gr.		
IMR 4064	36.7 gr.	38.2 gr.	39.6 gr.	40.9 gr.	
Hybrid 100V	40.6 gr.	41.8 gr.	43.1 gr.	44.3 gr.	45.5 gr.
WIN 760	41.0 gr.	42.3 gr.	43.6 gr.		
VIHT N-160	41.9 gr.	43.5 gr.	45.1 gr.		
IMR 4831	43.0 gr.	44.5 gr.	45.9 gr.	47.2 gr.	
Alliant RL-19	45.8 gr.	47.1 gr.	48.3 gr.	49.6 gr.	

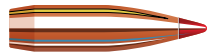
Create custom ballistic tables using our online calculators at hornady.com/ballistics

85-87 GRAIN BULLETS

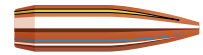
SECTIONAL DENSITY: 0.206-0.210
DIAMETER: 0.243"



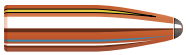
85 gr. InterBond®
Item No. 24539
C.O.L.: 2.825"
G1 B.C.: 0.395



87 gr. V-MAX®
Item No. 22440
C.O.L.: 2.825"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 2.825"
G1 B.C.: 0.376



87 gr. SP
Item No. 2440
C.O.L.: 2.825"
G1 B.C.: 0.327

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
H4895	30.8 gr.	32.2 gr.	33.6 gr.	35.0 gr.	36.4 gr.	37.8 gr.
VARGET	31.9 gr.	33.3 gr.	34.8 gr.	36.2 gr.	37.6 gr.	39.0 gr.
IMR 4064	32.5 gr.	33.9 gr.	35.4 gr.	36.8 gr.	38.3 gr.	39.7 gr.
Alliant RL-15	32.8 gr.	34.4 gr.	36.1 gr.	37.7 gr.	39.3 gr.	41.0 gr.
VIHT N-140	31.9 gr.	33.9 gr.	35.9 gr.	38.0 gr.	40.0 gr.	
Accurate 4350		39.8 gr.	41.1 gr.	42.5 gr.	43.9 gr.	
WIN 760	38.0 gr.	39.5 gr.	41.0 gr.	42.6 gr.	44.1 gr.	45.6 gr.
Hybrid 100V	40.8 gr.	41.8 gr.	42.8 gr.	43.7 gr.	44.7 gr.	45.7 gr.
IMR 4831			41.8 gr.	43.4 gr.	45.1 gr.	46.7 gr.
VIHT N-160			42.5 gr.	43.9 gr.	45.3 gr.	46.7 gr.
Alliant RL-19			44.3 gr.	45.4 gr.	46.6 gr.	47.8 gr.
WIN Supreme 780	45.1 gr.	16.4 gr.	47.8 gr.	49.2 gr.	50.5 gr.	51.9 gr.

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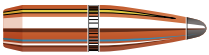
INDICATES MAXIMUM LOAD — USE WITH CAUTION

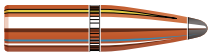
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 2.810"
G1 B.C.: 0.355



100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 2.810"
G1 B.C.: 0.405



100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 2.810"
G1 B.C.: 0.381

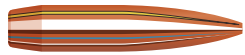
	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	32.4 gr.	33.8 gr.	35.2 gr.	36.6 gr.	38.0 gr.	
Accurate 4350		39.1 gr.	40.3 gr.	41.5 gr.	42.6 gr.	
WIN 760	37.3 gr.	38.8 gr.	40.3 gr.	41.8 gr.	43.3 gr.	
Hybrid 100V	38.6 gr.	39.8 gr.	41.0 gr.	42.3 gr.	43.5 gr.	
IMR 4831			40.9 gr.	42.5 gr.	44.1 gr.	
VIHT N-160			41.0 gr.	42.6 gr.	44.1 gr.	
Alliant RL-19		41.7 gr.	43.0 gr.	44.2 gr.	45.4 gr.	
Alliant RL-22			43.8 gr.	45.2 gr.	46.6 gr.	48.0 gr.
IMR 7828			44.9 gr.	46.3 gr.	47.7 gr.	49.0 gr.
WIN Supreme 780	42.6 gr.	44.3 gr.	45.9 gr.	47.6 gr.	49.3 gr.	
VIHT N-165			46.0 gr.	47.7 gr.	49.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

105 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.243"

105 gr. A-MAX®
(Discontinued)
Item No. 24562
C.O.L.: 2.810"
G1 B.C.: 0.500



^105 gr. BTHP Match™
Item No. 2458
C.O.L.: 2.810"
G1 B.C.: 0.530
G7 B.C.: 0.253

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 4350		39.0 gr.	40.2 gr.	41.3 gr.	42.4 gr.	
IMR 4831		38.9 gr.	40.2 gr.	41.5 gr.	42.8 gr.	
WIN 760	37.0 gr.	38.7 gr.	40.4 gr.	42.2 gr.		
VIHT N-160		40.0 gr.	41.3 gr.	42.6 gr.	43.9 gr.	
Hybrid 100V	38.8 gr.	40.0 gr.	41.3 gr.	42.6 gr.		
Alliant RL-19		41.0 gr.	42.1 gr.	43.2 gr.	44.3 gr.	45.4 gr.
Alliant RL-22		41.9 gr.	43.3 gr.	44.7 gr.	46.1 gr.	47.5 gr.
VIHT N-165			43.3 gr.	44.9 gr.	46.6 gr.	48.2 gr.
H4831		41.9 gr.	43.6 gr.	45.2 gr.	46.9 gr.	
WIN Supreme 780	42.2 gr.	44.3 gr.	46.4 gr.	48.5 gr.		

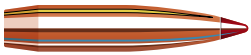
Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *Hornady recommends a 1:9" or faster twist barrel to stabilize these bullets.*

^NOTE: *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

108 GRAIN BULLETS

SECTIONAL DENSITY: 0.261
DIAMETER: 0.243"



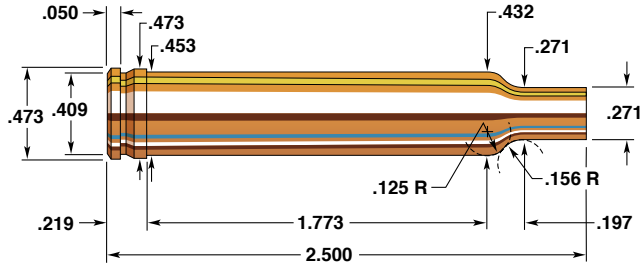
***108 gr. ELD® Match**
Item No. 24561
C.O.L.: 2.825"
G1 B.C.: 0.525
G7 B.C.: 0.264

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
SUPERFORMANCE	39.2 gr.	40.3 gr.	41.4 gr.	42.5 gr.	43.7 gr.	
IMR 4831	38.3 gr.	40.0 gr.	41.6 gr.	43.3 gr.	44.9 gr.	
Alliant RL-22	40.2 gr.	41.4 gr.	42.7 gr.	43.9 gr.	45.1 gr.	
Alliant RL-19	40.8 gr.	42.1 gr.	43.4 gr.	44.7 gr.	45.9 gr.	46.6 gr.
IMR 7828 SSC	40.1 gr.	41.8 gr.	43.5 gr.	45.2 gr.		
H4831 SC	40.5 gr.	42.4 gr.	44.4 gr.	46.3 gr.	48.3 gr.	
VIHT N-165	43.3 gr.	44.5 gr.	45.8 gr.	47.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8" or faster twist barrel to stabilize this bullet.*

NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



240 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.243"
Barrel:	.24", 1 in 10" Twist	**Maximum COL:**	.3.100"
Case:	.Weatherby	**Max. Case Length:**	2.500"
Primer:	Federal 210	**Case Trim Length:**	2.490"

The 240 Weatherby Magnum is one of the most powerful factory loaded 6mms commercially available. It has enough added powder capacity to drive a 100 grain Spire Point at a velocity 300 fps faster than either the 243 or the 6mm Remington.

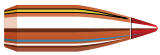
In size, the 240 case head is the same as the 30-06 and has nearly identical powder capacity. The case is belted and features the familiar Weatherby double radius shoulder. The 240 Weatherby is chambered in Weatherby's deluxe Mark V stainless and Mark V® Accumark Ultra Lightweight rifles.

A host of powder-bullet combinations worked well in our firearm. A variety of powders produced velocity of 3700 fps with the 70 grain Spire Point and 3200 fps with the 100 grain Spire Point.

As in all Weatherby rifles, each barrel has more freebore than most standard commercial rifles and bullets must be seated farther out of the case to be close to the rifling. This frequently improves accuracy. Also, hunting rifles with light weight barrels tend to heat up rapidly when fired many times in succession. This heat can cause a change in point of impact and larger groups, as was evident with our test rifle. As with several other calibers, allowing the barrel to stay cool aids accuracy and prolongs barrel life.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



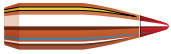
58 gr. V-MAX®
Item No. 22411
C.O.L.: 3.020"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**3500**	**3600**	**3700**	**3800**	**3900**
H4895	39.7 gr.	41.4 gr.	43.0 gr.	44.7 gr.	
Accurate 2495	41.2 gr.	42.5 gr.	43.7 gr.	45.0 gr.	46.2 gr.
VARGET	40.3 gr.	42.0 gr.	43.7 gr.	45.4 gr.	
IMR 4064	40.7 gr.	42.4 gr.	44.0 gr.	45.7 gr.	47.4 gr.
VIHT N-140	43.0 gr.	44.4 gr.	45.8 gr.	47.2 gr.	
Alliant RL-15	43.4 gr.	44.7 gr.	45.9 gr.	47.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"



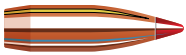
65 gr. V-MAX®
Item No. 22415
C.O.L.: 3.020"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
H4895	35.8 gr.	37.5 gr.	39.2 gr.	40.8 gr.	42.5 gr.	
Accurate 2495	36.7 gr.	38.1 gr.	39.6 gr.	41.0 gr.	42.5 gr.	
VARGET	37.4 gr.	38.9 gr.	40.4 gr.	41.9 gr.	43.4 gr.	
IMR 4064	37.7 gr.	39.3 gr.	40.9 gr.	42.4 gr.	44.0 gr.	45.6 gr.
VIHT N-140	37.7 gr.	39.4 gr.	41.1 gr.	42.8 gr.	44.5 gr.	
Alliant RL-15	38.2 gr.	39.9 gr.	41.6 gr.	43.3 gr.	45.1 gr.	46.8 gr.
IMR 4350	43.9 gr.	45.3 gr.	46.8 gr.	48.2 gr.	49.7 gr.	51.1 gr.

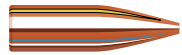
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 3.075"
G1 B.C.: 0.330



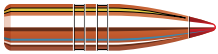
75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 3.075"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)			
POWDER	**3200**	**3300**	**3400**	**3500**
IMR 4064		42.5 gr.	43.9 gr.	45.4 gr.
IMR 4320		44.1 gr.	45.4 gr.	46.7 gr.
IMR 4350		47.2 gr.	48.4 gr.	50.1 gr.
Accurate 4350	44.7 gr.	46.7 gr.	48.8 gr.	
WIN 760		47.7 gr.	48.9 gr.	50.1 gr.
VIHT N-160	46.9 gr.	48.3 gr.	49.8 gr.	
IMR 4831		49.7 gr.	50.9 gr.	52.2 gr.
Alliant RL-19	48.2 gr.	50.0 gr.	51.8 gr.	53.6 gr.
H4831	49.7 gr.	52.1 gr.	54.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.243"

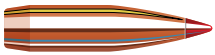


80 gr. GMX®
Item No. 24370
C.O.L.: 3.075"
G1 B.C.: 0.300

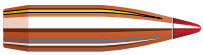
NOTE: USE 85-87 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

85-87 GRAIN BULLETS

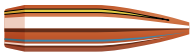
SECTIONAL DENSITY: 0.206-0.210
DIAMETER: 0.243"



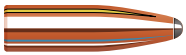
85 gr. InterBond®
Item No. 24539
C.O.L.: 3.075"
G1 B.C.: 0.395



87 gr. V-MAX®
Item No. 22440
C.O.L.: 3.075"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 3.075"
G1 B.C.: 0.376



87 gr. SP
Item No. 2440
C.O.L.: 3.075"
G1 B.C.: 0.327

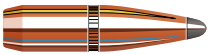
	VELOCITY (FPS – feet per second)		
POWDER	**3100**	**3200**	**3300**
IMR 4064	41.0 gr.	42.6 gr.	
IMR 4320	42.5 gr.	43.7 gr.	44.9 gr.
Accurate 4350	43.2 gr.	44.9 gr.	
WIN 760	44.8 gr.	46.8 gr.	48.8 gr.
IMR 4350	45.6 gr.	47.0 gr.	48.4 gr.
VIHT N-160	46.0 gr.	48.0 gr.	
IMR 4831	47.0 gr.	48.4 gr.	
Alliant RL-19	46.4 gr.	48.6 gr.	50.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

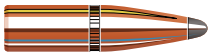
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 3.075"
G1 B.C.: 0.355



100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 3.075"
G1 B.C.: 0.405



100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 3.075"
G1 B.C.: 0.381

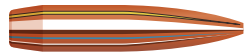
	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4064		39.0 gr.	40.6 gr.	42.3 gr.	
IMR 4350		43.2 gr.	44.6 gr.	46.0 gr.	
H4350	41.5 gr.	43.2 gr.	44.9 gr.		
IMR 4831		44.5 gr.	46.1 gr.	47.7 gr.	49.3 gr.
VIHT N-160		44.5 gr.	46.3 gr.	48.1 gr.	
WIN 760	43.0 gr.	44.7 gr.	46.3 gr.	48.0 gr.	
Alliant RL-19		44.3 gr.	46.5 gr.	48.6 gr.	
Alliant RL-25		52.4 gr.	53.9 gr.	55.4 gr.	56.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

105 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.243"

105 gr. A-MAX®
(Discontinued)
Item No. 24562
C.O.L.: 3.220"
G1 B.C.: 0.500



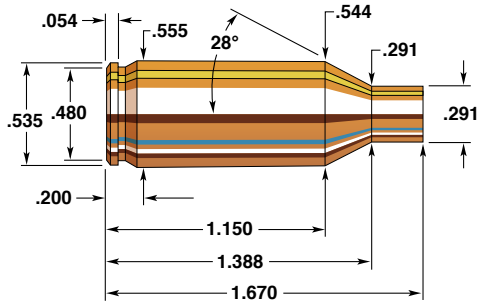
^105 gr. BTHP Match™
Item No. 2458
C.O.L.: 3.220"
G1 B.C.: 0.530
G7 B.C.: 0.253

	VELOCITY (FPS – feet per second)			
POWDER	**2800**	**2900**	**3000**	**3100**
IMR 4350	40.8 gr.	42.3 gr.	43.8 gr.	
H4350	40.9 gr.	42.5 gr.	44.0 gr.	
IMR 4831	40.9 gr.	42.8 gr.	44.8 gr.	
VIHT N-160	42.8 gr.	44.6 gr.	46.4 gr.	
Alliant RL-19	43.2 gr.	45.3 gr.	47.2 gr.	
Alliant RL-25	49.8 gr.	51.2 gr.	52.6 gr.	54.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *Hornady recommends a 1:9" or faster twist barrel to stabilize these bullets.*

^NOTE: *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



243 Winchester Super Short Magnum

Rifle: . . . . . Browning A-Bolt/Custom
Barrel: . . . . . 26", 1 in 8" Twist
Case: Winchester 300 WSM/Reformed
Primer: . . . . . Winchester WLR

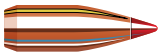
Bullet Diameter: . . . . . 0.243"
Maximum COL: . . . . . 2.360"
Max. Case Length: . . . . . .1.670"
Case Trim Length: . . . . . 1.660"

One of the newest entries in the short magnum derby, the 243 Winchester Super Short Magnum is among the fastest 6mm cartridges on the market. It is based on Winchester's WSM line of cartridges; but, it is significantly shorter.

VARGET is our powder of choice with varmint bullets, H 4831 & RL-19 worked well with hunting weight bullets. It is important that you start low and approach maximum loads with caution. We found that signs of excessive pressure came on with very little warning.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



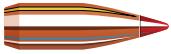
58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.200"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**3500**	**3600**	**3700**	**3800**	**3900**
Accurate 2495	34.7 gr.	36.2 gr.	37.7 gr.	39.1 gr.	
H4895	35.4 gr.	36.9 gr.	38.4 gr.	39.9 gr.	41.4 gr.
IMR 4064	37.4 gr.	38.8 gr.	40.2 gr.	41.6 gr.	42.9 gr.
Accurate 4064	37.8 gr.	39.1 gr.	40.4 gr.	41.7 gr.	43.1 gr.
VIHT N-150	37.2 gr.	38.8 gr.	40.3 gr.	41.9 gr.	
VARGET	37.9 gr.	39.4 gr.	40.9 gr.	42.4 gr.	43.9 gr.
IMR 4350	44.5 gr.	45.9 gr.	47.2 gr.	48.5 gr.	49.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"



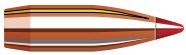
65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.200"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)				
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**
Accurate 2495	32.3 gr.	34.0 gr.	35.7 gr.	37.3 gr.	
H4895	33.7 gr.	35.2 gr.	36.7 gr.	38.2 gr.	
Alliant RL-15	35.5 gr.	37.0 gr.	38.5 gr.	40.0 gr.	41.5 gr.
VARGET	35.8 gr.	37.3 gr.	38.8 gr.	40.3 gr.	
IMR 4064	37.0 gr.	38.0 gr.	39.0 gr.	40.0 gr.	40.9 gr.
Accurate 4350	41.1 gr.	42.4 gr.	43.7 gr.	45.0 gr.	46.3 gr.
IMR 4350	42.2 gr.	43.6 gr.	44.9 gr.	46.3 gr.	47.7 gr.
VIHT N-160	42.5 gr.	44.2 gr.	46.0 gr.		

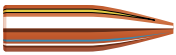
Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.250"
G1 B.C.: 0.330



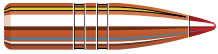
75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.250"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
VARGET	32.7 gr.	34.2 gr.	35.7 gr.	37.2 gr.	38.6 gr.	
Accurate 4350	36.2 gr.	37.8 gr.	39.5 gr.	41.1 gr.	42.8 gr.	
IMR 4350	38.5 gr.	39.9 gr.	41.3 gr.	42.7 gr.	44.1 gr.	45.4 gr.
IMR 4831	38.8 gr.	40.5 gr.	42.2 gr.	43.8 gr.	45.5 gr.	47.1 gr.
VIHT N-160	39.0 gr.	40.6 gr.	42.3 gr.	43.9 gr.	45.5 gr.	
Alliant RL-19	39.8 gr.	41.3 gr.	42.8 gr.	44.4 gr.	45.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

80 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.243"

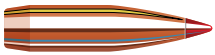


80 gr. GMX®
Item No. 24370
C.O.L.: 2.245"
G1 B.C.: 0.300

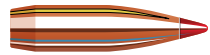
NOTE: USE 85-87 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

85-87 GRAIN BULLETS

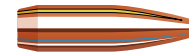
SECTIONAL DENSITY: 0.206-0.210
DIAMETER: 0.243"



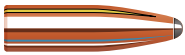
85 gr. InterBond®
Item No. 24539
C.O.L.: 2.245"
G1 B.C.: 0.395



87 gr. V-MAX®
Item No. 22440
C.O.L.: 2.245"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 2.250"
G1 B.C.: 0.376



87 gr. SP
Item No. 2440
C.O.L.: 2.250"
G1 B.C.: 0.327

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
Accurate 4350	35.4 gr.	37.0 gr.	38.6 gr.	40.3 gr.	41.9 gr.
IMR 4350	36.8 gr.	38.3 gr.	39.7 gr.	41.1 gr.	42.6 gr.
Alliant RL-19	37.8 gr.	39.3 gr.	40.9 gr.	42.4 gr.	43.9 gr.
VIHT N-160	36.7 gr.	38.7 gr.	40.6 gr.	42.6 gr.	
IMR 4831	38.0 gr.	39.5 gr.	41.1 gr.	42.6 gr.	44.1 gr.
H4831	38.7 gr.	40.3 gr.	41.8 gr.	43.4 gr.	44.9 gr.
VIHT N-165	39.0 gr.	40.9 gr.	42.7 gr.	44.6 gr.	46.5 gr.

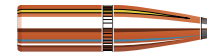
Create custom ballistic tables using our online calculators at hornady.com/ballistics

95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 2.240"
G1 B.C.: 0.355

100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 2.240"
G1 B.C.: 0.405



100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 2.240"
G1 B.C.: 0.381

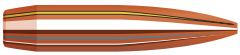
	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 4350	35.4 gr.	36.9 gr.	38.4 gr.	39.9 gr.	41.4 gr.
IMR 4350	35.9 gr.	37.5 gr.	39.0 gr.	40.5 gr.	42.0 gr.
IMR 4831	37.0 gr.	38.5 gr.	40.1 gr.	41.6 gr.	43.1 gr.
Alliant RL-19	36.8 gr.	38.5 gr.	40.3 gr.	42.1 gr.	43.9 gr.
H4831	37.9 gr.	39.5 gr.	41.1 gr.	42.7 gr.	44.2 gr.
Alliant RL-22	37.1 gr.	38.9 gr.	40.7 gr.	42.5 gr.	44.3 gr.
VIHT N-165	39.1 gr.	40.8 gr.	42.5 gr.	44.1 gr.	45.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

105 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.243"

105 gr. A-MAX®
(Discontinued)
Item No. 24562
C.O.L.: 2.300"
G1 B.C.: 0.500



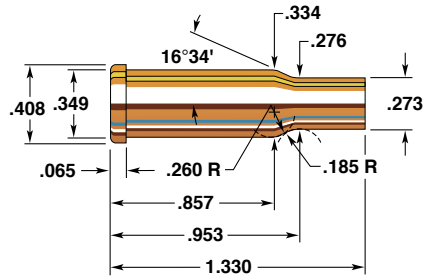
^105 gr. BTHP Match™
Item No. 2458
C.O.L.: 2.300"
G1 B.C.: 0.530
G7 B.C.: 0.253

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 4350	34.9 gr.	36.5 gr.	38.1 gr.		
IMR 4350	35.7 gr.	37.2 gr.	38.7 gr.	40.3 gr.	
IMR 4831	36.3 gr.	38.0 gr.	39.6 gr.	41.2 gr.	
Alliant RL-19	36.2 gr.	38.0 gr.	39.7 gr.	41.5 gr.	43.2 gr.
Alliant RL-22	36.7 gr.	38.4 gr.	40.2 gr.	42.0 gr.	
H4831	36.8 gr.	38.7 gr.	40.5 gr.	42.4 gr.	
VIHT N-165	36.1 gr.	38.3 gr.	40.6 gr.	42.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:9" or faster twist barrel to stabilize these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



25-20 Winchester

Rifle:	Marlin 1894 CL	**Bullet Diameter:**	0.257"
Barrel:	22", 1 in 16" Twist	**Maximum COL:**	1.592"
Case:	Remington	**Max. Case Length:**	1.330"
Primer:	Winchester WSR	**Case Trim Length:**	1.320"

The 25-20 Winchester is a rimmed bottle necked cartridge that is based on the 32-20 Winchester case necked down to 25 caliber. It was introduced about 1893 by Winchester for their lever action Model 92. Before the advent of the 22 Hornet and the 218 Bee, it was a very popular varmint round often used on small game as well. The cartridge came into being as the repeater version of its 25-20 single shot cartridge, though it was based on a different case.

The 25-20 achieved wide popularity in the many bolt-, slide-, and lever-action rifles chambered for it. While it is an old-timer today, it has had a very long run as cartridges go and still has factory ammunition available for it.

Hornady makes a bullet especially for the 25-20, the cannelured 60 grain Flat Point, a bullet designed to expand effectively at 25-20 velocities over relatively short ranges. The 25-20 Winchester should be used only for small game and varmints. Tubular magazines prevent the use of any pointed 25 caliber bullets.

Why do old-timers like the 25-20 Winchester have such longevity? It's a good question. Factory support (ammunition and firearms) are part of the formula, but not all of it. There are plenty of 25-20 rifles out there - and plenty of shooters who enjoy using them.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.257"

60 gr. FP
Item No. 2510
C.O.L.: 1.590"
G1 B.C.: 0.101

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
Alliant 2400	6.7 gr.	7.4 gr.	8.2 gr.	8.9 gr.	9.6 gr.	10.3 gr.
VIHT N-110	7.9 gr.	8.4 gr.	8.8 gr.	9.2 gr.		
H110	7.2 gr.	7.9 gr.	8.6 gr.	9.3 gr.		
WIN 296	7.5 gr.	8.1 gr.	8.8 gr.	9.5 gr.		
IMR 4227	8.4 gr.	9.3 gr.	10.2 gr.	11.1 gr.	12.0 gr.	
Accurate 1680	9.6 gr.	10.6 gr.	11.7 gr.	12.7 gr.		

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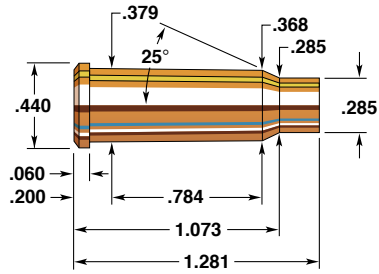

256 Winchester Magnum

Rifle:	Marlin Model 62	**Bullet Diameter:**	0.257"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	1.590"
Case:	Winchester	**Max. Case Length:**	1.281"
Primer:	Winchester WSR	**Case Trim Length:**	1.271"

The 256 Winchester Magnum is a cartridge based on a necked down 357 Magnum case. It is perhaps most notable for the speed with which it flopped.

Introduced in 1961 in the unique Ruger "Hawkeye" pistol (see the Handgun Reloading Data section for loads for use in this firearm), it was originally conceived as a high velocity handgun round suitable for long-range varmint shooting. The 22 Remington Jet had apparently whetted some interest in this kind of shooting, and it was believed that this interest signified a good potential market for the new arms and ammo.

Marlin promptly (1962) saw the suitability of the new 256 Winchester Magnum as a rifle cartridge and began chambering its lever action Model 62 for the round. Velocities up to 600 fps higher were possible in the longer barrel, and heavier bullets (75 and 87 grains) could be loaded to better advantage.

Shooters received all these developments with a yawn, and both Ruger and Marlin soon discontinued producing firearms for the 256 Winchester. As a pistol cartridge it was selling into a highly over estimated market; as a rifle cartridge the 256 simply couldn't match the versatility and performance potential of a host of older varmint cartridges. Consequently sales and production were low and, today, one rarely sees a rifle in this caliber.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.257"

60 gr. FP
Item No. 2510
C.O.L.: 1.560"
G1 B.C.: 0.101

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
UNIQUE	8.1 gr.	8.6 gr.	9.1 gr.			
HERCO	9.0 gr.	9.5 gr.	10.1 gr.			
Alliant 2400		12.7 gr.	13.3 gr.	13.9 gr.	14.5 gr.	15.1 gr.
H4198	15.3 gr.	15.8 gr.	16.3 gr.			

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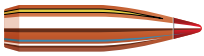
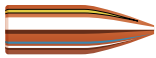
75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 1.720"
G1 B.C.: 0.290



75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 1.720"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
HERCO	8.7 gr.	9.5 gr.			
H110	10.5 gr.	11.2 gr.			
Alliant 2400	10.6 gr.	11.5 gr.	12.3 gr.	13.2 gr.	14.0 gr.
H4198	13.9 gr.	14.5 gr.	15.2 gr.	15.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 1.775"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)			
POWDER	**1800**	**1900**	**2000**	**2100**
Alliant 2400		10.6 gr.	11.4 gr.	12.3 gr.
H110	10.0 gr.	10.7 gr.	11.4 gr.	12.1 gr.
H4198	12.8 gr.	13.6 gr.	14.4 gr.	

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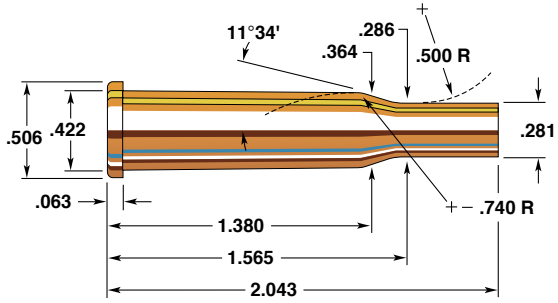

25-35 Winchester

Rifle:	T/C Encore Custom	**Bullet Diameter:**	0.257"
Barrel:	20", 1 in 8" Twist	**Maximum COL:**	2.550"
Case:	Hornady	**Max. Case Length:**	2.043"
Primer:	Winchester WLR	**Case Trim Length:**	2.033"

By modern standards, the 25-35 Winchester, a rimmed bottlenecked cartridge first introduced in 1895, is only marginally useful on deer, appropriate for smaller game only at moderate ranges, and quite unspectacular on varmints. These same judgments have all been rendered on the 30-30 Winchester, another small bore smokeless powder cartridge also introduced in 1895 and considered (theoretically and only by some) for all practical purposes obsolete. Obviously a substantial number of shooters have failed to accept such judgmental obsolescence!

The loads given here may also be used in the 25 Remington, a rimless version of the 25-35 Winchester developed for use in Remington's Model 8 semi-automatic rifle and its Model 14 slide action. Many European combination guns were chambered for the 25-35 Winchester under the designation 6.5 x 52mm R, and these same loads may be used with cartridges so designated. Always, however, start low and work up to maximum loads carefully. Loads developed in one action may be excessive in a different and/or weaker action. Err on the side of caution.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.257"

60 gr. FP
Item No. 2510
C.O.L.: 2.305"
G1 B.C.: 0.101

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
H4198	21.3 gr.	22.1 gr.	23.0 gr.	23.8 gr.		
IMR 3031	25.1 gr.	25.9 gr.	26.7 gr.	27.5 gr.	28.2 gr.	
BL-C(2)	25.9 gr.	26.9 gr.	27.9 gr.	28.9 gr.	29.9 gr.	
H4895	27.1 gr.	27.9 gr.	28.7 gr.	29.5 gr.	30.3 gr.	31.1 gr.
IMR 4064	26.6 gr.	27.6 gr.	28.7 gr.	29.7 gr.	30.8 gr.	
IMR 4320	27.1 gr.	28.1 gr.	29.2 gr.	30.2 gr.	31.3 gr.	32.3 gr.

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110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"

110 gr. FTX®
Item No. 2542
C.O.L.: 2.550"
G1 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031	19.6 gr.	20.5 gr.	21.5 gr.	22.5 gr.		
X-TERMINATOR	19.8 gr.	21.0 gr.	22.2 gr.	23.4 gr.		
H4895	20.7 gr.	21.7 gr.	22.8 gr.	23.8 gr.		
NORMA 202	20.8 gr.	22.1 gr.	23.3 gr.	24.6 gr.		
IMR 4320	21.3 gr.	22.4 gr.	23.5 gr.	24.6 gr.		
LEVERevolution	20.4 gr.	21.9 gr.	23.4 gr.	24.9 gr.	26.4 gr.	27.9 gr.
IMR 4064	21.8 gr.	23.0 gr.	24.1 gr.	25.2 gr.		
VARGET	21.9 gr.	23.0 gr.	24.2 gr.	25.3 gr.		
Power Pro 2000 MR	22.4 gr.	23.7 gr.	25.0 gr.	26.3 gr.	27.6 gr.	28.9 gr.

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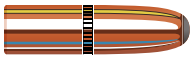
117 GRAIN BULLETS

SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"



117 gr. InterLock® RN
Item No. 2550
C.O.L.: 2.550"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
IMR 3031	17.9 gr.	18.9 gr.	20.0 gr.	21.0 gr.	22.1 gr.	
X-TERMINATOR	18.2 gr.	19.4 gr.	20.6 gr.	21.8 gr.	22.9 gr.	
H4895	19.1 gr.	20.1 gr.	21.2 gr.	22.2 gr.	23.3 gr.	
NORMA 202	18.7 gr.	20.0 gr.	21.3 gr.	22.7 gr.	24.0 gr.	25.3 gr.
LEVERevolution	18.3 gr.	19.8 gr.	21.3 gr.	22.8 gr.	24.2 gr.	25.7 gr.
IMR 4320	19.9 gr.	21.0 gr.	22.1 gr.	23.1 gr.	24.2 gr.	
VARGET	20.1 gr.	21.2 gr.	22.3 gr.	23.3 gr.	24.4 gr.	
IMR 4064	20.2 gr.	21.3 gr.	22.5 gr.	23.6 gr.	24.7 gr.	
Power Pro 2000 MR	20.0 gr.	21.5 gr.	22.9 gr.	24.4 gr.	25.8 gr.	27.3 gr.

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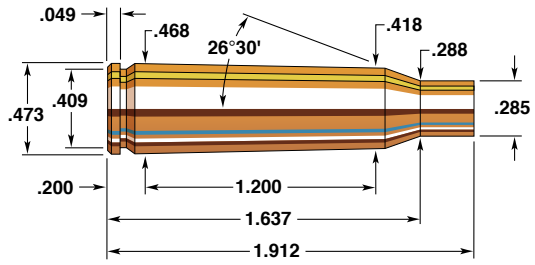


250 Savage

Rifle: . . . . . T/C Encore Custom
Barrel: . . . . . 26", 1 in 10" Twist
Case: . . . . . Hornady
Primer: . . . . . WLR
Bullet Diameter: . . . . . 0.257"
Maximum COL: . . . . . 2.515"
Max. Case Length: . . . . . 1.912"
Case Trim Length: . . . . . 1.902"

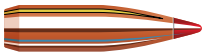
Cartridges were once named by caliber, powder charge, and bullet weight, nomenclature that not only made sense, but conveyed a lot of information. Thus the designation 45-70-500 named a 45 caliber cartridge loaded with 70 grains of blackpowder and 500 grain bullet.

Sometimes called the 250-3000, the "3000" in the 250 Savage's name has to do with neither powder nor bullet weights, but rather with the velocity original factory cartridges could develop when loaded with 87 grain bullets. Three thousand fps muzzle velocity, like the four minute mile, doesn't seem very fast to us today, but in 1915 when the 250-3000 was introduced it was a noteworthy accomplishment.

Developed by Charles Newton, the 250 Savage was chambered for 48 years after its introduction in the popular Model 99 Savage. During its extended career, the 250 Savage has proved an effective varmint and medium game cartridge in both lever and bolt action rifles. Though it managed to remain popular after the introduction of the more powerful 257 Roberts in 1934, it could not withstand competition from the new 6mm's introduced in the mid-1950s. However, in the 1980's Remington chambered their Limited Production 700 Classic in 250-3000 Savage. The 1 in 14" twist of the 250 Savage, however, will not stabilize our 110 grain or heavier bullets.

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 2.475"
G1 B.C.: 0.290

75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 2.475"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4320	30.7 gr.	32.1 gr.	33.4 gr.	34.7 gr.	36.1 gr.	
VARGET	31.5 gr.	32.8 gr.	34.1 gr.	35.4 gr.	36.7 gr.	
LEVERevolution	32.5 gr.	33.6 gr.	34.8 gr.	35.9 gr.	37.0 gr.	38.2 gr.
WIN 748	32.5 gr.	33.7 gr.	34.9 gr.	36.1 gr.	37.3 gr.	
Alliant RL-15	31.6 gr.	33.3 gr.	34.9 gr.	36.6 gr.		
CFE 223	33.3 gr.	34.5 gr.	35.8 gr.	37.0 gr.	38.2 gr.	39.5 gr.
BL-C(2)	33.7 gr.	35.0 gr.	36.2 gr.	37.5 gr.	38.7 gr.	

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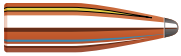
87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"



87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 2.435"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 3031	29.6 gr.	30.7 gr.	31.7 gr.		
BL-C(2)	30.3 gr.	31.7 gr.	33.1 gr.	34.5 gr.	
Accurate 2520		31.9 gr.	33.5 gr.	35.1 gr.	36.7 gr.
H4895	31.0 gr.	32.3 gr.	33.5 gr.	34.8 gr.	
Alliant RL-15		32.6 gr.	33.8 gr.	35.1 gr.	36.3 gr.
IMR 4320	32.0 gr.	33.3 gr.	34.5 gr.		
H380	33.2 gr.	34.5 gr.	35.8 gr.	37.0 gr.	
IMR 4350	37.0 gr.	38.0 gr.	39.0 gr.	40.0 gr.	
WIN 760	36.9 gr.	38.0 gr.	39.2 gr.	40.3 gr.	
H4831	39.2 gr.	40.3 gr.	41.5 gr.	42.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.195
DIAMETER: 0.257"

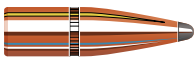
90 gr. GMX®
Item No. 25410
C.O.L.: 2.650"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
Accurate 2520	28.3 gr.	29.7 gr.	31.1 gr.	32.5 gr.	
VARGET	29.3 gr.	30.6 gr.	31.8 gr.	33.1 gr.	
Alliant RL-15	29.9 gr.	31.2 gr.	32.4 gr.	33.6 gr.	34.9 gr.
LEVERevolution	29.6 gr.	31.1 gr.	32.6 gr.		
CFE 223	31.1 gr.	32.4 gr.	33.6 gr.	34.8 gr.	36.0 gr.
BL-C(2)	32.1 gr.	33.3 gr.	34.4 gr.	35.6 gr.	
WIN 760	32.8 gr.	34.4 gr.	35.9 gr.	37.5 gr.	
IMR 4007 SSC	33.4 gr.	34.7 gr.	35.9 gr.		
H414	34.1 gr.	35.3 gr.	36.5 gr.	37.7 gr.	
H380	33.6 gr.	35.1 gr.	36.6 gr.	38.1 gr.	
H4350	34.0 gr.	35.5 gr.	36.9 gr.	38.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.216
DIAMETER: 0.257"



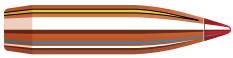
100 gr. InterLock® SP *(Discontinued)*
Item No. 2540
C.O.L.: 2.455"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
VARGET	28.0 gr.	29.2 gr.	30.4 gr.	31.7 gr.		
Alliant RL-15	27.6 gr.	29.2 gr.	30.7 gr.	32.3 gr.	33.9 gr.	
LEVERevolution	28.7 gr.	29.9 gr.	31.1 gr.	32.3 gr.	33.5 gr.	
CFE 223	29.5 gr.	30.7 gr.	32.0 gr.	33.3 gr.	34.5 gr.	
BL-C(2)	30.3 gr.	31.6 gr.	32.9 gr.	34.3 gr.	35.6 gr.	
Alliant RL-17	30.1 gr.	31.8 gr.	33.4 gr.	35.1 gr.	36.7 gr.	37.5 gr.
IMR 4007 SSC	30.6 gr.	32.1 gr.	33.6 gr.	35.1 gr.	36.7 gr.	37.4 gr.
H380	31.0 gr.	32.4 gr.	33.9 gr.	35.3 gr.	36.7 gr.	37.4 gr.
WIN 760	31.8 gr.	33.2 gr.	34.6 gr.	36.0 gr.	37.4 gr.	
H4350	31.9 gr.	33.3 gr.	34.7 gr.	36.1 gr.	37.4 gr.	
H414	32.3 gr.	33.7 gr.	35.1 gr.	36.5 gr.	37.8 gr.	38.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"



110 gr. InterBond®
Item No. 25419
C.O.L.: 2.650"
G1 B.C.: 0.390

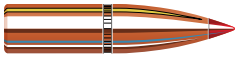
110 gr. FTX®
Item No. 2542
C.O.L.: 2.425"
G1 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
LEVERevolution	26.7 gr.	28.3 gr.	29.9 gr.	31.4 gr.	33.0 gr.
Alliant RL-15	27.5 gr.	29.0 gr.	30.5 gr.	32.0 gr.	33.5 gr.
CFE 223	28.6 gr.	30.1 gr.	31.5 gr.	33.0 gr.	34.5 gr.
BL-C(2)	29.7 gr.	31.0 gr.	32.2 gr.	33.5 gr.	
Alliant RL-17	29.8 gr.	31.3 gr.	32.9 gr.	34.4 gr.	35.9 gr.
H380	29.6 gr.	31.3 gr.	33.1 gr.	34.8 gr.	
H4350	31.1 gr.	32.5 gr.	33.8 gr.	35.2 gr.	36.5 gr.
WIN 760	31.3 gr.	32.7 gr.	34.0 gr.	35.4 gr.	
H414	31.5 gr.	32.9 gr.	34.3 gr.	35.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

117 GRAIN BULLETS

SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"



117 gr. SST®
Item No. 25522
C.O.L.: 2.650"
G1 B.C.: 0.390

117 gr. InterLock® BTSP
Item No. 2552
C.O.L.: 2.650"
G1 B.C.: 0.391

117 gr. InterLock® RN
Item No. 2550
C.O.L.: 2.515"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
LEVERevolution	27.2 gr.	28.7 gr.	30.2 gr.	31.7 gr.	
Alliant RL-15	27.4 gr.	29.0 gr.	30.6 gr.	32.2 gr.	
CFE 223	28.0 gr.	29.6 gr.	31.1 gr.	32.6 gr.	34.2 gr.
BL-C(2)	29.2 gr.	30.6 gr.	31.9 gr.	33.3 gr.	34.6 gr.
H380	29.8 gr.	31.3 gr.	32.9 gr.	34.4 gr.	
WIN 760	30.1 gr.	31.7 gr.	33.3 gr.	34.8 gr.	
IMR 4007 SSC	29.5 gr.	31.4 gr.	33.2 gr.	35.0 gr.	
H4350	30.9 gr.	32.2 gr.	33.6 gr.	35.0 gr.	
Alliant RL-17	29.9 gr.	31.6 gr.	33.3 gr.	35.1 gr.	
H414	30.9 gr.	32.3 gr.	33.8 gr.	35.3 gr.	

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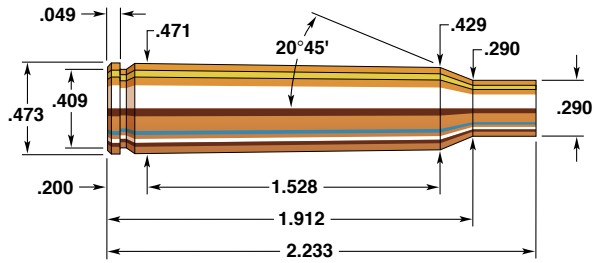


257 Roberts

Rifle:	Winchester 70	**Bullet Diameter:**	0.257"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	2.780"
Case:	Hornady/Frontier	**Max. Case Length:**	2.233"
Primer:	Winchester WLR	**Case Trim Length:**	2.223"

For about seven decades the 257 Roberts has been performing accurately and effectively as a hunting cartridge suitable for everything from varmints to medium sized game. It began its career as a wildcat development of Ned H. Roberts, a well known writer and experimenter. Remington introduced the 257 Roberts as a commercial round in 1934. Though Remington's factory version differed in minor respects from Roberts' design, both are essentially the 7 x 57mm Mauser case necked down to 25 caliber. Some cases currently produced are designed for +P pressures in the 257 Roberts, and have slightly less powder capacity. Segregate your brass by brand and develop loads accordingly.

The appeal of the 257 Roberts arose from its versatility. Not only would it destroy chucks and coyotes at extended ranges, it still had the power and flat trajectory to be a dependable whitetail or antelope cartridge. Both Remington and Winchester revisited this dual-purpose concept when they produced their new 6mm's in the 1950s. These developments subsequently diminished the popularity of the 257 Roberts. Some new powders and new rifles, such as the Ruger Model 77 and the Remington Limited Edition Classic Model 700, and +P pressure limits may spark new life into this solid performer.

Caution: The following data is for +P pressure in +P cases. This data should only be used in modern firearms designed for this cartridge.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.257"

60 gr. FP
Item No. 2510
C.O.L.: 2.535"
G1 B.C.: 0.101

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
Accurate 2495	39.0 gr.	40.7 gr.	42.4 gr.	44.0 gr.	45.7 gr.
VARGET	40.7 gr.	42.5 gr.	44.3 gr.	46.1 gr.	48.0 gr.
Alliant RL-15	41.9 gr.	43.1 gr.	44.3 gr.	45.5 gr.	46.7 gr.
IMR 4064	41.7 gr.	43.0 gr.	44.4 gr.		
VIHT N-140	42.1 gr.	43.5 gr.	44.8 gr.	46.1 gr.	
WIN 760	47.3 gr.	48.7 gr.	50.1 gr.	51.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"

75 gr. V-MAX®
Item No. 22520
C.O.L.: 2.780"
G1 B.C.: 0.290

75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 2.780"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
Accurate 2495	33.5 gr.	35.2 gr.	36.9 gr.	38.6 gr.	40.2 gr.	41.9 gr.
VARGET	33.7 gr.	35.6 gr.	37.5 gr.	39.3 gr.	41.2 gr.	43.1 gr.
Alliant RL-15	36.3 gr.	37.8 gr.	39.3 gr.	41.2 gr.	43.1 gr.	
IMR 4064	35.3 gr.	37.3 gr.	39.3 gr.	41.3 gr.	43.3 gr.	
IMR 4350	40.9 gr.	42.5 gr.	44.2 gr.	45.8 gr.	47.5 gr.	49.1 gr.
WIN 760	41.9 gr.	43.3 gr.	44.8 gr.	46.2 gr.	47.7 gr.	49.1 gr.
H414	43.9 gr.	45.0 gr.	46.1 gr.	47.2 gr.	48.3 gr.	49.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

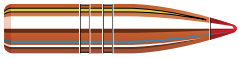
87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 2.780"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 2495	28.2 gr.	30.3 gr.	32.3 gr.	34.4 gr.	36.5 gr.	38.5 gr.
VARGET	34.3 gr.	35.7 gr.	37.1 gr.	38.4 gr.		
VIHT N-140	33.6 gr.	35.3 gr.	37.0 gr.	38.7 gr.	40.4 gr.	
IMR 4064	33.6 gr.	35.3 gr.	37.0 gr.	38.8 gr.	40.5 gr.	42.2 gr.
Alliant RL-15	34.4 gr.	36.1 gr.	37.9 gr.	39.7 gr.	41.5 gr.	
IMR 4350	37.8 gr.	39.7 gr.	41.7 gr.	43.6 gr.	45.6 gr.	
WIN 760	38.8 gr.	40.5 gr.	42.1 gr.	43.8 gr.	45.5 gr.	47.1 gr.
H414	38.6 gr.	40.5 gr.	42.4 gr.	44.3 gr.	46.2 gr.	48.2 gr.
Accurate 4350	39.3 gr.	41.1 gr.	42.9 gr.	44.7 gr.	46.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.195
DIAMETER: 0.257"



90 gr. GMX®
Item No. 25410
C.O.L.: 2.780"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3250**
Alliant RL-15	32.0 gr.	34.9 gr.	37.9 gr.	40.9 gr.		
VARGET	36.6 gr.	38.1 gr.	39.6 gr.	41.2 gr.		
IMR 4064	37.6 gr.	39.0 gr.	40.3 gr.	41.7 gr.		
WIN 760	40.9 gr.	42.1 gr.	43.3 gr.	44.6 gr.	45.9 gr.	46.5 gr.
Alliant RL-17	41.3 gr.	42.6 gr.	43.9 gr.	45.2 gr.	46.5 gr.	47.2 gr.
IMR 4350	41.6 gr.	43.1 gr.	44.6 gr.	46.1 gr.		
SUPERFORMANCE	44.0 gr.	45.3 gr.	46.6 gr.	47.9 gr.	49.2 gr.	49.9 gr.

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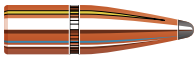
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.216
DIAMETER: 0.257"



100 gr. InterLock®
SP *(Discontinued)*
Item No. 2540
C.O.L.: 2.780"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
VARGET	32.4 gr.	34.0 gr.	35.6 gr.	37.1 gr.	38.7 gr.		
VIHT N-140	32.3 gr.	34.0 gr.	35.8 gr.	37.5 gr.			
IMR 4064	32.7 gr.	34.3 gr.	36.0 gr.	37.6 gr.	39.2 gr.		
Alliant RL-15	33.1 gr.	34.8 gr.	36.4 gr.	38.0 gr.	39.6 gr.		
IMR 4350	36.8 gr.	38.5 gr.	40.2 gr.	41.9 gr.	43.6 gr.		
WIN 760	37.6 gr.	39.3 gr.	40.9 gr.	42.6 gr.	44.2 gr.		
Accurate 4350	38.5 gr.	40.0 gr.	41.6 gr.	43.1 gr.	44.6 gr.		
H414	38.2 gr.	39.9 gr.	41.6 gr.	43.3 gr.	45.0 gr.	46.7 gr.	
IMR 4831	38.8 gr.	40.4 gr.	42.0 gr.	43.6 gr.	45.2 gr.		
SUPERFORMANCE	41.0 gr.	42.4 gr.	43.9 gr.	45.3 gr.	46.8 gr.	48.2 gr.	49.7 gr.
H4831	40.9 gr.	42.8 gr.	44.6 gr.	46.5 gr.	48.3 gr.		
Alliant RL-19	42.3 gr.	43.8 gr.	45.4 gr.	46.9 gr.	48.5 gr.		
Alliant RL-22	42.2 gr.	43.9 gr.	45.5 gr.	47.1 gr.	48.8 gr.		

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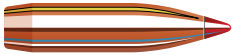
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"



110 gr. InterBond®
Item No. 25419
C.O.L.: 2.780"
G1 B.C.: 0.390

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
VARGET	34.5 gr.	36.1 gr.	37.6 gr.		
Alliant RL-15	34.8 gr.	36.6 gr.	38.4 gr.		
IMR 4064	35.5 gr.	37.2 gr.	38.9 gr.		
Alliant RL-17	38.7 gr.	40.0 gr.	41.4 gr.	42.8 gr.	44.2 gr.
WIN 760	38.6 gr.	40.2 gr.	41.8 gr.	43.4 gr.	
IMR 4350	39.0 gr.	40.6 gr.	42.2 gr.	43.7 gr.	
SUPERFORMANCE	38.7 gr.	41.1 gr.	43.4 gr.	45.8 gr.	

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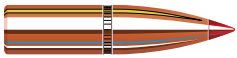
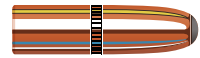
117 GRAIN BULLETS

SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"



117 gr. SST®
Item No. 25522
C.O.L.: 2.780"
G1 B.C.: 0.390

117 gr. InterLock® BTSP
Item No. 2552
C.O.L.: 2.780"
G1 B.C.: 0.391



117 gr. InterLock® RN
Item No. 2550
C.O.L.: 2.745"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
H4350	34.6 gr.	36.7 gr.	38.7 gr.	40.8 gr.	42.8 gr.
IMR 4350	35.6 gr.	37.3 gr.	39.1 gr.	40.8 gr.	42.6 gr.
WIN 760	37.4 gr.	39.0 gr.	40.7 gr.	42.4 gr.	
IMR 4831	37.5 gr.	39.2 gr.	41.0 gr.	42.7 gr.	44.4 gr.
VIHT N-160	37.8 gr.	39.7 gr.	41.5 gr.	43.4 gr.	
SUPERFORMANCE	38.8 gr.	40.6 gr.	42.4 gr.	44.1 gr.	45.9 gr.
Alliant RL-19	40.5 gr.	42.2 gr.	43.8 gr.	45.5 gr.	47.2 gr.
H4831	39.4 gr.	41.6 gr.	43.8 gr.	46.0 gr.	
IMR 7828	42.1 gr.	43.8 gr.	45.6 gr.	47.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.260
DIAMETER: 0.257"

120 gr. InterLock® HP *(Discontinued)*
Item No. 2560
C.O.L.: 2.780"
G1 B.C.: 0.394

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
H4350	33.4 gr.	35.4 gr.	37.5 gr.	39.5 gr.	
IMR 4350	35.5 gr.	37.2 gr.	38.9 gr.	40.6 gr.	
VIHT N-160	35.5 gr.	37.5 gr.	39.4 gr.	41.3 gr.	
IMR 4831	36.8 gr.	38.5 gr.	40.1 gr.	41.7 gr.	
H4831	37.0 gr.	39.1 gr.	41.2 gr.	43.3 gr.	
Alliant RL-19	39.0 gr.	40.8 gr.	42.5 gr.	44.2 gr.	46.0 gr.

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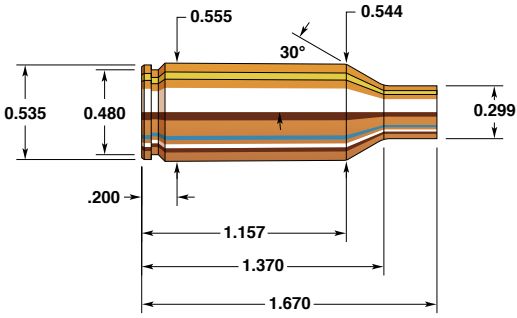


25 Winchester Super Short Magnum

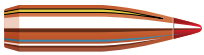
Rifle:	Browning A-Bolt	**Bullet Diameter:**	0.257"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	2.350"
Case:	.WW	**Max. Case Length:**	.1.670"
Primer:	Winchester WLR	**Case Trim Length:**	1.660"

Winchester's 25 caliber entry in the WSSM series fits right in between the 257 Roberts and the 25-06 Remington, in terms of power. And like the rest of the WSM and WSSM cartridges, it is loosely based on the 404 Jeffery cartridge. Its short stocky design is intended to help efficiency and accuracy. Both of which were just fine in our rifle. The magazine design functioned smoothly, but holds one less round than comparable rifles in 257 Roberts or 25-06.

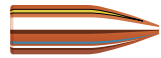
The 25 WSSM is a fine cartridge for hunting deer and antelope in the western United States, where one needs a flat shooting hard hitting rifle. When loaded with a bullet like our 75 grain V-MAX® the 25 WSSM becomes an excellent varmint cartridge, ideal for larger varmints like coyotes and bobcats. We don't recommend taking your 25 WSSM to too many prairie dog towns as the heavy powder charges will heat the barrel quickly and shorten its life. If you are looking for one bullet to fill both roles, then look no further than the 100 grain SP, long the bullet of choice in the 257 Roberts, it will work equally well in the 25 WSSM. Our test rifle preferred the 117 gr SST® and IMR 4350. We were able to achieve very consistent velocities and very good groups. We were also impressed with the combination of our 120 grain HP and IMR 4350.

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 2.300"
G1 B.C.: 0.290



75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 2.300"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)						
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3550**	**3600**
H4895	36.7 gr.	38.2 gr.	39.8 gr.	41.3 gr.	42.8 gr.	43.5 gr.	44.3 gr.
VIHT N-140	38.4 gr.	39.9 gr.	41.4 gr.	42.9 gr.	44.3 gr.	45.1 gr.	
Alliant RL-15	39.3 gr.	40.6 gr.	41.9 gr.	43.2 gr.	44.5 gr.	45.1 gr.	45.8 gr.
VARGET	39.5 gr.	40.9 gr.	42.4 gr.	43.9 gr.	45.3 gr.	46.0 gr.	46.8 gr.
IMR 4320	40.0 gr.	41.4 gr.	42.8 gr.	44.2 gr.	45.5 gr.	46.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 2.300"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)						
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3550**	**3600**
H4895	33.7 gr.	35.7 gr.	37.6 gr.	39.6 gr.	41.5 gr.	42.5 gr.	
Alliant RL-15	35.8 gr.	37.5 gr.	39.2 gr.	40.9 gr.	42.6 gr.	43.4 gr.	
VIHT N-140	35.2 gr.	37.1 gr.	39.0 gr.	40.9 gr.	42.8 gr.		
VARGET	36.5 gr.	38.3 gr.	40.0 gr.	41.7 gr.	43.4 gr.	44.2 gr.	
IMR 4320	37.5 gr.	39.1 gr.	40.8 gr.	42.4 gr.	44.0 gr.	44.9 gr.	
BIG GAME	41.5 gr.	43.2 gr.	45.0 gr.	46.8 gr.	48.5 gr.	49.4 gr.	50.3 gr.
H414	42.1 gr.	43.8 gr.	45.4 gr.	47.0 gr.	48.6 gr.	49.4 gr.	50.2 gr.

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90 GRAIN BULLETS

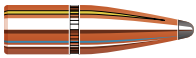
SECTIONAL DENSITY: 0.195
DIAMETER: 0.257"

90 gr. GMX®
Item No. 25410
C.O.L.: 2.300"
G1 B.C.: 0.290

NOTE: USE 100 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.216
DIAMETER: 0.257"



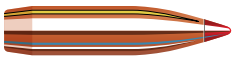
100 gr. InterLock®
SP *(Discontinued)*
Item No. 2540
C.O.L.: 2.350"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3150**	**3200**
H4895	35.0 gr.	36.6 gr.	38.2 gr.	39.8 gr.	40.6 gr.	
Alliant RL-15	35.9 gr.	37.8 gr.	39.5 gr.	41.3 gr.	42.2 gr.	
VIHT N-140	35.5 gr.	37.5 gr.	39.5 gr.	41.4 gr.		
BIG GAME	41.3 gr.	43.8 gr.	44.7 gr.	46.3 gr.	47.2 gr.	48.0 gr.
H414	41.0 gr.	42.9 gr.	44.8 gr.	46.6 gr.	47.6 gr.	48.5 gr.
IMR 4350	41.8 gr.	43.4 gr.	45.1 gr.	46.8 gr.	47.6 gr.	48.4 gr.
H4350	40.9 gr.	43.1 gr.	45.3 gr.	47.5 gr.	48.6 gr.	
WIN 760	42.5 gr.	44.3 gr.	46.1 gr.	48.0 gr.	48.9 gr.	49.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"

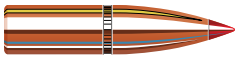


110 gr. InterBond®
Item No. 25419
C.O.L.: 2.300"
G1 B.C.: 0.390

NOTE: USE 117 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

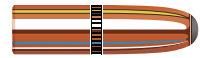
117 GRAIN BULLETS

SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"



117 gr. SST®
Item No. 25522
C.O.L.: 2.300"
G1 B.C.: 0.390

117 gr. InterLock® BTSP
Item No. 2552
C.O.L.: 2.300"
G1 B.C.: 0.391



117 gr. InterLock® RN
Item No. 2550
C.O.L.: 2.300"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
Alliant RL-15	33.6 gr.	35.8 gr.	38.1 gr.	40.4 gr.	41.5 gr.		
IMR 4350	39.1 gr.	40.9 gr.	42.7 gr.	44.5 gr.	45.4 gr.	46.3 gr.	
Accurate 2700	39.8 gr.	41.4 gr.	43.0 gr.	44.6 gr.			
H414	39.0 gr.	40.9 gr.	42.8 gr.	44.7 gr.	45.6 gr.	46.7 gr.	
BIG GAME	37.3 gr.	39.8 gr.	42.3 gr.	44.8 gr.	46.1 gr.		
H4350	39.1 gr.	41.0 gr.	43.0 gr.	44.9 gr.	45.9 gr.		
WIN 760	40.5 gr.	42.4 gr.	44.3 gr.	46.2 gr.	47.2 gr.	48.1 gr.	49.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

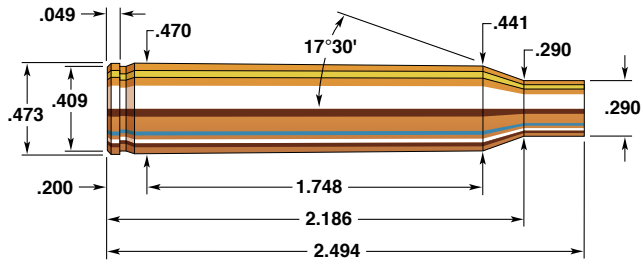
120 GRAIN BULLETS

SECTIONAL DENSITY: 0.260
DIAMETER: 0.257"

120 gr. InterLock® HP *(Discontinued)*
Item No. 2560
C.O.L.: 2.300"
G1 B.C.: 0.394

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**
Alliant RL-15	33.9 gr.	36.1 gr.	38.2 gr.			
IMR 4350	39.3 gr.	41.0 gr.	42.7 gr.	44.5 gr.	45.3 gr.	
BIG GAME	38.1 gr.	40.4 gr.	42.8 gr.	45.1 gr.		
H414	39.2 gr.	41.0 gr.	42.8 gr.	44.6 gr.		
H4350	38.4 gr.	40.7 gr.	43.0 gr.	45.2 gr.		
WIN 760	40.7 gr.	42.5 gr.	44.3 gr.	46.7 gr.	47.0 gr.	47.9 gr.
Alliant RL-19	40.8 gr.	43.0 gr.	45.2 gr.	47.4 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



25-06 Remington

Rifle:	Remington 700	**Bullet Diameter:**	0.257"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	3.250"
Case:	Hornady	**Max. Case Length:**	2.494"
Primer:	Winchester WLR	**Case Trim Length:**	2.484"

Necking the 30-06 up and down has resulted in some very fine sporting cartridges. The 25-06 Remington is one of these. In 1969, forty-nine years after A. O. Niedner introduced this wildcat, Remington adopted the round and made it commercially available in their Model 700 bolt action rifles. Not all wildcats achieve such factory recognition—and forty years was certainly time enough for a thorough test of the 25-06's capabilities.

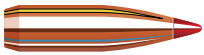
The 25-06 has essentially helped keep the 25 caliber alive for the past five decades. With the advent of the popular 6mm Remington and 243 Winchester, the 25's rapidly lost ground.

The 25-06 has ample power for making long shots at deer and antelope, with some hunters claiming it is even adequate for elk. However, we feel its best use is on deer- and antelope-sized game. As a varmint round, the 25-06 is outstanding. It is truly a multipurpose caliber. A properly scoped 25-06 with Hornady varmint bullets is easily capable of 300 to 400 yard varminting.

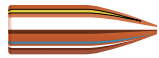
In our testing, the powders that performed the best with the 25-06 Remington were RL-22 and IMR 4831. These slower burning powders perform best when loaded in the region ranging between 90% of maximum to maximum.

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 3.100"
G1 B.C.: 0.290



75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 3.100"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 4320	41.6 gr.	43.5 gr.	45.4 gr.	47.3 gr.	49.1 gr.	
VARGET	43.6 gr.	45.4 gr.	47.2 gr.	48.9 gr.	50.7 gr.	
Alliant RL-15	44.7 gr.	46.3 gr.	47.8 gr.	49.4 gr.	50.9 gr.	
WIN 760	49.1 gr.	50.6 gr.	52.0 gr.	53.5 gr.	55.0 gr.	
H414	50.2 gr.	51.8 gr.	53.5 gr.	55.1 gr.	56.7 gr.	
IMR 4350	50.2 gr.	51.9 gr.	53.5 gr.	55.1 gr.	56.7 gr.	
Accurate 4350	50.9 gr.	52.5 gr.	54.0 gr.	55.6 gr.	57.1 gr.	
VIHT N-160	51.9 gr.	53.5 gr.	55.1 gr.	56.7 gr.	58.3 gr.	59.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 3.120"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4320	38.7 gr.	40.4 gr.	42.2 gr.	43.9 gr.	45.6 gr.	
Alliant RL-15	40.0 gr.	42.0 gr.	43.9 gr.	45.8 gr.		
H414	45.7 gr.	47.6 gr.	49.5 gr.	51.3 gr.	53.2 gr.	
Accurate 4350	46.2 gr.	47.9 gr.	49.6 gr.	51.4 gr.	53.1 gr.	54.8 gr.
IMR 4350	46.7 gr.	48.3 gr.	50.0 gr.	51.6 gr.	53.3 gr.	
IMR 4831	47.1 gr.	48.9 gr.	50.7 gr.	52.6 gr.	54.4 gr.	56.2 gr.
VIHT N-160	47.5 gr.	49.2 gr.	50.9 gr.	52.6 gr.	54.3 gr.	
H4831	49.4 gr.	51.3 gr.	53.3 gr.	55.2 gr.	57.2 gr.	
Alliant RL-19	51.0 gr.	52.5 gr.	54.1 gr.	55.7 gr.	57.3 gr.	58.8 gr.

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90 GRAIN BULLETS

SECTIONAL DENSITY: 0.195
DIAMETER: 0.257"

90 gr. GMX®
Item No. 25410
C.O.L.: 3.135"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4451	44.8 gr.	46.6 gr.	48.3 gr.	50.1 gr.		
Hybrid 100V	48.1 gr.	49.6 gr.	51.1 gr.	52.6 gr.		
Alliant RL-17	48.2 gr.	49.6 gr.	51.1 gr.	52.6 gr.		
IMR 4350	49.1 gr.	50.4 gr.	51.7 gr.			
Alliant RL-23	49.3 gr.	51.0 gr.	52.7 gr.	54.4 gr.	56.1 gr.	
IMR 4831	51.0 gr.	52.3 gr.	53.6 gr.			
Power Pro 4000 MR	51.2 gr.	52.4 gr.	53.7 gr.	54.9 gr.	56.1 gr.	
WIN Supreme 780	54.0 gr.	55.3 gr.	56.6 gr.	57.9 gr.	59.2 gr.	60.5 gr.
Alliant RL-22	54.1 gr.	55.5 gr.	56.9 gr.	58.3 gr.		
IMR 7828 SSC	54.4 gr.	55.7 gr.	57.0 gr.			
VIHT N-165	54.3 gr.	55.7 gr.	57.1 gr.	58.4 gr.	59.8 gr.	
H4831	54.6 gr.	56.2 gr.	57.8 gr.			

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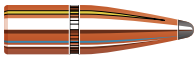
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.216
DIAMETER: 0.257"



100 gr. InterLock® SP *(Discontinued)*
Item No. 2540
C.O.L.: 3.120"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4451	43.7 gr.	45.6 gr.	47.5 gr.	49.4 gr.	51.3 gr.	
IMR 4350	45.7 gr.	47.4 gr.	49.1 gr.	50.8 gr.	52.5 gr.	
Accurate 4350	46.4 gr.	48.2 gr.	49.9 gr.	51.6 gr.	53.3 gr.	
Hybrid 100V	47.4 gr.	49.0 gr.	50.6 gr.	52.1 gr.	53.7 gr.	
IMR 4831	46.9 gr.	48.6 gr.	50.4 gr.	52.2 gr.	53.9 gr.	
Alliant RL-17	48.5 gr.	49.7 gr.	51.0 gr.	52.2 gr.	53.5 gr.	
IMR 4007 SSC	47.2 gr.	49.0 gr.	50.8 gr.	52.7 gr.		
Alliant RL-23	49.3 gr.	50.9 gr.	52.5 gr.	54.1 gr.	55.6 gr.	57.2 gr.
Alliant RL-22	48.0 gr.	50.1 gr.	52.3 gr.	54.4 gr.	56.6 gr.	58.7 gr.
Power Pro 4000 MR	50.7 gr.	52.1 gr.	53.4 gr.	54.8 gr.	56.2 gr.	
H4831	47.4 gr.	50.1 gr.	52.7 gr.	55.4 gr.		
VIHT N-165	49.2 gr.	51.4 gr.	53.6 gr.	55.7 gr.	57.9 gr.	
IMR 7828	50.5 gr.	53.0 gr.	55.6 gr.	58.2 gr.		
WIN Supreme 780	53.3 gr.	55.1 gr.	56.8 gr.	58.5 gr.	60.3 gr.	

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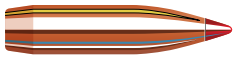
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"



110 gr. InterBond®
Item No. 25419
C.O.L.: 3.135"
G1 B.C.: 0.390

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4451	40.1 gr.	41.9 gr.	43.8 gr.	45.6 gr.	47.4 gr.	49.3 gr.
Hybrid 100V	43.1 gr.	44.8 gr.	46.5 gr.	48.2 gr.	49.9 gr.	
Alliant RL-17	44.8 gr.	46.4 gr.	48.1 gr.	49.7 gr.	51.3 gr.	
IMR 4350	44.8 gr.	46.5 gr.	48.3 gr.	50.0 gr.		
Alliant RL-23	45.5 gr.	47.2 gr.	48.9 gr.	50.7 gr.	52.4 gr.	54.1 gr.
IMR 4831	45.9 gr.	47.7 gr.	49.4 gr.	51.1 gr.	52.8 gr.	
Power Pro 4000 MR	46.8 gr.	48.3 gr.	49.7 gr.	51.2 gr.	52.7 gr.	
VIHT N-165	47.8 gr.	49.6 gr.	51.4 gr.	53.2 gr.	55.0 gr.	
Alliant RL-22	47.3 gr.	49.5 gr.	51.6 gr.	53.8 gr.	56.0 gr.	
H4831	48.1 gr.	50.1 gr.	52.2 gr.	54.2 gr.	56.2 gr.	
IMR 7828 SSC	49.6 gr.	51.4 gr.	53.2 gr.	55.0 gr.		
WIN Supreme 780	50.5 gr.	52.0 gr.	53.5 gr.	55.1 gr.	56.6 gr.	

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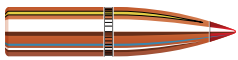
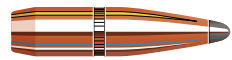
117 GRAIN BULLETS

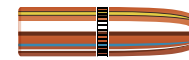
SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"



117 gr. SST®
Item No. 25522
C.O.L.: 3.135"
G1 B.C.: 0.390



117 gr. InterLock® BTSP
Item No. 2552
C.O.L.: 3.160"
G1 B.C.: 0.391



117 gr. InterLock® RN
Item No. 2550
C.O.L.: 3.050"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4451	43.4 gr.	45.3 gr.	47.1 gr.		
IMR 4350	45.0 gr.	46.7 gr.	48.4 gr.	50.0 gr.	
Accurate 4350	44.9 gr.	47.0 gr.	49.1 gr.	51.2 gr.	
Alliant RL-17	47.2 gr.	48.2 gr.	49.3 gr.	50.4 gr.	
Hybrid 100V	46.5 gr.	48.1 gr.	49.6 gr.	51.1 gr.	
IMR 4831	46.3 gr.	48.0 gr.	49.8 gr.	51.6 gr.	
Alliant RL-23	47.8 gr.	49.6 gr.	51.4 gr.	53.2 gr.	
Power Pro 4000 MR	48.9 gr.	50.4 gr.	51.9 gr.	53.4 gr.	
Alliant RL-22	48.1 gr.	50.1 gr.	52.1 gr.	54.1 gr.	56.1 gr.
VIHT N-165	47.5 gr.	50.1 gr.	52.6 gr.	55.2 gr.	
H4831	49.3 gr.	51.1 gr.	52.9 gr.	54.7 gr.	
IMR 7828	50.3 gr.	52.4 gr.	54.5 gr.	56.6 gr.	
WIN Supreme 780	52.7 gr.	54.2 gr.	55.8 gr.	57.3 gr.	
Alliant RL-25	52.9 gr.	54.9 gr.	56.9 gr.	58.9 gr.	

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INDICATES MAXIMUM LOAD — USE WITH CAUTION

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.260
DIAMETER: 0.257"

120 gr. InterLock® HP *(Discontinued)*
Item No. 2560
C.O.L.: 3.240"
G1 B.C.: 0.394

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	42.4 gr.	44.3 gr.	46.1 gr.	47.9 gr.	49.8 gr.
IMR 4831	42.7 gr.	44.6 gr.	46.5 gr.	48.5 gr.	50.4 gr.
Accurate 4350	42.8 gr.	44.8 gr.	46.8 gr.	48.8 gr.	
Alliant RL-22	44.0 gr.	46.3 gr.	48.7 gr.	51.0 gr.	53.4 gr.
VIHT N-165	45.5 gr.	47.8 gr.	50.0 gr.	52.2 gr.	54.4 gr.
H4831	45.8 gr.	47.9 gr.	50.0 gr.	52.2 gr.	54.3 gr.
IMR 7828	46.5 gr.	48.6 gr.	50.7 gr.	52.8 gr.	54.9 gr.
Alliant RL-25	50.4 gr.	52.4 gr.	54.4 gr.	56.4 gr.	58.5 gr.

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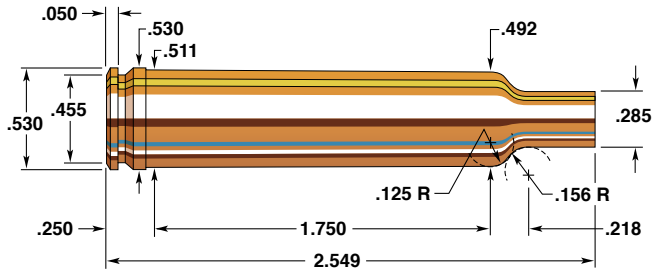


257 Weatherby Magnum

Rifle: . . . . . Weatherby Vanguard
Barrel: . . . . . .24", 1 in 10" Twist
Case: . . . . . .Hornady
Primer: . . . . . Federal 215
Bullet Diameter: . . . . . 0.257"
Maximum COL: . . . . . .3.170"
Max. Case Length: . . . . . 2.549"
Case Trim Length: . . . . . 2.539"

In 1944, Roy Weatherby shortened a 300 H&H Magnum case, necked it down to 25 caliber, and gave the shoulder the characteristic Weatherby double radius configuration. Roy Weatherby thus created his excellent 257 Weatherby Magnum. The 257 Weatherby case has more powder capacity than the 25-06 Remington and thus produces 100 to 200 fps more velocity.

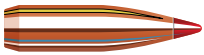
This cartridge is a superb choice for hunting deer, antelope, sheep, and even goat. Many elk-sized animals have been taken with this cartridge, but, it is at its best on deer-sized game. As a varminter, the 257 Weatherby Magnum is a good performer with a 75 grain V-MAX®.

The early 257 Weatherby Magnums had a 1:12" twist and would not stabilize the 120 grain Hollow Point, but this problem no longer exists as all 257 Weatherby Magnums are now made with 1:10" twists.

Slower burning propellants are the best choices for large capacity small bore cartridges. Our advice is to load rounds toward the maximum loads listed for most consistent, most accurate performance. All powders listed performed very well, especially RL-25.

75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 3.140"
G1 B.C.: 0.290

75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 3.140"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
WIN 760	55.3 gr.	57.9 gr.	60.5 gr.		
IMR 4831	61.6 gr.	63.4 gr.	65.2 gr.	67.0 gr.	68.8 gr.
H4350	62.0 gr.	63.8 gr.	65.5 gr.		
IMR 4350	62.6 gr.	64.0 gr.	65.5 gr.	66.9 gr.	
VIHT N-160	62.7 gr.	64.3 gr.	66.0 gr.	67.6 gr.	
Alliant RL-19	66.4 gr.	68.1 gr.	69.8 gr.	71.6 gr.	
Alliant RL-22	67.3 gr.	69.0 gr.	70.7 gr.	72.5 gr.	
WIN Supreme 780	68.1 gr.	69.7 gr.	71.2 gr.	72.7 gr.	
VIHT N-165	67.7 gr.	69.7 gr.	71.7 gr.	73.7 gr.	

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87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 3.185"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
H4350	55.5 gr.	57.5 gr.	59.5 gr.	61.5 gr.	
IMR 4350	57.0 gr.	58.9 gr.	60.7 gr.	62.6 gr.	64.4 gr.
WIN 760	55.6 gr.	58.4 gr.	61.2 gr.		
VIHT N-160	59.0 gr.	60.9 gr.	62.9 gr.	64.8 gr.	
IMR 4831	59.5 gr.	61.3 gr.	63.0 gr.	64.8 gr.	66.6 gr.
Alliant RL-19	62.8 gr.	64.6 gr.	66.4 gr.		
WIN Supreme 780	64.9 gr.	66.5 gr.	68.1 gr.		
VIHT N-165	64.6 gr.	66.6 gr.	68.5 gr.		

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90 GRAIN BULLETS

SECTIONAL DENSITY: 0.195
DIAMETER: 0.257"

90 gr. GMX®
Item No. 25410
C.O.L.: 3.180"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**3300**	**3400**	**3500**	**3600**	**3700**
H4350	57.1 gr.	59.1 gr.	61.1 gr.	63.1 gr.	
IMR 4831	61.8 gr.	64.0 gr.	66.1 gr.	68.3 gr.	
IMR 7828 SSC	64.1 gr.	65.9 gr.	67.7 gr.	69.5 gr.	
H4831	64.2 gr.	66.3 gr.	68.4 gr.	70.5 gr.	
WIN Supreme 780	65.6 gr.	67.3 gr.	69.1 gr.	70.8 gr.	72.5 gr.
Alliant RL-22	65.7 gr.	67.3 gr.	69.1 gr.	70.7 gr.	
MAGPRO	69.8 gr.	71.9 gr.	73.9 gr.	76.0 gr.	
H1000	68.7 gr.	71.5 gr.	74.2 gr.		

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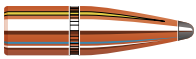
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.216
DIAMETER: 0.257"



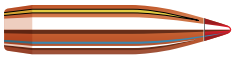
100 gr. InterLock® SP *(Discontinued)*
Item No. 2540
C.O.L.: 3.185"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
H4350	54.4 gr.	56.4 gr.	58.5 gr.	60.5 gr.	
IMR 4831	58.7 gr.	60.8 gr.	62.9 gr.	65.1 gr.	
IMR 7828 SSC	60.3 gr.	62.5 gr.	64.6 gr.	66.8 gr.	
Alliant RL-22	62.6 gr.	64.1 gr.	65.5 gr.	66.9 gr.	
H4831	60.8 gr.	63.0 gr.	65.2 gr.	67.4 gr.	
WIN Supreme 780	61.5 gr.	63.7 gr.	66.0 gr.	68.3 gr.	70.5 gr.
Alliant RL-25	64.7 gr.	66.8 gr.	68.8 gr.	70.9 gr.	
MAGPRO	66.4 gr.	68.4 gr.	70.4 gr.	72.4 gr.	74.5 gr.
H1000	64.9 gr.	67.5 gr.	70.0 gr.	72.5 gr.	
MAGNUM	68.1 gr.	70.1 gr.	72.1 gr.	74.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.257"



110 gr. InterBond®
Item No. 25419
C.O.L.: 3.190"
G1 B.C.: 0.390

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
H4350	52.5 gr.	54.5 gr.	56.5 gr.	58.5 gr.	
IMR 4831	56.9 gr.	59.0 gr.	61.1 gr.	63.2 gr.	
IMR 7828 SSC	58.1 gr.	60.2 gr.	62.2 gr.	64.3 gr.	
H4831	56.9 gr.	59.7 gr.	62.4 gr.	65.2 gr.	
WIN Supreme 780	60.1 gr.	61.9 gr.	63.7 gr.	65.6 gr.	67.4 gr.
Alliant RL-22	60.8 gr.	62.5 gr.	64.2 gr.	65.8 gr.	
Alliant RL-25	63.8 gr.	65.6 gr.	67.3 gr.	69.1 gr.	
MAGPRO	64.2 gr.	66.2 gr.	68.2 gr.	70.3 gr.	
H1000	61.9 gr.	64.8 gr.	67.7 gr.	70.5 gr.	
MAGNUM	65.7 gr.	67.8 gr.	69.8 gr.	71.9 gr.	73.9 gr.

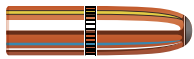
Create custom ballistic tables using our online calculators at hornady.com/ballistics

117 GRAIN BULLETS

SECTIONAL DENSITY: 0.253
DIAMETER: 0.257"

117 gr. SST®
Item No. 25522
C.O.L.: 3.215"
G1 B.C.: 0.390

117 gr. InterLock® BTSP
Item No. 2552
C.O.L.: 3.200"
G1 B.C.: 0.391



117 gr. InterLock® RN
Item No. 2550
C.O.L.: 3.050"
G1 B.C.: 0.243

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
H4350	50.5 gr.	52.4 gr.	54.3 gr.	56.2 gr.		
IMR 4831	53.6 gr.	55.8 gr.	58.1 gr.	60.4 gr.	62.6 gr.	
H4831	52.6 gr.	55.3 gr.	58.1 gr.	60.8 gr.	63.5 gr.	66.3 gr.
IMR 7828 SSC	54.4 gr.	56.7 gr.	59.1 gr.	61.4 gr.	63.7 gr.	
Alliant RL-22	58.0 gr.	59.6 gr.	61.3 gr.	62.9 gr.	64.5 gr.	
WIN Supreme 780	57.2 gr.	59.1 gr.	61.1 gr.	63.0 gr.	65.0 gr.	
Alliant RL-25	60.2 gr.	62.0 gr.	63.8 gr.	65.6 gr.	67.4 gr.	
H1000	59.0 gr.	61.4 gr.	63.8 gr.	66.3 gr.	68.7 gr.	71.1 gr.
MAGPRO	60.5 gr.	62.8 gr.	65.1 gr.	67.3 gr.	69.6 gr.	71.8 gr.
MAGNUM	62.3 gr.	64.3 gr.	66.4 gr.	68.4 gr.	70.4 gr.	72.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.260
DIAMETER: 0.257"

120 gr. InterLock® HP *(Discontinued)*
Item No. 2560
C.O.L.: 3.290"
G1 B.C.: 0.394

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
H4350	50.5 gr.	52.4 gr.	54.3 gr.	56.3 gr.	
IMR 4831	53.2 gr.	55.7 gr.	58.3 gr.	60.9 gr.	
H4831	54.4 gr.	56.7 gr.	59.1 gr.	61.4 gr.	63.7 gr.
IMR 7828 SSC	54.3 gr.	56.8 gr.	59.3 gr.	61.8 gr.	
Alliant RL-22	57.3 gr.	59.2 gr.	61.0 gr.	62.9 gr.	
WIN Supreme 780	57.7 gr.	59.7 gr.	61.8 gr.	63.9 gr.	
H1000	57.5 gr.	60.2 gr.	63.0 gr.	65.7 gr.	68.4 gr.
Alliant RL-25	60.0 gr.	62.2 gr.	64.3 gr.	66.5 gr.	
MAGPRO	61.5 gr.	63.6 gr.	65.7 gr.	67.9 gr.	
MAGNUM	62.3 gr.	64.6 gr.	66.8 gr.	69.0 gr.	

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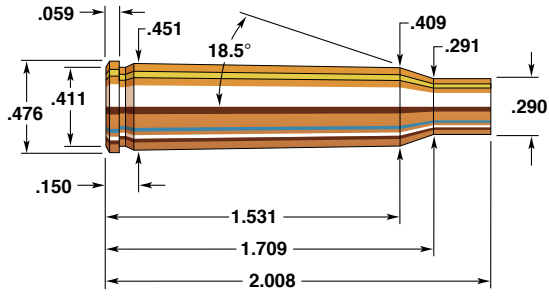


6.5 X 50mm Japanese

Rifle:	Arisaka Type 38	**Bullet Diameter:**	0.264"
Barrel:	32", 1 in 9" Twist	**Maximum COL:**	2.992"
Case:	Norma	**Max. Case Length:**	2.008"
Primer:	Federal 210	**Case Trim Length:**	1.998"

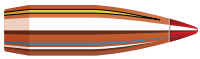
The 6.5 X 50mm Japanese was the Japanese service cartridge introduced in 1897 and brought out in 1905 in that nation's Type 38 rifle. No factory sporting rifle has ever been chambered for the cartridge.

First brought into America after WW II by returning GI's and subsequently imported in large numbers by surplus arms dealers, the 6.5mm Japanese has been readily adapted to sporting use. The type 38 has a modified Mauser design action which permits loading the 6.5mm rifles to its full potential. However, since many of these rifles have seen considerable use, careful inspection of the firearm by a knowledgeable gunsmith is highly recommended.

The military cartridge was loaded with a 139 grain bullet to a velocity of 2500 fps, approximately the same power as other 6.5mm's of the period. With the Hornady 6.5mm 140 grain Spire Point, four different powders can be used to reach 2600 fps (though the wise handloader should here, as always, approach maximums with caution). With the wide assortment of Hornady 6.5mm bullets available for loading this cartridge, the 6.5 X 50mm should continue to see effective use on game up to deer and black bear size.

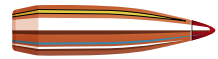
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

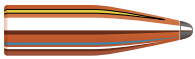


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.770"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.770"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.770"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.770"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 3031		30.4 gr.	31.6 gr.	32.8 gr.	34.0 gr.	
IMR 4064	31.3 gr.	32.5 gr.	33.6 gr.	34.8 gr.	35.9 gr.	37.1 gr.
H4895	31.5 gr.	32.7 gr.	33.8 gr.	35.0 gr.	36.1 gr.	37.3 gr.
IMR 4320	31.9 gr.	33.2 gr.	34.4 gr.	35.6 gr.	36.8 gr.	
H380	33.3 gr.	34.5 gr.	35.7 gr.	36.8 gr.	38.0 gr.	
IMR 4350	36.5 gr.	37.6 gr.	38.8 gr.	39.9 gr.	41.0 gr.	
H4831	38.7 gr.	39.8 gr.	40.8 gr.			

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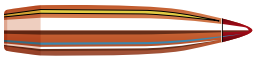
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

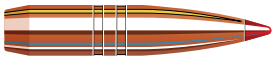
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"

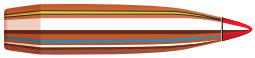


***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.845"
G1 B.C.: 0.458
G7 B.C.: 0.233

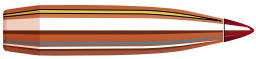
120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.845"
G1 B.C.: 0.465



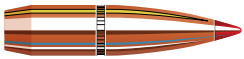
120 gr. GMX®
Item No. 26110
C.O.L.: 2.845"
G1 B.C.: 0.450



123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.845"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.845"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.845"
G1 B.C.: 0.510

NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

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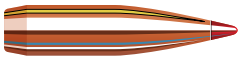
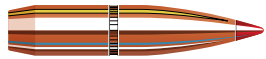
*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

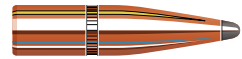
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



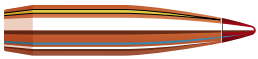
129 gr. InterBond®
Item No. 26209
C.O.L.: 2.845"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 2.845"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.845"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.800"
G1 B.C.: 0.549
G7 B.C.: 0.277

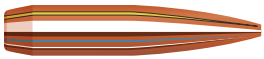
	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	28.9 gr.	30.0 gr.	31.1 gr.	32.2 gr.	
IMR 4064	30.0 gr.	31.4 gr.	32.7 gr.	34.0 gr.	35.4 gr.
H4895	30.2 gr.	31.6 gr.	33.0 gr.	34.4 gr.	
IMR 4320	30.5 gr.	32.0 gr.	33.6 gr.	35.2 gr.	36.7 gr.
H380	31.9 gr.	33.3 gr.	34.6 gr.	35.9 gr.	
IMR 4350	35.0 gr.	36.2 gr.	37.3 gr.	38.3 gr.	39.6 gr.
H4831	37.3 gr.	38.5 gr.	39.8 gr.	41.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

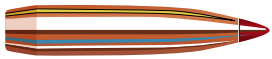
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.287
DIAMETER: 0.264"

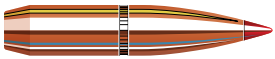


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.800"
G1 B.C.: 0.580

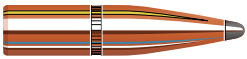
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.800"
G1 B.C.: 0.585



***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.800"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.800"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.800"
G1 B.C.: 0.465

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031	28.3 gr.	29.4 gr.	30.5 gr.	31.5 gr.	
IMR 4064	29.7 gr.	30.8 gr.	31.8 gr.	32.9 gr.	34.0 gr.
H4895	29.8 gr.	31.0 gr.	32.3 gr.	33.5 gr.	34.7 gr.
IMR 4320	29.4 gr.	31.0 gr.	32.7 gr.	34.3 gr.	
H380	31.1 gr.	32.5 gr.	34.0 gr.		
IMR 4350		35.0 gr.	36.4 gr.	37.8 gr.	39.2 gr.
H4831		36.8 gr.	38.1 gr.	39.4 gr.	40.7 gr.

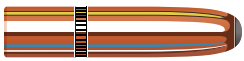
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

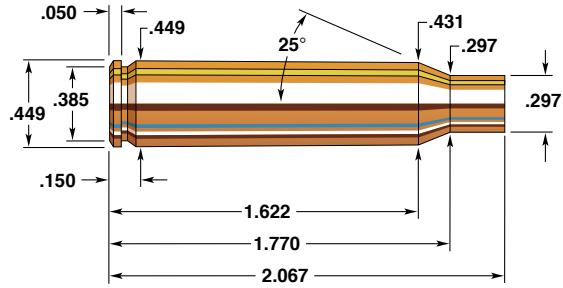
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 2.855"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	26.9 gr.	28.2 gr.	29.4 gr.	30.7 gr.	31.9 gr.
IMR 4064	27.5 gr.	29.0 gr.	30.6 gr.	32.1 gr.	33.6 gr.
IMR 4320			30.8 gr.	32.5 gr.	34.1 gr.
H4895	28.0 gr.	29.5 gr.	31.0 gr.	32.5 gr.	34.0 gr.
H380		30.4 gr.	32.0 gr.	33.7 gr.	
IMR 4350		32.7 gr.	34.2 gr.	35.7 gr.	37.2 gr.
H4831		34.8 gr.	36.1 gr.	37.3 gr.	38.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5 X 52mm Carcano

Rifle:	.M41	**Bullet Diameter:**	0.264 – 0.267"
Barrel:	27", 1 in 7.9" Twist	**Maximum COL:**	.3.012"
Case:	Privi Partizan	**Max. Case Length:**	2.067"
Primer:	Winchester WLR	**Case Trim Length:**	.2.055"

Carcano rifles have become popular collector firearms again, recent imports and the availability of accurate information, ammunition and components have helped to make it more attractive. The first of the 6.5 mm military cartridges to appear was near the end of the 19th century. The Carcano's history has been plagued by a great deal of negative press and criticism, mainly the result of misinformation and lack of understanding of the design.

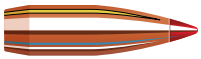
The Carcano's action design is by no means weak, tests performed by P.O. Ackley and several others were unable to cause action failure. However, surplus rifles should all be thoroughly inspected by a competent gunsmith before firing. Carcano rifles are built with a .257" bore and .268" grooves. This was done to extend barrel life. The rifles are, by virtue of this, not generally accurate with conventional .264" 6.5 mm bullets. Hornady now produces a .267" 160 grain Round Nose bullet designed specifically for Carcano rifles. We have achieved excellent accuracy with this bullet and the loads listed here, our best results came from H 414 and WIN 760.

Historically, Norma has been the only source for Boxer primed Carcano cartridge cases, these cases have an extractor groove that is too narrow and does not function properly in the stripper clip and eject with difficulty. Cases recently made available by Privi Partizan have the proper groove dimension and functioned flawlessly in our test rifle.

Absolutely do not deviate from the components or loads shown for the 0.267" bullet. Dangerously high pressures may result.

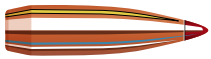
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

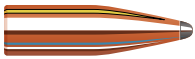


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.835"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.835"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.835"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.835"
G1 B.C.: 0.358

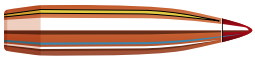
	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031	27.8 gr.	28.9 gr.	29.9 gr.	31.0 gr.	32.0 gr.	
IMR 4064	29.7 gr.	30.9 gr.	32.0 gr.	33.1 gr.	34.3 gr.	
H4895	29.5 gr.	30.8 gr.	32.2 gr.	33.6 gr.	35.0 gr.	
IMR 4320	30.0 gr.	31.3 gr.	32.7 gr.	34.0 gr.	35.4 gr.	
Alliant RL-15	29.3 gr.	31.5 gr.	33.7 gr.	35.8 gr.	38.0 gr.	40.0 gr.
IMR 4350	36.0 gr.	37.4 gr.	38.8 gr.	40.2 gr.	41.6 gr.	
VIHT N-160	37.7 gr.	38.9 gr.	40.1 gr.	41.3 gr.	42.5 gr.	43.7 gr.
H4831	38.8 gr.	40.2 gr.	41.6 gr.	43.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

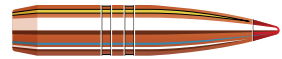
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



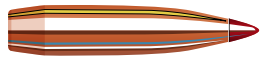
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.935"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.935"
G1 B.C.: 0.465

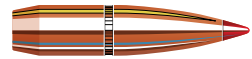


120 gr. GMX®
Item No. 26110
C.O.L.: 2.935"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.935"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.935"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.935"
G1 B.C.: 0.510

NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

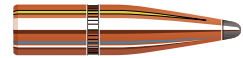
**NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

129 gr. InterBond®
Item No. 26209
C.O.L.: 2.935"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.935"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.935"
G1 B.C.: 0.445

***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.915"
G1 B.C.: 0.549
G7 B.C.: 0.277

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	26.9 gr.	28.3 gr.	29.7 gr.		
BL-C(2)	28.9 gr.	30.0 gr.	31.0 gr.	32.1 gr.	
IMR 4064	28.8 gr.	30.2 gr.	31.5 gr.	32.9 gr.	
Alliant RL-15	28.1 gr.	29.9 gr.	31.6 gr.	33.4 gr.	
H4895	28.8 gr.	30.3 gr.	31.9 gr.		
VIHT N-160	36.1 gr.	37.6 gr.	39.0 gr.	40.5 gr.	41.9 gr.
H4831	37.9 gr.	39.2 gr.	40.4 gr.		

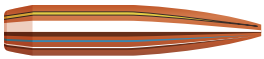
Create custom ballistic tables using our online calculators at hornady.com/ballistics

**NOTE: Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

INDICATES MAXIMUM LOAD — USE WITH CAUTION

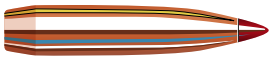
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.287
DIAMETER: 0.264"

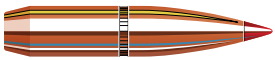


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.915"
G1 B.C.: 0.580

140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.915"
G1 B.C.: 0.585



***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.915"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.915"
G1 B.C.: 0.520

140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.915"
G1 B.C.: 0.465

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**
IMR 3031	26.2 gr.	27.5 gr.	28.8 gr.		
BL-C(2)	27.0 gr.	28.2 gr.	29.4 gr.	30.6 gr.	
H4895	27.8 gr.	29.3 gr.	30.8 gr.	32.3 gr.	
IMR 4064	28.2 gr.	29.7 gr.	31.0 gr.	32.7 gr.	
IMR 4320	28.9 gr.	30.3 gr.	31.7 gr.	33.1 gr.	
H380	29.1 gr.	30.7 gr.	32.3 gr.	33.8 gr.	
Accurate 4350	32.3 gr.	33.6 gr.	35.0 gr.	36.4 gr.	
IMR 4350	33.3 gr.	34.9 gr.	36.4 gr.	37.9 gr.	
VIHT N-160	34.0 gr.	35.6 gr.	37.2 gr.	38.9 gr.	40.5 gr.
H4831	36.8 gr.	37.9 gr.	39.1 gr.	40.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

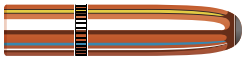
*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

SECTIONAL DENSITY: 0.321
DIAMETER: 0.267"

NOTE:
Only Winchester WLRM Primers should be used with this data.

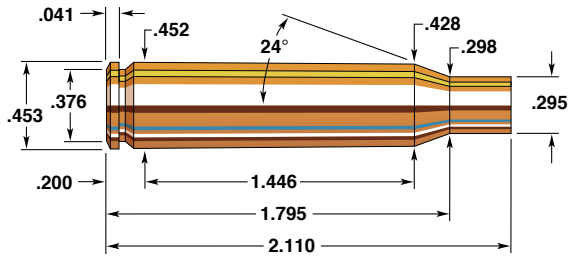


160 gr. RN
Item No. 2645
C.O.L.: 2.960"
G1 B.C.: 0.275

	VELOCITY (FPS – feet per second)						
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**
IMR 4064	29.3 gr.	30.0 gr.	30.7 gr.	31.4 gr.			
Alliant RL-15		30.0 gr.	30.8 gr.	31.6 gr.			
VARGET	29.7 gr.	30.5 gr.	31.4 gr.	32.2 gr.			
Accurate 4064	30.1 gr.	30.8 gr.	31.6 gr.	32.4 gr.			
H414			34.1 gr.	35.0 gr.	36.0 gr.	36.9 gr.	37.8 gr.
WIN 760			35.0 gr.	35.9 gr.	36.9 gr.	37.8 gr.	39.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: Use only the components shown. Absolutely do not reduce charge weights below those shown.



6.5 X 54mm Mannlicher-Schoenauer

Rifle:	Steyr Carbine	**Bullet Diameter:**	0.264"
Barrel:	.18", 1 in 8½" Twist	**Maximum COL:**	3.063"
Case:	Norma	**Max. Case Length:**	.2.110"
Primer:	Federal 210	**Case Trim Length:**	.2.100"

Never an especially popular hunting cartridge in the U. S., the 6.5 x 54mm Mannlicher-Schoenauer cartridge was loaded by American firms until about 1940, and many European-made rifles for this cartridge are still in regular use today.

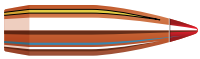
Prized for its efficient spiral magazine and smooth action, the Mannlicher-Schoenauer rifle has a split bridge, which poses problems for scope mounting. Paul Jaeger, Williams, Redfield, Pachmayr, and Leupold, however, made special side mounts to overcome the difficulty.

First adopted by the Greek army in 1903, the 6.5 x 54mm M-S cartridge has been used by hunters throughout the world. If you are loading for an older military rifle, careful inspection of the firearm by a knowledgeable gunsmith is highly recommended. Reloadable Boxer-primed cartridge brass is available from Norma on the domestic market, and Stoeger Arms imports both rifles and ammunition in 6.5 x 54mm M-S caliber.

There is an outstanding selection of Hornady 6.5mm bullets suitable for loading in this cartridge, all the way from the long, deep penetrating 160 grain Round Nose down to the explosive 95 grain V-MAX®, an excellent choice for varmint shooting with the 6.5 x 54mm M-S.

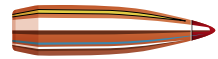
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

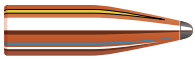


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.870"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.870"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.870"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.870"
G1 B.C.: 0.358

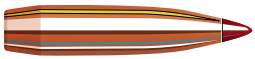
	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031	28.6 gr.	30.1 gr.	31.6 gr.	33.2 gr.	
IMR 4064	31.1 gr.	32.6 gr.	34.2 gr.	35.8 gr.	
H4895	31.3 gr.	32.9 gr.	34.4 gr.	35.9 gr.	37.5 gr.
IMR 4320	31.9 gr.	33.3 gr.	34.7 gr.	36.1 gr.	37.5 gr.
H380	32.6 gr.	34.1 gr.	35.6 gr.	37.1 gr.	38.5 gr.
IMR 4350	37.7 gr.	39.0 gr.	40.4 gr.	41.7 gr.	
H4831	40.6 gr.	42.0 gr.	43.4 gr.	44.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

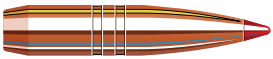
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



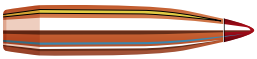
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.970"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.970"
G1 B.C.: 0.465

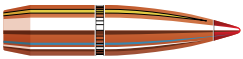


120 gr. GMX®
Item No. 26110
C.O.L.: 2.970"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.970"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.970"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.970"
G1 B.C.: 0.510

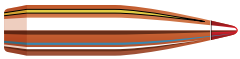
NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

Create custom ballistic tables using our online calculators at hornady.com/ballistics

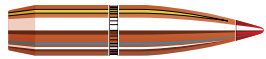
*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

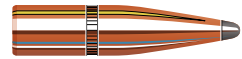
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



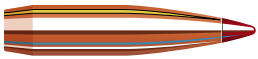
129 gr. InterBond®
Item No. 26209
C.O.L.: 2.970"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 2.970"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.970"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.950"
G1 B.C.: 0.549
G7 B.C.: 0.277

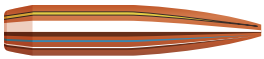
	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	29.1 gr.	30.6 gr.	32.2 gr.	33.8 gr.	
IMR 4064	30.9 gr.	32.3 gr.	33.7 gr.	35.1 gr.	
H4895	31.0 gr.	32.4 gr.	33.8 gr.		
IMR 4320	30.9 gr.	32.5 gr.	34.1 gr.	35.7 gr.	
H380	32.3 gr.	33.7 gr.	35.1 gr.		
IMR 4350		36.8 gr.	38.2 gr.	39.7 gr.	41.1 gr.
H4831		39.4 gr.	40.8 gr.	42.4 gr.	43.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

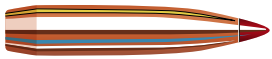
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.287
DIAMETER: 0.264"

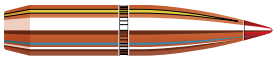


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.950"
G1 B.C.: 0.580

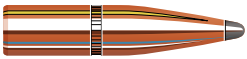
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.950"
G1 B.C.: 0.585



***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.950"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.950"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.950"
G1 B.C.: 0.465

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	28.2 gr.	29.8 gr.	31.3 gr.	32.8 gr.	
H4895	29.8 gr.	31.3 gr.	32.9 gr.	34.4 gr.	
IMR 4064	30.0 gr.	31.6 gr.	33.2 gr.	34.8 gr.	
IMR 4320	30.2 gr.	31.8 gr.	33.4 gr.	35.1 gr.	
H380	31.7 gr.	33.3 gr.	34.8 gr.	36.4 gr.	
IMR 4350	35.2 gr.	36.7 gr.	38.2 gr.	39.6 gr.	41.1 gr.
H4831	38.4 gr.	39.7 gr.	41.0 gr.	42.4 gr.	43.7 gr.

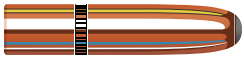
Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.

160 GRAIN BULLETS

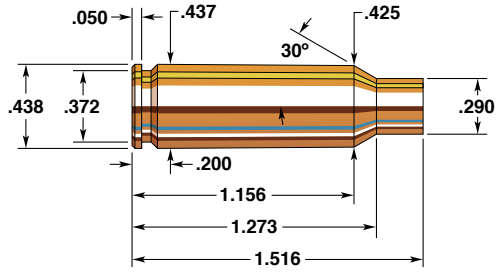
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 2.970"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)				
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**
IMR 3031	26.8 gr.	28.4 gr.	30.0 gr.		
IMR 4064	28.5 gr.	30.0 gr.	31.5 gr.	33.0 gr.	
H4895	28.6 gr.	30.1 gr.	31.6 gr.		
IMR 4320	28.9 gr.	30.5 gr.	32.0 gr.	33.6 gr.	
H380	30.1 gr.	31.6 gr.	33.2 gr.		
IMR 4350		34.0 gr.	35.6 gr.	37.3 gr.	39.0 gr.
H4831		35.8 gr.	37.4 gr.	38.9 gr.	40.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5 Grendel

Rifle:	Alexander Arms	**Bullet Diameter:**	0.264"
Barrel:	18", 1 in 8" Twist	**Maximum COL:**	2.260"
Case:	Hornady	**Max. Case Length:**	1.520"
Primer:	WSR	**Case Trim Length:**	1.510"

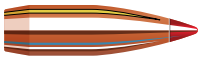
The 6.5 Grendel was developed by Bill Alexander in 2002 and is quite possibly the most efficient cartridge ever to be chambered in the AR platform. Based on the PPC family of cartridges, which were designed in the 1970's by Dr. Lou Palmisano and Ferris Pindell as cartridges for bench rest competition, the 6.5 Grendel has its roots firmly planted in the precision shooting world.

The "Grendel" is a very versatile cartridge and we have found it to be very effective with bullets from our 95 grain V-MAX® to our 129 grain SST®. The 6.5 Grendel is not fickle or finicky in the least; a sign of a great deal of forethought in the design.

Versatility is a strong suite of the Grendel, capable of everything from varmint hunting to long range target shooting to tactical use and as a medium game hunting cartridge. 6.5mm bullets have excellent sectional density and ballistic coefficients which translates to great performance in the external and terminal ballistics departments, for hunting game up to and including deer, the 129 grain SST® is unbeatable, for varmints and plinking, one cannot go wrong with the 95 grain V-MAX®, if it's long range targets that are on the menu, then look no further than the 123 grain ELD® Match.

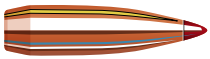
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

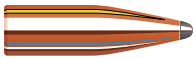


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.245"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.245"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.245"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.210"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Accurate LT-30	22.6 gr.	23.7 gr.	24.9 gr.	26.1 gr.		
Alliant RL-10X	22.9 gr.	24.2 gr.	25.4 gr.	26.6 gr.	27.3 gr.	
Accurate LT-32	24.0 gr.	25.1 gr.	26.2 gr.	27.3 gr.		
Benchmark	24.7 gr.	26.0 gr.	27.4 gr.	28.7 gr.	29.4 gr.	
H335	26.0 gr.	27.1 gr.	28.1 gr.	29.1 gr.	29.6 gr.	
Accurate 2460	25.6 gr.	26.9 gr.	28.0 gr.	29.2 gr.	29.8 gr.	30.3 gr.
TAC	25.4 gr.	26.8 gr.	28.2 gr.	29.5 gr.	30.2 gr.	
NORMA 201	26.5 gr.	27.6 gr.	28.7 gr.	29.8 gr.	30.3 gr.	
WIN 748	27.3 gr.	28.6 gr.	29.9 gr.	30.5 gr.		
CFE 223	28.5 gr.	29.7 gr.	31.0 gr.	32.2 gr.	32.9 gr.	33.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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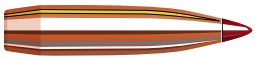
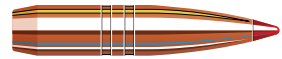
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



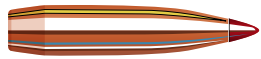
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.245"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.245"
G1 B.C.: 0.465

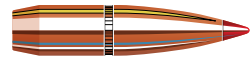


120 gr. GMX®
Item No. 26110
C.O.L.: 2.245"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.245"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.245"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.245"
G1 B.C.: 0.510

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**	**2500**
Benchmark	23.0 gr.	24.2 gr.	25.3 gr.	26.5 gr.	27.1 gr.	
H335	24.1 gr.	25.3 gr.	26.4 gr.			
TAC	24.0 gr.	25.3 gr.	26.5 gr.	27.8 gr.		
Accurate 2460	24.2 gr.	25.3 gr.	26.5 gr.	27.6 gr.		
NORMA 201	24.4 gr.	25.5 gr.	26.6 gr.	27.7 gr.		
Accurate 2520	24.9 gr.	26.1 gr.	27.3 gr.	28.5 gr.	29.1 gr.	
VARGET	25.2 gr.	26.4 gr.	27.6 gr.	28.9 gr.		
Alliant RL-15	25.8 gr.	26.9 gr.	28.0 gr.	29.0 gr.		
WIN 748	25.9 gr.	27.1 gr.	28.3 gr.	29.5 gr.	30.1 gr.	
BL-C(2)	26.1 gr.	27.4 gr.	28.6 gr.	29.9 gr.	30.5 gr.	
CFE 223	26.2 gr.	27.5 gr.	28.7 gr.	30.0 gr.	30.6 gr.	31.2 gr.

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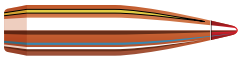
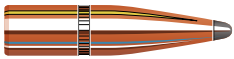
129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

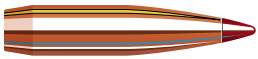


129 gr. InterBond®
Item No. 26209
C.O.L.: 2.245"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.245"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.245"
G1 B.C.: 0.445

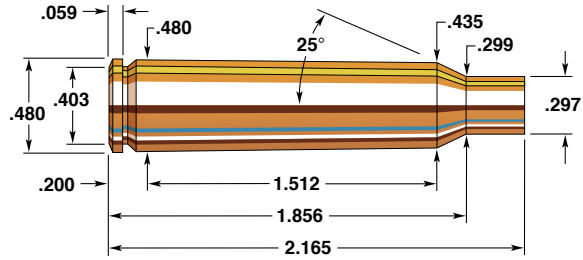


***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.245"
G1 B.C.: 0.549
G7 B.C.: 0.277

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2350**
IMR 8208 XBR	22.4 gr.	23.6 gr.	24.9 gr.	26.2 gr.	
H4895	23.0 gr.	24.2 gr.	25.4 gr.	26.6 gr.	
NORMA 202	23.7 gr.	24.8 gr.	25.9 gr.	27.0 gr.	27.5 gr.
TAC	23.6 gr.	24.8 gr.	26.0 gr.	27.3 gr.	
IMR 4895	23.9 gr.	25.0 gr.	26.1 gr.		
VARGET	23.8 gr.	25.0 gr.	26.2 gr.	27.5 gr.	
Alliant RL-15	23.8 gr.	25.0 gr.	26.3 gr.	27.6 gr.	
Accurate 2520	24.7 gr.	25.8 gr.	26.9 gr.	28.0 gr.	28.5 gr.
WIN 748	24.7 gr.	26.1 gr.	27.5 gr.	28.9 gr.	29.5 gr.
BL-C(2)	25.2 gr.	26.4 gr.	27.7 gr.	28.9 gr.	29.5 gr.
CFE 223	27.9 gr.	29.1 gr.	30.4 gr.	31.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



6.5 X 55mm Swedish

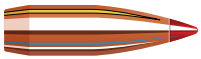
Rifle:	Mauser Model 1896	**Bullet Diameter:**	0.264"
Barrel:	29", 1 in 7½" Twist	**Maximum COL:**	3.150"
Case:	Hornady/Frontier	**Max. Case Length:**	2.165"
Primer:	Winchester WLR	**Case Trim Length:**	2.155"

The 6.5 x 55mm is an excellent and deservedly popular military surplus import. Adopted as the Swedish service cartridge in 1894, the cartridge is popular in Sweden and Norway and increasingly here as well.

Loaded with Hornady 129 grain and 140 grain bullets, the 6.5 x 55mm is acceptable for all but the largest North American game. The 160 grain Round Nose bullet, while sacrificing some performance due to its shape, nevertheless has extremely good sectional density and offers excellent performance on North American game at appropriate ranges. Reloaders are cautioned against attempting high intensity loads in either the Mauser or Krag actions, for they were not designed for pressures commonly developed in current factory rifles. Loads listed were safe in our test rifles, but maximum loads should be developed with care by each individual handloader. Start several grains below the top loads listed and work up a grain at a time, watching for signs of excessive pressure. The Model 1896 rifles with 29" barrels and Model 38 rifles with 24" barrels will both produce 200 fps faster velocities than the 18" carbine.

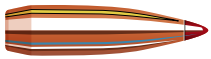
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

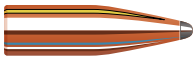


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.905"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.905"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.905"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.905"
G1 B.C.: 0.358

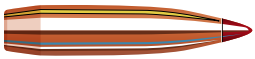
	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
VIHT N-150	36.2 gr.	37.7 gr.	39.2 gr.	40.8 gr.	42.3 gr.	
VIHT N-140	35.7 gr.	37.6 gr.	39.6 gr.	41.5 gr.		
IMR 4064	37.0 gr.	38.3 gr.	39.7 gr.	41.0 gr.	42.3 gr.	
Alliant RL-15	38.0 gr.	39.1 gr.	40.2 gr.	41.3 gr.	42.4 gr.	
WIN 760	36.2 gr.	38.7 gr.	41.2 gr.	43.7 gr.	46.2 gr.	
IMR 4350	41.0 gr.	42.5 gr.	44.0 gr.	45.5 gr.	47.0 gr.	48.4 gr.
IMR 4007 SSC	40.9 gr.	42.5 gr.	44.2 gr.			
Hybrid 100V	41.0 gr.	42.7 gr.	44.3 gr.	46.0 gr.		
Alliant RL-17	42.2 gr.	43.5 gr.	44.7 gr.	46.0 gr.		
VIHT N-160	44.3 gr.	45.7 gr.	47.0 gr.	48.3 gr.	49.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

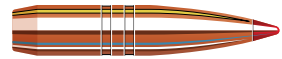
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



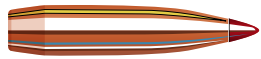
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.905"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.905"
G1 B.C.: 0.465

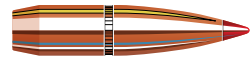


120 gr. GMX®
Item No. 26110
C.O.L.: 2.905"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.905"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.905"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.905"
G1 B.C.: 0.510

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
NORMA URP	37.4 gr.	38.8 gr.	40.2 gr.	41.6 gr.	43.1 gr.	
H4350	37.6 gr.	39.1 gr.	40.6 gr.	42.1 gr.	43.7 gr.	
WIN 760	37.7 gr.	39.2 gr.	40.6 gr.	42.1 gr.		
Alliant RL-17	38.1 gr.	39.4 gr.	40.8 gr.	42.1 gr.	43.4 gr.	44.1 gr.
Hybrid 100V	38.1 gr.	39.4 gr.	40.8 gr.	42.1 gr.	43.5 gr.	
IMR 4350	37.9 gr.	39.4 gr.	40.8 gr.	42.3 gr.	43.7 gr.	
VIHT N-160	39.0 gr.	40.6 gr.	42.2 gr.	43.8 gr.	45.4 gr.	
Hunter	40.3 gr.	41.9 gr.	43.4 gr.	44.9 gr.	46.4 gr.	47.2 gr.
Alliant RL-19	40.3 gr.	42.1 gr.	43.8 gr.	45.5 gr.	47.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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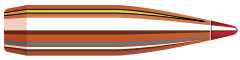
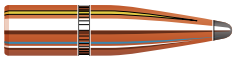
129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

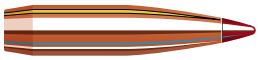


129 gr. InterBond®
Item No. 26209
C.O.L.: 2.905"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.905"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.905"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 3.025"
G1 B.C.: 0.549
G7 B.C.: 0.277

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
WIN 760	27.1 gr.	30.8 gr.	34.6 gr.	38.3 gr.	42.1 gr.
IMR 4007 SSC	35.6 gr.	37.3 gr.	39.0 gr.	40.8 gr.	
IMR 4350	36.4 gr.	37.9 gr.	39.4 gr.	40.9 gr.	42.4 gr.
VIHT N-160	33.4 gr.	36.0 gr.	38.5 gr.	41.0 gr.	43.6 gr.
Alliant RL-17	37.1 gr.	38.5 gr.	40.0 gr.	41.4 gr.	
Hybrid 100V	36.4 gr.	38.1 gr.	39.9 gr.	41.7 gr.	
H4831	33.8 gr.	36.8 gr.	39.7 gr.	42.6 gr.	45.6 gr.
Alliant RL-22	34.4 gr.	37.2 gr.	39.9 gr.	42.7 gr.	45.4 gr.
Alliant RL-19	38.2 gr.	39.8 gr.	41.5 gr.	43.2 gr.	44.8 gr.
Power Pro 4000 MR	39.0 gr.	40.4 gr.	41.8 gr.	43.2 gr.	

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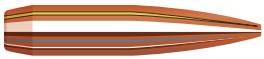
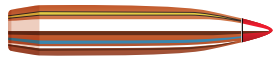
140-143 GRAIN BULLETS

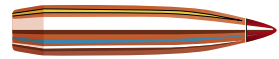
SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"



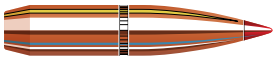
^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 3.025"
G1 B.C.: 0.580



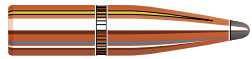
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 3.025"
G1 B.C.: 0.585



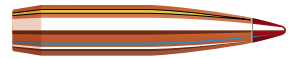
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 3.025"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.905"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.905"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 3.025"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-17	35.9 gr.	37.8 gr.	39.7 gr.	41.6 gr.	
Hybrid 100V	36.7 gr.	38.7 gr.	40.8 gr.		
H4350	37.2 gr.	39.1 gr.	41.0 gr.		
IMR 4350	38.4 gr.	39.9 gr.	41.5 gr.		
IMR 4831	38.6 gr.	40.4 gr.	42.3 gr.	44.1 gr.	
Power Pro 4000 MR	38.7 gr.	40.5 gr.	42.3 gr.	44.1 gr.	
SUPERFORMANCE	39.0 gr.	40.8 gr.	42.6 gr.		
VIHT N-160	39.1 gr.	41.1 gr.	43.0 gr.		
Alliant RL-19	40.8 gr.	42.5 gr.	44.2 gr.		
VIHT N-165	43.1 gr.	44.6 gr.	46.2 gr.	47.8 gr.	48.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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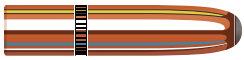
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

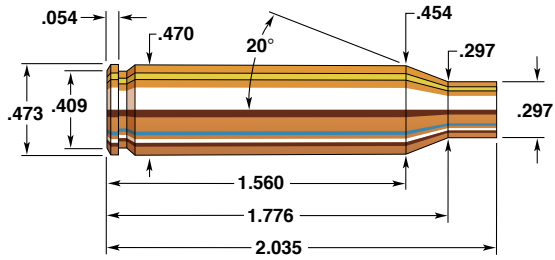
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 2.970"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)		
POWDER	**2100**	**2200**	**2300**
Alliant RL-17	35.0 gr.	36.8 gr.	38.5 gr.
Hybrid 100V	35.1 gr.	37.2 gr.	39.3 gr.
Power Pro 4000 MR	36.6 gr.	38.5 gr.	40.4 gr.
Alliant RL-19	37.6 gr.	39.5 gr.	41.3 gr.
H4831	38.3 gr.	40.3 gr.	42.3 gr.
IMR 7828	39.6 gr.	41.4 gr.	43.3 gr.
VIHT N-165	39.2 gr.	41.4 gr.	43.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



260 Remington

Rifle:	Remington 700	**Bullet Diameter:**	0.264"
Barrel:	24", 1 in 8" Twist	**Maximum COL:**	2.800"
Case:	Remington	**Max. Case Length:**	.2.035"
Primer:	.Remington 9½	**Case Trim Length:**	.2.025"

Offspring of the 308 Winchester and Jim Carmichael's designing, the 260 Remington was introduced commercially in January of 1997. It is the 308 necked down to accept .264" diameter bullets.

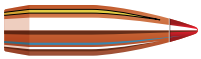
Firearms with a minimum chamber dimension reportedly have had some trouble with our bullets contacting the rifling when they are seated to the cannelure. This problem is easily remedied by seating the bullets deep enough to clear the rifling. We encountered no such problem in the Remington M700 that we used for own testing. Pressures for all 260 Remington loads were determined using strain gauges and an Oehler M83.

As the loading data tables indicate, many powders can be used effectively in the 260 Remington. In general for light bullets use IMR 4831 or RL-15 and the heavy ones IMR 7828 and H 4831.

This cartridge performs best when stoked with medium-slow to slow burning powders and with these powders the best consistency is found using mid range loads and up. Pay special attention to the possibility of bullets contacting the lands, thereby creating potentially high-pressure loads when coupled with maximum powder charges. Start low and work up. The 260 Remington is a fine cartridge whether you are going after prairie dogs and coyotes with the accurate and explosive 95 grain V-MAX® or mule deer with the reliable 120-grain GMX®.

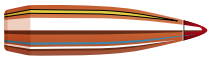
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

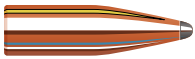


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.775"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.775"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.775"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.775"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
Accurate 2495	33.8 gr.	35.3 gr.	36.7 gr.	38.1 gr.	39.5 gr.	
H4895	33.7 gr.	35.3 gr.	36.8 gr.	38.4 gr.	39.9 gr.	
IMR 4064	34.3 gr.	36.0 gr.	37.6 gr.	39.3 gr.	40.9 gr.	
VARGET	35.5 gr.	36.9 gr.	38.3 gr.	39.7 gr.	41.1 gr.	
VIHT N-140	35.6 gr.	37.0 gr.	38.5 gr.	40.0 gr.	41.4 gr.	
Alliant RL-15	36.1 gr.	37.5 gr.	38.9 gr.	40.4 gr.	41.8 gr.	
WIN 760	39.5 gr.	41.1 gr.	42.7 gr.	44.3 gr.	45.8 gr.	47.4 gr.
Accurate 4350	42.0 gr.	43.1 gr.	44.3 gr.	45.4 gr.	46.6 gr.	47.7 gr.
IMR 4831	42.1 gr.	43.5 gr.	45.0 gr.	46.4 gr.	47.9 gr.	49.4 gr.

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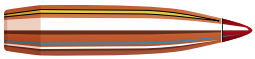
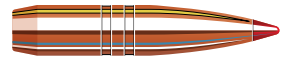
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



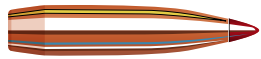
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.775"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.775"
G1 B.C.: 0.465

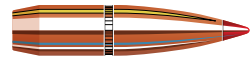


120 gr. GMX®
Item No. 26110
C.O.L.: 2.775"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.775"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.775"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.775"
G1 B.C.: 0.510

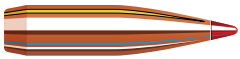
NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

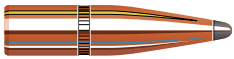
129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

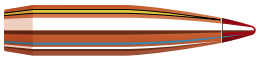


129 gr. InterBond®
Item No. 26209
C.O.L.: 2.775"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.775"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.775"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.800"
G1 B.C.: 0.549
G7 B.C.: 0.277

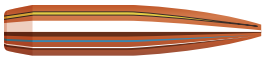
	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
VARGET	32.5 gr.	34.0 gr.	35.6 gr.	37.1 gr.		
Alliant RL-15	32.5 gr.	34.1 gr.	35.7 gr.	37.3 gr.	38.9 gr.	
VIHT N-140	32.6 gr.	34.2 gr.	35.9 gr.	37.5 gr.		
Accurate 4350	37.3 gr.	38.7 gr.	40.0 gr.	41.4 gr.	42.7 gr.	
IMR 4831	37.6 gr.	39.2 gr.	40.8 gr.	42.5 gr.	44.1 gr.	45.7 gr.
Alliant RL-19	38.9 gr.	40.7 gr.	42.5 gr.	44.3 gr.	46.1 gr.	47.9 gr.
Alliant RL-22	40.0 gr.	41.8 gr.	43.6 gr.	45.5 gr.	47.3 gr.	49.1 gr.
H4831	40.2 gr.	42.2 gr.	44.1 gr.	46.0 gr.	48.0 gr.	49.9 gr.
VIHT N-165	41.3 gr.	42.9 gr.	44.5 gr.	46.1 gr.	47.7 gr.	49.3 gr.
IMR 7828	41.8 gr.	43.3 gr.	44.9 gr.	46.5 gr.	48.0 gr.	
H1000	43.4 gr.	45.4 gr.	47.4 gr.	49.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

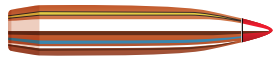
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

140-143 GRAIN BULLETS

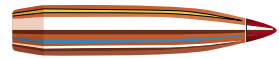
SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"



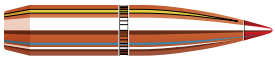
^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.785"
G1 B.C.: 0.580



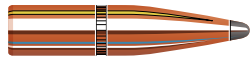
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.785"
G1 B.C.: 0.585



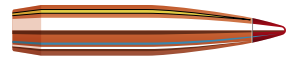
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.785"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.775"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.775"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 2.800"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4831	35.8 gr.	37.2 gr.	38.5 gr.	39.9 gr.	41.3 gr.
Accurate 4350	36.3 gr.	37.7 gr.	39.0 gr.	40.4 gr.	41.7 gr.
Alliant RL-19	38.1 gr.	39.8 gr.	41.6 gr.	43.4 gr.	45.1 gr.
VIHT N-165	39.7 gr.	41.3 gr.	42.8 gr.	44.3 gr.	45.9 gr.
H4831	39.0 gr.	40.8 gr.	42.5 gr.	44.3 gr.	46.0 gr.
Alliant RL-22	40.2 gr.	41.8 gr.	43.4 gr.	45.0 gr.	46.6 gr.
H1000	42.5 gr.	44.3 gr.	46.1 gr.	47.8 gr.	49.6 gr.

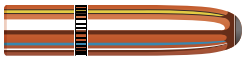
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

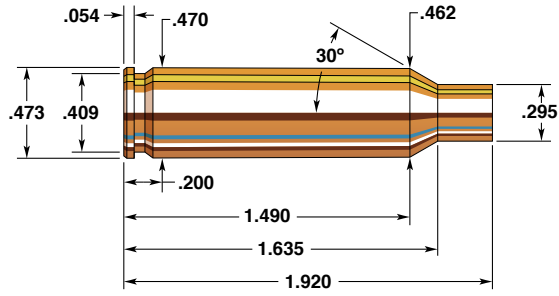
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 2.840"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)			
POWDER	**2300**	**2400**	**2500**	**2600**
Accurate 4350	38.3 gr.	39.7 gr.	41.1 gr.	
IMR 4831	38.6 gr.	40.5 gr.	42.3 gr.	44.1 gr.
Alliant RL-19	40.7 gr.	42.5 gr.	44.2 gr.	46.0 gr.
H4831	41.4 gr.	43.4 gr.	45.4 gr.	47.3 gr.
IMR 7828	42.3 gr.	43.9 gr.	45.6 gr.	47.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5 Creedmoor

Rifle: . . . . . Remington 700/Custom
Barrel: . . . . . 24", 1 in 8" Twist
Case: . . . . . Hornady
Primer: . . . . . Federal 210M

Bullet Diameter: . . . . . 0.264"
Maximum COL: . . . . . 2.825"
Max. Case Length: . . . . . 1.920"
Case Trim Length: . . . . . 1.910"

Very possibly the most well balanced cartridge to ever grace the pages of the Hornady Handbook of Cartridge Reloading, the 6.5 Creedmoor was developed by Hornady Senior Ballistics Scientist, Dave Emary and Dennis DeMille in 2007 and announced in the 2008 Hornady Catalog. Based on the 30 TC, a 2007 Hornady introduction, the 6.5 Creedmoor is a shortened and improved design that has become a very popular cartridge with both match shooters and hunters alike.

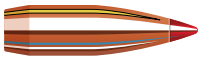
The 6.5 Creedmoor was designed as the ultimate “across the course” cartridge and initial factory offerings were with 120 and 140 grain A-MAX® bullets and factory load data printed on the label so that the ammunition could be matched by handloader.

One of the biggest advantages the 6.5 Creedmoor has over cartridges like the 260 Remington and the 6.5 – 284 is the fact that it was designed ground up as a short action cartridge. While the body of the 6.5 Creedmoor is shorter than the 260 Remington the fact that bullets do not need to be seated as deep means that it has as much useable propellant payload capacity AND bullets can be loaded longer to accommodate different throats and still fit in short action magazines.

When reloading the 6.5 Creedmoor the handloader should note that it prefers medium to medium slow burning propellants Hodgdon Varget, H4350, RL-15 and Norma URP. The Creedmoor is equally comfortable at the National Matches as it is in the field. Its light recoil and low muzzle blast make it the perfect cartridge for new or recoil sensitive shooters.

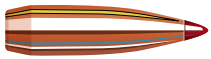
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

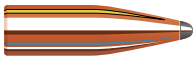


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.710"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.710"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.710"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.700"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)						
POWDER	**2900**	**2950**	**3000**	**3050**	**3100**	**3150**	**3200**
IMR 8208 XBR	36.8 gr.	37.5 gr.	38.2 gr.	38.8 gr.	39.5 gr.		
H4895	36.4 gr.	37.2 gr.	38.0 gr.	38.8 gr.	39.6 gr.	40.5 gr.	
IMR 4895	37.0 gr.	37.7 gr.	38.4 gr.	39.2 gr.	39.9 gr.	40.6 gr.	
TAC	38.2 gr.	38.7 gr.	39.1 gr.	39.5 gr.	40.0 gr.		
VARGET	37.2 gr.	38.0 gr.	38.7 gr.	39.5 gr.	40.3 gr.	41.1 gr.	
NORMA 203 B	36.7 gr.	37.6 gr.	38.6 gr.	39.6 gr.	40.5 gr.	41.5 gr.	42.5 gr.
Alliant RL-15	37.2 gr.	38.1 gr.	39.0 gr.	39.9 gr.	40.8 gr.	41.7 gr.	
WIN 748	37.3 gr.	38.2 gr.	39.2 gr.	40.2 gr.	41.1 gr.	42.1 gr.	
IMR 4320	38.2 gr.	38.9 gr.	39.7 gr.	40.4 gr.	41.2 gr.	41.9 gr.	
Accurate 2520	38.2 gr.	39.0 gr.	39.7 gr.	40.5 gr.	41.3 gr.	42.1 gr.	
BL-C(2)	37.9 gr.	38.9 gr.	39.9 gr.	40.9 gr.	41.9 gr.	42.9 gr.	
IMR 4007 SSC	43.1 gr.	43.8 gr.	44.5 gr.	45.2 gr.	45.9 gr.	46.6 gr.	

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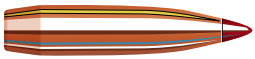
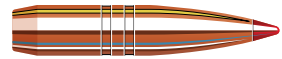
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



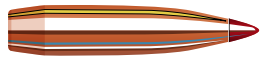
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.710"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.710"
G1 B.C.: 0.465

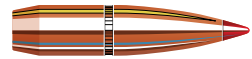


120 gr. GMX®
Item No. 26110
C.O.L.: 2.710"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.710"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.710"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.710"
G1 B.C.: 0.510

	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2750**	**2800**	**2850**	**2900**	**2950**	**3000**
VARGET	36.0 gr.	36.8 gr.	37.6 gr.	38.4 gr.	39.2 gr.		
Alliant RL-15	36.1 gr.	36.9 gr.	37.8 gr.	38.6 gr.	39.5 gr.		
NORMA 203 B	36.3 gr.	37.2 gr.	38.0 gr.	38.9 gr.	39.7 gr.		
WIN 748	37.0 gr.	37.9 gr.	38.7 gr.	39.6 gr.			
BIG GAME	39.6 gr.	40.4 gr.	41.2 gr.	42.0 gr.	42.8 gr.		
NORMA URP	40.2 gr.	41.0 gr.	41.8 gr.	42.5 gr.	43.3 gr.	44.1 gr.	
Accurate 4350	40.4 gr.	41.1 gr.	41.9 gr.	42.6 gr.	43.3 gr.		
Alliant RL-17	40.7 gr.	41.5 gr.	42.2 gr.	42.9 gr.	43.6 gr.	44.3 gr.	
IMR 4350	40.7 gr.	41.5 gr.	42.3 gr.	43.0 gr.	43.8 gr.	44.6 gr.	
H4350	40.7 gr.	41.5 gr.	42.3 gr.	43.1 gr.	43.9 gr.		
SUPERFORMANCE	44.2 gr.	44.9 gr.	45.6 gr.	46.4 gr.	47.1 gr.	47.8 gr.	48.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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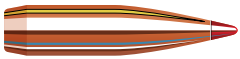
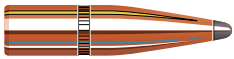
129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

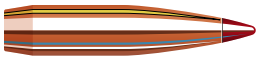


129 gr. InterBond®
Item No. 26209
C.O.L.: 2.670"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.670"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.690"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.800"
G1 B.C.: 0.549
G7 B.C.: 0.277

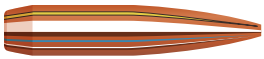
	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2650**	**2700**	**2750**	**2800**	**2850**	**2900**
NORMA 203 B	35.5 gr.	36.3 gr.	37.2 gr.	38.0 gr.	38.8 gr.		
VARGET	35.5 gr.	36.4 gr.	37.3 gr.	38.2 gr.			
Alliant RL-15	35.9 gr.	36.7 gr.	37.5 gr.	38.4 gr.	39.3 gr.		
WIN 748	35.8 gr.	36.7 gr.	37.6 gr.	38.4 gr.	39.3 gr.		
BIG GAME	38.9 gr.	39.7 gr.	40.4 gr.	41.1 gr.	41.8 gr.		
NORMA URP	38.8 gr.	39.6 gr.	40.5 gr.	41.3 gr.	42.1 gr.	42.9 gr.	
Accurate 4350	39.1 gr.	40.0 gr.	40.7 gr.	41.5 gr.	42.4 gr.	43.2 gr.	
Alliant RL-17	39.2 gr.	40.0 gr.	40.8 gr.	41.6 gr.	42.5 gr.	43.6 gr.	
IMR 4350	39.8 gr.	40.6 gr.	41.4 gr.	42.2 gr.	43.0 gr.		
Hybrid 100V	40.5 gr.	41.4 gr.	42.3 gr.	43.2 gr.	44.0 gr.	44.9 gr.	
WIN 760	40.7 gr.	41.6 gr.	42.5 gr.	43.4 gr.	44.2 gr.	45.1 gr.	46.0 gr.
H4350	41.1 gr.	41.9 gr.	42.8 gr.				
SUPERFORMANCE	42.6 gr.	43.4 gr.	44.2 gr.	45.0 gr.	45.8 gr.	46.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

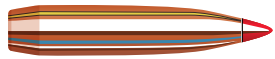
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

140-143 GRAIN BULLETS

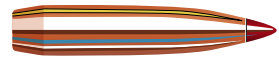
SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"



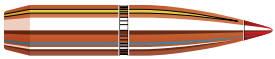
^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.800"
G1 B.C.: 0.580



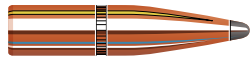
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.800"
G1 B.C.: 0.585



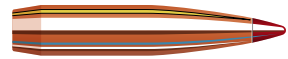
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.800"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.690"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.680"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 2.800"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)						
POWDER	**2400**	**2500**	**2600**	**2650**	**2700**	**2750**	**2800**
NORMA 203 B	32.5 gr.	34.4 gr.	36.3 gr.	37.3 gr.			
VARGET	32.7 gr.	34.5 gr.	36.4 gr.				
Alliant RL-15	33.5 gr.	35.3 gr.	37.1 gr.	37.9 gr.			
BIG GAME	35.1 gr.	36.9 gr.	38.7 gr.	39.6 gr.	40.5 gr.	41.4 gr.	
Alliant RL-17	35.3 gr.	37.0 gr.	38.7 gr.	39.6 gr.	40.4 gr.	41.3 gr.	
NORMA URP	35.3 gr.	37.1 gr.	38.8 gr.	39.7 gr.	40.6 gr.	41.4 gr.	
Hybrid 100V	35.6 gr.	37.3 gr.	38.9 gr.	39.7 gr.	40.5 gr.	41.3 gr.	
WIN 760	35.9 gr.	37.7 gr.	39.5 gr.	40.4 gr.	41.3 gr.		
IMR 4350	36.1 gr.	37.8 gr.	39.5 gr.	40.3 gr.	41.1 gr.	42.0 gr.	
H4350	35.6 gr.	37.6 gr.	39.6 gr.	40.5 gr.	41.5 gr.		
IMR 4451	36.6 gr.	38.5 gr.	40.4 gr.	41.3 gr.			
SUPERFORMANCE	38.2 gr.	39.8 gr.	41.4 gr.	42.2 gr.	43.1 gr.	43.9 gr.	44.7 gr.

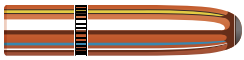
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

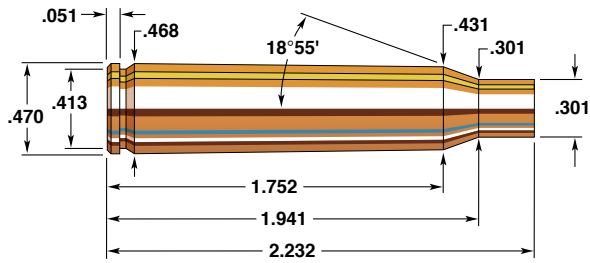
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 2.740"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2350**	**2400**	**2450**	**2500**	**2550**
VARGET	33.4 gr.	34.3 gr.	35.2 gr.			
NORMA 203 B	33.6 gr.	34.6 gr.	35.7 gr.	36.7 gr.		
Alliant RL-15	34.0 gr.	35.1 gr.	36.1 gr.	37.2 gr.		
WIN 748	34.4 gr.	35.4 gr.	36.5 gr.			
BIG GAME	35.6 gr.	36.8 gr.	37.9 gr.	39.1 gr.	40.2 gr.	
NORMA URP	36.0 gr.	37.0 gr.	38.0 gr.	38.9 gr.	39.9 gr.	
H4350	36.5 gr.	37.5 gr.	38.6 gr.	39.6 gr.	40.6 gr.	
IMR 4350	36.8 gr.	37.7 gr.	38.7 gr.	39.6 gr.	40.5 gr.	
Accurate 4350	37.0 gr.	37.9 gr.	38.8 gr.	39.8 gr.		
WIN 760	38.1 gr.	39.0 gr.	40.0 gr.	41.0 gr.	42.0 gr.	42.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5 X 57mm

Rifle:	Mauser 66	**Bullet Diameter:**	0.264"
Barrel:	23⅝", 1 in 8" Twist	**Maximum COL:**	3.247"
Case:	RWS	**Max. Case Length:**	2.232"
Primer:	Federal 210	**Case Trim Length:**	2.222"

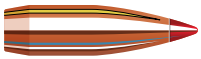
The 6.5 x 57mm is based on the 7 x 57mm Mauser case necked down, with a slightly different shoulder angle and nearly identical case length. It originated sometime around 1895 and remains quite popular in Europe. Unlike the 7 x 57mm Mauser, it was never adopted as a military cartridge. Also unlike the 7 x 57mm, the 6.5 x 57mm has never gained wide popularity in the U. S. The 6.5 x 57mm is of adequate size to easily handle deer-sized game and can be used effectively on elk and black bear, and though European firearms have been imported in this chambering, the 6.5 x 57mm is relatively hard to find on trails in North America.

The 6.5mm bullets offered by Hornady are very deadly and dependable. Their extremely high ballistic coefficients make them most desirable for the 6.5mm: the 95 grain V-MAX® for varminting, 129 grain Spire Point, 140 grain Spire Point, 160 grain Round Nose for big game, and the 140 grain ELD® Match for target shooting.

A rimmed version of this cartridge is used extensively in combination guns such as the Sauer, and maximum loads here should be dropped by 10 to 15% when loading for such firearms. Our data was obtained through the use of the much stronger Mauser Model 66 bolt action rifle. Know the limitations of the firearm you're loading for, and know the signs of excessive pressure that signal you to back off.

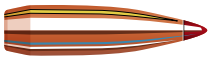
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

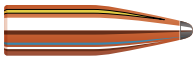


95 gr. V-MAX®
Item No. 22601
C.O.L.: 3.015"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 3.015"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 3.015"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 3.015"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4064	39.4 gr.	40.6 gr.	41.7 gr.	42.8 gr.	
IMR 4350	42.8 gr.	44.0 gr.	45.1 gr.	46.3 gr.	47.5 gr.
IMR 4831	45.9 gr.	47.0 gr.	48.0 gr.	49.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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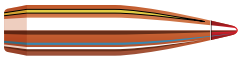
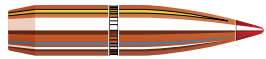
129-130 GRAIN BULLETS

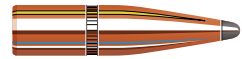
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



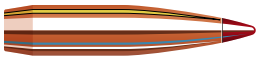
129 gr. InterBond®
Item No. 26209
C.O.L.: 3.005"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 3.005"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 3.005"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 3.030"
G1 B.C.: 0.549
G7 B.C.: 0.277

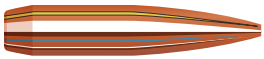
	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4064	36.0 gr.	37.4 gr.	38.9 gr.	40.4 gr.	
IMR 4350	39.3 gr.	40.6 gr.	41.9 gr.	43.2 gr.	44.5 gr.
IMR 4831	42.4 gr.	43.7 gr.	45.0 gr.	46.3 gr.	47.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

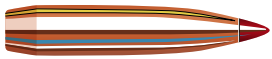
140-143 GRAIN BULLETS

SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"

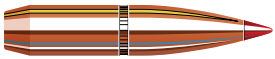


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 3.030"
G1 B.C.: 0.580

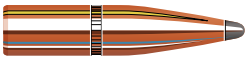
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 3.030"
G1 B.C.: 0.585



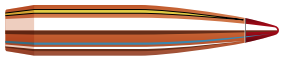
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 3.030"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 3.030"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 3.030"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 3.030"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4064	35.2 gr.	36.7 gr.	38.2 gr.	39.7 gr.	
IMR 4350	38.3 gr.	39.7 gr.	41.1 gr.	42.4 gr.	43.8 gr.
IMR 4831	41.0 gr.	42.2 gr.	43.5 gr.	44.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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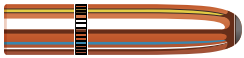
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

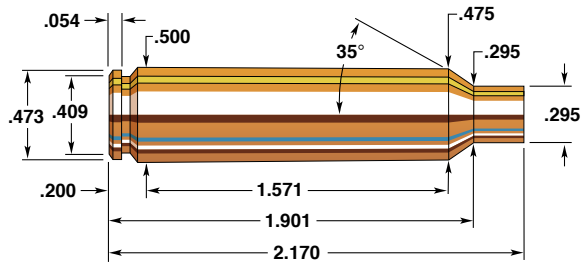
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 3.075"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4064	32.9 gr.	34.6 gr.	36.4 gr.	38.1 gr.	
IMR 4350	36.0 gr.	37.5 gr.	39.0 gr.	40.5 gr.	41.9 gr.
IMR 4831	39.4 gr.	40.7 gr.	42.0 gr.	43.3 gr.	44.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5mm-284

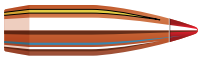
Rifle: . . . . . T/C Encore Custom
Barrel: . . . . . 24", 1 in 9" Twist
Case: . . . . . Winchester
Primer: . . . . . Federal 210
Bullet Diameter: . . . . . 0.264"
Maximum COL: . . . . . 2.800"
Max. Case Length: . . . . . .2.170"
Case Trim Length: . . . . . .2.160"

The 6.5mm-284 is one of the many wildcats based on the 284 Winchester case. Most guns built for this cartridge have custom barrels ranging from 26 to 30 inches and are strictly intended for target shooting. Our own test rifle had a very short throat. A shorter barrel with this shorter throat produced lower test velocities.

The popularity of the 6.5mm-284 has come mainly from the target/ match shooting fraternity, in large measure because some 6.5mm match bullets, such as our 140 grain ELD® Match, are highly efficient ballistically. Some powders that looked good were H 4350, IMR 4350, VIHT N-160, and WIN 760 with the light bullets. VIHT N-165 and IMR 4831 performed well when coupled with heavier bullets.

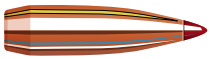
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

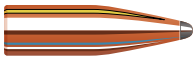


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.820"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.820"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.820"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.820"
G1 B.C.: 0.358

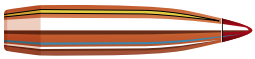
	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4064	38.2 gr.	39.7 gr.	41.3 gr.	42.9 gr.	
Alliant RL-15	37.2 gr.	39.2 gr.	41.3 gr.	43.3 gr.	
Accurate 4350	42.4 gr.	44.0 gr.	45.6 gr.	47.3 gr.	48.9 gr.
VIHT N-160	40.7 gr.	42.9 gr.	45.1 gr.	47.4 gr.	
H414	41.5 gr.	43.5 gr.	45.6 gr.	47.7 gr.	49.7 gr.
H4350	42.1 gr.	44.0 gr.	45.9 gr.	47.8 gr.	49.7 gr.
WIN 760	42.7 gr.	44.4 gr.	46.1 gr.	47.9 gr.	
IMR 4350	42.9 gr.	44.6 gr.	46.3 gr.	48.0 gr.	49.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

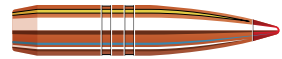
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



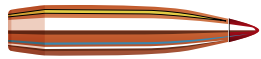
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.870"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.870"
G1 B.C.: 0.465

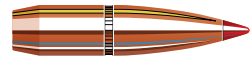


120 gr. GMX®
Item No. 26110
C.O.L.: 2.870"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.870"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.870"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.870"
G1 B.C.: 0.510

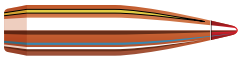
NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

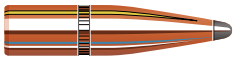
129-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"

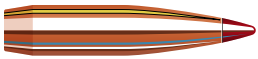


129 gr. InterBond®
Item No. 26209
C.O.L.: 2.870"
G1 B.C.: 0.485

129 gr. SST®
Item No. 26202
C.O.L.: 2.870"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.870"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.880"
G1 B.C.: 0.549
G7 B.C.: 0.277

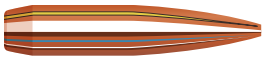
	VELOCITY (FPS – feet per second)			
POWDER	**2500**	**2600**	**2700**	**2800**
IMR 4350	38.8 gr.	40.6 gr.	42.4 gr.	44.2 gr.
VIHT N-160	38.2 gr.	40.6 gr.	43.0 gr.	
Alliant RL-19	42.3 gr.	44.2 gr.	46.1 gr.	48.1 gr.
H4831	43.0 gr.	45.2 gr.	47.5 gr.	49.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

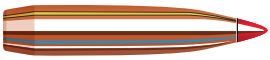
***NOTE:** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

140-143 GRAIN BULLETS

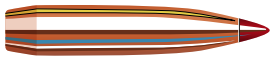
SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"



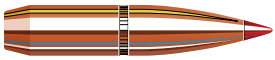
^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.880"
G1 B.C.: 0.580



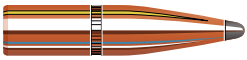
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.880"
G1 B.C.: 0.585



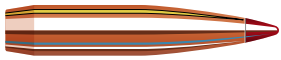
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.880"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.880"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.880"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 2.880"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)			
POWDER	**2400**	**2500**	**2600**	**2700**
IMR 4831	38.9 gr.	40.9 gr.	42.9 gr.	44.9 gr.
H4831	39.9 gr.	41.9 gr.	43.9 gr.	45.9 gr.
VIHT N-165	40.4 gr.	42.7 gr.	45.0 gr.	47.2 gr.
Alliant RL-22	41.9 gr.	44.1 gr.	46.2 gr.	48.4 gr.

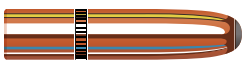
Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.

160 GRAIN BULLETS

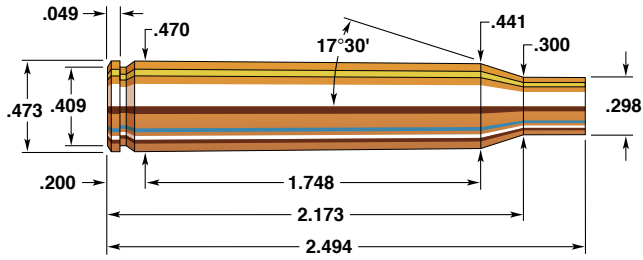
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 3.010"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 4831	37.6 gr.	39.5 gr.	41.4 gr.	43.4 gr.	
H4831	37.4 gr.	39.7 gr.	42.1 gr.	44.4 gr.	
VIHT N-165	39.1 gr.	41.4 gr.	43.7 gr.	46.1 gr.	
Alliant RL-22		42.5 gr.	44.3 gr.	46.2 gr.	48.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5mm-06

Rifle: . . . . . Winchester 70/Shilen
Barrel: . . . . . 24", 1 in 8" Twist
Case: . . . . . Hornady/Frontier
Primer: . . . . . Winchester WLR
Bullet Diameter: . . . . . 0.264"
Maximum COL: . . . . . 3.340"
Max. Case Length: . . . . . 2.494"
Case Trim Length: . . . . . 2.484"

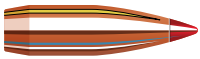
How 'modern' is modern? How 'new' is new? Here in the Hornady Handbook, where we list cartridges in terms of relative power, the 6.5mm-06 lies adjacent to the 6.5mm Remington Magnum (1966) and the 264 Winchester Magnum (1958), both of which are high performance 6.5mm caliber cartridges of recent origin introduced with much fanfare. The precursor of the 6.5mm- 06 was introduced in 1913 as the 256 Newton. Charles Newton's cartridge varies only very slightly from the wildcat 6.5mm-06 related to it. From its inception it has been a practical, effective, and useful hunting cartridge. Though the more recent Winchester and Remington 6.5mm cartridges have stolen interest from the 6.5mm- 06, it remains an excellent cartridge with many performance characteristics to recommend it.

The 6.5mm-06 is based on the 30-06, the patriarch of 20th century wildcat development. Somewhat less powerful than the 264 Winchester—its advocates claim that may explain why it's easier on barrels—it has power enough for nearly all North American game, and is extremely effective on varmints as well.

In our tests, H 4831 and VihtaVouri N-165 were excellent powders for heavier 6.5mm Hornady InterLock hunting bullets (129 and 140 grain), and H 4350 was outstanding with lighter bullets, the 100 grain Spire Point and the 95 grain V-MAX®. Our test rifle gave us superb accuracy with these loads.

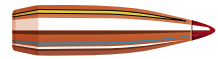
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

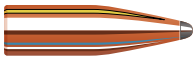


95 gr. V-MAX®
Item No. 22601
C.O.L.: 3.310"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 3.310"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 3.310"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 3.310"
G1 B.C.: 0.358

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
H380	45.3 gr.	47.0 gr.	48.7 gr.	50.4 gr.	52.1 gr.	
IMR 4350	45.5 gr.	47.2 gr.	48.9 gr.	50.6 gr.	52.3 gr.	
WIN 760	45.1 gr.	46.9 gr.	48.8 gr.	50.6 gr.	52.4 gr.	
H4350	46.3 gr.	48.3 gr.	50.2 gr.	52.2 gr.	54.2 gr.	
IMR 4831	48.0 gr.	49.6 gr.	51.3 gr.	52.9 gr.	54.5 gr.	
Accurate 4350	48.2 gr.	49.9 gr.	51.5 gr.	53.2 gr.	54.8 gr.	
VIHT N-160	47.6 gr.	49.4 gr.	51.3 gr.	53.1 gr.	55.0 gr.	
H4831	50.0 gr.	52.0 gr.	54.1 gr.	56.1 gr.	58.1 gr.	
Alliant RL-19	51.7 gr.	53.3 gr.	55.0 gr.	56.6 gr.	58.3 gr.	
VIHT N-165	52.1 gr.	53.9 gr.	55.6 gr.	57.3 gr.	59.1 gr.	60.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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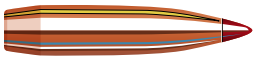
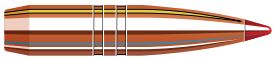
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



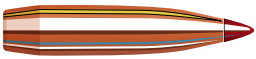
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 3.250"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 3.250"
G1 B.C.: 0.465

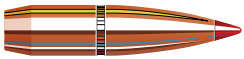


120 gr. GMX®
Item No. 26110
C.O.L.: 3.250"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 3.250"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 3.250"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 3.250"
G1 B.C.: 0.510

NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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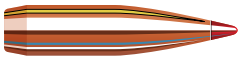
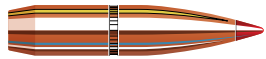
129-130 GRAIN BULLETS

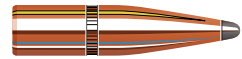
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



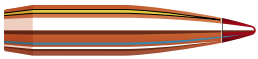
129 gr. InterBond®
Item No. 26209
C.O.L.: 3.250"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 3.250"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 3.250"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 3.265"
G1 B.C.: 0.549
G7 B.C.: 0.277

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	41.3 gr.	43.2 gr.	45.1 gr.	46.9 gr.	48.8 gr.
H4350	41.5 gr.	43.5 gr.	45.5 gr.	47.5 gr.	49.5 gr.
IMR 4831	42.3 gr.	44.2 gr.	46.0 gr.	47.9 gr.	49.8 gr.
Accurate 4350	41.7 gr.	43.9 gr.	46.0 gr.	48.2 gr.	50.3 gr.
VIHT N-160	41.4 gr.	43.7 gr.	45.9 gr.	48.1 gr.	50.4 gr.
Alliant RL-22	44.0 gr.	46.0 gr.	48.0 gr.	50.0 gr.	52.0 gr.
Alliant RL-19	44.6 gr.	46.5 gr.	48.5 gr.	50.4 gr.	52.4 gr.
H4831	44.2 gr.	46.3 gr.	48.3 gr.	50.4 gr.	52.5 gr.
VIHT N-165	42.6 gr.	45.2 gr.	47.7 gr.	50.3 gr.	52.9 gr.
IMR 7828	45.8 gr.	47.7 gr.	49.6 gr.	51.6 gr.	53.5 gr.

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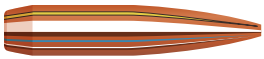
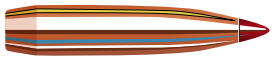
140-143 GRAIN BULLETS

SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"

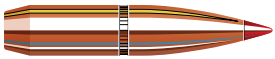


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 3.265"
G1 B.C.: 0.580

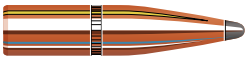
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 3.265"
G1 B.C.: 0.585



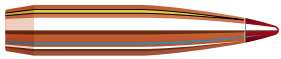
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 3.265"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 3.265"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 3.265"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 3.265"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
VIHT N-160	41.8 gr.	43.6 gr.	45.5 gr.		
H4831	42.3 gr.	44.7 gr.	47.1 gr.	49.4 gr.	
Alliant RL-22	42.9 gr.	45.0 gr.	47.1 gr.	49.3 gr.	51.4 gr.
Alliant RL-19	43.4 gr.	45.5 gr.	47.5 gr.	49.6 gr.	51.6 gr.
IMR 7828	44.0 gr.	46.0 gr.	48.0 gr.	49.9 gr.	51.9 gr.
VIHT N-165	43.6 gr.	45.8 gr.	48.1 gr.	50.4 gr.	

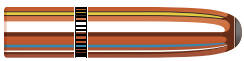
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

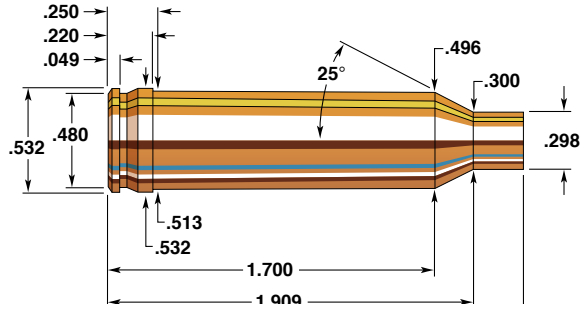
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 3.310"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)			
POWDER	**2500**	**2600**	**2700**	**2800**
Alliant RL-19	45.2 gr.	47.5 gr.	49.8 gr.	
Alliant RL-22	45.6 gr.	47.8 gr.	50.1 gr.	52.3 gr.
IMR 7828	46.7 gr.	48.9 gr.	51.0 gr.	53.2 gr.
VIHT N-165	46.3 gr.	48.7 gr.	51.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.5mm Remington Magnum

Rifle: . . . . . F.N. Mauser Custom
Barrel: . . . . . 24", 1 in 9" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 9½M

Bullet Diameter: . . . . . 0.264"
Maximum COL: . . . . . 2.800"
Max. Case Length: . . . . . .2.170"
Case Trim Length: . . . . . .2.160"

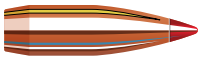
This belted cartridge, introduced in 1966 in Remington's Model 600 carbine, has considerably more powder capacity than the smaller European 6.5mm's. Developed by necking down the 350 Remington Magnum to 6.5mm, it was loaded by the factory with a 120 grain bullet and basically sold for game hunting. Reloaders can readily adapt it for varminting with 95 grain V-MAX® loads (the 129 grain Spire Point and SST® quite suitable for varmint shooting also, and is proving an excellent dual purpose bullet in the 6.5mm magnums).

The 18½" barrel of the Model 600 in which this cartridge was originally chambered did not fully exploit its performance potential. Remington did chamber its 6.5mm Magnum in the Model 700 BDL, a rifle whose 24" barrel will develop considerably more velocity than possible with the carbine version. The initial appeal this cartridge enjoyed seems since to have waned. The 6.5mm Remington Magnum is neither the first nor the last cartridge whose popularity could not be sustained because of the firearm introduced with it.

Heavy bullets must be seated quite deeply in the short-necked 6.5mm Remington Magnum case, thereby reducing case capacity and velocity potential. Despite this, Remington's 6.5mm is adequate for all but the largest North American game when loaded with the wide selection of Hornady 6.5mm bullets.

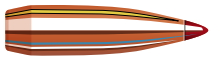
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

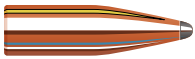


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.940"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.940"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.940"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.940"
G1 B.C.: 0.358

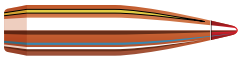
	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 3031	36.8 gr.	38.7 gr.	40.5 gr.	42.4 gr.	
IMR 4064	38.6 gr.	40.5 gr.	42.4 gr.	44.3 gr.	
H4895	39.1 gr.	41.0 gr.	42.9 gr.	44.7 gr.	
IMR 4320	39.9 gr.	41.9 gr.	43.8 gr.	45.7 gr.	47.6 gr.
H380	42.5 gr.	44.6 gr.	46.8 gr.	49.0 gr.	
IMR 4350	45.2 gr.	47.0 gr.	48.7 gr.	50.5 gr.	52.2 gr.
H4831	50.0 gr.	51.6 gr.	53.3 gr.	55.0 gr.	56.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

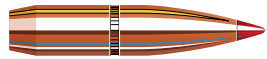
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

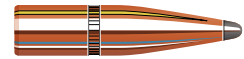
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



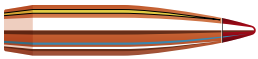
129 gr. InterBond®
Item No. 26209
C.O.L.: 3.040"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 3.040"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 3.040"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 3.040"
G1 B.C.: 0.549
G7 B.C.: 0.277

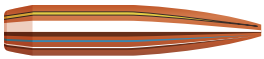
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 3031	37.3 gr.	39.3 gr.	41.2 gr.	43.2 gr.	
IMR 4064	38.2 gr.	40.2 gr.	42.1 gr.	44.1 gr.	
H4895	38.4 gr.	40.4 gr.	42.4 gr.	44.4 gr.	46.4 gr.
IMR 4320	39.5 gr.	41.4 gr.	43.3 gr.	45.2 gr.	47.1 gr.
IMR 4350		43.6 gr.	45.7 gr.	47.7 gr.	49.8 gr.
H380	41.9 gr.	44.0 gr.	46.1 gr.	48.3 gr.	
H4831		48.3 gr.	50.3 gr.	52.3 gr.	54.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

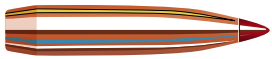
140-143 GRAIN BULLETS

SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"

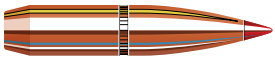


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 3.020"
G1 B.C.: 0.580

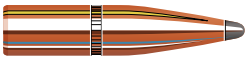
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 3.020"
G1 B.C.: 0.585



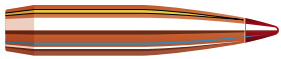
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 3.020"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 3.020"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 3.020"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 3.040"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031	37.5 gr.	39.7 gr.	41.9 gr.	44.1 gr.	
H4895	39.1 gr.	41.2 gr.	43.4 gr.	45.5 gr.	47.7 gr.
IMR 4064	38.7 gr.	41.0 gr.	43.4 gr.	45.7 gr.	48.0 gr.
IMR 4320	39.9 gr.	42.1 gr.	44.3 gr.	46.4 gr.	
IMR 4350			45.7 gr.	48.2 gr.	
H380	41.6 gr.	44.0 gr.	46.3 gr.	48.6 gr.	50.9 gr.
H4831		47.4 gr.	49.7 gr.	52.0 gr.	54.3 gr.

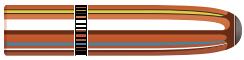
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

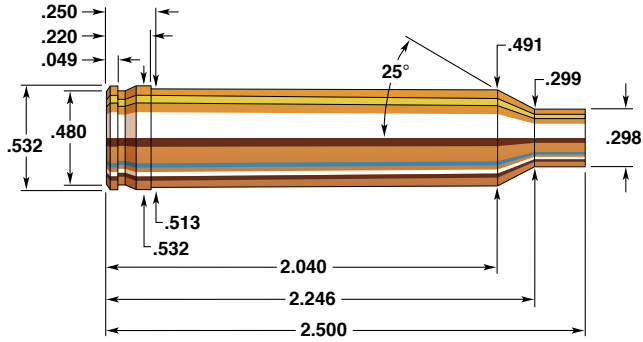
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 3.040"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 3031	36.0 gr.	38.3 gr.	40.4 gr.	42.6 gr.		
IMR 4064	36.9 gr.	39.2 gr.	41.6 gr.	43.9 gr.		
H4895	37.6 gr.	39.7 gr.	41.8 gr.	43.9 gr.	46.0 gr.	
IMR 4320	38.0 gr.	40.1 gr.	42.3 gr.	44.5 gr.	46.7 gr.	
H380	39.7 gr.	42.0 gr.	44.3 gr.	46.7 gr.		
IMR 4350		42.5 gr.	44.7 gr.	46.9 gr.	49.1 gr.	
H4831			48.1 gr.	50.2 gr.	52.4 gr.	54.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



264 Winchester Magnum

Rifle:	Winchester 70/Douglas	**Bullet Diameter:**	0.264"
Barrel:	24", 1 in 9" Twist	**Maximum COL:**	3.340"
Case:	Remington	**Max. Case Length:**	2.500"
Primer:	Remington 9½M	**Case Trim Length:**	2.490"

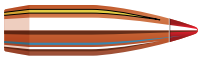
Belted, hot, and powerful, the 264 Winchester Magnum is one of a series of belted magnums the firm announced, beginning with its 458 Winchester. Introduced in 1958 and billed then as the ultimate in high velocity, flat trajectory hunting cartridges, the 264 became fairly popular for plains and mountain hunting. In use on varmints, the 264 can turn in spectacular results when it drives a 95 grain V-MAX® up to 3500 fps. Loaded with the long 160 grain Hornady Round Nose or the 140 grain Hornady Spire Point, the 264 Winchester has performed well on the largest North American game. If long range target shooting is desired, and a fast enough twist barrel is used, the 140 grain ELD® Match and 143 grain ELD-X® bullets are excellent choices, while the 120 grain GMX® and 129 grain Spire Point should drop an antelope or deer in its tracks.

There are no free lunches, however, and many 264 Winchester Magnum owners quickly discovered that the price of ultra high velocity is reduced barrel life. Any time a large capacity case with a small bore is fired quickly, barrel wear can be a problem. Spacing shots so the barrel can cool and using moderate loads whenever possible will help prolong the 264 Winchester Magnum's barrel life.

One significant reason the 7mm Remington Magnum so totally eclipsed the popularity of the 264 Winchester Magnum may well be that the 7mm is, or is perceived to be, somewhat easier on barrels.

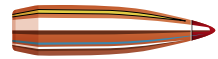
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

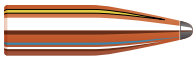


95 gr. V-MAX®
Item No. 22601
C.O.L.: 3.205"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 3.205"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 3.205"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 3.205"
G1 B.C.: 0.358

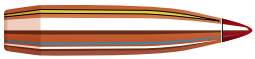
	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3550**	**3600**
Alliant RL-17	54.9 gr.	57.0 gr.	59.2 gr.	61.4 gr.	62.5 gr.	63.6 gr.
Hybrid 100V	57.4 gr.	59.2 gr.	61.1 gr.	63.0 gr.	64.0 gr.	64.9 gr.
H4350	56.9 gr.	59.0 gr.	61.2 gr.	63.3 gr.	64.4 gr.	65.5 gr.
IMR 4350	57.5 gr.	59.7 gr.	62.0 gr.	64.2 gr.	65.3 gr.	
IMR 4831	58.9 gr.	61.1 gr.	63.3 gr.	65.4 gr.	66.5 gr.	
SUPERFORMANCE	59.0 gr.	61.1 gr.	63.2 gr.	65.4 gr.		
Alliant RL-22	59.7 gr.	62.0 gr.	64.3 gr.	66.6 gr.	67.8 gr.	
Alliant RL-19	59.7 gr.	62.0 gr.	64.5 gr.	66.8 gr.	68.0 gr.	69.2 gr.
H4831 SC	61.9 gr.	64.3 gr.	66.7 gr.	69.1 gr.	70.3 gr.	
IMR 7828	63.0 gr.	65.1 gr.	67.2 gr.	69.4 gr.	70.4 gr.	71.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

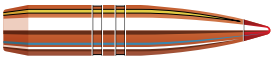
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



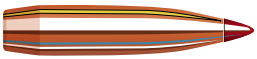
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 3.200"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 3.200"
G1 B.C.: 0.465

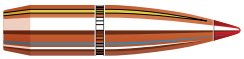


120 gr. GMX®
Item No. 26110
C.O.L.: 3.200"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 3.200"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 3.200"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 3.200"
G1 B.C.: 0.510

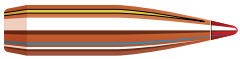
	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3150**	**3200**
Alliant RL-17	51.2 gr.	53.4 gr.	55.7 gr.	56.8 gr.	58.0 gr.
H4350	52.1 gr.	54.3 gr.	56.5 gr.	57.6 gr.	
Hybrid 100V	52.7 gr.	54.8 gr.	56.9 gr.	58.0 gr.	
Alliant RL-22	52.7 gr.	54.9 gr.	57.1 gr.	58.2 gr.	59.3 gr.
IMR 4350	53.5 gr.	55.8 gr.	58.1 gr.	59.2 gr.	
Alliant RL-19	53.9 gr.	56.1 gr.	58.4 gr.	59.5 gr.	60.6 gr.
IMR 4831	54.3 gr.	56.5 gr.	58.7 gr.	59.8 gr.	60.9 gr.
SUPERFORMANCE	54.0 gr.	56.4 gr.	58.7 gr.	59.9 gr.	
H4831 SC	56.6 gr.	59.0 gr.	61.5 gr.	62.8 gr.	
IMR 7828	58.0 gr.	60.1 gr.	62.2 gr.	63.3 gr.	64.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

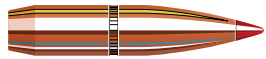
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

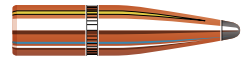
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



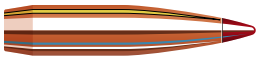
129 gr. InterBond®
Item No. 26209
C.O.L.: 3.200"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 3.200"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 3.200"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 3.210"
G1 B.C.: 0.549
G7 B.C.: 0.277

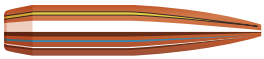
	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3150**	**3200**
Hybrid 100V	52.6 gr.	54.8 gr.	57.0 gr.		
H4350	52.4 gr.	54.8 gr.	57.2 gr.		
IMR 4350	53.5 gr.	55.9 gr.	58.2 gr.	59.4 gr.	
Alliant RL-22	53.7 gr.	56.3 gr.	59.0 gr.	60.3 gr.	61.6 gr.
IMR 4831	54.2 gr.	56.6 gr.	59.1 gr.	60.3 gr.	
Alliant RL-19	54.1 gr.	56.8 gr.	59.5 gr.	60.8 gr.	62.2 gr.
H4831 SC	56.4 gr.	59.0 gr.	61.5 gr.	62.8 gr.	
IMR 7828	56.9 gr.	59.5 gr.	62.2 gr.	63.5 gr.	
Alliant RL-25	59.1 gr.	61.7 gr.	64.3 gr.	65.6 gr.	66.9 gr.
H1000	59.2 gr.	61.9 gr.	64.6 gr.	65.9 gr.	
MAGNUM	60.8 gr.	63.3 gr.	65.8 gr.	67.1 gr.	68.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

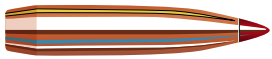
140-143 GRAIN BULLETS

SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"

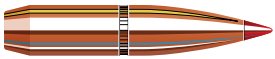


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 3.210"
G1 B.C.: 0.580

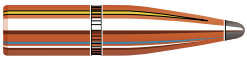
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 3.210"
G1 B.C.: 0.585



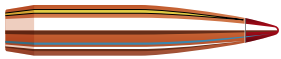
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 3.210"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 3.210"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 3.210"
G1 B.C.: 0.465



***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 3.210"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**
Hybrid 100V	49.3 gr.	51.7 gr.	54.0 gr.	56.4 gr.	
Alliant RL-22	49.6 gr.	52.4 gr.	55.3 gr.	58.1 gr.	59.5 gr.
IMR 4831	50.9 gr.	53.4 gr.	56.0 gr.	58.5 gr.	
Alliant RL-19	50.8 gr.	53.5 gr.	56.1 gr.	58.7 gr.	60.1 gr.
H4831 SC	52.6 gr.	55.3 gr.	58.0 gr.	60.6 gr.	62.0 gr.
IMR 7828	53.0 gr.	55.7 gr.	58.4 gr.	61.1 gr.	62.4 gr.
H1000	54.3 gr.	57.0 gr.	59.8 gr.	62.6 gr.	64.0 gr.
Alliant RL-25	53.7 gr.	56.8 gr.	59.8 gr.	62.8 gr.	64.3 gr.
MAGNUM	57.4 gr.	59.9 gr.	62.4 gr.	64.9 gr.	66.1 gr.

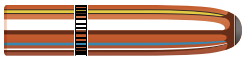
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

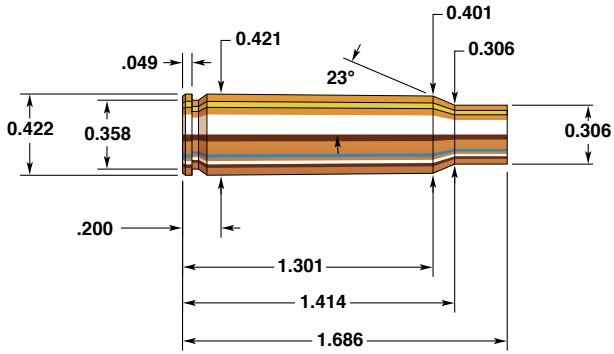
SECTIONAL DENSITY: 0.328
DIAMETER: 0.264"



160 gr. InterLock® RN
Item No. 2640
C.O.L.: 3.320"
G1 B.C.: 0.283

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2650**	**2700**	**2750**	**2800**	**2850**
H4350	51.1 gr.	52.4 gr.	53.6 gr.	54.8 gr.		
IMR 4350	51.8 gr.	52.9 gr.	54.0 gr.	55.2 gr.	56.4 gr.	
IMR 4831	52.8 gr.	54.0 gr.	55.3 gr.	56.6 gr.	57.8 gr.	
Alliant RL-22	52.8 gr.	54.1 gr.	55.4 gr.	56.7 gr.		
H4831 SC	54.3 gr.	55.6 gr.	56.9 gr.	58.2 gr.	59.5 gr.	60.8 gr.
IMR 7828	54.7 gr.	56.0 gr.	57.4 gr.	58.8 gr.	60.1 gr.	
Alliant RL-25	56.1 gr.	57.5 gr.	59.0 gr.	60.4 gr.	61.8 gr.	
H1000	56.5 gr.	57.9 gr.	59.3 gr.	60.6 gr.		
MAGNUM	59.2 gr.	60.4 gr.	61.5 gr.	62.7 gr.	63.9 gr.	65.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



6.8 Remington SPC

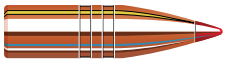
Rifle:	.DPMS	**Bullet Diameter:**	0.277"
Barrel:	16", 1 in 10" Twist	**Maximum COL:**	2.250"
Case:	Hornady	**Max. Case Length:**	1.686"
Primer:	.CCI 41	**Case Trim Length:**	1.676"

The 6.8mm SPC has a very interesting pedigree. Originally developed at the request of and in conjunction with the 5th Special Forces Group of the United States Army, the 6.8mm SPC is designed to deliver more lethality from the AR-15 platform than the standard 5.56 x 45mm NATO currently delivers.

Since it's inception the 6.8 SPC has been chambered in a variety of firearms from AR-15's to bolt action rifles, to single shots like Thompson Center's Contender. AR-15 style rifles are limited to shooting bullets that weigh 115 grains and less, unless the bullet has a short ogive and will allow the COL to remain under the maximum 2.250”, like our 120 grain SST®. Bolt actions and single shots are able to utilize heavier bullets loaded to longer COL's. These heavier bullets are better choices if one is using the 6.8mm SPC for hunting medium game like deer or antelope. In our testing we found that the optimal hunting bullet for single shots and bolt action 6.8's is the 130 grain InterBond®. Bonded bullets share one unique feature. To bond the lead core to the copper jacket, heat is required. Heat used in the bonding process also anneals or softens the bullet some. Bonded bullets are some of the toughest bullets on the market, but what many fail to realize is that bonded bullets also open better at lower impact velocities. The lower impact velocities with the 6.8mm SPC are all well within the 130 grain IB bullets working range.

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.186
DIAMETER: 0.277"



100 gr. GMX®
Item No. 27190
C.O.L.: 2.250"
G1 B.C.: 0.274

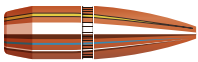
100 gr. SP *(Discontinued)*
Item No. 2710
C.O.L.: 2.245"
G1 B.C.: 0.307

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2450**	**2500**	**2550**
IMR 4227	20.5 gr.	21.8 gr.	22.4 gr.		
Accurate 1680	22.8 gr.	24.0 gr.			
Alliant RL-7	23.9 gr.	24.7 gr.	25.2 gr.		
VIHT N-130	23.9 gr.	25.0 gr.	25.5 gr.	26.0 gr.	
NORMA 200	24.6 gr.	25.5 gr.	26.0 gr.	26.4 gr.	
Power Pro 1200 R	26.3 gr.	27.3 gr.	27.7 gr.	28.2 gr.	28.7 gr.
Accurate 2230	26.9 gr.	28.3 gr.	29.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.277"



110 gr. BTHP W/C
Item No. 27200
C.O.L.: 2.245"
G1 B.C.: 0.360

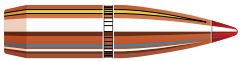
110 gr. V-MAX® W/C
Item No. 22721
C.O.L.: 2.245"
G1 B.C.: 0.370

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
H4198	20.7 gr.	22.2 gr.	23.7 gr.	25.2 gr.	
Alliant RL-7	22.0 gr.	22.9 gr.	23.8 gr.		
Accurate 1680	22.5 gr.	23.3 gr.	24.1 gr.	24.9 gr.	25.7 gr.
VIHT N-130	22.8 gr.	23.9 gr.	25.1 gr.		
Alliant RL-10X	23.8 gr.	24.7 gr.	25.7 gr.	26.6 gr.	
VIHT N-133	24.4 gr.	25.4 gr.	26.4 gr.		
IMR 8208 XBR	24.6 gr.	26.3 gr.	28.1 gr.	29.8 gr.	
H322	25.4 gr.	26.3 gr.	27.2 gr.	28.1 gr.	
Accurate 2230	25.5 gr.	26.7 gr.	28.0 gr.		
Benchmark	26.3 gr.	27.4 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.277"



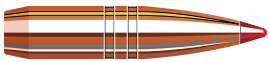
120 gr. SST®
Item No. 2716
C.O.L.: 2.240"
G1 B.C.: 0.400

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2350**	**2400**
Accurate 1680		21.1 gr.	22.1 gr.	23.1 gr.	23.6 gr.	24.1 gr.
H4198	20.8 gr.	21.8 gr.	22.8 gr.	23.8 gr.	24.3 gr.	24.8 gr.
Alliant RL-7	21.2 gr.	22.3 gr.	23.4 gr.	24.5 gr.	25.0 gr.	
VIHT N-130	21.2 gr.	22.3 gr.	23.4 gr.	24.5 gr.	25.1 gr.	
NORMA 200	21.8 gr.	22.8 gr.	23.8 gr.	24.8 gr.	25.3 gr.	25.8 gr.
Alliant RL-10X	22.4 gr.	23.4 gr.	24.4 gr.	25.4 gr.	25.9 gr.	
H322	23.5 gr.	24.5 gr.	25.6 gr.	26.6 gr.	27.1 gr.	
Accurate 2230	23.1 gr.	24.3 gr.	25.5 gr.	26.7 gr.	27.3 gr.	
IMR 8208 XBR	24.1 gr.	25.2 gr.	26.2 gr.	27.3 gr.	27.8 gr.	28.3 gr.
X-TERMINATOR	24.4 gr.	25.7 gr.	27.0 gr.	28.3 gr.	28.9 gr.	29.6 gr.

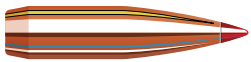
Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.242
DIAMETER: 0.277"

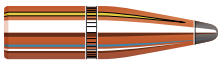


130 gr. GMX®
Item No. 27370
C.O.L.: 2.355"
G1 B.C.: 0.460



130 gr. InterBond®
Item No. 27309
C.O.L.: 2.355"
G1 B.C.: 0.460

130 gr. SST®
Item No. 27302
C.O.L.: 2.355"
G1 B.C.: 0.460



130 gr. InterLock® SP
Item No. 2730
C.O.L.: 2.355"
G1 B.C.: 0.409

	VELOCITY (FPS – feet per second)			
POWDER	**2000**	**2100**	**2200**	**2300**
Alliant RL-7	20.6 gr.	21.6 gr.	22.6 gr.	
H4198	21.0 gr.	22.0 gr.	22.9 gr.	23.8 gr.
Accurate 1680	21.1 gr.	22.0 gr.	22.9 gr.	23.8 gr.
VIHT N-130	21.3 gr.	22.4 gr.	23.4 gr.	24.4 gr.
Alliant RL-10X	22.1 gr.	23.1 gr.	24.1 gr.	25.2 gr.
H322	23.6 gr.	24.7 gr.	25.8 gr.	26.9 gr.
Accurate 2230	24.2 gr.	25.4 gr.	26.4 gr.	

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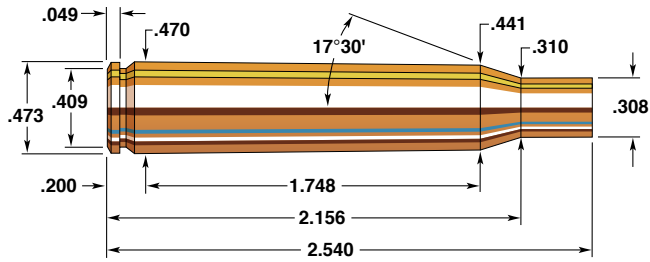
***NOTE:** This bullet will not fit in AR-15 type firearms magazines.*



270 Winchester

Rifle:	Winchester 70	**Bullet Diameter:**	0.277"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Hornady/Frontier	**Max. Case Length:**	2.540"
Primer:	Winchester WLR	**Case Trim Length:**	2.530"

This popular necked down 30-06 cartridge was introduced in 1925 by Winchester for their Model 54 bolt action. Its renown as a flat shooting big game stopper has kept the 270 Winchester alive and well for more than 90 years. Much of the popularity of the 270 can be credited to the late Jack O'Connor, who wrote more articles on the 270 caliber than any other person. The 270 has long held a position as one of the most popular big game cartridges in North America. In recent years, the 7mm's have gained a large following, but they have not slowed the sales of the venerable 270.

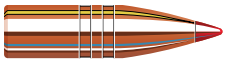
The flat shooting, high velocity 130 grain GMX® and 150 grain Interbond® along with our 140 grain Boat Tail Spire Point make this cartridge effective on all North American game and many of the thin skinned animals of Africa. Our field proven Inner Groove design coupled with the famous Hornady InterLock feature bonds cores for optimum controlled expansion and reliable one shot kills.

The 270 Winchester can double as a varmint round. Hornady makes a 100 grain Spire Point and a 110 grain V-MAX® for long range varminting.

The powder that showed the best uniformity and yielded the best accuracy was IMR 4831. The 270 Winchester is an efficient cartridge, and for this reason most powders listed performed quite well.

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.186
DIAMETER: 0.277"



100 gr. GMX®
Item No. 27190
C.O.L.: 3.100"
G1 B.C.: 0.274

100 gr. SP *(Discontinued)*
Item No. 2710
C.O.L.: 3.120"
G1 B.C.: 0.307

	VELOCITY (FPS – feet per second)						
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**	**3450**
NORMA 202	45.1 gr.	46.6 gr.	48.0 gr.	49.5 gr.	50.9 gr.	52.4 gr.	
VARGET	45.3 gr.	47.0 gr.	48.8 gr.	50.5 gr.	52.3 gr.	54.0 gr.	
Alliant RL-15	46.1 gr.	47.5 gr.	49.0 gr.	50.5 gr.	52.0 gr.	53.5 gr.	
IMR 4064	46.1 gr.	47.7 gr.	49.3 gr.	51.0 gr.	52.6 gr.	54.2 gr.	55.0 gr.
VIHT N-150	46.9 gr.	48.4 gr.	49.9 gr.	51.3 gr.	52.8 gr.		
Power Pro 2000 MR	47.9 gr.	49.3 gr.	50.8 gr.	52.3 gr.	53.7 gr.	55.2 gr.	55.9 gr.
WIN 760	51.1 gr.	52.7 gr.	54.2 gr.	55.7 gr.	57.2 gr.	58.7 gr.	59.5 gr.
IMR 4350	53.0 gr.	54.8 gr.	56.6 gr.	58.3 gr.			

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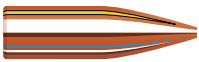
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.277"

110 gr. V-MAX® W/C
Item No. 22721
C.O.L.: 3.165"
G1 B.C.: 0.370



110 gr. HP *(Discontinued)*
Item No. 2720
C.O.L.: 3.165"
G1 B.C.: 0.352

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4064	42.0 gr.	43.9 gr.	45.9 gr.	47.8 gr.	49.8 gr.	51.7 gr.
VARGET	41.4 gr.	43.6 gr.	45.8 gr.	48.0 gr.	50.2 gr.	52.3 gr.
Alliant RL-15	44.0 gr.	45.6 gr.	47.3 gr.	48.9 gr.	50.5 gr.	52.1 gr.
VIHT N-150	45.7 gr.	47.4 gr.	49.1 gr.	50.8 gr.	52.5 gr.	
WIN 760	49.5 gr.	51.0 gr.	52.4 gr.	53.9 gr.	55.4 gr.	56.8 gr.
IMR 4350	49.7 gr.	51.5 gr.	53.2 gr.	54.9 gr.	56.6 gr.	58.4 gr.
H4350	50.1 gr.	51.8 gr.	53.6 gr.	55.3 gr.	57.1 gr.	58.8 gr.
Accurate 4350	50.8 gr.	52.4 gr.	53.9 gr.	55.5 gr.	57.1 gr.	58.6 gr.
IMR 4831	52.3 gr.	53.8 gr.	55.2 gr.	56.7 gr.	58.1 gr.	59.6 gr.
Alliant RL-19	53.0 gr.	54.7 gr.	56.4 gr.	58.1 gr.	59.8 gr.	61.5 gr.

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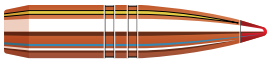
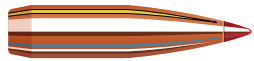
130 GRAIN BULLETS

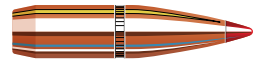
SECTIONAL DENSITY: 0.242
DIAMETER: 0.277"



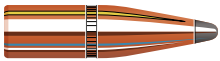
130 gr. GMX®
Item No. 27370
C.O.L.: 3.210"
G1 B.C.: 0.460



130 gr. InterBond®
Item No. 27309
C.O.L.: 3.210"
G1 B.C.: 0.460



130 gr. SST®
Item No. 27302
C.O.L.: 3.210"
G1 B.C.: 0.460



130 gr. InterLock® SP
Item No. 2730
C.O.L.: 3.210"
G1 B.C.: 0.409

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4064	41.6 gr.	43.4 gr.	45.1 gr.	46.8 gr.	48.6 gr.	
Power Pro 2000 MR	45.8 gr.	47.8 gr.	49.9 gr.			
WIN 760	46.7 gr.	48.6 gr.	50.5 gr.	52.5 gr.	54.4 gr.	
IMR 4350	47.1 gr.	49.0 gr.	50.9 gr.	52.7 gr.	54.6 gr.	
IMR 4451	47.2 gr.	49.1 gr.	51.0 gr.	52.9 gr.	54.9 gr.	
H4350	47.4 gr.	49.4 gr.	51.3 gr.	53.3 gr.	55.3 gr.	
Accurate 4350	48.6 gr.	50.4 gr.	52.2 gr.	54.0 gr.		
Hybrid 100V	49.0 gr.	50.6 gr.	52.2 gr.	53.3 gr.		
IMR 4007 SSC	48.9 gr.	50.6 gr.	52.3 gr.	53.9 gr.		
IMR 4831	49.5 gr.	51.1 gr.	52.8 gr.	54.4 gr.	56.1 gr.	
Alliant RL-17	50.2 gr.	51.5 gr.	52.8 gr.	54.1 gr.	55.4 gr.	
Alliant RL-19	50.6 gr.	52.4 gr.	54.1 gr.	55.9 gr.	57.6 gr.	59.4 gr.
Power Pro 4000 MR	52.2 gr.	53.6 gr.	55.0 gr.	56.4 gr.		
H4831	52.3 gr.	54.2 gr.	56.2 gr.	58.1 gr.	60.1 gr.	62.0 gr.
Alliant RL-22	52.7 gr.	54.4 gr.	56.2 gr.	57.9 gr.	59.6 gr.	61.3 gr.
VIHT N-165	53.0 gr.	54.8 gr.	56.6 gr.	58.4 gr.	60.2 gr.	62.0 gr.
WIN Supreme 780	54.8 gr.	56.9 gr.	59.0 gr.	61.1 gr.		

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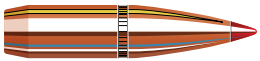
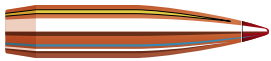
140-145 GRAIN BULLETS

SECTIONAL DENSITY: 0.261-0.284
DIAMETER: 0.277"



140 gr. SST®
Item No. 27352
C.O.L.: 3.210"
G1 B.C.: 0.495

140 gr. InterLock® BTSP
Item No. 2735
C.O.L.: 3.210"
G1 B.C.: 0.486



***145 gr. ELD-X®**
Item No. 27356
C.O.L.: 3.210"
G1 B.C.: 0.485
G7 B.C.: 0.244

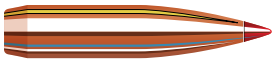
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
WIN 760	47.4 gr.	49.2 gr.	51.0 gr.	52.9 gr.	
H4350	47.4 gr.	49.3 gr.	51.2 gr.	53.1 gr.	
IMR 4350	48.1 gr.	49.7 gr.	51.4 gr.	53.0 gr.	
IMR 4451	47.9 gr.	49.9 gr.	51.8 gr.	53.7 gr.	
Hybrid 100V	48.9 gr.	50.3 gr.	51.8 gr.	53.3 gr.	
Accurate 4350	48.8 gr.	50.4 gr.	52.0 gr.	53.7 gr.	
Alliant RL-17	49.3 gr.	50.7 gr.	52.1 gr.	53.6 gr.	
IMR 4831	49.2 gr.	50.9 gr.	52.6 gr.	54.3 gr.	56.1 gr.
IMR 4007 SSC	49.2 gr.	51.0 gr.	52.8 gr.		
Alliant RL-19	51.0 gr.	52.7 gr.	54.3 gr.	56.0 gr.	57.6 gr.
Power Pro 4000 MR	51.1 gr.	52.8 gr.	54.4 gr.	56.0 gr.	
VIHT N-165	52.4 gr.	54.3 gr.	56.1 gr.	58.0 gr.	59.9 gr.
Alliant RL-22	52.8 gr.	54.5 gr.	56.2 gr.	57.9 gr.	59.7 gr.
H4831	53.0 gr.	54.7 gr.	56.5 gr.	58.2 gr.	59.9 gr.
WIN Supreme 780	54.6 gr.	56.3 gr.	58.1 gr.	59.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

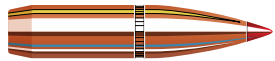
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.277"



150 gr. InterBond®
Item No. 27409
C.O.L.: 3.210"
G1 B.C.: 0.525



150 gr. SST®
Item No. 27402
C.O.L.: 3.210"
G1 B.C.: 0.525

150 gr. InterLock® SP
Item No. 2740
C.O.L.: 3.210"
G1 B.C.: 0.462

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
Hybrid 100V	46.6 gr.	48.2 gr.	49.8 gr.	51.5 gr.	
H4350	46.6 gr.	48.5 gr.	50.4 gr.	52.3 gr.	
IMR 4451	47.0 gr.	48.8 gr.	50.6 gr.		
Alliant RL-17	47.9 gr.	49.2 gr.	50.6 gr.	52.0 gr.	
Accurate 4350	47.3 gr.	49.0 gr.	50.8 gr.		
IMR 4350	47.4 gr.	49.1 gr.	50.8 gr.	52.5 gr.	
IMR 4831	48.1 gr.	50.0 gr.	51.9 gr.	53.8 gr.	
Power Pro 4000 MR	50.3 gr.	51.7 gr.	53.1 gr.	54.5 gr.	
Alliant RL-19	49.5 gr.	51.4 gr.	53.3 gr.	55.1 gr.	
Alliant RL-22	50.7 gr.	52.7 gr.	54.7 gr.	56.7 gr.	58.7 gr.
H4831	50.5 gr.	52.8 gr.	55.0 gr.	57.3 gr.	
VIHT N-165	50.9 gr.	53.0 gr.	55.1 gr.	57.1 gr.	
WIN Supreme 780	52.0 gr.	53.9 gr.	55.7 gr.	57.6 gr.	
Alliant RL-23	53.1 gr.	54.8 gr.	56.4 gr.		

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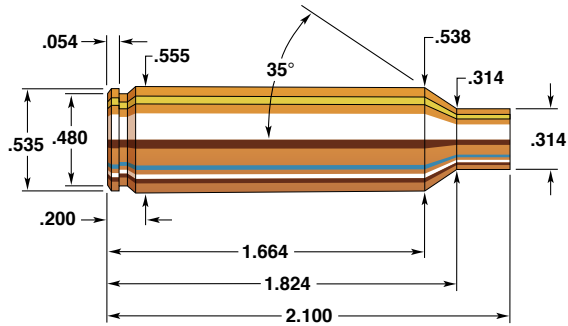


270 Winchester Short Magnum

Rifle:	Winchester Model 70	**Bullet Diameter:**	0.277"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	2.860"
Case:	Winchester	**Max. Case Length:**	2.100"
Primer:	Winchester WLRM	**Case Trim Length:**	2.090"

The 270 WSM (Winchester Short Magnum) is one in a family of cartridges from Winchester. Their choice of bore diameter is rather interesting, as there are only three other commercially available cartridges with a .277" bullet, which is generally accepted as a Winchester original.

As with most of the short magnums, the 270 WSM is chambered in lightweight, short action rifles, and marketed on the premise that they are the best of both worlds, magnum power in a light, quick handling rifle. This logic seems sound enough, but as the old saying goes “there is no such thing as a free lunch” and the light weight of the gun is offset by increased recoil. Barrel length is critical for efficient performance in a cartridge of this magnitude. Winchester chose 24" barrels on all of the rifles offered in 270 WSM, which gives the impression that Winchester considered the folly of earlier short magnums such as the 6.5 Remington Magnum and made an effort to position themselves for success.

Our test rifle seemed to prefer slower burning propellants such as H 4831 with our hunting weight bullets. The 270 WSM is an excellent long range hunting cartridge, especially when coupled with our 270 caliber SST® bullets now available in three different weights, 130, 140, and 150 grain, or the 130 grain GMX® bullet. If one chooses to do any varminting with this cartridge the 110 grain V-MAX® is an excellent choice, and best accuracy will be had with a bit faster burning propellant, such as H 4350.

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.186
DIAMETER: 0.277"

100 gr. SP *(Discontinued)*
Item No. 2710
C.O.L.: 2.660"
G1 B.C.: 0.307

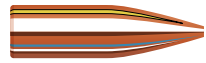
	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
Alliant RL-15	47.6 gr.	49.9 gr.	52.1 gr.	54.3 gr.	56.6 gr.	58.8 gr.
H4350	52.8 gr.	55.2 gr.	57.6 gr.	59.9 gr.	62.3 gr.	64.7 gr.
IMR 4350	58.3 gr.	60.1 gr.	61.8 gr.	63.6 gr.	65.3 gr.	67.0 gr.
VIHT N-160	56.9 gr.	59.2 gr.	61.5 gr.	63.8 gr.	66.1 gr.	68.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.277"

110 gr. V-MAX® W/C
Item No. 22721
C.O.L.: 2.720"
G1 B.C.: 0.370



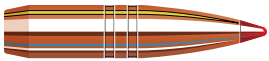
110 gr. HP *(Discontinued)*
Item No. 2720
C.O.L.: 2.720"
G1 B.C.: 0.352

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
Alliant RL-15	47.5 gr.	49.9 gr.	52.2 gr.	54.6 gr.	56.9 gr.
H4350	53.8 gr.	55.9 gr.	58.0 gr.	60.1 gr.	
IMR 4350	56.0 gr.	58.2 gr.	60.2 gr.	62.4 gr.	64.5 gr.
VIHT N-160	56.5 gr.	59.0 gr.	61.6 gr.	64.2 gr.	66.7 gr.

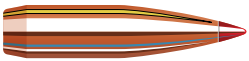
Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.242
DIAMETER: 0.277"

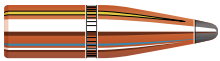


130 gr. GMX®
Item No. 27370
C.O.L.: 2.785"
G1 B.C.: 0.460



130 gr. InterBond®
Item No. 27309
C.O.L.: 2.785"
G1 B.C.: 0.460

130 gr. SST®
Item No. 27302
C.O.L.: 2.785"
G1 B.C.: 0.460



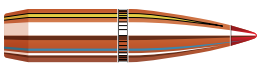
130 gr. InterLock® SP
Item No. 2730
C.O.L.: 2.785"
G1 B.C.: 0.409

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4350	52.8 gr.	55.2 gr.	57.6 gr.	60.0 gr.	
Alliant RL-19	51.6 gr.	54.9 gr.	58.2 gr.	61.5 gr.	
H4831	55.5 gr.	58.0 gr.	60.4 gr.	62.9 gr.	
VIHT N-165	61.7 gr.	63.2 gr.	64.8 gr.	66.4 gr.	67.9 gr.

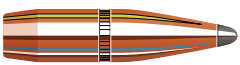
Create custom ballistic tables using our online calculators at hornady.com/ballistics

140-145 GRAIN BULLETS

SECTIONAL DENSITY: 0.261-0.284
DIAMETER: 0.277"



140 gr. SST®
Item No. 27352
C.O.L.: 2.785"
G1 B.C.: 0.495



140 gr. InterLock® BTSP
Item No. 2735
C.O.L.: 2.755"
G1 B.C.: 0.486

***145 gr. ELD-X®**
Item No. 27356
C.O.L.: 2.785"
G1 B.C.: 0.485
G7 B.C.: 0.244

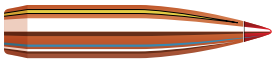
	VELOCITY (FPS – feet per second)			
POWDER	**2800**	**2900**	**3000**	**3100**
IMR 4350	53.4 gr.	56.0 gr.	58.6 gr.	
Alliant RL-19	53.9 gr.	56.5 gr.	59.1 gr.	61.7 gr.
H4831	55.8 gr.	58.3 gr.	60.8 gr.	63.3 gr.
VIHT N-165	60.4 gr.	62.5 gr.	64.6 gr.	66.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.277"



150 gr. InterBond®
Item No. 27409
C.O.L.: 2.785"
G1 B.C.: 0.525

150 gr. SST®
Item No. 27402
C.O.L.: 2.785"
G1 B.C.: 0.525

150 gr. InterLock® SP
Item No. 2740
C.O.L.: 2.765"
G1 B.C.: 0.462

	VELOCITY (FPS – feet per second)			
POWDER	**2700**	**2800**	**2900**	**3000**
H4350	48.9 gr.	52.2 gr.	55.5 gr.	58.8 gr.
Alliant RL-19	53.9 gr.	56.1 gr.	58.3 gr.	60.5 gr.
IMR 4831	55.1 gr.	57.0 gr.	58.9 gr.	60.9 gr.
VIHT N-165	57.8 gr.	60.1 gr.	62.4 gr.	64.8 gr.

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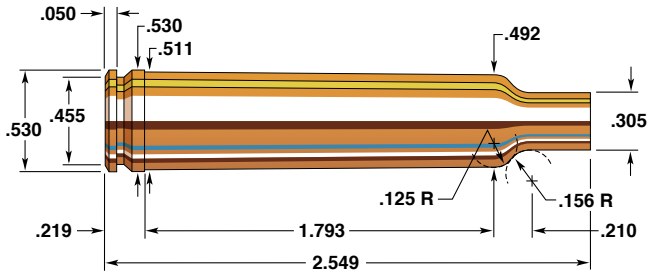

270 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.277"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	3.295"
Case:	.Weatherby	**Max. Case Length:**	2.549"
Primer:	Federal 215	**Case Trim Length:**	2.539"

The 270 Weatherby Magnum is at home anywhere on the North American continent. Its high velocity, flat trajectory, and long range stopping power make it a fine choice for thinskinned African plains animals as well.

This particular cartridge was actually the first case that Roy Weatherby derived from the necked down 300 H&H case and incorporates the signature Weatherby double radius shoulder. The 270 Weatherby Magnum is commercially available in the excellent Mark V Weatherby action and, given its effectiveness, has also been chambered by Ruger in its Number 1 action and U. S. Repeating Arms Co. in its famous Model 70.

By using the explosive Hornady 100 grain Spire Points or 110 grain V-MAX®, the 270 Weatherby Magnum can be used very effectively on varmints, but it is at its best with the heavier bullets. Hornady bullet selection is excellent, with weights from 130 grains to 150 grains in GMX®, ELD-X®, Interbond®, SST® and Traditional Configurations.

During our testing all powders gave acceptable results. Most large cartridges do not perform well with reduced loads and the 270 Weatherby Magnum cartridge is no exception. For best performance all loads should be kept near maximum. As always, work them up cautiously.

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.186
DIAMETER: 0.277"

100 gr. SP *(Discontinued)*
Item No. 2710
C.O.L.: 3.220"
G1 B.C.: 0.307

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
Alliant RL-15	54.8 gr.	56.5 gr.	58.3 gr.	60.1 gr.	61.8 gr.	
Accurate 4350	59.0 gr.	61.1 gr.	63.1 gr.	65.1 gr.	67.2 gr.	69.2 gr.
H4350	59.0 gr.	61.1 gr.	63.2 gr.	65.4 gr.	67.5 gr.	
IMR 4350	61.1 gr.	62.7 gr.	64.3 gr.	65.9 gr.	67.5 gr.	69.1 gr.
IMR 4831	60.0 gr.	62.2 gr.	64.3 gr.	66.5 gr.	68.7 gr.	70.8 gr.
VIHT N-160	62.3 gr.	64.3 gr.	66.3 gr.	68.3 gr.	70.3 gr.	
Alliant RL-19	67.1 gr.	68.7 gr.	70.3 gr.	71.9 gr.	73.5 gr.	75.1 gr.
H4831	62.3 gr.	65.1 gr.	68.0 gr.	70.9 gr.	73.8 gr.	
VIHT N-165	67.5 gr.	69.4 gr.	71.3 gr.	73.3 gr.	75.2 gr.	

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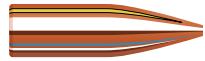
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.277"

110 gr. V-MAX® W/C
Item No. 22721
C.O.L.: 3.280"
G1 B.C.: 0.370



110 gr. HP *(Discontinued)*
Item No. 2720
C.O.L.: 3.280"
G1 B.C.: 0.352

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
Alliant RL-15	53.7 gr.	55.3 gr.	57.0 gr.	58.7 gr.	60.4 gr.
Accurate 4350	56.1 gr.	58.2 gr.	60.3 gr.	62.4 gr.	64.5 gr.
H4350	52.6 gr.	55.6 gr.	58.6 gr.	61.6 gr.	64.6 gr.
IMR 4350	58.5 gr.	60.2 gr.	61.9 gr.	63.6 gr.	65.3 gr.
IMR 4831	60.9 gr.	62.5 gr.	64.1 gr.	65.6 gr.	67.2 gr.
VIHT N-160	61.3 gr.	63.2 gr.	65.0 gr.	66.8 gr.	68.6 gr.
Alliant RL-19	63.6 gr.	65.6 gr.	67.5 gr.	69.5 gr.	71.5 gr.
H4831	60.1 gr.	63.0 gr.	65.9 gr.	68.8 gr.	71.7 gr.
VIHT N-165	64.9 gr.	66.9 gr.	68.9 gr.	70.9 gr.	72.9 gr.

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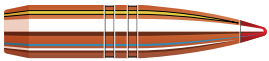
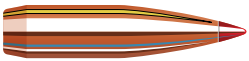
130 GRAIN BULLETS

SECTIONAL DENSITY: 0.242
DIAMETER: 0.277"

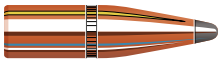


130 gr. GMX®
Item No. 27370
C.O.L.: 3.280"
G1 B.C.: 0.460



130 gr. InterBond®
Item No. 27309
C.O.L.: 3.280"
G1 B.C.: 0.460

130 gr. SST®
Item No. 27302
C.O.L.: 3.280"
G1 B.C.: 0.460



130 gr. InterLock® SP
Item No. 2730
C.O.L.: 3.240"
G1 B.C.: 0.409

	VELOCITY (FPS – feet per second)			
POWDER	**2900**	**3000**	**3100**	**3200**
Alliant RL-15	50.9 gr.	53.3 gr.	55.7 gr.	
IMR 4350	52.6 gr.	55.5 gr.	58.3 gr.	
H4350	54.8 gr.	57.0 gr.	59.2 gr.	
Accurate 4350	56.2 gr.	58.3 gr.	60.3 gr.	62.4 gr.
IMR 4831	56.2 gr.	58.4 gr.	60.7 gr.	63.0 gr.
VIHT N-160	60.4 gr.	62.3 gr.	64.2 gr.	66.2 gr.
H4831	61.9 gr.	64.2 gr.	66.5 gr.	68.8 gr.
Alliant RL-22	62.2 gr.	64.4 gr.	66.7 gr.	69.0 gr.
Alliant RL-19	63.0 gr.	64.9 gr.	66.7 gr.	68.5 gr.
VIHT N-165	63.9 gr.	66.0 gr.	68.1 gr.	70.1 gr.

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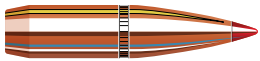
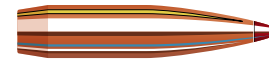
140-145 GRAIN BULLETS

SECTIONAL DENSITY: 0.261-0.284
DIAMETER: 0.277"



140 gr. SST®
Item No. 27352
C.O.L.: 3.240"
G1 B.C.: 0.495

140 gr. InterLock® BTSP
Item No. 2735
C.O.L.: 3.240"
G1 B.C.: 0.486



***145 gr. ELD-X®**
Item No. 27356
C.O.L.: 3.250"
G1 B.C.: 0.485
G7 B.C.: 0.244

	VELOCITY (FPS – feet per second)			
POWDER	**2800**	**2900**	**3000**	**3100**
Accurate 4350	48.5 gr.	52.2 gr.	56.0 gr.	
IMR 4350	54.3 gr.	56.4 gr.	58.6 gr.	
H4350	54.7 gr.	56.7 gr.	58.7 gr.	
IMR 4831	54.9 gr.	57.3 gr.	59.6 gr.	62.0 gr.
VIHT N-160	58.4 gr.	60.4 gr.	62.4 gr.	
Alliant RL-19	57.5 gr.	60.2 gr.	62.8 gr.	65.5 gr.
H4831	58.2 gr.	60.9 gr.	63.5 gr.	66.2 gr.
Alliant RL-22	61.4 gr.	63.4 gr.	65.3 gr.	67.3 gr.
VIHT N-165	61.0 gr.	63.4 gr.	65.7 gr.	68.1 gr.

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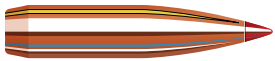
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.277"



150 gr. InterBond®
Item No. 27409
C.O.L.: 3.250"
G1 B.C.: 0.525

150 gr. SST®
Item No. 27402
C.O.L.: 3.250"
G1 B.C.: 0.525

150 gr. InterLock® SP
Item No. 2740
C.O.L.: 3.210"
G1 B.C.: 0.462

	VELOCITY (FPS – feet per second)			
POWDER	**2700**	**2800**	**2900**	**3000**
IMR 4350	52.3 gr.	54.7 gr.	57.1 gr.	
H4350	52.6 gr.	55.1 gr.	57.6 gr.	
IMR 4831	53.8 gr.	56.3 gr.	58.5 gr.	
Alliant RL-19	54.5 gr.	57.7 gr.	61.0 gr.	64.3 gr.
H4831	56.5 gr.	59.3 gr.	62.0 gr.	
Alliant RL-22	59.7 gr.	61.9 gr.	64.1 gr.	66.3 gr.
VIHT N-165	60.2 gr.	62.6 gr.	65.1 gr.	
IMR 7828	61.1 gr.	63.3 gr.	65.5 gr.	67.8 gr.
Alliant RL-25	65.3 gr.	67.5 gr.	69.6 gr.	71.8 gr.

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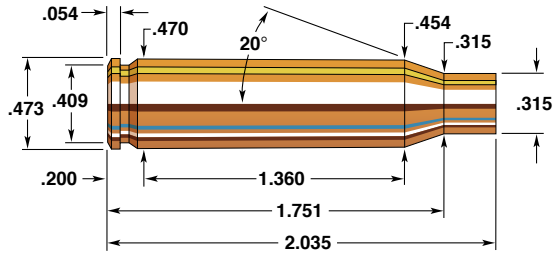


7mm-08 Remington

Rifle:	T/C Encore	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9" Twist	**Maximum COL:**	2.800"
Case:	Hornady/Frontier	**Max. Case Length:**	2.035"
Primer:	Remington 9½	**Case Trim Length:**	2.025"

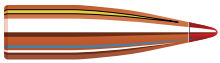
Ammunition makers are fond of extending their product line by necking down (or up) cartridges already in their catalog. The parentage of the 7mm-08 Remington is simple to decipher. This medium capacity cartridge was introduced by the firm in 1980 and is the 308 Winchester necked down to the increasingly popular 7mm caliber. Why it took Remington until 1980 to do so poses an interesting question; wildcatters had been doing exactly the same thing for over two decades. The cartridge was originally chambered in Remington's Model 788 and 700BDL Varmint Special rifles.

The 7mm-08 Remington is deemed suitable for most North American game, especially given the fact that it can be reloaded with heavier bullets than the 120 and 140 grain projectiles used in factory loads. The cartridge has also gathered a following among metallic silhouette shooters. Good ballistic performance, greater bullet choice for handloaders, and power enough to deliver knock down velocities over distant hunting or target ranges all favor the cartridge's popularity, especially among silhouette shooters.

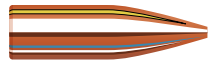
As 7mm caliber has grown in popularity over the years, so has the line of Hornady Bullets manufactured in that caliber. Among the most efficient long range hunting choices are the 139 grain GMX® and 154 grain Interbond®. Hornady's 7mm 162 grain ELD® Match is designed expressly for match use. The 7mm-08 performs well with a wide variety of medium burning powders.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.700"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.700"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 2495	34.1 gr.	36.1 gr.	38.2 gr.	40.2 gr.	42.2 gr.	
H4895	34.6 gr.	36.4 gr.	38.2 gr.	40.0 gr.	41.8 gr.	
VARGET	36.5 gr.	38.3 gr.	40.1 gr.	41.9 gr.	43.7 gr.	
IMR 4064	37.4 gr.	38.8 gr.	40.2 gr.	41.7 gr.	43.1 gr.	
VIHT N-140	37.3 gr.	39.0 gr.	40.6 gr.	42.2 gr.		
IMR 8208 XBR	37.6 gr.	39.1 gr.	40.7 gr.	42.2 gr.	43.8 gr.	
Alliant RL-15	37.8 gr.	39.3 gr.	40.8 gr.	42.2 gr.	43.7 gr.	
Power Pro 2000 MR	41.9 gr.	43.5 gr.	45.2 gr.	46.9 gr.	48.6 gr.	50.0 gr.
WIN 760	41.5 gr.	43.6 gr.	45.6 gr.	47.7 gr.	49.7 gr.	
Accurate 4350	43.9 gr.	45.3 gr.	46.6 gr.			
IMR 4007 SSC	43.9 gr.	45.7 gr.	47.5 gr.			

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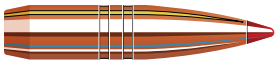
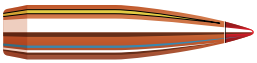
139 GRAIN BULLETS

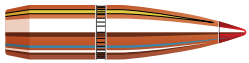
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



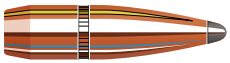
139 gr. GMX®
Item No. 28270
C.O.L.: 2.755"
G1 B.C.: 0.486



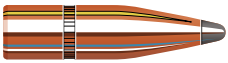
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.755"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.755"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.775"
G1 B.C.: 0.453



139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.775"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
Accurate 2495	33.2 gr.	35.0 gr.	36.9 gr.	38.8 gr.	40.6 gr.	
IMR 4064	34.1 gr.	35.9 gr.	37.6 gr.	39.4 gr.	41.1 gr.	
IMR 8208 XBR	33.2 gr.	35.3 gr.	37.4 gr.	39.5 gr.	41.6 gr.	
VARGET	33.5 gr.	35.5 gr.	37.5 gr.	39.5 gr.	41.5 gr.	
Alliant RL-15	35.0 gr.	36.7 gr.	38.4 gr.	40.1 gr.	41.9 gr.	
VIHT N-140	35.1 gr.	36.9 gr.	38.6 gr.	40.4 gr.		
Power Pro 2000 MR	37.1 gr.	39.1 gr.	41.1 gr.	43.1 gr.	45.1 gr.	47.0 gr.
IMR 4007 SSC	36.3 gr.	38.8 gr.	41.4 gr.	44.0 gr.	46.6 gr.	
IMR 4350	39.5 gr.	41.3 gr.	43.0 gr.	44.8 gr.	46.5 gr.	
Accurate 4350	41.0 gr.	42.4 gr.	43.7 gr.	45.0 gr.		
WIN 760	40.1 gr.	41.9 gr.	43.6 gr.	45.4 gr.	47.1 gr.	48.9 gr.
Alliant RL-17	41.3 gr.	42.7 gr.	44.2 gr.	45.6 gr.	47.1 gr.	
H414	40.8 gr.	42.6 gr.	44.5 gr.	46.3 gr.	48.1 gr.	49.9 gr.
VIHT N-160	41.5 gr.	43.1 gr.	44.7 gr.	46.4 gr.	48.0 gr.	

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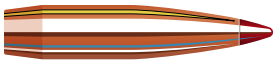
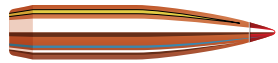
150-154 GRAIN BULLETS

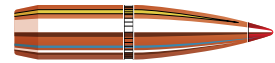
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



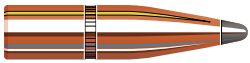
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.800"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.755"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.755"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.800"
G1 B.C.: 0.433

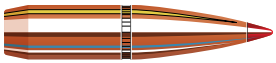
	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4064	33.7 gr.	35.4 gr.	37.2 gr.	38.9 gr.	40.7 gr.	
VARGET	33.4 gr.	35.3 gr.	37.1 gr.	39.0 gr.		
Alliant RL-15	34.3 gr.	36.1 gr.	37.8 gr.	39.5 gr.		
VIHT N-140	34.4 gr.	36.2 gr.	38.1 gr.	39.9 gr.		
Power Pro 2000 MR	36.4 gr.	38.3 gr.	40.2 gr.	42.1 gr.	44.0 gr.	
IMR 4350	38.2 gr.	39.9 gr.	41.6 gr.	43.3 gr.	45.0 gr.	
WIN 760	38.6 gr.	40.3 gr.	42.1 gr.	43.9 gr.	45.6 gr.	
Accurate 4350	39.6 gr.	41.1 gr.	42.6 gr.	44.0 gr.		
IMR 4007 SSC	38.8 gr.	40.6 gr.	42.4 gr.	44.2 gr.	46.0 gr.	
Alliant RL-17	39.6 gr.	41.2 gr.	42.8 gr.	44.4 gr.	46.0 gr.	47.5 gr.
H414	39.4 gr.	41.2 gr.	43.0 gr.	44.7 gr.	46.5 gr.	48.3 gr.
VIHT N-160	39.6 gr.	41.5 gr.	43.3 gr.	45.2 gr.	47.1 gr.	
Alliant RL-19	41.8 gr.	43.5 gr.	45.1 gr.	46.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

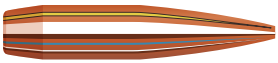
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

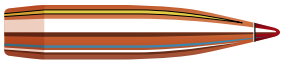
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



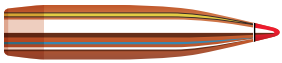
162 gr. SST®
Item No. 28452
C.O.L.: 2.755"
G1 B.C.: 0.550



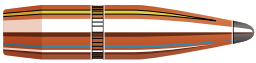
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.755"
G1 B.C.: 0.610



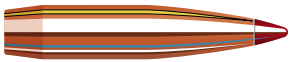
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.755"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.755"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.800"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.755"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VARGET	30.7 gr.	32.9 gr.	35.1 gr.	37.3 gr.	39.5 gr.	
IMR 4064	32.1 gr.	34.0 gr.	35.9 gr.	37.9 gr.	39.8 gr.	
VIHT N-140	32.1 gr.	34.1 gr.	36.1 gr.	38.1 gr.		
Alliant RL-15	32.6 gr.	34.4 gr.	36.3 gr.	38.1 gr.	39.9 gr.	
IMR 4350	37.1 gr.	38.7 gr.	40.4 gr.	42.1 gr.	43.8 gr.	
WIN 760	36.9 gr.	38.8 gr.	40.7 gr.	42.6 gr.	44.5 gr.	
Power Pro 2000 MR	34.3 gr.	37.6 gr.	40.8 gr.			
Accurate 4350	37.9 gr.	39.4 gr.	41.0 gr.	42.5 gr.	44.1 gr.	
H414	37.5 gr.	39.3 gr.	41.1 gr.	43.0 gr.	44.8 gr.	46.6 gr.
IMR 4007 SSC	38.7 gr.	39.6 gr.	41.3 gr.	43.0 gr.	44.7 gr.	
VIHT N-160	37.6 gr.	39.5 gr.	41.4 gr.	43.3 gr.	45.2 gr.	
Alliant RL-17	38.2 gr.	39.8 gr.	41.4 gr.	42.9 gr.	44.5 gr.	46.0 gr.

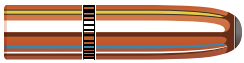
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

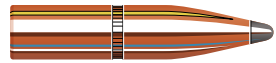
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

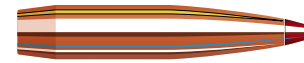
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.785"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.800"
G1 B.C.: 0.462



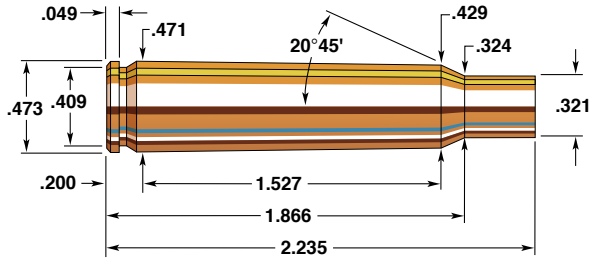
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 2.800"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
VARGET	32.5 gr.	34.6 gr.	36.8 gr.	38.9 gr.	
Alliant RL-15	33.9 gr.	35.9 gr.	37.9 gr.		
VIHT N-140	34.0 gr.	36.0 gr.	38.0 gr.		
IMR 4350	37.0 gr.	39.0 gr.	41.0 gr.	43.1 gr.	
Accurate 4350	38.7 gr.	40.3 gr.	41.9 gr.		
H414	38.4 gr.	40.3 gr.	42.1 gr.	44.0 gr.	45.9 gr.
WIN 760	38.9 gr.	40.5 gr.	42.1 gr.	43.7 gr.	
VIHT N-160	38.6 gr.	40.7 gr.	42.7 gr.	44.7 gr.	
Alliant RL-19	40.6 gr.	42.4 gr.	44.1 gr.	45.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7 X 57mm Mauser

Rifle:	Winchester 70	**Bullet Diameter:**	0.284"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	3.065"
Case:	Hornady/Frontier	**Max. Case Length:**	2.235"
Primer:	Winchester WLR	**Case Trim Length:**	2.225"

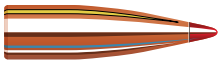
Originally a military round, the 7 x 57mm is a popular and effective sporting round. Mauser developed the cartridge in 1892 and Americans encountered it in 1898 when they faced the Spanish in Cuba. American manufacturers provide loaded ammunition, but few offer rifles chambered for the 7 x 57mm. It is more popular in European countries, where rimmed versions of the 7 x 57mm are also available. It is also known as the 275 Rigby cartridge. Both are usually chambered in combination guns and the maximum loads listed here should be reduced 10 to 15% for them. We developed data in the strong, modern Winchester Model 70. This data should not be used in the older Mauser Model 93 or 95 and, as always, max loads should be approached cautiously in all rifles.

Ballistically, the 7mm Mauser, as shown here, is only slightly less powerful than the 270 Winchester, 280 Remington, and the 284 Winchester. The cartridge is more than adequate for nearly all North American big game and many of the plains game of Africa.

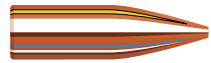
Powders that produced best results in our rifle were IMR 4064, and WIN 760. The 139 and 154 grain Interbond® make ideal medium game bullets, with the 175 grain Spire Point being better suited for elk and other large game.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.850"
G1 B.C.: 0.365



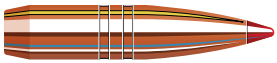
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.850"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
Accurate 2495	32.5 gr.	34.3 gr.	36.2 gr.	38.0 gr.	39.8 gr.	
VIHT N-140	34.1 gr.	35.7 gr.	37.3 gr.	38.9 gr.	40.5 gr.	42.0 gr.
WIN 748	35.3 gr.	36.7 gr.	38.2 gr.	39.7 gr.	41.1 gr.	42.6 gr.
Alliant RL-15	34.9 gr.	36.5 gr.	38.0 gr.	39.6 gr.	41.2 gr.	42.7 gr.
IMR 4064	35.8 gr.	37.2 gr.	38.6 gr.	40.1 gr.	41.5 gr.	42.9 gr.
VARGET	35.6 gr.	37.2 gr.	38.8 gr.	40.4 gr.	42.0 gr.	43.5 gr.
Accurate 2700	37.0 gr.	38.9 gr.	40.8 gr.	42.7 gr.	44.5 gr.	46.4 gr.
IMR 4350	40.1 gr.	41.7 gr.	43.3 gr.	44.9 gr.	46.5 gr.	48.1 gr.
H4350	40.7 gr.	42.4 gr.	44.1 gr.	45.8 gr.	47.5 gr.	49.1 gr.

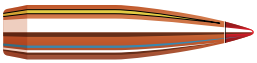
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

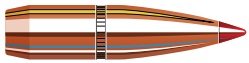
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



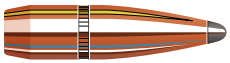
139 gr. GMX®
Item No. 28270
C.O.L.: 3.000"
G1 B.C.: 0.486



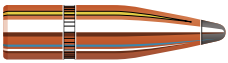
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.000"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.000"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.000"
G1 B.C.: 0.453



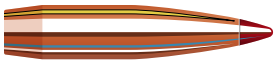
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.000"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VIHT N-140	31.7 gr.	33.7 gr.	35.7 gr.	37.7 gr.	39.8 gr.	
Alliant RL-15	33.2 gr.	35.1 gr.	37.1 gr.	39.0 gr.	41.0 gr.	
VARGET	34.5 gr.	36.1 gr.	37.8 gr.	39.4 gr.	41.1 gr.	
IMR 4064	34.2 gr.	36.0 gr.	37.9 gr.	39.7 gr.	41.5 gr.	
WIN 748	34.0 gr.	36.0 gr.	38.0 gr.	40.1 gr.	42.1 gr.	
Accurate 2700	35.0 gr.	37.4 gr.	39.9 gr.	42.3 gr.	44.8 gr.	47.2 gr.
IMR 4350	38.9 gr.	40.7 gr.	42.4 gr.	44.2 gr.	45.9 gr.	
Accurate 4350	39.5 gr.	41.3 gr.	43.1 gr.	44.9 gr.	46.6 gr.	
H4350	39.8 gr.	41.5 gr.	43.2 gr.	44.9 gr.	46.6 gr.	48.3 gr.
IMR 4831	40.4 gr.	42.2 gr.	43.9 gr.	45.7 gr.	47.4 gr.	
VIHT N-160	41.6 gr.	43.3 gr.	45.0 gr.	46.7 gr.	48.4 gr.	

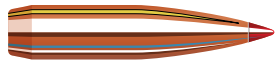
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

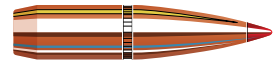
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



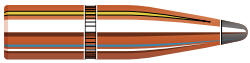
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.000"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.000"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.000"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.000"
G1 B.C.: 0.433

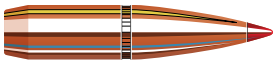
	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4064	32.9 gr.	34.7 gr.	36.5 gr.	38.3 gr.	
Alliant RL-15	33.5 gr.	35.5 gr.	37.4 gr.	39.4 gr.	
WIN 760	37.0 gr.	38.9 gr.	40.7 gr.	42.6 gr.	44.5 gr.
Accurate 4350	37.3 gr.	39.3 gr.	41.2 gr.	43.2 gr.	45.2 gr.
VIHT N-160	37.3 gr.	39.3 gr.	41.3 gr.	43.4 gr.	45.4 gr.
IMR 4350	37.9 gr.	39.8 gr.	41.6 gr.	43.4 gr.	
H4831	39.6 gr.	41.8 gr.	44.0 gr.	46.2 gr.	48.4 gr.
Alliant RL-19	41.5 gr.	43.1 gr.	44.8 gr.	46.4 gr.	48.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

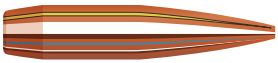
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

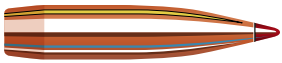
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



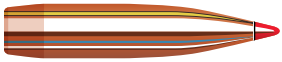
162 gr. SST®
Item No. 28452
C.O.L.: 3.000"
G1 B.C.: 0.550



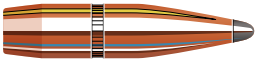
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.000"
G1 B.C.: 0.610



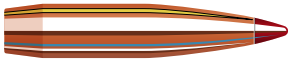
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.000"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.000"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.000"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.000"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4350	38.1 gr.	39.5 gr.	41.0 gr.	42.5 gr.	44.0 gr.
WIN 760	36.4 gr.	38.5 gr.	40.6 gr.	42.7 gr.	44.8 gr.
H4350	37.4 gr.	39.2 gr.	41.0 gr.	42.8 gr.	44.6 gr.
Accurate 4350	38.3 gr.	39.9 gr.	41.4 gr.	42.9 gr.	
IMR 4831	38.7 gr.	40.4 gr.	42.1 gr.	43.8 gr.	
VIHT N-160	38.8 gr.	40.7 gr.	42.7 gr.	44.6 gr.	
H4831	40.6 gr.	42.3 gr.	44.1 gr.	45.8 gr.	47.6 gr.
Alliant RL-22	41.5 gr.	43.1 gr.	44.7 gr.	46.4 gr.	48.0 gr.

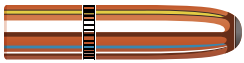
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

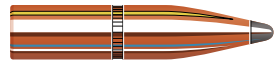
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

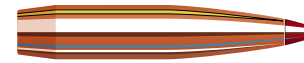
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.015"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.000"
G1 B.C.: 0.462

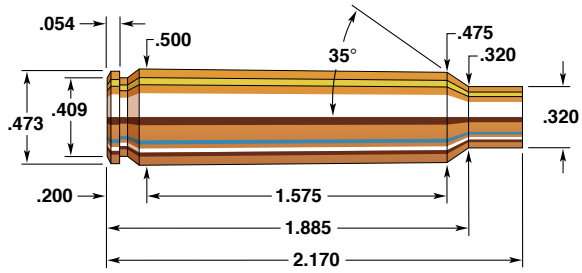


***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.000"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**
Accurate 2700	34.3 gr.	36.3 gr.	38.3 gr.	40.3 gr.	42.4 gr.
WIN 760	35.4 gr.	37.1 gr.	38.8 gr.	40.4 gr.	42.1 gr.
H414	35.3 gr.	37.1 gr.	38.9 gr.	40.7 gr.	42.5 gr.
Accurate 4350	35.7 gr.	37.5 gr.	39.3 gr.	41.1 gr.	
IMR 4831	35.7 gr.	37.5 gr.	39.3 gr.	41.2 gr.	43.0 gr.
H4831	37.7 gr.	39.5 gr.	41.3 gr.	43.1 gr.	
Alliant RL-19	38.6 gr.	40.6 gr.	42.5 gr.	44.4 gr.	46.4 gr.
IMR 7828	39.8 gr.	41.7 gr.	43.6 gr.	45.5 gr.	47.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



284 Winchester

Rifle:	T/C Encore	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9" Twist	**Maximum COL:**	2.800"
Case:	Winchester	**Max. Case Length:**	2.170"
Primer:	Remington 9½	**Case Trim Length:**	2.160"

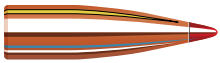
The 284 Winchester is a 7mm cartridge designed to approximate 270 Winchester performance yet function through Winchester's short-action Model 88 and Model 100 rifles. To achieve 270 performance, Winchester developed a unique case with a rebated rim the size of the 308's, a larger case head, and a body nearly the size of the big belted magnums.

The interesting new 284 case inspired a great surge of wildcatting activity. The case has been necked down to 22, 6mm, 25, and 6.5mm calibers and up to 30 and 35 calibers, producing wildcats similar to those based on the 30-06 case, but better adapted to short actions. One problem with the 284's design is the short case neck which requires long bullets to be seated deeply in the case in lever and autoloading actions. Custom bolt actions can be made to take this problem into account and thus maintain the full potential of the 284. In shorter actions, bullets must be seated deeper (to a maximum C.O.L of 2.800") to fit these firearms' magazines and actions. Accordingly, the next to maximum load listed should be tops and should be approached cautiously. Modern lever- and autoloading actions are strong, but their camming action may make case extractions difficult with maximum loads. Sub-maximum loads will be more easily extracted.

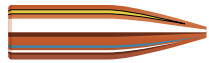
In our custom T/C Encore test rifle, 154 grain Hornady Spire Points could be driven up to 2700 fps, and all 7mm bullets delivered excellent accuracy. The 284 is adequate for all North American game, as are its ballistic counterparts the, 270 and the 280.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.905"
G1 B.C.: 0.365



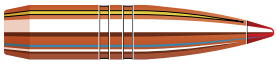
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.905"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
VARGET	38.2 gr.	40.1 gr.	42.0 gr.	43.8 gr.	45.7 gr.	47.6 gr.
VIHT N-140	37.7 gr.	39.8 gr.	41.9 gr.	44.0 gr.	46.1 gr.	48.1 gr.
WIN 748	38.8 gr.	40.8 gr.	42.8 gr.	44.8 gr.	46.9 gr.	48.9 gr.
Accurate 4350	45.0 gr.	46.8 gr.	48.5 gr.	50.3 gr.	52.0 gr.	53.8 gr.
Alliant RL-19	47.3 gr.	49.2 gr.	51.1 gr.	53.0 gr.	54.9 gr.	56.8 gr.

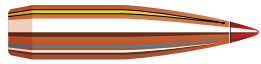
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

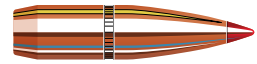
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



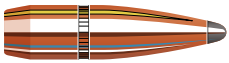
139 gr. GMX®
Item No. 28270
C.O.L.: 2.960"
G1 B.C.: 0.486



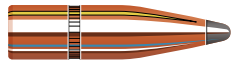
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.960"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.960"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.960"
G1 B.C.: 0.453



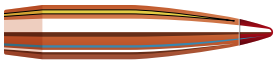
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.960"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
VARGET	37.8 gr.	39.5 gr.	41.3 gr.	43.1 gr.		
VIHT N-140	37.1 gr.	39.2 gr.	41.2 gr.	43.3 gr.	45.3 gr.	
WIN 748	37.9 gr.	40.1 gr.	42.2 gr.	44.3 gr.	46.4 gr.	
Accurate 4350	43.6 gr.	45.4 gr.	47.3 gr.	49.1 gr.	51.0 gr.	52.8 gr.
Alliant RL-19	45.6 gr.	47.7 gr.	49.7 gr.	51.8 gr.	53.8 gr.	55.9 gr.

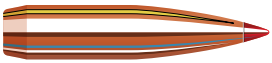
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

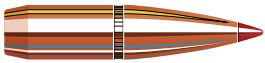
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



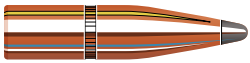
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.975"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.975"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.975"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.975"
G1 B.C.: 0.433

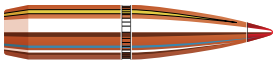
	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VARGET	35.2 gr.	37.0 gr.	38.9 gr.	40.8 gr.	42.7 gr.	
VIHT N-140	34.6 gr.	36.7 gr.	38.8 gr.	40.9 gr.	43.0 gr.	
WIN 760	40.2 gr.	42.1 gr.	44.0 gr.	45.9 gr.	47.9 gr.	49.8 gr.
Accurate 4350	40.4 gr.	42.4 gr.	44.5 gr.	46.5 gr.	48.6 gr.	50.6 gr.
Alliant RL-19	42.2 gr.	44.3 gr.	46.4 gr.	48.5 gr.	50.6 gr.	52.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

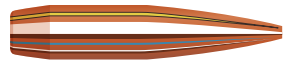
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

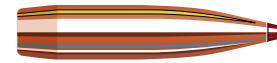
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



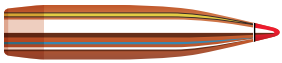
162 gr. SST®
Item No. 28452
C.O.L.: 2.995"
G1 B.C.: 0.550



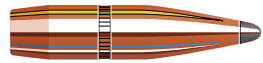
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.995"
G1 B.C.: 0.610



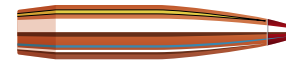
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.995"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.995"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.995"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.995"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VARGET	35.2 gr.	37.0 gr.	38.8 gr.	40.6 gr.	42.4 gr.	
IMR 4064	35.0 gr.	36.8 gr.	38.7 gr.	40.6 gr.	42.5 gr.	
H4350	38.9 gr.	41.3 gr.	43.6 gr.	45.9 gr.	48.2 gr.	50.5 gr.
WIN 760	40.0 gr.	42.0 gr.	44.1 gr.	46.1 gr.	48.2 gr.	50.2 gr.
VIHT N-160	39.6 gr.	41.8 gr.	44.0 gr.	46.1 gr.	48.3 gr.	
Accurate 4350	40.6 gr.	42.6 gr.	44.6 gr.	46.6 gr.	48.6 gr.	50.6 gr.
IMR 4831	42.5 gr.	44.6 gr.	46.7 gr.	48.9 gr.	51.0 gr.	53.1 gr.
Alliant RL-19	42.5 gr.	44.6 gr.	46.8 gr.	49.0 gr.	51.2 gr.	53.3 gr.

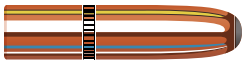
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

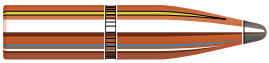
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

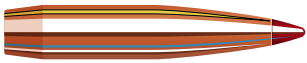
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.895"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.980"
G1 B.C.: 0.462



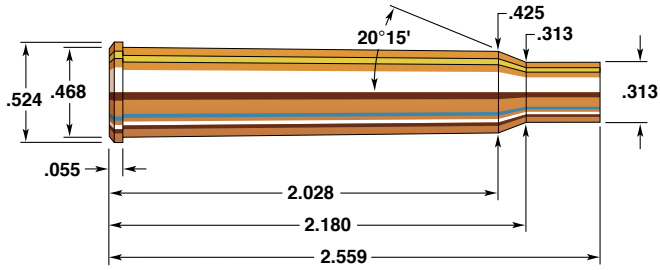
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 2.995"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
VIHT N-160	38.3 gr.	40.5 gr.	42.7 gr.	44.9 gr.	47.1 gr.	
Accurate 4350	38.5 gr.	40.7 gr.	42.9 gr.	45.2 gr.	47.4 gr.	
WIN 760	38.9 gr.	41.0 gr.	43.2 gr.	45.3 gr.	47.4 gr.	
Alliant RL-19	39.8 gr.	42.4 gr.	44.9 gr.	47.4 gr.	49.9 gr.	52.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7 X 65mm R

Rifle:	Custom	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9" Twist	**Maximum COL:**	.3.291"
Case:	Hornady	**Max. Case Length:**	2.559"
Primer:	Federal 210	**Case Trim Length:**	2.549"

The 7 x 65mm R is a cartridge developed in 1917 by the German ballistician Wilhelm Brenneke. Its popularity remains primarily European, and it is chambered most often there in double rifles, drillings, and single shots.

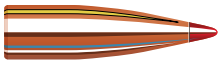
Frank Barnes observed in his encyclopedic and popular *Cartridges of the World* that "those who think everything new and worthwhile always originates as the result of good old Yankee ingenuity better take a look at this cartridge [the 7 x 65mm R.]". Basically, the 7 x 65mm R is close to the 280 Remington in case capacity and dimensions, though it possesses a rim—and a 40 year head start on the 280. Anything hunted with the 280 Remington (and, for that matter, the 7mm-06) can be hunted with the 7 x 65mm R. It is unlikely that this particular cartridge will ever gain much of a following for North American hunting purposes because of wildcat and upstart competition, but its European popularity should continue for some time.

Caution must be used when using the data presented here, as this data was obtained with a strong bolt action modern rifle. Normally, combination guns are not capable of handling loads equivalent to that of the bolt action. For this reason, loads should be reduced 10 to 15% when loading for combination guns.

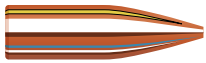
Best accuracy and uniformity in our test rifle was obtained with IMR 4831, VIHT N-160 and IMR 4350.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.300"
G1 B.C.: 0.365



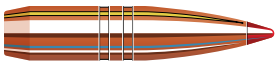
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.300"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3150**
Accurate 2495	41.4 gr.	42.8 gr.	44.3 gr.	45.7 gr.	47.2 gr.	
NORMA 202	42.2 gr.	44.0 gr.	45.7 gr.	47.5 gr.	49.2 gr.	
VARGET	41.2 gr.	43.3 gr.	45.4 gr.	47.4 gr.	49.5 gr.	50.5 gr.
VIHT N-140	43.7 gr.	45.2 gr.	46.8 gr.	48.3 gr.	49.8 gr.	
IMR 4064	41.7 gr.	43.7 gr.	45.8 gr.	47.8 gr.	49.9 gr.	50.9 gr.
Alliant RL-15	44.7 gr.	46.3 gr.	47.8 gr.	49.4 gr.	51.0 gr.	51.8 gr.
H4350	48.1 gr.	50.3 gr.	52.5 gr.	54.6 gr.	56.8 gr.	57.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

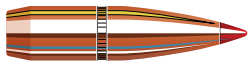
139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

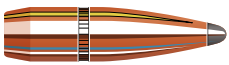


139 gr. GMX®
Item No. 28270
C.O.L.: 3.350"
G1 B.C.: 0.486

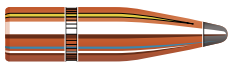
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.350"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.350"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.350"
G1 B.C.: 0.453



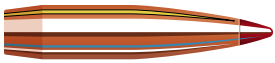
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.350"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**
Hybrid 100V	46.1 gr.	48.3 gr.	50.4 gr.	52.5 gr.	53.6 gr.	54.6 gr.
IMR 4350	48.5 gr.	50.2 gr.	51.9 gr.	53.7 gr.	54.5 gr.	55.4 gr.
H4350	47.4 gr.	49.5 gr.	51.7 gr.	53.9 gr.	54.9 gr.	
IMR 4451	47.9 gr.	49.9 gr.	51.9 gr.	54.0 gr.		
Hunter	48.6 gr.	50.7 gr.	52.7 gr.	54.8 gr.	55.8 gr.	
VIHT N-160	49.4 gr.	51.2 gr.	53.0 gr.	54.8 gr.	55.7 gr.	
SUPERFORMANCE	50.4 gr.	52.3 gr.	54.3 gr.	56.2 gr.	57.2 gr.	58.1 gr.
Alliant RL-19	52.4 gr.	54.2 gr.	56.0 gr.	57.8 gr.	58.7 gr.	

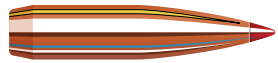
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

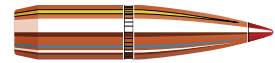
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



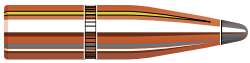
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.340"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.340"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.340"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.340"
G1 B.C.: 0.433

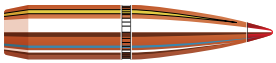
	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
Hybrid 100V	44.3 gr.	46.8 gr.	49.3 gr.	51.8 gr.	53.0 gr.	
H4350	46.3 gr.	48.5 gr.	50.8 gr.	53.1 gr.		
IMR 4350	46.5 gr.	48.6 gr.	50.8 gr.	52.9 gr.	53.9 gr.	
IMR 4451	46.9 gr.	49.2 gr.	51.5 gr.			
Hunter	47.2 gr.	49.9 gr.	52.5 gr.	55.2 gr.		
VIHT N-160	49.0 gr.	50.9 gr.	52.8 gr.	54.6 gr.		
Alliant RL-19	50.5 gr.	52.4 gr.	54.3 gr.	56.2 gr.	57.1 gr.	58.1 gr.
SUPERFORMANCE	50.9 gr.	52.7 gr.	54.6 gr.	56.5 gr.	57.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

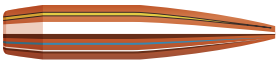
*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

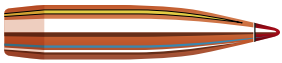
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



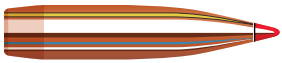
162 gr. SST®
Item No. 28452
C.O.L.: 3.340"
G1 B.C.: 0.550



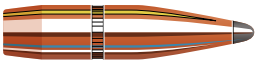
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.340"
G1 B.C.: 0.610



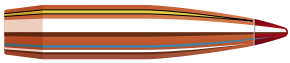
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.300"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.300"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.340"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.340"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2750**	**2800**
Hybrid 100V	45.7 gr.	47.5 gr.	49.3 gr.	50.2 gr.	51.1 gr.
IMR 4451	46.1 gr.	48.2 gr.	50.3 gr.		
IMR 4350	47.0 gr.	48.7 gr.	50.5 gr.	51.4 gr.	52.3 gr.
H4350	45.6 gr.	48.1 gr.	50.7 gr.	51.9 gr.	
SUPERFORMANCE	47.4 gr.	49.2 gr.	51.1 gr.	52.0 gr.	53.0 gr.
Hunter	46.8 gr.	49.0 gr.	51.3 gr.	52.4 gr.	
VIHT N-160	48.1 gr.	49.9 gr.	51.7 gr.	52.6 gr.	53.5 gr.
Alliant RL-19	49.1 gr.	50.8 gr.	52.5 gr.	53.3 gr.	54.2 gr.

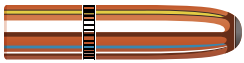
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

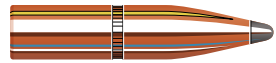
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

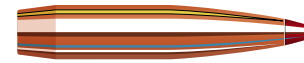
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.290"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.300"
G1 B.C.: 0.462



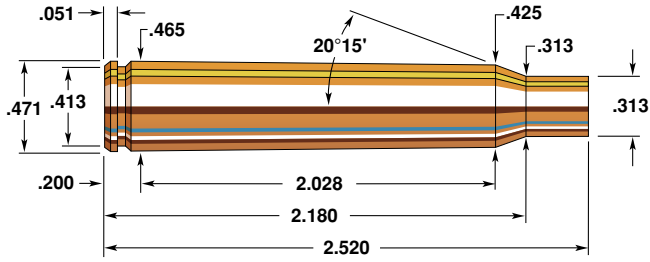
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.340"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
H4350	42.4 gr.	45.0 gr.	47.7 gr.	50.4 gr.	
Hybrid 100V	43.3 gr.	45.5 gr.	47.7 gr.	49.9 gr.	
IMR 4451	44.4 gr.	46.5 gr.	48.5 gr.		
IMR 4350	44.5 gr.	46.6 gr.	48.7 gr.	50.7 gr.	
SUPERFORMANCE	44.8 gr.	47.0 gr.	49.1 gr.	51.3 gr.	
Hunter	45.5 gr.	47.7 gr.	50.0 gr.	52.3 gr.	
VIHT N-160	46.1 gr.	48.1 gr.	50.1 gr.	52.1 gr.	
Alliant RL-19	47.8 gr.	49.7 gr.	51.5 gr.	53.4 gr.	54.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7 X 64mm Brenneke

Rifle:	Sauer 101	**Bullet Diameter:**	0.284"
Barrel:	.22", 1 in 8.66" Twist	**Maximum COL:**	3.307"
Case:	Hornady	**Max. Case Length:**	2.522"
Primer:	Winchester WLR	**Case Trim Length:**	.2.512"

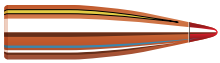
German designer, Wilhelm Brenneke created the 7x64mm cartridge in 1917. Over the years it has gained popularity in Europe and other locales as an excellent hunting cartridge. While it's never seen major popularity in the United States, it is nonetheless an admirable hunting round. With ballistics similar (though not interchangeable) to the 280 Remington, its velocity combined with a wide variety of 7mm bullet options make it a versatile option for the field. The 7x65mm R is the rimmed version of this cartridge.

A 120 grain V-Max bullet at 3,100 feet per second covers the varmint end of the versatility spectrum. For deer size game, all of the 139 grain options in InterLock, SST and GMX are all excellent choices. Nearing 2,700 feet per second, the 162 grain ELD-X bullet is suitable for both deer and elk size game. A 175 grain InterLock spire point at 2,650 feet per second is an impressive option that completes the 7x64mm's broad versatility.

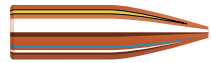
Reloader 17 provided impressive velocities across a variety of bullet weights. The always consistent H 4350 performed well in lighter bullet weights with H 4831 taking over in the heavier 154 to 162 grain bullet options.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.250"
G1 B.C.: 0.365



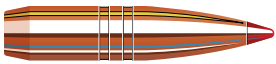
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.250"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
Alliant RL-15	40.9 gr.	42.9 gr.	45.0 gr.	47.0 gr.	49.1 gr.	51.1 gr.
Alliant RL-17	45.2 gr.	47.3 gr.	49.4 gr.	51.4 gr.	53.5 gr.	55.6 gr.
Hybrid 100V	47.3 gr.	49.2 gr.	51.1 gr.	53.0 gr.	54.9 gr.	56.9 gr.
H4350	47.1 gr.	49.1 gr.	51.1 gr.	53.1 gr.	55.1 gr.	57.1 gr.
WIN 760	48.0 gr.	49.9 gr.	51.8 gr.	53.7 gr.	55.6 gr.	
IMR 4350	47.2 gr.	49.5 gr.	51.8 gr.	54.1 gr.		
Alliant RL-19	53.4 gr.	55.1 gr.	56.9 gr.	58.6 gr.		
H4831	53.0 gr.	55.4 gr.	57.8 gr.	60.2 gr.		

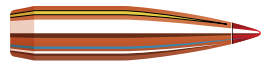
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

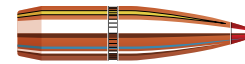
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



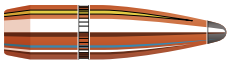
139 gr. GMX®
Item No. 28270
C.O.L.: 3.270"
G1 B.C.: 0.486



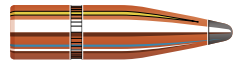
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.270"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.270"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.250"
G1 B.C.: 0.453



139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.270"
G1 B.C.: 0.392

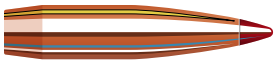
	VELOCITY (FPS – feet per second)						
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
Alliant RL-15	36.7 gr.	39.4 gr.	42.1 gr.	44.8 gr.	47.5 gr.		
Alliant RL-17	41.2 gr.	43.7 gr.	46.3 gr.	48.9 gr.	51.4 gr.	52.7 gr.	54.0 gr.
IMR 4007 SSC	43.3 gr.	45.4 gr.	47.6 gr.	49.7 gr.	51.8 gr.		
NORMA URP	45.4 gr.	47.1 gr.	48.7 gr.	50.3 gr.	51.9 gr.	52.8 gr.	
Hybrid 100V	45.6 gr.	47.2 gr.	48.9 gr.	50.5 gr.	52.2 gr.	53.0 gr.	
IMR 4350	44.3 gr.	46.5 gr.	48.6 gr.	50.8 gr.	52.9 gr.	54.0 gr.	
Hunter	44.7 gr.	47.0 gr.	49.4 gr.	51.8 gr.	54.2 gr.		
VIHT N-160	48.4 gr.	50.2 gr.	51.9 gr.	53.7 gr.	55.5 gr.		
SUPERFORMANCE	51.5 gr.	52.9 gr.	54.2 gr.	55.6 gr.	56.9 gr.	57.6 gr.	
Alliant RL-19	51.5 gr.	53.3 gr.	55.1 gr.	56.9 gr.	58.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

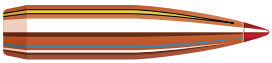
INDICATES MAXIMUM LOAD — USE WITH CAUTION

150-154 GRAIN BULLETS

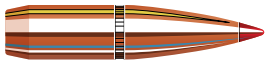
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



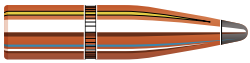
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.270"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.270"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.250"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.250"
G1 B.C.: 0.433

	VELOCITY (FPS – feet per second)						
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2750**	**2800**
Alliant RL-15	35.7 gr.	38.2 gr.	40.7 gr.	43.1 gr.	45.6 gr.		
NORMA URP	41.4 gr.	43.6 gr.	45.7 gr.	47.9 gr.	50.1 gr.	51.2 gr.	52.3 gr.
Alliant RL-17	41.5 gr.	43.7 gr.	45.8 gr.	47.9 gr.	50.1 gr.	51.1 gr.	52.2 gr.
IMR 4007 SSC	42.3 gr.	44.3 gr.	46.4 gr.	48.5 gr.	50.5 gr.	51.5 gr.	
WIN 760	44.3 gr.	43.9 gr.	47.5 gr.	49.1 gr.	50.7 gr.		
H4350	39.8 gr.	42.7 gr.	45.6 gr.	48.5 gr.	51.5 gr.		
Hybrid 100V	42.3 gr.	44.6 gr.	47.0 gr.	49.3 gr.	51.6 gr.	52.7 gr.	
SUPERFORMANCE	47.9 gr.	49.2 gr.	50.4 gr.	51.6 gr.	52.8 gr.		
Hunter	44.6 gr.	46.9 gr.	49.1 gr.	51.4 gr.	53.7 gr.		
Alliant RL-19	49.1 gr.	50.8 gr.	52.5 gr.	54.2 gr.	55.9 gr.	56.8 gr.	57.6 gr.
H4831	48.2 gr.	50.7 gr.	53.2 gr.	55.7 gr.	58.2 gr.	59.4 gr.	

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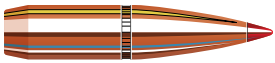
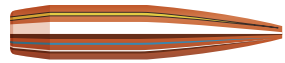
162 GRAIN BULLETS

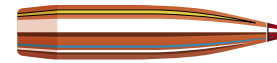
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



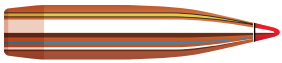
162 gr. SST®
Item No. 28452
C.O.L.: 3.270"
G1 B.C.: 0.550



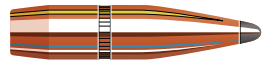
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.270"
G1 B.C.: 0.610



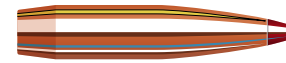
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.270"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.270"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.285"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.270"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
NORMA URP	45.4 gr.	47.0 gr.	48.5 gr.	50.1 gr.	50.9 gr.	
Alliant RL-17	45.7 gr.	47.1 gr.	48.6 gr.	50.1 gr.	50.8 gr.	51.5 gr.
IMR 4007 SSC	46.1 gr.	47.8 gr.	49.5 gr.			
IMR 4350	45.0 gr.	47.3 gr.	49.6 gr.			
Hybrid 100V	46.2 gr.	47.9 gr.	49.7 gr.	51.4 gr.	52.3 gr.	
SUPERFORMANCE	41.1 gr.	45.6 gr.	50.1 gr.			
WIN 760	46.7 gr.	48.5 gr.	50.3 gr.			
H4350	47.4 gr.	48.9 gr.	50.4 gr.	51.9 gr.		
Hunter	48.1 gr.	49.6 gr.	51.1 gr.	52.6 gr.		
H4831	51.5 gr.	53.2 gr.	55.0 gr.	56.7 gr.	57.6 gr.	

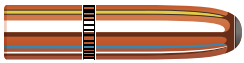
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

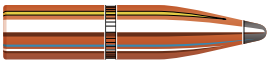
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

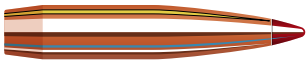
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.300"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.290"
G1 B.C.: 0.462



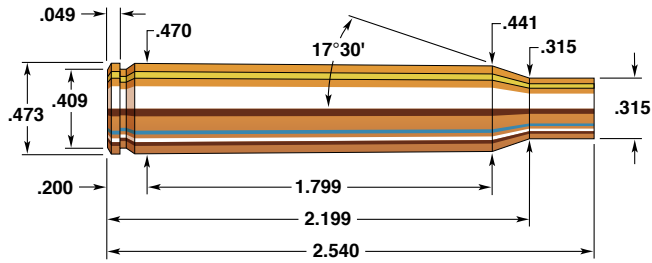
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.290"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)						
POWDER	**2200**	**2300**	**2400**	**2500**	**2550**	**2600**	**2650**
Alliant RL-17	38.1 gr.	40.9 gr.	43.6 gr.	46.3 gr.	47.7 gr.	49.1 gr.	50.5 gr.
Hybrid 100V	42.7 gr.	44.9 gr.	47.1 gr.	49.3 gr.	50.3 gr.		
IMR 4350	39.7 gr.	42.8 gr.	45.9 gr.	49.0 gr.	50.5 gr.		
NORMA URP	40.8 gr.	43.6 gr.	46.5 gr.	49.3 gr.	50.8 gr.		
Alliant RL-19	47.1 gr.	49.1 gr.	51.2 gr.	53.3 gr.	54.3 gr.	55.4 gr.	
H4831	42.9 gr.	46.6 gr.	50.3 gr.	54.0 gr.	55.8 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



280 Remington

Rifle:	Remington 700	**Bullet Diameter:**	0.284"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	3.330"
Case:	Remington	**Max. Case Length:**	2.540"
Primer:	Winchester WLR	**Case Trim Length:**	2.530"

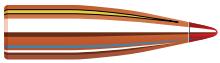
In 1957 Remington introduced the 280 in their Model 740 autoloader. It was not until later that the round was chambered in their bolt action models. The 280 is based on the 30-06 Springfield case and is slightly longer than the 270, thus preventing accidental chambering of the 280 round in a 270 rifle.

The 280 is not as popular as the 270 but is gaining. It was not offered to the shooting public for 32 years after the 270 and even then provided no appreciable gain in ballistic performance. The 280, however, does have greater loading potential than the 270 because of the wider range of 7mm bullets available.

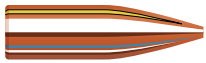
In the early 1980's Remington renamed the 280 the 7mm Express Remington. The dimensions of the cartridge case were the same, but with the new, improved, slow burning powders, maximum velocities could increase 100 fps, according to Remington. However, a few years later still, the cartridge returned to its former name, the 280 Remington. While the company stumbled somewhat in establishing a niche for this cartridge, it remains a fine entry, capable of taking any big game on the North American continent, a standard by which many cartridges are judged. It is interesting that a similar cartridge, the 7 x 64mm Brenneke, was produced in Germany in the early part of the century. Although similar in ballistics and dimensions, they are not interchangeable. IMR 4350 and H 4831 gave best results in the 280 Remington throughout the range of bullets tested.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.250"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.250"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4064	40.2 gr.	42.4 gr.	44.6 gr.	46.8 gr.	49.0 gr.	
Alliant RL-15	42.3 gr.	44.2 gr.	46.0 gr.	47.9 gr.	49.7 gr.	
IMR 4350	44.8 gr.	47.1 gr.	49.4 gr.	51.7 gr.	54.0 gr.	56.3 gr.
Accurate 4350	46.1 gr.	48.2 gr.	50.2 gr.	52.3 gr.	54.3 gr.	56.4 gr.
WIN 760	45.3 gr.	47.7 gr.	50.1 gr.	52.5 gr.	54.9 gr.	
H414	45.0 gr.	47.5 gr.	50.0 gr.	52.5 gr.	55.0 gr.	
H4350	45.8 gr.	48.2 gr.	50.6 gr.	53.0 gr.	55.4 gr.	57.8 gr.
IMR 4831	46.6 gr.	48.9 gr.	51.2 gr.	53.5 gr.	55.8 gr.	58.1 gr.
VIHT N-160	46.9 gr.	49.3 gr.	51.7 gr.	54.1 gr.	56.5 gr.	
Alliant RL-19	51.7 gr.	53.7 gr.	55.7 gr.	57.7 gr.	59.7 gr.	

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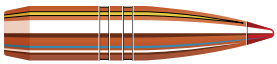
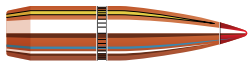
139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

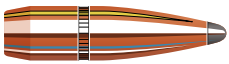


139 gr. GMX®
Item No. 28270
C.O.L.: 3.280"
G1 B.C.: 0.486

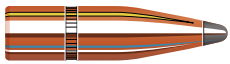
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.280"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.280"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.290"
G1 B.C.: 0.453



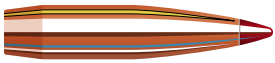
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.330"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	38.3 gr.	40.4 gr.	42.6 gr.	44.7 gr.	46.9 gr.	
Accurate 4350	43.1 gr.	45.1 gr.	47.2 gr.	49.2 gr.	51.3 gr.	53.3 gr.
IMR 4350	43.0 gr.	45.1 gr.	47.3 gr.	49.4 gr.	51.6 gr.	53.7 gr.
H414	42.4 gr.	44.8 gr.	47.1 gr.	49.5 gr.	51.8 gr.	
WIN 760	43.1 gr.	45.3 gr.	47.6 gr.	49.8 gr.	52.1 gr.	
H4350	42.9 gr.	45.3 gr.	47.8 gr.	50.2 gr.	52.7 gr.	
IMR 4831	44.4 gr.	46.5 gr.	48.7 gr.	50.8 gr.	53.0 gr.	55.1 gr.
VIHT N-160	43.3 gr.	45.9 gr.	48.4 gr.	51.0 gr.	53.5 gr.	
Alliant RL-19	47.9 gr.	50.1 gr.	52.4 gr.	54.6 gr.	56.9 gr.	
H4831	47.9 gr.	50.5 gr.	53.0 gr.	55.6 gr.	58.1 gr.	

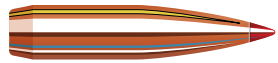
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

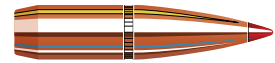
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



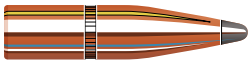
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.330"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.275"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.280"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.330"
G1 B.C.: 0.433

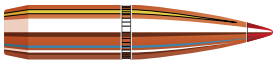
	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4831	42.7 gr.	44.9 gr.	47.2 gr.	47.4 gr.	51.7 gr.	53.9 gr.
Accurate 4350	42.5 gr.	44.5 gr.	46.6 gr.	48.6 gr.	50.7 gr.	
IMR 4350	42.1 gr.	44.3 gr.	46.5 gr.	48.7 gr.	50.9 gr.	
H4350	42.3 gr.	44.6 gr.	46.9 gr.	49.2 gr.	51.5 gr.	
VIHT N-160	42.7 gr.	45.3 gr.	47.8 gr.	50.4 gr.		
Alliant RL-19	46.8 gr.	49.0 gr.	51.2 gr.	53.4 gr.	55.6 gr.	
H4831	45.6 gr.	48.4 gr.	51.2 gr.	54.0 gr.	56.8 gr.	
Alliant RL-22	47.9 gr.	50.0 gr.	52.1 gr.	54.2 gr.	56.3 gr.	58.4 gr.
IMR 7828	47.6 gr.	49.9 gr.	52.2 gr.	54.5 gr.	56.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

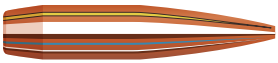
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

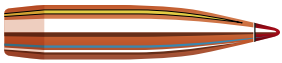
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



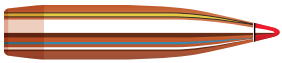
162 gr. SST®
Item No. 28452
C.O.L.: 3.330"
G1 B.C.: 0.550



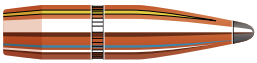
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.330"
G1 B.C.: 0.610



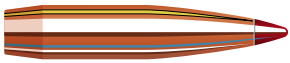
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.330"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.330"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.330"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.330"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4064	36.3 gr.	38.5 gr.	40.7 gr.	42.9 gr.		
Accurate 4350	40.3 gr.	42.3 gr.	44.3 gr.	46.3 gr.	48.3 gr.	
IMR 4350	40.4 gr.	42.4 gr.	44.4 gr.	46.4 gr.	48.4 gr.	50.4 gr.
H4350	39.7 gr.	42.1 gr.	44.6 gr.	47.0 gr.	49.5 gr.	
IMR 4831	41.2 gr.	43.3 gr.	45.4 gr.	47.5 gr.	49.6 gr.	51.7 gr.
Alliant RL-19	44.2 gr.	46.5 gr.	48.7 gr.	51.0 gr.	53.2 gr.	
H4831	43.8 gr.	46.3 gr.	48.8 gr.	51.3 gr.	53.8 gr.	
VIHT N-165	44.3 gr.	46.7 gr.	49.1 gr.	51.5 gr.	53.9 gr.	56.3 gr.
Alliant RL-22	44.6 gr.	46.9 gr.	49.2 gr.	51.5 gr.	53.8 gr.	56.1 gr.
IMR 7828	45.3 gr.	47.5 gr.	49.7 gr.	51.9 gr.	54.1 gr.	56.3 gr.

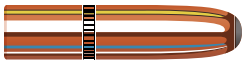
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

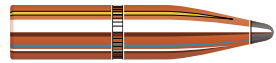
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

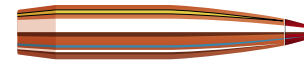
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.320"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.330"
G1 B.C.: 0.462



***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.330"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4350	39.6 gr.	41.7 gr.	43.8 gr.	45.9 gr.	48.0 gr.	
H4350	39.6 gr.	41.8 gr.	44.1 gr.	46.3 gr.	48.6 gr.	
IMR 4831	39.8 gr.	42.1 gr.	44.3 gr.	46.6 gr.	48.8 gr.	51.1 gr.
Alliant RL-19	42.8 gr.	45.1 gr.	47.4 gr.	49.7 gr.	52.0 gr.	
VIHT N-165	43.5 gr.	45.9 gr.	48.3 gr.	50.7 gr.	53.1 gr.	
IMR 7828	44.4 gr.	46.6 gr.	48.8 gr.	51.0 gr.	53.2 gr.	55.4 gr.
Alliant RL-22	43.9 gr.	46.2 gr.	48.6 gr.	50.9 gr.	53.3 gr.	55.6 gr.
VIHT N-560	45.1 gr.	47.1 gr.	49.2 gr.	51.2 gr.	53.3 gr.	
H4831	43.3 gr.	45.9 gr.	48.5 gr.	51.1 gr.	53.7 gr.	

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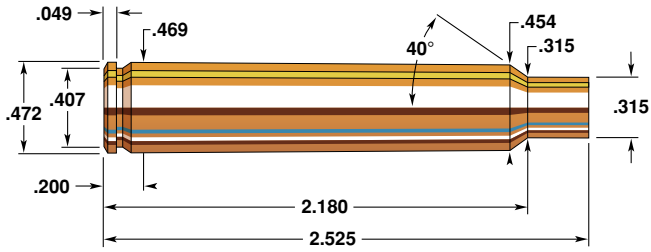
***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



280 Ackley Improved

Rifle:	Kimber Montana	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9½" Twist	**Maximum COL:**	3.330"
Case:	Hornady	**Max. Case Length:**	2.590"
Primer:	WLR	**Case Trim Length:**	2.530"

P.O. Ackley "improved" many cartridges over his career, but none enjoy the popularity today as much as the 280 Ackley Improved. While there were a few early renditions of an improved 7mm based on the 30-06 case, the final version features a 40 degree shoulder and less taper than the standard 280 Remington.

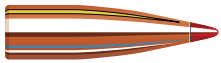
The extra case capacity translates into roughly 100 feet per second gains in velocity over the parent 280 Remington cartridge. Many loads for the 280 Ackley Improved approach 7mm Remington Magnum velocities with significantly less powder. The efficiency of the 280 Ackley Improved speaks to its popularity.

Cartridge cases for our load development were hydraulically formed from our standard 280 Remington brass. Fire forming standard 280 Remington cases is also a viable option. Like many Ackley Improved cartridges, firing standard parent case ammunition (in this case, the 280 Remington), is also an option if cases are needed or you simply can't obtain the improved ammunition. Expect a slight drop in velocity when shooting standard 280 Remington ammo out of an improved chamber.

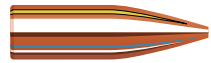
For big game hunting with a fast, flat-shooting 139gr GMX® at 3,100 fps to a sleek low-drag 162gr ELD-X® bullet at 2,900 fps the 280 Ackley Improved shines. Sheep hunters in particular looking for magnum performance from lighter, non-magnum rifles can certainly benefit from the efficiency of the 280 Ackley Improved.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.250"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.250"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Power Pro 2000 MR	48.1 gr.	49.8 gr.	51.6 gr.	53.4 gr.	55.1 gr.	56.9 gr.
IMR 4350	52.4 gr.	53.9 gr.	55.4 gr.	57.0 gr.	58.5 gr.	60.1 gr.
H4350	52.9 gr.	54.7 gr.	56.4 gr.	58.2 gr.	60.0 gr.	61.7 gr.
IMR 4831	54.1 gr.	55.7 gr.	57.4 gr.	59.0 gr.	60.6 gr.	62.2 gr.
Alliant RL-19	56.5 gr.	58.3 gr.	60.1 gr.	61.9 gr.	63.7 gr.	
Alliant RL-22	57.0 gr.	58.9 gr.	60.7 gr.	62.6 gr.	64.5 gr.	

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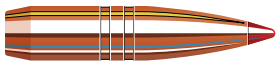
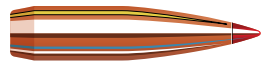
139 GRAIN BULLETS

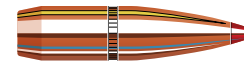
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



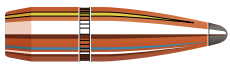
139 gr. GMX®
Item No. 28270
C.O.L.: 3.280"
G1 B.C.: 0.486



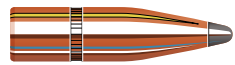
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.280"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.280"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.290"
G1 B.C.: 0.453



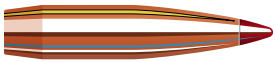
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.300"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	50.8 gr.	52.5 gr.	54.3 gr.	56.0 gr.	57.7 gr.
H4350	51.1 gr.	53.1 gr.	55.1 gr.	57.1 gr.	
IMR 4831	52.2 gr.	54.0 gr.	55.9 gr.	57.8 gr.	59.6 gr.
Hunter	51.4 gr.	53.8 gr.	56.2 gr.	58.5 gr.	60.9 gr.
Alliant RL-19	54.1 gr.	56.1 gr.	58.1 gr.	60.1 gr.	62.1 gr.
Alliant RL-22	55.3 gr.	57.3 gr.	59.3 gr.	61.2 gr.	63.2 gr.
H4831	55.7 gr.	58.1 gr.	60.6 gr.	63.0 gr.	

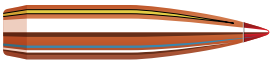
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

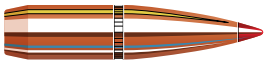
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



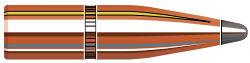
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.280"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.275"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.280"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.300"
G1 B.C.: 0.433

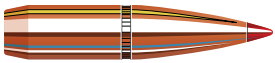
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	48.8 gr.	50.8 gr.	52.7 gr.	54.7 gr.	
H4350	48.2 gr.	50.7 gr.	53.1 gr.	55.6 gr.	
IMR 4831	50.5 gr.	52.4 gr.	54.4 gr.	56.3 gr.	58.2 gr.
Hunter	50.0 gr.	52.3 gr.	54.5 gr.	56.8 gr.	
Alliant RL-19	52.0 gr.	54.3 gr.	56.5 gr.	58.7 gr.	
Alliant RL-22	52.1 gr.	54.4 gr.	56.7 gr.	59.0 gr.	
H4831	53.9 gr.	56.2 gr.	58.4 gr.	60.7 gr.	
IMR 7828	55.3 gr.	57.2 gr.	59.1 gr.	61.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

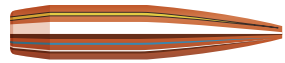
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

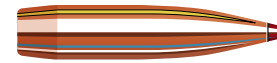
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



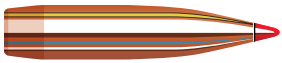
162 gr. SST®
Item No. 28452
C.O.L.: 3.330"
G1 B.C.: 0.550



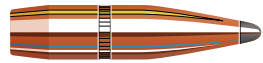
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.330"
G1 B.C.: 0.610



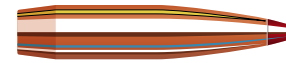
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.330"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.330"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.300"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.330"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4350	47.2 gr.	49.3 gr.	51.4 gr.	53.5 gr.	
H4350	48.0 gr.	50.1 gr.	52.3 gr.	54.5 gr.	
IMR 4831	48.5 gr.	50.7 gr.	53.0 gr.	55.2 gr.	
Hunter	49.1 gr.	51.3 gr.	53.6 gr.	55.9 gr.	58.2 gr.
Alliant RL-19	50.8 gr.	52.8 gr.	54.9 gr.	57.0 gr.	59.1 gr.
Alliant RL-22	50.9 gr.	53.0 gr.	55.0 gr.	57.1 gr.	59.2 gr.
H4831	51.7 gr.	54.2 gr.	56.7 gr.	59.3 gr.	
IMR 7828	53.9 gr.	55.9 gr.	57.9 gr.	59.9 gr.	61.9 gr.

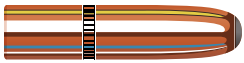
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

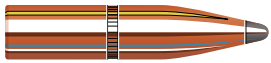
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

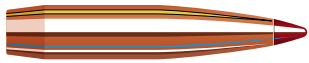
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.320"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.300"
G1 B.C.: 0.462



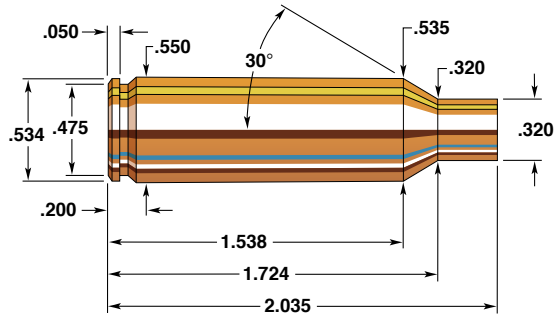
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.330"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4350	41.9 gr.	44.4 gr.	46.8 gr.	49.3 gr.	51.7 gr.	
H4350	40.6 gr.	43.5 gr.	46.3 gr.	49.1 gr.	52.0 gr.	
IMR 4831	44.1 gr.	46.3 gr.	48.5 gr.	50.7 gr.	52.9 gr.	
Hunter	43.7 gr.	46.0 gr.	48.3 gr.	50.7 gr.	53.0 gr.	
Alliant RL-19	45.0 gr.	47.5 gr.	49.9 gr.	52.4 gr.	54.8 gr.	
Alliant RL-22	45.7 gr.	48.0 gr.	50.4 gr.	52.8 gr.	55.1 gr.	
H4831	44.5 gr.	47.4 gr.	50.3 gr.	53.1 gr.	56.0 gr.	
IMR 7828	48.0 gr.	50.3 gr.	52.6 gr.	54.9 gr.	57.2 gr.	59.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Remington Short Action Ultra Magnum

Rifle: . . . Remington Model 7 Magnum
Barrel: . . . . . 24", 1 in 9¼" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 9½ M

Bullet Diameter: . . . . . 0.284"
Maximum COL: . . . . . 2.825"
Max. Case Length: . . . . . .2.035"
Case Trim Length: . . . . . .2.025"

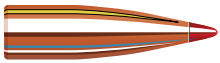
Basically, the 7mm SAUM (Short Action Ultra Mag) is a 7mm Ultra Mag case shortened to 308 Winchester case length. Remington introduced the cartridge in 2002 chambered in their new Model Seven Magnum. Their intent was to provide magnum performance in a lightweight fast handling gun.

The SAUM line of cartridges is similar in size, shape and performance to Winchester's Short Magnum line of cartridges. Our testing revealed the SAUM line of cartridges to be slightly more efficient than Winchester's offerings, but the Winchester cartridges are capable of producing higher velocities with most bullets. This is due to the fact that Winchester's short action will support a cartridge roughly .035" longer than Remington's short action. That doesn't seem like much but it does make a difference. Note: while similar, these two cartridges are not interchangeable.

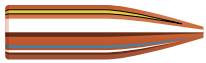
Our test rifle did well on the range. Groups of 1" to 1¼" were common with all weights of bullets. In our opinion, the 7mm SAUM is at its best with the 154 grain SST®. It is capable of driving the 154 grain SST® to a maximum velocity of 3000 fps with RL-19. Flat shooting and hard hitting, the 7mm SAUM & the Hornady 7mm 154 grain SST® are an ideal combination for all game from antelope to elk.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.770"
G1 B.C.: 0.365



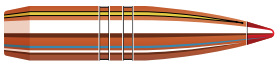
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.770"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
BIG GAME	51.7 gr.	53.9 gr.	56.1 gr.	58.3 gr.	
Accurate 4350	53.6 gr.	55.3 gr.	57.1 gr.	58.9 gr.	
H4350	53.4 gr.	55.7 gr.	58.0 gr.	60.4 gr.	
WIN 760	55.5 gr.	57.3 gr.	59.1 gr.	60.9 gr.	62.7 gr.
IMR 4831	57.3 gr.	59.0 gr.	60.7 gr.	62.5 gr.	64.2 gr.
VIHT N-160	56.9 gr.	58.8 gr.	60.7 gr.	62.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

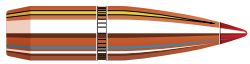
139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

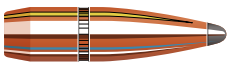


139 gr. GMX®
Item No. 28270
C.O.L.: 2.770"
G1 B.C.: 0.486

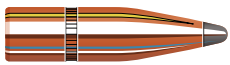
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.770"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.770"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.770"
G1 B.C.: 0.453



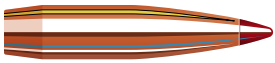
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.770"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
H4350	53.5 gr.	55.4 gr.	57.4 gr.	59.3 gr.	
Accurate 4350	54.0 gr.	55.7 gr.	57.5 gr.	59.2 gr.	
WIN 760	54.2 gr.	56.4 gr.	58.5 gr.	60.7 gr.	
VIHT N-160	55.5 gr.	57.6 gr.	59.6 gr.		
IMR 4831	56.1 gr.	57.9 gr.	59.7 gr.	61.5 gr.	
Alliant RL-19	56.5 gr.	58.6 gr.	60.7 gr.	62.8 gr.	64.9 gr.
H4831	57.8 gr.	60.0 gr.	62.2 gr.	64.4 gr.	

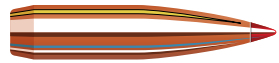
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

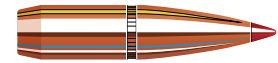
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



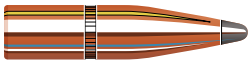
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.825"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.825"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.825"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.825"
G1 B.C.: 0.433

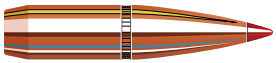
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 4350	50.1 gr.	52.1 gr.	54.0 gr.	56.0 gr.	
H4350	50.0 gr.	52.2 gr.	54.4 gr.	56.6 gr.	
WIN 760	50.4 gr.	52.8 gr.	55.2 gr.	57.6 gr.	
IMR 4831	51.5 gr.	53.8 gr.	56.1 gr.	58.4 gr.	
Alliant RL-19	51.5 gr.	53.9 gr.	56.4 gr.	58.8 gr.	61.3 gr.
VIHT N-160	52.5 gr.	54.7 gr.	57.0 gr.		
H4831	52.5 gr.	55.2 gr.	57.9 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

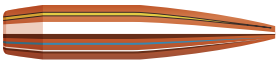
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

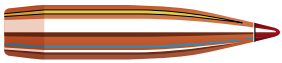
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



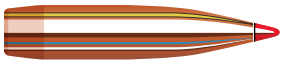
162 gr. SST®
Item No. 28452
C.O.L.: 2.770"
G1 B.C.: 0.550



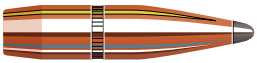
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.770"
G1 B.C.: 0.610



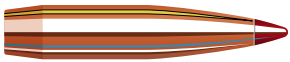
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.770"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.770"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.770"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.770"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)			
POWDER	**2600**	**2700**	**2800**	**2900**
BIG GAME	50.3 gr.	52.1 gr.	53.9 gr.	
H4350	49.0 gr.	51.9 gr.	54.8 gr.	
Accurate 4350	50.9 gr.	53.0 gr.	55.1 gr.	
WIN 760	51.2 gr.	53.3 gr.	55.5 gr.	
IMR 4831	53.7 gr.	55.5 gr.	57.3 gr.	59.2 gr.
VIHT N-160	52.8 gr.	55.2 gr.	57.6 gr.	
Alliant RL-19	53.3 gr.	55.8 gr.	58.2 gr.	60.6 gr.
H4831	53.5 gr.	56.2 gr.	58.9 gr.	

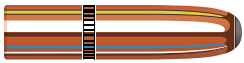
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

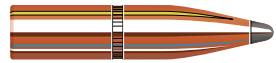
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

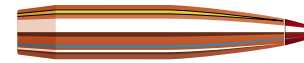
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.805"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.820"
G1 B.C.: 0.462



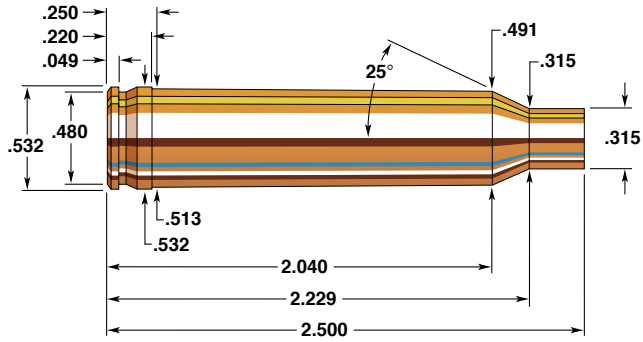
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 2.825"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
H4350	46.5 gr.	48.8 gr.	51.1 gr.	53.4 gr.	
WIN 760	48.6 gr.	50.7 gr.	52.7 gr.	54.8 gr.	
Alliant RL-19	48.4 gr.	50.9 gr.	53.4 gr.	55.9 gr.	58.4 gr.
IMR 4831	49.9 gr.	51.9 gr.	53.9 gr.	55.9 gr.	
H4831	50.1 gr.	52.4 gr.	54.8 gr.	57.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Remington Magnum

Rifle:	Remington 700	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9" Twist	**Maximum COL:**	3.290"
Case:	Hornady/Frontier	**Max. Case Length:**	2.500"
Primer:	Winchester WLRM	**Case Trim Length:**	2.490"

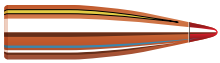
In 1962 Remington introduced their new 7mm Magnum cartridge in their also new Model 700 bolt action rifle. In almost five decades of use, this cartridge has become extremely popular, rivaling the 270, and possessing enough power to account for anything from varmints to moose. Its power is little different than the 7 x 61mm Sharpe & Hart or the 7mm Weatherby Magnum, but its appeal arises primarily from availability of loaded ammunition and rifles from the numerous arms and ammunition companies, acceptable recoil, good accuracy and versatility. Another plus for the 7mm Remington Magnum is that it is easier on barrels than such grossly overbore cartridges as the 264 Winchester Magnum or 257 Weatherby Magnum. It is probably the most popular magnum rifle cartridge sold today.

Our particular rifle gave more than adequate results with all powders listed—most powders tested had slow burning rates since the faster powders would not yield adequate velocity. Hodgdon's H-4831 was the best overall powder for our rifle. It produced velocities at or near the top with all bullet weights and provided the best overall groups with all the bullets. The 7mm Magnum is capable of fine accuracy, and is therefore a good candidate for the 162 grain ELD® Match or even the new ELD-X® bullet for long range target shooting.

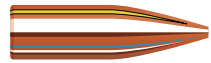
Remington introduced one of the most winning combinations in recent firearms history with the 7mm Remington Magnum in its Model 700 rifle. Listening to what the shooter wants pays off!

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.290"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.290"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
WIN 760	53.0 gr.	55.4 gr.	57.8 gr.	60.2 gr.		
H414	54.3 gr.	56.6 gr.	58.9 gr.	61.1 gr.		
VIHT N-160	54.1 gr.	56.7 gr.	59.2 gr.	61.8 gr.	64.3 gr.	
Accurate 4350	54.8 gr.	57.2 gr.	59.6 gr.	62.1 gr.	64.5 gr.	
IMR 4831	57.2 gr.	59.5 gr.	61.8 gr.			
IMR 4451	57.6 gr.	59.9 gr.	62.2 gr.	64.5 gr.		
Alliant RL-22	58.7 gr.	61.1 gr.	63.4 gr.	65.8 gr.	68.2 gr.	70.6 gr.
VIHT N-560	58.8 gr.	61.2 gr.	63.5 gr.	65.9 gr.	68.3 gr.	70.7 gr.
Hybrid 100V	60.9 gr.	62.5 gr.	64.0 gr.	65.5 gr.		
Alliant RL-17	60.4 gr.	62.3 gr.	64.3 gr.			
Alliant RL-19	60.4 gr.	62.5 gr.	64.5 gr.	66.5 gr.		
Power Pro 4000 MR	62.2 gr.	64.4 gr.	66.5 gr.	68.6 gr.		
IMR 7828	65.2 gr.	66.4 gr.	67.6 gr.	68.8 gr.		

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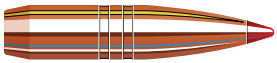
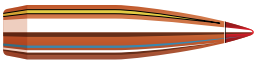
INDICATES MAXIMUM LOAD — USE WITH CAUTION

139 GRAIN BULLETS

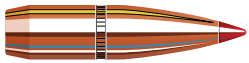
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



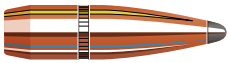
139 gr. GMX®
Item No. 28270
C.O.L.: 3.290"
G1 B.C.: 0.486



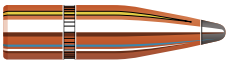
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.290"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.290"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.250"
G1 B.C.: 0.453



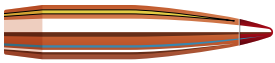
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.250"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4350	52.9 gr.	55.2 gr.	57.4 gr.	59.7 gr.	61.9 gr.	
IMR 4831	53.2 gr.	55.7 gr.	58.3 gr.	60.9 gr.	63.5 gr.	
VIHT N-160	53.7 gr.	56.1 gr.	58.5 gr.			
IMR 4451	54.3 gr.	56.6 gr.	58.9 gr.	61.2 gr.		
H4350	54.6 gr.	56.9 gr.	59.2 gr.	61.5 gr.		
Alliant RL-17	54.6 gr.	57.0 gr.	59.4 gr.	61.8 gr.		
Alliant RL-19	55.8 gr.	57.9 gr.	60.1 gr.	62.2 gr.	64.3 gr.	
Hybrid 100V	56.3 gr.	58.7 gr.	61.1 gr.			
H4831	55.5 gr.	58.7 gr.	61.9 gr.	65.0 gr.		
Alliant RL-22	57.2 gr.	59.6 gr.	62.0 gr.	64.4 gr.	66.8 gr.	
VIHT N-560	57.7 gr.	60.4 gr.	63.1 gr.	65.9 gr.		
Power Pro 4000 MR	58.2 gr.	60.7 gr.	63.2 gr.	65.7 gr.		
IMR 7828	60.2 gr.	62.2 gr.	64.2 gr.	66.1 gr.	68.1 gr.	
MAGPRO	59.9 gr.	62.7 gr.	65.5 gr.	68.3 gr.	71.7 gr.	73.9 gr.
WIN Supreme 780	60.6 gr.	63.4 gr.	66.3 gr.	69.1 gr.		
H1000	61.9 gr.	64.7 gr.	67.4 gr.	70.1 gr.	72.8 gr.	
RETUMBO	64.5 gr.	66.9 gr.	69.3 gr.	71.7 gr.	74.2 gr.	
MAGNUM	64.0 gr.	67.7 gr.	70.6 gr.	73.7 gr.		

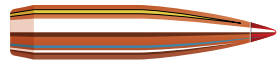
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

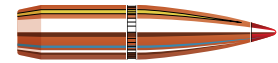
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



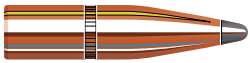
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.290"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.290"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.290"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.290"
G1 B.C.: 0.433

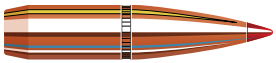
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4451	52.5 gr.	54.7 gr.	56.9 gr.	59.1 gr.	
Alliant RL-17	54.2 gr.	56.2 gr.	58.1 gr.	60.0 gr.	
Accurate 4350	53.1 gr.	55.7 gr.	58.3 gr.		
IMR 4831	54.8 gr.	56.9 gr.	59.1 gr.		
Hybrid 100V	55.3 gr.	57.5 gr.	59.8 gr.		
VIHT N-560	55.5 gr.	58.1 gr.	60.6 gr.	63.2 gr.	65.7 gr.
H4831	56.3 gr.	58.6 gr.	61.0 gr.		
Alliant RL-22	56.6 gr.	58.9 gr.	61.1 gr.	63.4 gr.	
VIHT N-165	56.5 gr.	58.8 gr.	61.2 gr.	63.5 gr.	
Power Pro 4000 MR	57.3 gr.	59.5 gr.	61.6 gr.	63.6 gr.	
IMR 7828	58.8 gr.	61.0 gr.	63.3 gr.	65.5 gr.	
MAGPRO	58.9 gr.	61.8 gr.	64.8 gr.	67.8 gr.	
H1000	61.2 gr.	63.6 gr.	66.0 gr.	68.3 gr.	
WIN Supreme 780	62.0 gr.	64.1 gr.	66.1 gr.	68.2 gr.	
Alliant RL-25	63.1 gr.	65.1 gr.	67.2 gr.	69.3 gr.	71.3 gr.
RETUMBO	62.6 gr.	65.2 gr.	67.7 gr.	70.3 gr.	
MAGNUM	64.7 gr.	67.2 gr.	69.6 gr.	72.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

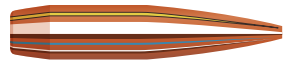
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

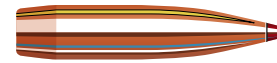
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



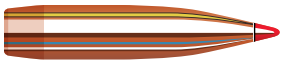
162 gr. SST®
Item No. 28452
C.O.L.: 3.290"
G1 B.C.: 0.550



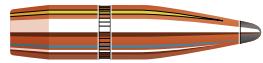
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.290"
G1 B.C.: 0.610



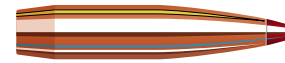
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.290"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.290"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.290"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.290"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	50.2 gr.	52.7 gr.	55.1 gr.	57.6 gr.	
VIHT N-160	50.3 gr.	52.9 gr.	55.6 gr.		
Accurate 4350	50.4 gr.	53.1 gr.	55.7 gr.	58.4 gr.	
IMR 4831	51.7 gr.	54.0 gr.	56.2 gr.	58.4 gr.	60.6 gr.
IMR 4451	52.7 gr.	54.9 gr.	57.1 gr.		
Alliant RL-17	54.5 gr.	55.9 gr.	57.4 gr.		
Alliant RL-22	52.4 gr.	55.1 gr.	57.7 gr.	60.3 gr.	62.9 gr.
Hybrid 100V	55.2 gr.	57.1 gr.	58.8 gr.		
VIHT N-165	52.7 gr.	55.9 gr.	59.1 gr.	62.3 gr.	
H4831	53.7 gr.	56.7 gr.	59.7 gr.		
IMR 7828	55.5 gr.	58.9 gr.	61.4 gr.	63.8 gr.	
Power Pro 4000 MR	57.5 gr.	59.7 gr.	61.8 gr.		
H1000	56.8 gr.	59.8 gr.	62.7 gr.	65.6 gr.	68.5 gr.
Alliant RL-25	59.4 gr.	61.9 gr.	64.3 gr.	66.8 gr.	69.3 gr.
MAGPRO	60.0 gr.	62.4 gr.	64.8 gr.	67.2 gr.	69.6 gr.
WIN Supreme 780	60.7 gr.	63.4 gr.	66.0 gr.		
RETUMBO	62.9 gr.	65.3 gr.	67.7 gr.	70.1 gr.	
MAGNUM	64.8 gr.	67.5 gr.	70.2 gr.		

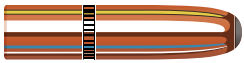
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

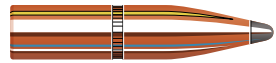
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

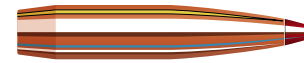
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.280"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.290"
G1 B.C.: 0.462



***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.290"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4831	50.0 gr.	52.7 gr.	55.3 gr.	57.9 gr.	
Alliant RL-22	50.1 gr.	53.2 gr.	56.3 gr.	59.5 gr.	
VIHT N-560	52.6 gr.	55.2 gr.	57.9 gr.	60.5 gr.	
VIHT N-165	50.7 gr.	54.5 gr.	58.2 gr.		
IMR 7828	54.0 gr.	56.5 gr.	59.0 gr.	61.5 gr.	
H4831	54.6 gr.	57.2 gr.	59.9 gr.		
H1000	53.8 gr.	57.1 gr.	60.4 gr.		
Alliant RL-25	55.8 gr.	58.4 gr.	61.0 gr.	63.6 gr.	66.2 gr.
MAGPRO	58.6 gr.	61.3 gr.	64.0 gr.	66.7 gr.	
RETUMBO	59.7 gr.	62.5 gr.	65.4 gr.		
MAGNUM	62.9 gr.	65.5 gr.	68.0 gr.		

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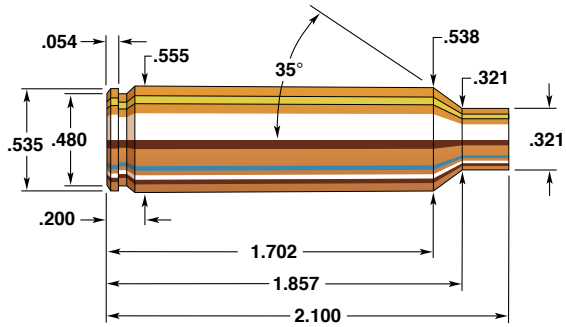
***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Winchester Short Magnum

Rifle:	Winchester Model 70	**Bullet Diameter:**	0.284"
Barrel:	24", 1 in 9½" Twist	**Maximum COL:**	2.860"
Case:	Winchester	**Max. Case Length:**	2.100"
Primer:	Winchester WLRM	**Case Trim Length:**	2.090"

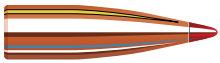
Niche marketing is nothing new. It's been around almost as long as discretionary income, and can be defined as the dividing of a necessity into variations that better suit individual preference. The firearm industry's original niche marketers called themselves wildcatters. Legendary wildcatters include P.O. Ackley, A.O. Niedner, Charles Newton, Elmer Keith, and recently J.D. Jones. Occasionally wildcat cartridges go on to become commercially loaded cartridges, such as the 25-06, originally developed by A.O. Niedner as a wildcat in 1920.

Lately the firearm manufacturers have gotten more involved with cartridge innovation, which is evidenced by the proliferation of newly designed commercial cartridges that did not begin life as wildcats. One of Winchester's entries into this arena is the 7mm Winchester Short Magnum. The middleweight of the WSM lineup, it is ballistically superior to the 7mm Remington Short Action Ultra Magnum, very similar in power to the 7mm Remington Magnum, with ample power for any game on the continent.

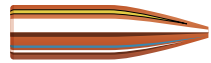
Although, our rifle performed well during testing, a possible disadvantage of the portly cartridge design is the fact that one round of magazine capacity is lost. However, the gun functioned flawlessly, and was plenty accurate for a hunting rifle. Most groups were 1" or less. Our gun seemed to prefer heavier bullets, our best results occurring with the 162 grain SST® and RL-22. This combination is a good balance of velocity, ballistic coefficient and a bullet more than capable of taking large, tough game such as Elk or Nilgai.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.825"
G1 B.C.: 0.365



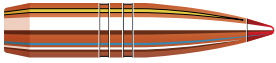
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.825"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
BIG GAME	55.9 gr.	58.4 gr.	60.8 gr.		
Accurate 4350	57.9 gr.	60.1 gr.	62.2 gr.	64.3 gr.	
H4350	58.0 gr.	60.4 gr.	62.8 gr.	65.2 gr.	
WIN 760	58.7 gr.	60.9 gr.	63.2 gr.	65.4 gr.	
IMR 4350	59.2 gr.	61.3 gr.	63.3 gr.	65.4 gr.	
VIHT N-160	60.7 gr.	63.2 gr.	65.8 gr.		
Alliant RL-19	61.1 gr.	63.6 gr.	66.0 gr.	68.5 gr.	71.0 gr.

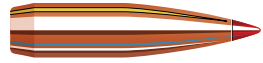
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

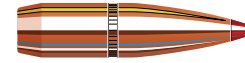
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



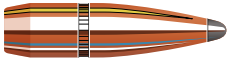
139 gr. GMX®
Item No. 28270
C.O.L.: 2.830"
G1 B.C.: 0.486



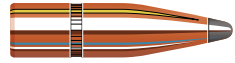
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.830"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.830"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.830"
G1 B.C.: 0.453



139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.830"
G1 B.C.: 0.392

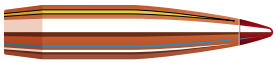
	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
H4350	53.7 gr.	56.4 gr.	59.1 gr.	61.7 gr.		
Accurate 4350	55.6 gr.	57.8 gr.	59.9 gr.	62.0 gr.		
WIN 760	58.3 gr.	60.0 gr.	61.7 gr.	63.4 gr.	65.1 gr.	
IMR 4831	59.8 gr.	61.6 gr.	63.4 gr.	65.1 gr.	66.9 gr.	
Alliant RL-19	60.0 gr.	62.2 gr.	64.4 gr.	66.6 gr.	68.8 gr.	71.0 gr.
H4831	57.2 gr.	60.5 gr.	63.7 gr.	67.0 gr.		
VIHT N-165	63.0 gr.	65.1 gr.	67.2 gr.	69.4 gr.	71.5 gr.	
MAGPRO	64.1 gr.	66.5 gr.	69.0 gr.	71.4 gr.	73.9 gr.	76.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

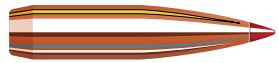
INDICATES MAXIMUM LOAD — USE WITH CAUTION

150-154 GRAIN BULLETS

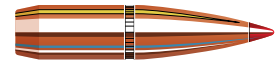
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



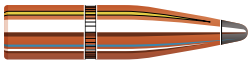
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.850"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.860"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.860"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.860"
G1 B.C.: 0.433

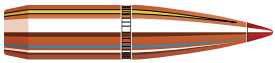
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 4350	52.0 gr.	54.2 gr.	56.4 gr.	58.6 gr.	60.8 gr.
WIN 760	53.8 gr.	55.9 gr.	57.9 gr.	60.0 gr.	62.1 gr.
Alliant RL-22	54.9 gr.	57.3 gr.	59.7 gr.	62.2 gr.	64.6 gr.
H4831	56.4 gr.	58.9 gr.	61.5 gr.	64.1 gr.	66.6 gr.
IMR 7828	57.0 gr.	59.4 gr.	61.8 gr.	64.2 gr.	66.6 gr.
VIHT N-165	56.6 gr.	59.4 gr.	62.2 gr.	65.0 gr.	67.8 gr.
MAGPRO		63.4 gr.	65.5 gr.	67.7 gr.	69.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

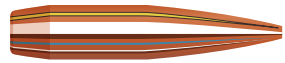
*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

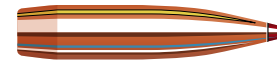
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



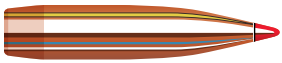
162 gr. SST®
Item No. 28452
C.O.L.: 2.850"
G1 B.C.: 0.550



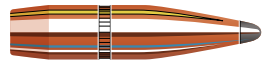
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.850"
G1 B.C.: 0.610



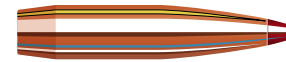
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.850"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.850"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.850"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.880"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 4350	50.5 gr.	52.8 gr.	55.0 gr.	57.3 gr.	59.5 gr.	
WIN 760	51.2 gr.	53.5 gr.	55.8 gr.	58.1 gr.	60.3 gr.	
Alliant RL-22	53.8 gr.	56.2 gr.	58.7 gr.	61.1 gr.	63.5 gr.	66.0 gr.
H4831	53.5 gr.	56.2 gr.	58.8 gr.	61.4 gr.	64.4 gr.	
IMR 7828	55.5 gr.	57.8 gr.	60.1 gr.	62.4 gr.	64.8 gr.	
VIHT N-165	55.1 gr.	57.7 gr.	60.4 gr.	63.0 gr.	65.6 gr.	
MAGPRO		60.8 gr.	63.4 gr.	66.0 gr.	68.6 gr.	71.2 gr.
MAGNUM	60.4 gr.	63.1 gr.	65.8 gr.	68.5 gr.	71.2 gr.	73.9 gr.

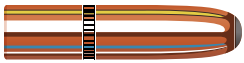
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

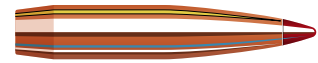
175 GRAIN BULLETS

SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.860"
G1 B.C.: 0.285

175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.860"
G1 B.C.: 0.462



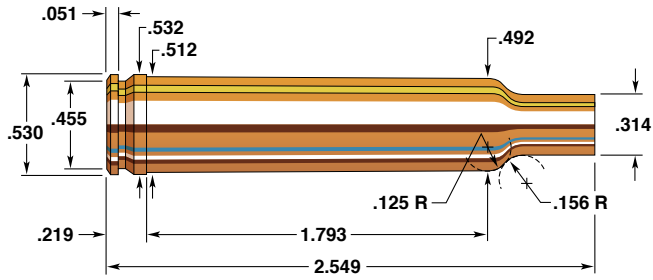
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 2.860"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
Accurate 4350	48.6 gr.	50.9 gr.	53.2 gr.	55.4 gr.	57.7 gr.	
WIN 760	49.3 gr.	51.6 gr.	54.0 gr.	56.3 gr.	58.7 gr.	
Alliant RL-22	52.0 gr.	54.1 gr.	56.2 gr.	58.4 gr.	60.5 gr.	
H4831	51.1 gr.	53.9 gr.	56.7 gr.	59.5 gr.	62.3 gr.	
VIHT N-165	53.0 gr.	55.6 gr.	58.3 gr.	60.9 gr.	63.5 gr.	
IMR 7828	53.3 gr.	55.9 gr.	58.6 gr.	61.2 gr.	63.9 gr.	
MAGPRO		59.9 gr.	62.1 gr.	64.3 gr.	66.5 gr.	68.7 gr.
MAGNUM	58.3 gr.	60.8 gr.	63.4 gr.	65.9 gr.	68.5 gr.	71.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.284"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.360"
Case:	Remington	**Max. Case Length:**	2.549"
Primer:	Remington 9½ M	**Case Trim Length:**	2.539"

When comparing 7mm magnums ballistically, the Weatherby has a slight edge over the 7mm Remington Magnum and boasts a strong 200 fps advantage in velocity over the 7 x 61mm Sharpe & Hart.

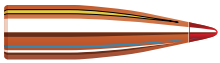
Weatherby introduced this cartridge in 1944, with its popularity growing only moderately since its inception. Basically, its growth has been hampered by the 300 Weatherby Magnum which soundly overshadows the 7mm in power. The 7mm Weatherby case is based on a shortened 300 H&H case and incorporates the familiar Weatherby double radius shoulder.

The 7mm Weatherby Magnum is an excellent cartridge for plains or mountain regions because of its long range, flat trajectory, and good remaining energy. When fired at 3000 fps, the Hornady 175 grain Spire Point still has over 2100 foot pounds of energy left at 300 yards. That's a lot of stopping power a long way out—and just what is needed for the game it was designed to hunt.

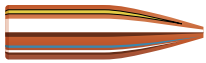
Good results were obtained with RL-22 and IMR 7828. With cartridges of such large case capacity, it is always best to keep loads at near maximum charges to prevent possible hangfires and erratic velocities.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.300"
G1 B.C.: 0.365



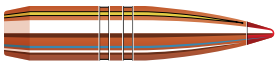
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.300"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 4064	54.9 gr.	57.0 gr.	59.1 gr.	61.3 gr.	63.4 gr.	
IMR 4350	59.1 gr.	61.3 gr.	63.5 gr.	65.7 gr.	67.9 gr.	70.2 gr.
Accurate 4350	61.6 gr.	63.3 gr.	65.1 gr.	66.8 gr.	68.6 gr.	70.3 gr.
H4350	59.7 gr.	62.0 gr.	64.3 gr.	66.6 gr.	68.9 gr.	71.2 gr.
VIHT N-160	63.8 gr.	65.8 gr.	67.9 gr.	69.9 gr.	72.0 gr.	
Alliant RL-19	66.4 gr.	68.3 gr.	70.2 gr.	72.0 gr.	73.9 gr.	75.8 gr.
VIHT N-165	68.6 gr.	70.4 gr.	72.3 gr.	74.1 gr.	75.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

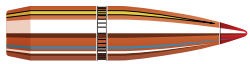
139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

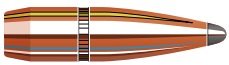


139 gr. GMX®
Item No. 28270
C.O.L.: 3.350"
G1 B.C.: 0.486

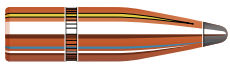
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.350"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.350"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.350"
G1 B.C.: 0.453



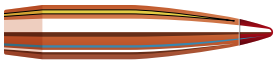
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.350"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4064	53.7 gr.	55.7 gr.	57.8 gr.	59.8 gr.	61.8 gr.	
IMR 4350	58.5 gr.	60.5 gr.	62.4 gr.	64.4 gr.	66.3 gr.	68.3 gr.
Accurate 4350	58.2 gr.	60.4 gr.	62.5 gr.	64.6 gr.	66.8 gr.	
H4350	59.5 gr.	61.4 gr.	63.3 gr.	65.2 gr.	67.1 gr.	69.0 gr.
IMR 4831	61.1 gr.	63.0 gr.	64.9 gr.	66.8 gr.	68.8 gr.	70.7 gr.
Alliant RL-19	62.6 gr.	64.7 gr.	66.7 gr.	68.8 gr.	70.9 gr.	73.0 gr.
H4831	65.0 gr.	67.0 gr.	69.0 gr.	71.0 gr.	72.9 gr.	74.9 gr.
Alliant RL-22	65.0 gr.	67.1 gr.	69.1 gr.	71.2 gr.	73.3 gr.	75.3 gr.
VIHT N-165	64.4 gr.	66.7 gr.	69.0 gr.	71.2 gr.	73.5 gr.	

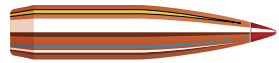
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

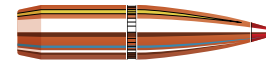
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



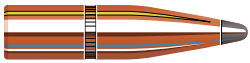
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.350"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.350"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.350"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.350"
G1 B.C.: 0.433

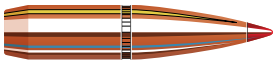
	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 4350	58.4 gr.	60.3 gr.	62.3 gr.	64.2 gr.	66.2 gr.	
IMR 4350	58.1 gr.	60.2 gr.	62.4 gr.	64.6 gr.	66.7 gr.	
H4350	55.7 gr.	58.6 gr.	61.5 gr.	64.4 gr.	67.3 gr.	
IMR 4831	60.7 gr.	62.8 gr.	64.9 gr.	67.0 gr.	69.0 gr.	
Alliant RL-19	62.6 gr.	64.7 gr.	66.9 gr.	69.0 gr.	71.1 gr.	
H4831	62.7 gr.	65.3 gr.	67.9 gr.	70.4 gr.	73.0 gr.	
Alliant RL-22	65.0 gr.	67.1 gr.	69.3 gr.	71.5 gr.	73.6 gr.	75.8 gr.
VIHT N-165	64.9 gr.	67.1 gr.	69.3 gr.	71.5 gr.	73.7 gr.	
IMR 7828	65.9 gr.	67.9 gr.	69.9 gr.	71.9 gr.	73.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

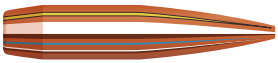
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

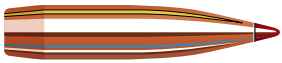
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



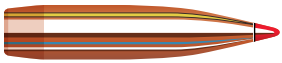
162 gr. SST®
Item No. 28452
C.O.L.: 3.350"
G1 B.C.: 0.550



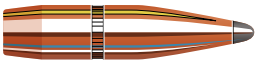
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.350"
G1 B.C.: 0.610



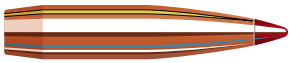
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.350"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.350"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.350"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.350"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4350	52.5 gr.	55.1 gr.	57.6 gr.	60.2 gr.	62.8 gr.	65.3 gr.
H4350	54.3 gr.	56.7 gr.	59.0 gr.	61.4 gr.	63.8 gr.	66.1 gr.
IMR 4831	55.4 gr.	58.0 gr.	60.5 gr.	63.0 gr.	65.5 gr.	
H4831	56.8 gr.	59.7 gr.	62.6 gr.	65.5 gr.	68.5 gr.	71.4 gr.
Alliant RL-19	60.4 gr.	62.4 gr.	64.4 gr.	66.5 gr.	68.5 gr.	70.5 gr.
IMR 7828	62.4 gr.	64.3 gr.	66.3 gr.	68.3 gr.	70.3 gr.	72.3 gr.
Alliant RL-22	61.7 gr.	63.9 gr.	66.1 gr.	68.3 gr.	70.4 gr.	72.6 gr.
VIHT N-165	63.3 gr.	65.2 gr.	67.0 gr.	68.8 gr.	70.7 gr.	

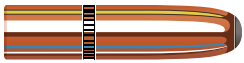
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

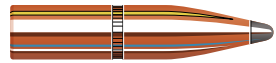
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

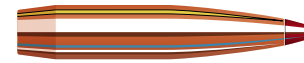
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.350"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.350"
G1 B.C.: 0.462



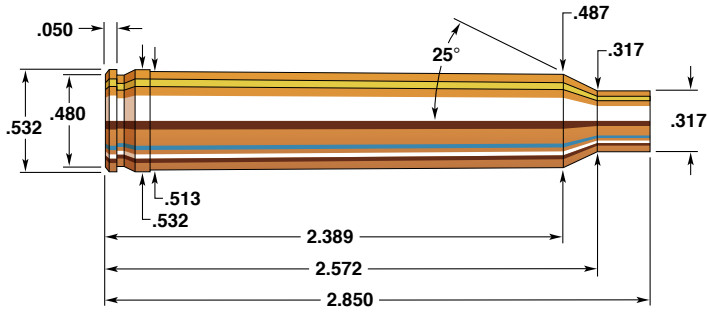
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.350"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	52.6 gr.	55.3 gr.	58.1 gr.	60.8 gr.	63.6 gr.	
IMR 4831	54.3 gr.	56.9 gr.	59.5 gr.	62.1 gr.	64.6 gr.	
H4831	57.3 gr.	59.9 gr.	62.5 gr.	65.0 gr.	67.6 gr.	70.1 gr.
Alliant RL-22	58.9 gr.	61.5 gr.	64.0 gr.	66.6 gr.	69.2 gr.	71.8 gr.
IMR 7828	58.8 gr.	61.6 gr.	64.5 gr.	67.3 gr.	70.2 gr.	
VIHT N-165	60.0 gr.	62.6 gr.	65.2 gr.	67.8 gr.		
H1000	62.3 gr.	65.1 gr.	67.8 gr.	70.6 gr.	73.4 gr.	76.1 gr.
Alliant RL-25	65.2 gr.	67.3 gr.	69.5 gr.	71.6 gr.	73.8 gr.	75.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Shooting Times Westerner

Rifle:	Remington 700/Hart	**Bullet Diameter:**	0.284"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.600"
Case:	Remington	**Max. Case Length:**	2.850"
Primer:	Federal 215	**Case Trim Length:**	2.840"

Cartridges are named for wildcatters, corporations, dimensions, calibers/powder charges/bullet weights, insects, geographical areas, associations, and, yes, gun magazines. The 7mm STW stands for the 7mm Shooting Times Westerner, a cartridge designed in 1989 by Layne Simpson, a gun writer for Shooting Times.

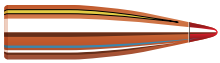
The 8mm Remington Magnum, introduced in 1978, is the basis for the 7mm STW. The 8mm parent never gained a great following, the paucity of bullets and loads being a significant factor. The 7mm STW suffers no such difficulty. It takes advantage of the long action of Remington's popular Model 700. A decrease in body taper and a bit more throat make it attractive for rechambering 7mm Remington Magnums. Our test barrels held up reasonably well in testing.

The 5th edition of the Hornady Handbook marked its first inclusion in our handbook series. The 7mm STW has an outstanding ballistics potential. Combined with the extensive line of 7mm Hornady Bullets, it should be suitable for everything from varmints to large North American game.

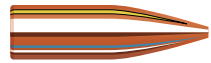
The 162 grain ELD-X® Hornady Bullet is an exceptional long range performer. Those hunting the largest North American game should consider either of the Hornady 175 grain selections.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 3.645"
G1 B.C.: 0.365



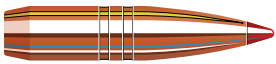
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 3.645"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
H4350	63.4 gr.	65.9 gr.	68.4 gr.	70.9 gr.	
VIHT N-160	66.3 gr.	68.4 gr.	70.6 gr.		
IMR 4831	66.2 gr.	68.8 gr.	71.3 gr.	73.9 gr.	
Alliant RL-19	69.0 gr.	71.3 gr.	73.5 gr.	75.8 gr.	78.0 gr.
Alliant RL-22	69.6 gr.	72.4 gr.	75.2 gr.	77.9 gr.	
IMR 7828	71.0 gr.	73.2 gr.	75.5 gr.	77.8 gr.	
VIHT N-165	71.0 gr.	73.3 gr.	75.7 gr.	78.0 gr.	
H4831	71.0 gr.	73.5 gr.	76.0 gr.	78.5 gr.	
H1000	76.1 gr.	78.6 gr.	81.1 gr.		

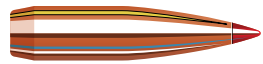
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

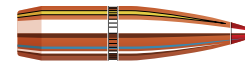
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



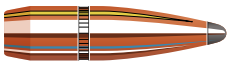
139 gr. GMX®
Item No. 28270
C.O.L.: 3.640"
G1 B.C.: 0.486



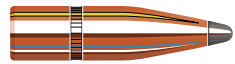
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.640"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.640"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.640"
G1 B.C.: 0.453



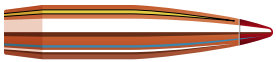
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.640"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4831	63.7 gr.	66.3 gr.	68.8 gr.	71.3 gr.	
Alliant RL-19	65.0 gr.	67.6 gr.	70.3 gr.	72.9 gr.	
Alliant RL-22	67.0 gr.	69.4 gr.	71.7 gr.	74.1 gr.	
VIHT N-165	67.2 gr.	70.0 gr.	72.7 gr.	75.4 gr.	
IMR 7828	69.0 gr.	71.1 gr.	73.3 gr.	75.5 gr.	
H4831	67.8 gr.	70.7 gr.	73.6 gr.	76.4 gr.	
H1000	72.8 gr.	75.4 gr.	78.0 gr.	80.6 gr.	83.2 gr.

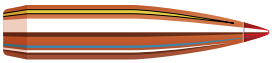
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

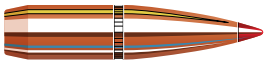
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



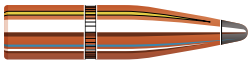
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.645"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.645"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.645"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.645"
G1 B.C.: 0.433

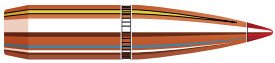
	VELOCITY (FPS – feet per second)				
POWDER	**2950**	**3000**	**3100**	**3150**	**3200**
IMR 4831	62.9 gr.	64.3 gr.	67.0 gr.		
Alliant RL-19	65.3 gr.	66.8 gr.	69.8 gr.	71.3 gr.	72.8 gr.
Alliant RL-22	65.9 gr.	67.2 gr.	69.8 gr.	71.1 gr.	
IMR 7828	66.7 gr.	68.0 gr.	70.6 gr.	71.8 gr.	73.1 gr.
H4831	66.5 gr.	68.0 gr.	70.9 gr.	72.4 gr.	
H1000	70.4 gr.	71.9 gr.	74.9 gr.	76.4 gr.	77.9 gr.
Alliant RL-25	70.6 gr.	72.0 gr.	75.0 gr.	76.5 gr.	
VIHT N-170	72.0 gr.	73.5 gr.	76.5 gr.		
VIHT 24N41	78.3 gr.	80.0 gr.	83.4 gr.	85.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

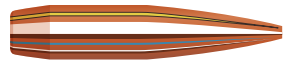
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

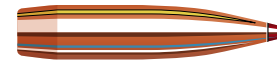
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



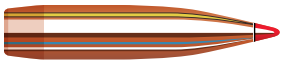
162 gr. SST®
Item No. 28452
C.O.L.: 3.645"
G1 B.C.: 0.550



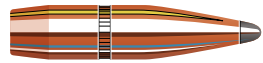
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.645"
G1 B.C.: 0.610



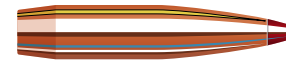
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.645"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.645"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.645"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.645"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**2950**	**3000**	**3050**	**3100**	**3150**
Alliant RL-19	65.4 gr.	66.6 gr.	67.8 gr.	69.0 gr.	70.2 gr.	71.4 gr.
H4831	65.6 gr.	67.1 gr.	68.6 gr.	70.2 gr.	71.7 gr.	73.2 gr.
Alliant RL-22	66.8 gr.	68.2 gr.	69.6 gr.	71.0 gr.	72.4 gr.	
VIHT N-165	68.3 gr.	69.5 gr.	70.8 gr.			
IMR 7828	68.7 gr.	69.8 gr.	71.0 gr.	72.2 gr.	73.4 gr.	
H1000	72.0 gr.	73.2 gr.	74.4 gr.	75.7 gr.	76.9 gr.	78.2 gr.
Alliant RL-25	71.7 gr.	73.1 gr.	74.5 gr.	75.9 gr.	77.2 gr.	
VIHT N-170	72.4 gr.	73.9 gr.	75.3 gr.	76.8 gr.		

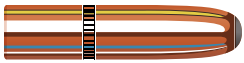
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

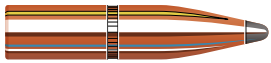
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

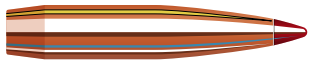
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.650"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.650"
G1 B.C.: 0.462



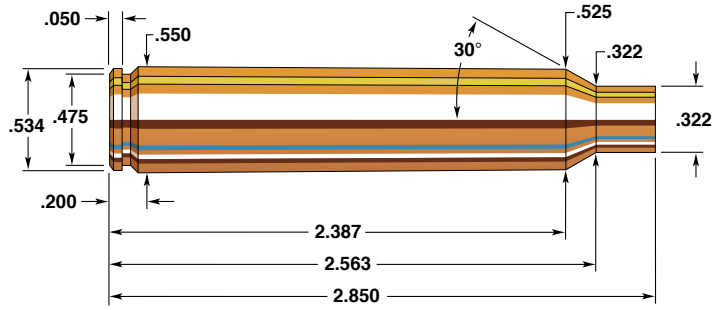
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.650"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**2750**	**2800**	**2850**	**2900**	**2950**	**3000**
Alliant RL-19	61.9 gr.	63.2 gr.	64.6 gr.	65.9 gr.	67.2 gr.	68.6 gr.
H4831	61.9 gr.	63.4 gr.	64.9 gr.	66.3 gr.		
VIHT N-165	62.3 gr.	63.7 gr.	65.1 gr.	66.5 gr.		
IMR 7828	64.3 gr.	65.6 gr.	66.9 gr.			
H1000	64.6 gr.	66.5 gr.	68.4 gr.	70.3 gr.		
VIHT N-170	66.9 gr.	68.5 gr.	70.1 gr.	71.7 gr.		
Alliant RL-25	68.0 gr.	69.8 gr.	71.5 gr.			
VIHT 24N41	71.4 gr.	73.1 gr.	74.8 gr.	76.5 gr.	78.2 gr.	79.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm Remington Ultra Magnum

Rifle: . . . . . Remington Model 700
Barrel: . . . . . 26", 1 in 9" Twist
Case: . . . . . Remington
Primer: . . . . . Federal 215

Bullet Diameter: . . . . . 0.284"
Maximum COL: . . . . . 3.600"
Max. Case Length: . . . . . 2.850"
Case Trim Length: . . . . . 2.840"

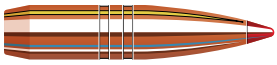
The 7mm Ultra Mag is the new king of the hill in the commercially loaded 7mm class. (Lazzaroni cartridges are considered proprietary). This is a fine hunting cartridge but, as one can imagine, barrel life would be limited if it were used as a target rifle. Its parent cartridge is the 404 Jeffery, the same as all of the other Ultra Mag cartridges to date. The 7mm Ultra Mag is the ballistically least efficient of the Ultra Mag line; however, it is capable of producing impressive velocities.

When loading for a cartridge such as this, there are a few things to be aware of. First, make sure that you are using powders that fill the case at least 80% full; any less than this can create the potential for inconsistent velocities and dangerous pressure spikes. Secondly, as mentioned earlier in this text, the 7mm Ultra Mag should be utilized as a hunting cartridge, and situations that dictate prolonged firing should be avoided.

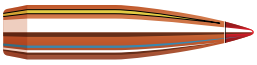
Powders that worked the best in our gun are RL-25 and H 1000. This cartridge should be loaded with heavier bullets for hunting situations, because the additional sectional density of the bullets will help to ensure adequate penetration if the shot is at close range. Our 7mm 162 grain SST® is an excellent choice in the 7mm Ultra Mag, but one should not over look the performance record of the 175 grain Spire Point.

139 GRAIN BULLETS

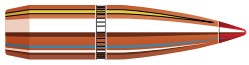
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



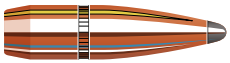
139 gr. GMX®
Item No. 28270
C.O.L.: 3.580"
G1 B.C.: 0.486



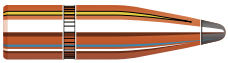
139 gr. InterBond®
Item No. 28209
C.O.L.: 3.580"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 3.580"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 3.575"
G1 B.C.: 0.453



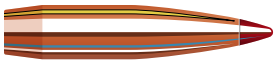
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 3.630"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
H4831	78.3 gr.	80.9 gr.	83.5 gr.	86.1 gr.		
Alliant RL-22	74.2 gr.	78.2 gr.	82.3 gr.	86.4 gr.	90.4 gr.	
IMR 7828	78.7 gr.	81.3 gr.	83.9 gr.	86.5 gr.	89.1 gr.	
VIHT N-165	78.5 gr.	81.3 gr.	84.0 gr.	86.8 gr.		
H1000		88.1 gr.	90.1 gr.	92.2 gr.	94.3 gr.	96.4 gr.

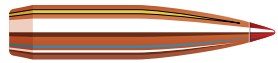
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

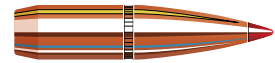
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



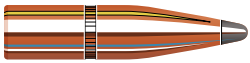
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 3.635"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 3.585"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 3.585"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 3.635"
G1 B.C.: 0.433

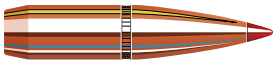
	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
Alliant RL-22	74.5 gr.	77.8 gr.	81.1 gr.	84.5 gr.	
H4831	77.5 gr.	80.1 gr.	82.7 gr.	85.3 gr.	
IMR 7828	77.8 gr.	80.3 gr.	82.9 gr.	85.5 gr.	
VIHT N-165	77.3 gr.	80.5 gr.	83.7 gr.	86.8 gr.	
H1000	82.3 gr.	85.3 gr.	88.2 gr.	91.2 gr.	
Alliant RL-25	83.9 gr.	86.4 gr.	88.8 gr.	91.2 gr.	93.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

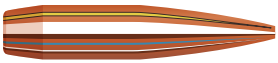
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

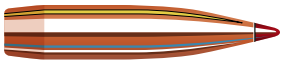
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



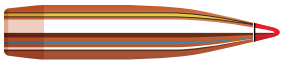
162 gr. SST®
Item No. 28452
C.O.L.: 3.635"
G1 B.C.: 0.550



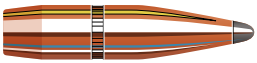
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 3.635"
G1 B.C.: 0.610



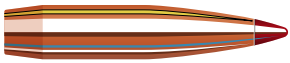
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 3.635"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 3.635"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 3.635"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 3.635"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
Alliant RL-22	75.8 gr.	78.7 gr.	81.6 gr.	84.5 gr.	
VIHT N-165	76.2 gr.	79.1 gr.	82.0 gr.		
IMR 7828	74.8 gr.	78.5 gr.	82.1 gr.		
H4831	77.4 gr.	80.3 gr.	83.2 gr.	86.1 gr.	
Alliant RL-25	83.2 gr.	85.2 gr.	87.2 gr.	89.3 gr.	91.3 gr.
H1000	80.1 gr.	83.7 gr.	87.3 gr.		

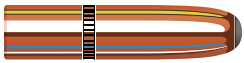
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

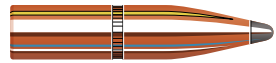
*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

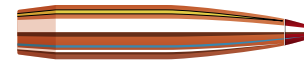
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 3.625"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 3.605"
G1 B.C.: 0.462



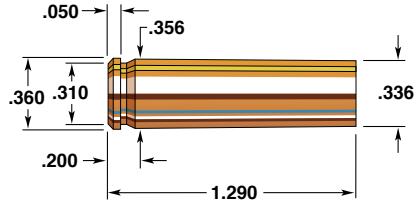
***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 3.635"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
Alliant RL-22	71.7 gr.	74.7 gr.	77.6 gr.	80.6 gr.	
H4831	72.9 gr.	75.7 gr.	78.5 gr.	81.4 gr.	
Alliant RL-25	77.7 gr.	80.4 gr.	83.2 gr.	85.9 gr.	88.6 gr.
H1000	71.7 gr.	76.9 gr.	82.1 gr.	87.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Hornady recommends a 1:8.5" or faster twist barrel to stabilize the 175 grain ELD-X®.*

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



30 M1 Carbine

Rifle:	30 Caliber M1 Carbine	**Bullet Diameter:**	0.308 – 0.309"
Barrel:	17½", 1 in 16" Twist	**Maximum COL:**	1.680"
Case:	Hornady/Frontier	**Max. Case Length:**	1.290"
Primer:	Winchester WSR	**Case Trim Length:**	1.280"

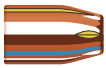
The 30 Carbine had its origin in 1940 when the U.S. Ordnance Department adopted the round as an alternate to the 45- caliber semi-auto sidearm. In 1963 thousands of 30 M1 Carbines were released by the U.S. Government through the DCM. The price was right, and surplus ammo was inexpensive and readily available. More than anything the original cost of the firearm and ammunition for this caliber has kept it alive and well. The populace has long had a romance for the 30 Carbine. The 30 M1 Carbine is not a highly accurate or deadly round. Its primary use is as a defense weapon. As a hunting round it should be limited to plinking and small game.

Having reported all this, how can we explain the attraction, fascination, or nostalgia the 30 M1 Carbine continues to hold? After military stocks of the carbine were exhausted, it came into commercial production and refuses to go away. Its looks are the model for many a 22 LR and other sporters, and have often been imitated. Maybe the 30 M1 Carbine is the small arms equivalent of that Ford Mustang or early Chevy Corvette secretly longed for but not acquired at first. The 30 M1 Carbine seems here to stay, whatever the reason.

30 M1 Carbine reloading is easy and economical. The Hornady 100 grain Short Jacket and the 110 grain Round Nose both give good accuracy and optimum expansion at 30 Carbine velocities.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.136
DIAMETER: 0.309"



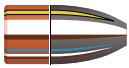
90 gr. XTP®
Item No. 31000
C.O.L.: 1.550"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
VIHT N-110	11.1 gr.	11.9 gr.	12.7 gr.	13.5 gr.	14.3 gr.	
Alliant 2400	11.6 gr.	12.3 gr.	13.0 gr.	13.7 gr.		
WIN 296	11.6 gr.	12.6 gr.	13.7 gr.	14.8 gr.	15.9 gr.	
H110	11.6 gr.	12.6 gr.	13.7 gr.	14.7 gr.	15.8 gr.	16.8 gr.
IMR 4227	13.5 gr.	14.2 gr.	15.0 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.151
DIAMETER: 0.308"



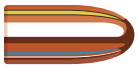
100 gr. Short Jacket
Item No. 3005
C.O.L.: 1.680"
G1 B.C.: 0.152

	VELOCITY (FPS – feet per second)				
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**
Accurate No. 9	11.2 gr.	11.9 gr.	12.7 gr.		
VIHT N-110	11.2 gr.	12.1 gr.	12.9 gr.	13.8 gr.	
Alliant 2400	11.4 gr.	12.3 gr.	13.2 gr.	14.1 gr.	
H110	13.3 gr.	14.3 gr.	15.0 gr.	15.7 gr.	16.5 gr.
IMR 4227	13.3 gr.	14.1 gr.	15.0 gr.	15.8 gr.	
WIN 296	14.1 gr.	14.8 gr.	15.5 gr.	16.2 gr.	16.9 gr.

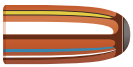
Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"



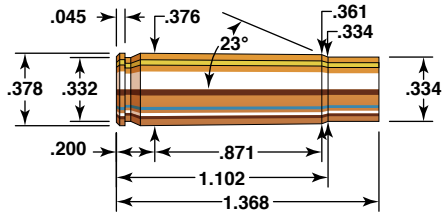
110 gr. FMJ-RN
Item No. 3017
C.O.L.: 1.680"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 1.680"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)			
POWDER	**1700**	**1800**	**1900**	**2000**
Accurate No. 9	10.7 gr.	11.4 gr.	12.1 gr.	
VIHT N-110	10.7 gr.	11.5 gr.	12.3 gr.	
Alliant 2400	10.9 gr.	11.5 gr.	12.2 gr.	
WIN 296		13.0 gr.	14.0 gr.	14.9 gr.
H110		13.1 gr.	14.0 gr.	14.9 gr.
Accurate 1680	16.1 gr.	17.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



300 Blackout

Rifle: . . . . . Smith & Wesson AR 15
Barrel: . . . . . .16", 1 in 7.5" Twist
Case: . . . . . Hornady
Primer: . . . . . Winchester Small Rifle

Bullet Diameter: . . . . . 0.308"
Maximum COL: . . . . . 2.260"
Max. Case Length: . . . . . 1.368"
Case Trim Length: . . . . . 1.358"

The 300 Blackout is a versatile round, commonly built on the AR-15 platform, that functionality with both supersonic and subsonic rounds. The loads presented in this section are safe to use in 300 Blackout and 300 Whisper designated rifles. The difference between the two is that the chamber throat of the 300 Blackout is 0.015" longer than the 300 Whisper. That is a small difference, but handloaders wanting to seat their bullets close to the lands should keep that in mind. Reloading dies are identical between the two cartridges.

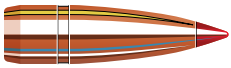
JD Jones of SSK Industries created the 300 Whisper by necking up the 221 Remington Fireball case to accept the 30 caliber (.308" diameter) bullets. The combination of reduced power capacity and increased caliber in the cartridge permits a wide variety of weight and powder charge combinations for an equally wide variety of shooting purposes.

Either a 110 grain V-MAX® at 2,400 fps or a 125 grain SST® at 2,100 fps makes for a surprisingly effective hunting cartridge out to 200 yards. Both the 208 grain and 225 grain bullet weights are commonly used for making subsonic loads. The 110 grain GMX® bullet is designed for expansion at 300 Blackout velocities as well. Don't start off with maximum loads with GMX® bullets as the tough copper-alloy material doesn't flex like lead-core bullets and therefore exhibits pressure signs sooner.

The following data was shot for velocity and functionality with an AR-15. We found that Accurate 1680 worked best for subsonic loads while still cycling the action.

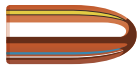
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

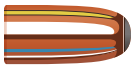


110 gr. GMX®
Item No. 30191
C.O.L.: 2.210"
G1 B.C.: 0.305

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.050"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 1.790"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 1.790"
G1 B.C.: 0.150

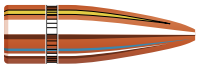
110 gr. SP
Item No. 3010
C.O.L.: 2.050"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
Accurate No. 9	14.5 gr.	15.5 gr.	16.6 gr.	17.6 gr.	
Alliant 2400	14.3 gr.	15.5 gr.	16.8 gr.		
NORMA R-123	14.7 gr.	16.0 gr.	17.3 gr.		
VIHT N-110	14.9 gr.	16.1 gr.	17.4 gr.		
H110	16.6 gr.	17.5 gr.	18.4 gr.	19.3 gr.	20.2 gr.
WIN 296	16.7 gr.	17.7 gr.	18.8 gr.	19.9 gr.	
LIL' GUN	17.7 gr.	18.9 gr.	20.1 gr.	21.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

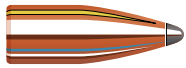
125-130 GRAIN BULLETS

SECTIONAL DENSITY: 0.188-0.196
DIAMETER: 0.308"



125 gr. HP
Item No. 30192
C.O.L.: 2.100"
G1 B.C.: 0.320

125 gr. SST®
Item No. 3019
C.O.L.: 2.100"
G1 B.C.: 0.305



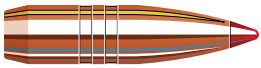
130 gr. SP
Item No. 3020
C.O.L.: 2.100"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**
Accurate No. 9	12.1 gr.	13.1 gr.	14.1 gr.		
Alliant 2400	11.8 gr.	13.4 gr.	14.9 gr.		
NORMA R-123	12.8 gr.	14.2 gr.	15.5 gr.		
VIHT N-110	12.8 gr.	14.1 gr.	15.5 gr.	16.8 gr.	
WIN 296	14.2 gr.	15.3 gr.	16.4 gr.	17.5 gr.	
H110	14.6 gr.	15.6 gr.	16.7 gr.	17.7 gr.	18.8 gr.
IMR 4227	14.4 gr.	15.7 gr.	17.0 gr.	18.3 gr.	
LIL' GUN	14.7 gr.	16.0 gr.	17.3 gr.	18.7 gr.	20.0 gr.
Accurate 5744	15.8 gr.	17.6 gr.	19.4 gr.		
Accurate 1680	18.3 gr.	19.5 gr.	20.7 gr.		

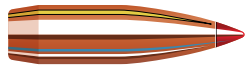
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

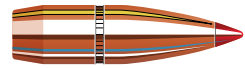
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



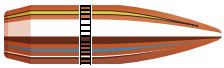
150 gr. GMX®
Item No. 30370
C.O.L.: 1.962"
G1 B.C.: 0.415



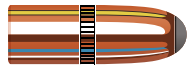
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.210"
G1 B.C.: 0.415



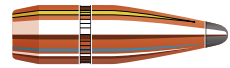
150 gr. SST®
Item No. 30302
C.O.L.: 2.210"
G1 B.C.: 0.415



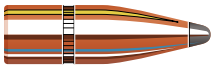
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.090"
G1 B.C.: 0.398



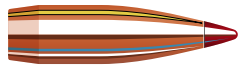
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 1.900"
G1 B.C.: 0.186



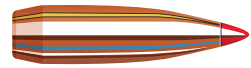
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.106"
G1 B.C.: 0.349



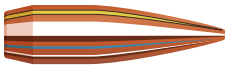
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.106"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.110"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.110"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.110"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)						
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**	**2000**	**2050**
Accurate No. 9	10.9 gr.	12.0 gr.	13.1 gr.	14.2 gr.			
Alliant 2400	10.8 gr.	12.0 gr.	13.2 gr.				
VIHT N-110	11.3 gr.	12.5 gr.	13.8 gr.				
LIL' GUN	11.8 gr.	13.1 gr.	14.4 gr.	15.7 gr.	17.0 gr.		
H110	12.3 gr.	13.5 gr.	14.7 gr.	15.9 gr.			
WIN 296	12.7 gr.	13.8 gr.	14.9 gr.	16.0 gr.			
IMR 4227	12.9 gr.	14.0 gr.	15.2 gr.	16.3 gr.			
VIHT N-120	14.1 gr.	15.2 gr.	16.3 gr.	17.3 gr.	18.4 gr.		
Accurate 1680	15.4 gr.	16.6 gr.	17.8 gr.	19.0 gr.	20.2 gr.	21.4 gr.	22.0 gr.

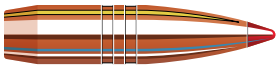
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

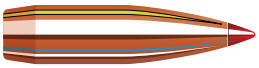
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

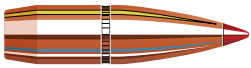
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



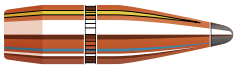
165 gr. GMX®
Item No. 30470
C.O.L.: 2.170"
G1 B.C.: 0.447



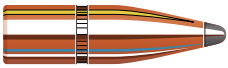
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.215"
G1 B.C.: 0.447



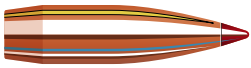
165 gr. SST®
Item No. 30452
C.O.L.: 2.100"
G1 B.C.: 0.447



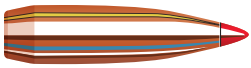
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.100"
G1 B.C.: 0.435



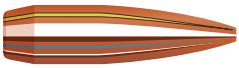
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.100"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.215"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.215"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.215"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**	**1850**
Alliant 2400	10.4 gr.	11.4 gr.	12.5 gr.			
NORMA R-123	10.5 gr.	11.8 gr.	13.0 gr.			
VIHT N-110	10.5 gr.	11.8 gr.	13.1 gr.			
LIL' GUN	10.8 gr.	12.1 gr.	13.3 gr.	14.5 gr.		
WIN 296	11.6 gr.	12.7 gr.	13.7 gr.	14.8 gr.		
H110	11.6 gr.	12.7 gr.	13.8 gr.	14.9 gr.		
IMR 4227	11.8 gr.	13.0 gr.	14.2 gr.			
VIHT N-120	13.3 gr.	14.3 gr.	15.4 gr.	16.5 gr.		
Accurate 5744	13.0 gr.	14.5 gr.	15.9 gr.			
Accurate 1680	14.6 gr.	15.7 gr.	16.7 gr.	17.8 gr.	18.9 gr.	19.4 gr.

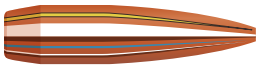
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

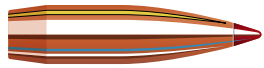
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

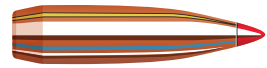
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



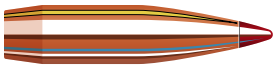
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.210"
G1 B.C.: 0.530



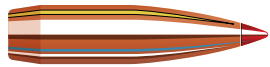
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.210"
G1 B.C.: 0.515
G7 B.C.: 0.259



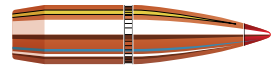
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.210"
G1 B.C.: 0.495



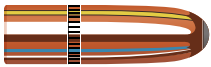
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.210"
G1 B.C.: 0.545
G7 B.C.: 0.275



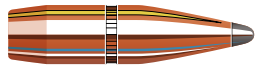
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.210"
G1 B.C.: 0.480



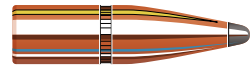
180 gr. SST®
Item No. 30702
C.O.L.: 2.110"
G1 B.C.: 0.480



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.050"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.120"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.120"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**	**1800**
Accurate No. 9	9.5 gr.	10.5 gr.	11.4 gr.			
Alliant 2400	9.9 gr.	10.9 gr.	11.9 gr.			
LIL' GUN	9.0 gr.	10.5 gr.	12.0 gr.	13.5 gr.		
VIHT N-110	10.2 gr.	11.3 gr.	12.3 gr.			
H110	10.2 gr.	11.5 gr.	12.8 gr.	14.1 gr.		
WIN 296	10.2 gr.	11.6 gr.	12.9 gr.			
IMR 4227	11.1 gr.	12.3 gr.	13.5 gr.	14.7 gr.		
VIHT N-120	12.5 gr.	13.6 gr.	14.7 gr.	15.7 gr.	16.8 gr.	
Accurate 5744	12.6 gr.	13.8 gr.	15.0 gr.	16.1 gr.		
Accurate 1680	13.4 gr.	14.6 gr.	15.8 gr.	17.0 gr.	18.1 gr.	19.3 gr.
NORMA 200	14.7 gr.	15.9 gr.	16.9 gr.	18.1 gr.	19.2 gr.	

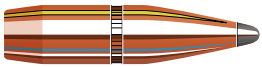
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.185"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**	**1650**
Accurate No. 9	8.9 gr.	9.7 gr.	10.6 gr.			
Alliant 2400	9.2 gr.	10.1 gr.	11.1 gr.			
LIL' GUN	8.0 gr.	9.6 gr.	11.2 gr.	12.8 gr.		
VIHT N-110	9.3 gr.	10.4 gr.	11.6 gr.			
H110	9.3 gr.	10.5 gr.	11.8 gr.	13.0 gr.		
WIN 296	9.9 gr.	11.0 gr.	12.1 gr.	13.2 gr.		
IMR 4227	10.2 gr.	11.3 gr.	12.5 gr.	13.6 gr.		
Accurate 5744	11.8 gr.	12.8 gr.	13.8 gr.	14.8 gr.		
VIHT N-120	12.0 gr.	12.9 gr.	13.8 gr.	14.7 gr.		
Accurate 1680	12.9 gr.	14.0 gr.	15.1 gr.	16.2 gr.	17.2 gr.	17.8 gr.
NORMA 200	13.5 gr.	14.6 gr.	15.7 gr.	16.8 gr.		

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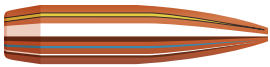
195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 2.250"
G1 B.C.: 0.550
G7 B.C.: 0.311

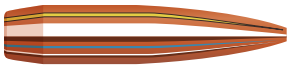
	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**	**1650**
Accurate No. 9	8.7 gr.	9.7 gr.	10.7 gr.			
Alliant 2400	8.9 gr.	10.0 gr.	11.0 gr.			
LIL' GUN	8.9 gr.	10.1 gr.	11.4 gr.	12.6 gr.	13.8 gr.	
NORMA R-123	9.2 gr.	10.3 gr.	11.5 gr.			
VIHT N-110	9.5 gr.	10.5 gr.	11.6 gr.			
WIN 296	9.7 gr.	10.9 gr.	12.1 gr.	13.4 gr.		
H110	9.7 gr.	10.9 gr.	12.2 gr.	13.4 gr.		
IMR 4227	10.3 gr.	11.5 gr.	12.7 gr.	13.9 gr.		
VIHT N-120	11.8 gr.	12.8 gr.	13.8 gr.	14.7 gr.		
Accurate 5744	11.6 gr.	12.9 gr.	14.2 gr.			
Accurate 1680	13.0 gr.	14.1 gr.	15.1 gr.	16.2 gr.	17.3 gr.	17.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

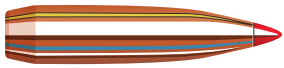
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

208 GRAIN BULLETS

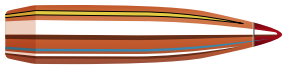
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 2.250"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 2.250"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 2.250"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**1000**	**1100**	**1200**	**1300**	**1400**	**1500**
Accurate No. 9	7.0 gr.	8.0 gr.	8.9 gr.	9.8 gr.		
LIL' GUN	6.7 gr.	7.8 gr.	9.0 gr.	10.2 gr.	11.4 gr.	
Alliant 2400	7.4 gr.	8.4 gr.	9.3 gr.	10.3 gr.		
H110	7.3 gr.	8.4 gr.	9.5 gr.	10.6 gr.	11.7 gr.	
VIHT N-110	7.5 gr.	8.6 gr.	9.6 gr.	10.6 gr.		
WIN 296	7.5 gr.	8.5 gr.	9.6 gr.	10.7 gr.	11.7 gr.	
IMR 4227	8.1 gr.	9.2 gr.	10.2 gr.	11.2 gr.		
VIHT N-120	9.3 gr.	10.2 gr.	11.0 gr.	11.9 gr.	12.7 gr.	
Accurate 5744	9.0 gr.	10.3 gr.	11.6 gr.	12.9 gr.		
SW Blackout	9.9 gr.	10.9 gr.	12.0 gr.	13.1 gr.	14.2 gr.	
Accurate 1680	10.4 gr.	11.3 gr.	12.3 gr.	13.3 gr.	14.3 gr.	15.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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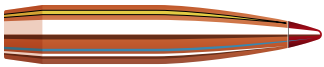
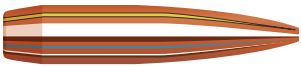
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 2.250"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 2.250"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)					
POWDER	**900**	**1000**	**1100**	**1200**	**1300**	**1400**
Accurate No. 9	6.6 gr.	7.5 gr.	8.3 gr.	9.1 gr.		
LIL' GUN	6.5 gr.	7.5 gr.	8.5 gr.	9.4 gr.	10.4 gr.	11.4 gr.
Alliant 2400	7.0 gr.	7.8 gr.	8.7 gr.	9.5 gr.		
H110	6.7 gr.	7.8 gr.	8.8 gr.	9.9 gr.	10.9 gr.	
WIN 296	6.9 gr.	7.9 gr.	8.9 gr.	9.9 gr.	10.9 gr.	
VIHT N-110	7.2 gr.	8.1 gr.	9.1 gr.	10.0 gr.		
IMR 4227	7.8 gr.	8.7 gr.	9.6 gr.	10.5 gr.		
VIHT N-120	9.0 gr.	9.7 gr.	10.3 gr.	11.0 gr.		
Accurate 5744	9.0 gr.	10.1 gr.	11.1 gr.	12.2 gr.		
Accurate 1680	10.0 gr.	10.8 gr.	11.6 gr.	12.4 gr.	13.2 gr.	

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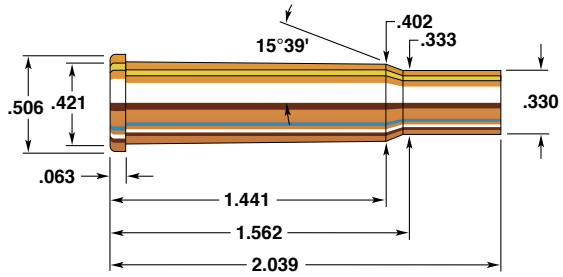
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.



30-30 Winchester

Rifle:	Winchester M 94	**Bullet Diameter:**	0.308"
Barrel:	20", 1 in 12" Twist	**Maximum COL:**	2.550"
Case:	Hornady/Frontier	**Max. Case Length:**	2.039"
Primer:	Federal 210	**Case Trim Length:**	2.029"

The 30-30 is one of America's favorite deer hunting cartridges and has been since 1895 when it was first introduced by Winchester. The reason is simple. It has always been chambered in a fast handling, dependable, and moderately priced firearm with adequate power. For the deer hunter who hunts areas where 100-150 yards are the longest shots, the 30-30 is more than sufficient.

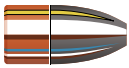
The 30-30 is largely found in carbine type firearms, with lever action Winchester Model 94s and Marlin Model 336s heading the list. It can also be found in a few bolt actions and is quite popular in Europe where it is found mainly in combination guns.

When reloading for lever actions, reloading dies should be set to full-length resize. Lever actions do not have the camming action of a bolt action to close on an oversized case and therefore require the cases to be sized to a greater degree for proper functioning. In our test rifle, WIN 748 gave the best results in accuracy and uniformity.

The 140 grain MonoFlex® and 160 grain FTX® bullets turn the 30-30 Winchester from a short range brush buster into a medium range precision hunting rifle. These bullets are designed to expand over a wide range of velocities and will deliver exceptional terminal performance even at extended ranges. Please note: The test barrel length for this data is 20". If you have a longer barreled rifle, we have found that muzzle velocities will increase approximately 30 fps per one inch of barrel length added.

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.151
DIAMETER: 0.308"



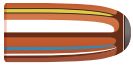
100 gr. Short Jacket
Item No. 3005
C.O.L.: 2.435"
G1 B.C.: 0.152

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VIHT N-130	21.5 gr.	23.6 gr.	25.7 gr.	27.8 gr.	30.0 gr.	32.1 gr.
IMR 3031	31.0 gr.	32.1 gr.	33.1 gr.	34.2 gr.	35.3 gr.	
H322	30.4 gr.	31.7 gr.	33.1 gr.	34.4 gr.		
Accurate 2230		30.0 gr.	32.3 gr.	34.8 gr.		
BL-C(2)	33.3 gr.	34.4 gr.	35.5 gr.	36.6 gr.	37.7 gr.	38.8 gr.
H335	35.5 gr.	36.8 gr.	38.1 gr.	39.5 gr.	40.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"



110 gr. RN
Item No. 3015
C.O.L.: 2.490"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
VIHT N-130	21.9 gr.	23.8 gr.	25.7 gr.	27.6 gr.	29.5 gr.	31.4 gr.
H322	30.9 gr.	32.1 gr.	33.2 gr.	34.4 gr.		
Accurate 2230	29.3 gr.	31.3 gr.	33.4 gr.			
BL-C(2)	32.7 gr.	33.8 gr.	35.0 gr.	36.1 gr.	37.3 gr.	
IMR 4064	33.0 gr.	34.1 gr.	35.2 gr.	36.4 gr.		
H335	34.1 gr.	36.0 gr.	37.9 gr.			

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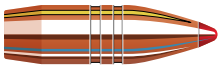
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.211
DIAMETER: 0.308"



140 gr. MonoFlex®
(30-30 Win)
Item No. 30310
C.O.L.: 2.570"
G1 B.C.: 0.277

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2150**	**2200**	**2250**	**2300**
IMR 8208 XBR	28.3 gr.	29.6 gr.	30.2 gr.			
H4895	28.7 gr.	30.1 gr.				
LEVERevolution	29.1 gr.	31.1 gr.	32.1 gr.	33.1 gr.	34.1 gr.	35.1 gr.
Accurate 2520	29.5 gr.	31.3 gr.	32.1 gr.	33.0 gr.		
WIN 748	30.5 gr.	31.8 gr.	32.5 gr.			
NORMA 203 B	30.7 gr.	32.4 gr.	33.2 gr.			
Alliant RL-15	30.9 gr.	32.5 gr.				
Power Pro 2000 MR	32.6 gr.	34.2 gr.				

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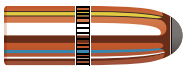
150 GRAIN BULLETS

SECTIONAL DENSITY: 0.226
DIAMETER: 0.308"



150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.550"
G1 B.C.: 0.186

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2250**	**2300**
TAC	25.2 gr.	27.3 gr.	29.3 gr.	31.4 gr.	32.4 gr.	
VIHT N-135	26.2 gr.	27.8 gr.	29.4 gr.	31.0 gr.	31.8 gr.	32.6 gr.
IMR 3031	26.6 gr.	28.2 gr.	29.8 gr.	31.4 gr.		
H335	27.4 gr.	29.3 gr.	31.2 gr.	33.1 gr.	34.1 gr.	35.0 gr.
IMR 8208 XBR	29.1 gr.	30.5 gr.	32.0 gr.	33.5 gr.		
IMR 4064	29.3 gr.	30.8 gr.	32.3 gr.			
Accurate 2520	28.1 gr.	30.2 gr.	32.4 gr.	34.5 gr.		
Alliant RL-15	29.5 gr.	31.0 gr.	32.5 gr.	34.0 gr.		
WIN 748	32.0 gr.	33.7 gr.	35.4 gr.	37.1 gr.	38.0 gr.	38.9 gr.
BL-C(2)	33.3 gr.	34.9 gr.	36.5 gr.	38.1 gr.	38.9 gr.	

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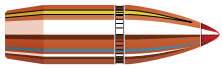
160 GRAIN BULLETS

SECTIONAL DENSITY: 0.241
DIAMETER: 0.308"



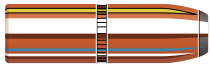
160 gr. FTX® (30-30)
Item No. 30395
C.O.L.: 2.535"
G1 B.C.: 0.330

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2050**	**2100**	**2200**	**2300**
H4895	26.8 gr.	27.9 gr.	28.4 gr.	28.9 gr.		
TAC	26.4 gr.	28.0 gr.	28.9 gr.	29.7 gr.		
H335	27.1 gr.	28.5 gr.	29.2 gr.			
IMR 8208 XBR	28.1 gr.	29.3 gr.	29.9 gr.	30.6 gr.		
Alliant RL-15	28.2 gr.	29.3 gr.	29.8 gr.			
Accurate 2520	27.9 gr.	29.8 gr.	30.7 gr.	31.7 gr.		
IMR 4895	28.2 gr.	29.8 gr.				
LEVERevolution	27.7 gr.	30.0 gr.	31.7 gr.	32.4 gr.	34.8 gr.	37.0 gr.
WIN 748	29.4 gr.	30.8 gr.	31.5 gr.			
BL-C(2)	30.8 gr.	31.4 gr.	33.3 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

170 GRAIN BULLETS

SECTIONAL DENSITY: 0.256
DIAMETER: 0.308"



170 gr. InterLock® FP
Item No. 3060
C.O.L.: 2.530"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**
VIHT N-135	24.5 gr.	26.3 gr.	28.1 gr.	29.9 gr.	
TAC	24.8 gr.	26.8 gr.	28.7 gr.	30.6 gr.	
IMR 3031	25.4 gr.	27.0 gr.	28.5 gr.		
IMR 8208 XBR	27.1 gr.	28.6 gr.	30.1 gr.	31.6 gr.	
Alliant RL-15	27.6 gr.	29.1 gr.	30.6 gr.	32.1 gr.	
Accurate 2520	27.3 gr.	29.2 gr.	31.2 gr.	33.1 gr.	
LEVERevolution	27.7 gr.	29.9 gr.	32.1 gr.	34.3 gr.	36.5 gr.
IMR 4064	27.7 gr.	30.0 gr.			
H335	29.3 gr.	30.9 gr.	32.4 gr.	34.0 gr.	
BL-C(2)	29.9 gr.	32.1 gr.	34.3 gr.	36.4 gr.	
WIN 748	31.4 gr.	33.1 gr.	34.8 gr.	36.5 gr.	

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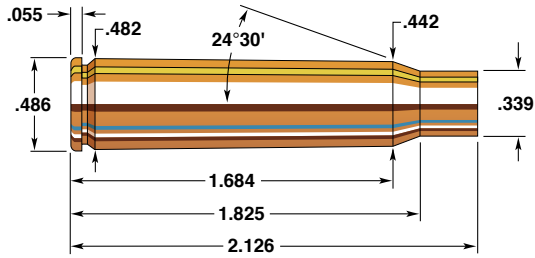


7.5 X 54mm MAS

Rifle:	MAS M-36	**Bullet Diameter:**	0.308"
Barrel:	22½", 1 in 11" Twist	**Maximum COL:**	3.025"
Case:	Lapua 6.5 x 55mm Reformed	**Max. Case Length:**	2.126"
Primer:	CCI #34	**Case Trim Length:**	2.116"

The 7.5 x 54mm MAS, or 7.5 x 54mm French MAS, was adopted as a French army cartridge in 1929 (MAS are the initials for the producing French arsenal, Manufacture d'Armes de Saint Etienne). In military service it was chambered in light machine-guns, the MAS 36 bolt action rifle, and the MAS 49/56 semi-automatic. It replaced the rimmed 8mm Lebel cartridge which had continued in service since 1886.

The rimless 7.5 x 54mm MAS is essentially in the same military class as the 30-40 Krag, the 303 British, and the 7.7mm Japanese, all cartridges of the early part of the 20th century and generally all used through World War II.

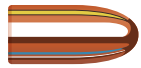
The attraction of the cartridges just mentioned has generally been in their availability as obsolete military ammunition and the surplus military rifles imported with them. All have their sporting uses when suitably adapted for the purpose. The 7.5 x 54mm MAS is suitable for a range of small to medium game, though few would find it up to the task of hunting the largest game on either the North American or European continents. Recently Berdan primed cases have become available from Spain and Yugoslavia.

NOTE: When loading for the 49/56, primers MUST be seated .005" below flush. Use only CCI #34 primers, and make sure there is adequate headspace as the 49/56 has a tendency to slam-fire.

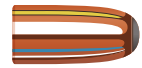
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.770"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.650"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.650"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.770"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 2495	35.9 gr.	38.0 gr.	40.2 gr.	42.3 gr.	44.5 gr.	
VIHT N-135	38.4 gr.	40.0 gr.	41.5 gr.	43.0 gr.	44.5 gr.	46.0 gr.
H4895	41.5 gr.	42.8 gr.	44.2 gr.	45.5 gr.	46.9 gr.	48.2 gr.
IMR 4895	42.3 gr.	43.6 gr.	44.9 gr.	46.2 gr.	47.5 gr.	48.8 gr.
WIN 748	42.1 gr.	43.6 gr.	45.2 gr.	46.8 gr.	48.3 gr.	
VARGET	42.1 gr.	43.9 gr.	45.8 gr.	47.6 gr.	49.4 gr.	

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130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

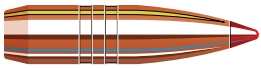
130 gr. SP
Item No. 3020
C.O.L.: 2.850"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
VIHT N-135	34.4 gr.	36.3 gr.	38.3 gr.	40.2 gr.	42.2 gr.	
VIHT N-150	34.8 gr.	37.0 gr.	39.3 gr.	41.5 gr.	43.8 gr.	
H4895	36.5 gr.	38.4 gr.	40.2 gr.	42.1 gr.	44.0 gr.	45.9 gr.
Alliant RL-15	37.3 gr.	39.1 gr.	40.8 gr.	42.5 gr.	44.3 gr.	46.0 gr.
IMR 4895	38.2 gr.	39.9 gr.	41.5 gr.	43.2 gr.	44.9 gr.	46.6 gr.
VARGET	39.5 gr.	41.0 gr.	42.6 gr.	44.1 gr.	45.7 gr.	47.2 gr.
IMR 4064	37.7 gr.	39.7 gr.	41.8 gr.	43.8 gr.	45.9 gr.	
WIN 748	37.1 gr.	39.5 gr.	41.8 gr.	44.1 gr.	46.4 gr.	48.7 gr.
H380	38.4 gr.	41.2 gr.	43.9 gr.	46.7 gr.	49.4 gr.	

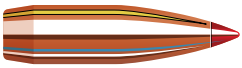
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

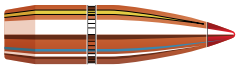
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



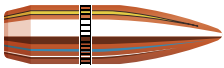
150 gr. GMX®
Item No. 30370
C.O.L.: 2.940"
G1 B.C.: 0.415



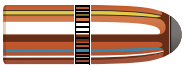
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.940"
G1 B.C.: 0.415



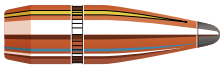
150 gr. SST®
Item No. 30302
C.O.L.: 2.940"
G1 B.C.: 0.415



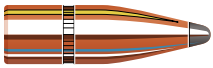
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.940"
G1 B.C.: 0.398



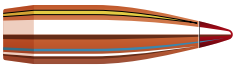
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.830"
G1 B.C.: 0.186



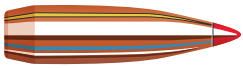
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.940"
G1 B.C.: 0.349



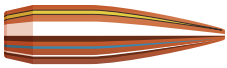
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.940"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.980"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.980"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.870"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
H4895	34.9 gr.	37.2 gr.	39.4 gr.	41.7 gr.	
IMR 4895	35.2 gr.	37.5 gr.	39.8 gr.	42.1 gr.	
Alliant RL-15	35.2 gr.	37.5 gr.	39.8 gr.	42.1 gr.	
WIN 748	38.6 gr.	39.9 gr.	41.1 gr.	42.4 gr.	
IMR 4064	38.1 gr.	39.7 gr.	41.2 gr.	42.8 gr.	44.4 gr.
VARGET	37.6 gr.	39.5 gr.	41.4 gr.	43.3 gr.	
VIHT N-160	40.4 gr.	42.5 gr.	44.5 gr.	46.6 gr.	48.6 gr.
WIN 760	40.6 gr.	42.8 gr.	45.0 gr.	47.1 gr.	

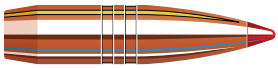
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

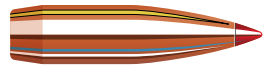
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

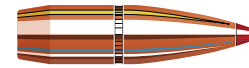
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



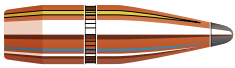
165 gr. GMX®
Item No. 30470
C.O.L.: 2.925"
G1 B.C.: 0.447



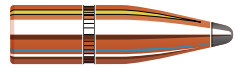
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.925"
G1 B.C.: 0.447



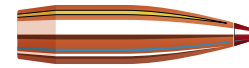
165 gr. SST®
Item No. 30452
C.O.L.: 2.925"
G1 B.C.: 0.447



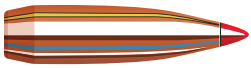
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.925"
G1 B.C.: 0.435



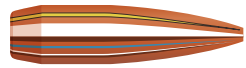
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.925"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.980"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.980"
G1 B.C.: 0.475



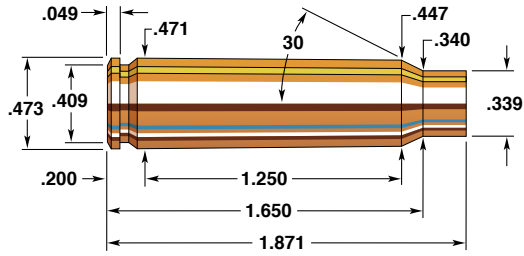
^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.980"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4064	36.2 gr.	37.9 gr.	39.7 gr.	41.4 gr.	
WIN 748	36.9 gr.	39.0 gr.	41.2 gr.	43.3 gr.	
VIHT N-160	37.4 gr.	40.2 gr.	42.9 gr.	45.7 gr.	
WIN 760	39.8 gr.	42.2 gr.	44.5 gr.	46.9 gr.	49.2 gr.
Accurate 2700	40.4 gr.	42.8 gr.	45.1 gr.		
IMR 4350	41.4 gr.	43.4 gr.	45.4 gr.	47.4 gr.	
H4350	42.0 gr.	43.9 gr.	45.8 gr.	47.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



300 Savage

Rifle:	Savage Mod 14	**Bullet Diameter:**	0.308"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	2.600"
Case:	Hornady	**Max. Case Length:**	1.871"
Primer:	Federal 210	**Case Trim Length:**	1.861"

The 300 Savage offers hunting performance much superior to that of the 30-30 Winchester. Though it never achieved the 30- 30's popularity, it has been a widely used big game cartridge, ample for all but the largest North American species. The rifle in which it was introduced in 1921—the Model 99 Savage lever action —has been the most popular of all the rifles chambered for it, although it has been produced in pumps, semi-automatics, and bolt actions.

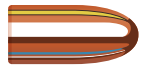
The 300 Savage was first loaded to equal the power of original military 30-06 loading with the 150-grain bullets. Lever actions and the capacity of the case have kept it from equaling the handloading potential of the 30-06 or the more recent 308 Winchester cartridge. The 308 indeed has superseded the 300 Savage in popularity because of its greater power and availability, and today is generally chambered in place of the Savage Arms Company development.

A very wide selection of 30 caliber Hornady Bullets may be handloaded in the 300 Savage case, with 150 and 165 grain weights among the most popular. Unlike lever actions with tubular magazines, the Model 99 Savage has a rotary magazine which will accommodate the ballistically more efficient Spire Points. Bullets over 180 grains offer little to most hunters using the 300 Savage as velocities are low and expansion is questionable. IMR 4064 is an outstanding powder for loading nearly all bullet weights. IMR 3031, H 4895, and VIHT N-140 are nearly equal in versatility.

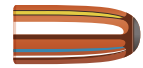
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.520"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.450"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.450"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.520"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
H4198	31.0 gr.	32.6 gr.	34.1 gr.	35.7 gr.		
IMR 3031	36.3 gr.	37.9 gr.	39.5 gr.	41.1 gr.	42.7 gr.	
H4895	37.1 gr.	39.1 gr.	41.0 gr.	43.0 gr.	45.0 gr.	47.0 gr.
IMR 4320	40.2 gr.	42.0 gr.	43.8 gr.	45.5 gr.	47.3 gr.	
VARGET	40.3 gr.	42.1 gr.	43.9 gr.	45.6 gr.		
IMR 4064	40.6 gr.	42.5 gr.	44.3 gr.	46.1 gr.		

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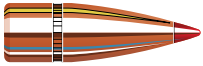
125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 2.600"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)						
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
H4198	27.9 gr.	29.3 gr.	30.7 gr.	32.2 gr.	33.6 gr.		
IMR 3031	31.9 gr.	33.6 gr.	35.3 gr.	37.0 gr.	38.8 gr.	40.5 gr.	
H4895	32.9 gr.	34.8 gr.	36.7 gr.	38.6 gr.	40.5 gr.	42.3 gr.	44.2 gr.
VARGET	33.4 gr.	35.6 gr.	37.9 gr.	40.1 gr.	42.4 gr.	44.6 gr.	
IMR 4320	35.4 gr.	37.3 gr.	39.2 gr.	41.0 gr.	42.9 gr.	44.8 gr.	
IMR 4064	36.9 gr.	38.5 gr.	40.2 gr.	41.8 gr.	43.5 gr.	45.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

130 gr. SP
Item No. 3020
C.O.L.: 2.520"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
H4198	28.3 gr.	29.8 gr.	31.3 gr.	32.8 gr.		
IMR 3031	32.6 gr.	34.1 gr.	35.7 gr.	37.2 gr.	38.7 gr.	40.3 gr.
H4895	32.2 gr.	34.3 gr.	36.3 gr.	38.4 gr.	40.4 gr.	42.5 gr.
VARGET	35.0 gr.	36.9 gr.	38.9 gr.	40.8 gr.	42.7 gr.	44.7 gr.
IMR 4320	35.9 gr.	37.7 gr.	39.5 gr.	41.4 gr.	43.2 gr.	45.1 gr.
IMR 4064	37.4 gr.	39.0 gr.	40.5 gr.	42.1 gr.	43.7 gr.	45.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.211
DIAMETER: 0.308"

140 gr. MonoFlex® (Marlin Express)
Item No. 30311
C.O.L.: 2.550"
G1 B.C.: 0.335

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	31.4 gr.	33.4 gr.	35.4 gr.	37.4 gr.	
H4895	34.0 gr.	35.8 gr.	37.6 gr.	39.3 gr.	41.1 gr.
VARGET	35.8 gr.	37.7 gr.	39.5 gr.	41.4 gr.	43.3 gr.
VIHT N-140	36.9 gr.	38.5 gr.	40.0 gr.	41.5 gr.	43.1 gr.
IMR 4064	36.9 gr.	38.5 gr.	40.1 gr.	41.6 gr.	43.2 gr.
Alliant RL-15	37.6 gr.	39.3 gr.	40.9 gr.	42.6 gr.	44.2 gr.

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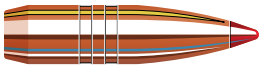
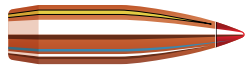
150-155 GRAIN BULLETS

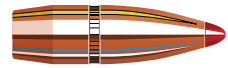
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



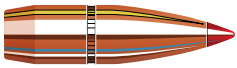
150 gr. GMX®
Item No. 30370
C.O.L.: 2.600"
G1 B.C.: 0.415



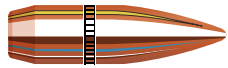
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.600"
G1 B.C.: 0.415



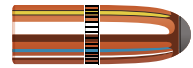
150 gr. SST® (300 Savage)
Item No. 30303
C.O.L.: 2.565"
G1 B.C.: 0.370



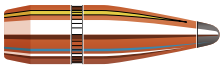
150 gr. SST®
Item No. 30302
C.O.L.: 2.600"
G1 B.C.: 0.415



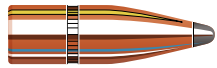
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.590"
G1 B.C.: 0.398



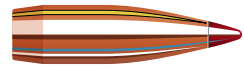
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.450"
G1 B.C.: 0.186



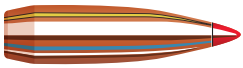
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.600"
G1 B.C.: 0.349



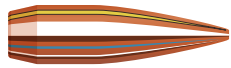
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.600"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.600"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.600"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.600"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	31.5 gr.	33.3 gr.	35.1 gr.	36.9 gr.		
H4895	31.9 gr.	34.0 gr.	36.2 gr.	38.3 gr.	40.4 gr.	
VARGET	33.6 gr.	35.8 gr.	37.9 gr.	40.0 gr.	42.2 gr.	
IMR 4064	35.4 gr.	37.3 gr.	39.1 gr.	40.9 gr.	42.8 gr.	
Alliant RL-15	36.3 gr.	38.0 gr.	39.7 gr.	41.3 gr.	43.0 gr.	
WIN 748	37.1 gr.	38.6 gr.	40.0 gr.	41.4 gr.	42.9 gr.	
Power Pro 2000 MR	37.3 gr.	39.1 gr.	41.0 gr.	42.9 gr.	44.7 gr.	46.6 gr.
Alliant RL-17	40.7 gr.	42.1 gr.	43.6 gr.	45.1 gr.	46.5 gr.	

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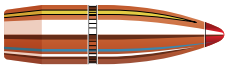
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

SECTIONAL DENSITY: 0.241
DIAMETER: 0.308"



160 gr. FTX®
(Marlin Express)
Item No. 30396
C.O.L.: 2.245"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)			
POWDER	**2200**	**2300**	**2400**	**2500**
IMR 3031	30.5 gr.	32.8 gr.	35.1 gr.	37.4 gr.
H4895	30.9 gr.	33.3 gr.	35.8 gr.	38.2 gr.
VARGET	33.7 gr.	35.8 gr.	37.9 gr.	40.0 gr.
VIHT N-140	35.8 gr.	37.4 gr.	39.0 gr.	40.5 gr.
Alliant RL-17	39.3 gr.	41.1 gr.	42.9 gr.	44.6 gr.

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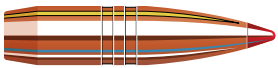
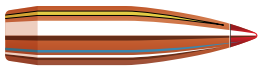
165 GRAIN BULLETS

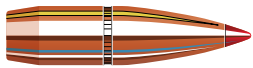
SECTIONAL DENSITY: 0.248
DIAMETER: 0.308"



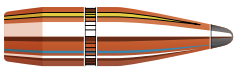
165 gr. GMX®
Item No. 30470
C.O.L.: 2.600"
G1 B.C.: 0.447



165 gr. InterBond®
Item No. 30459
C.O.L.: 2.600"
G1 B.C.: 0.447



165 gr. SST®
Item No. 30452
C.O.L.: 2.600"
G1 B.C.: 0.447



165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.600"
G1 B.C.: 0.435

165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.600"
G1 B.C.: 0.387

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031	30.8 gr.	33.2 gr.	35.5 gr.		
H4895	32.5 gr.	34.7 gr.	36.8 gr.	39.0 gr.	
VARGET	33.5 gr.	35.9 gr.	38.4 gr.	40.8 gr.	
VIHT N-140	36.2 gr.	37.8 gr.	39.5 gr.	41.2 gr.	
Alliant RL-15	35.8 gr.	37.9 gr.	39.9 gr.	42.0 gr.	
WIN 748	37.6 gr.	39.1 gr.	40.6 gr.	42.1 gr.	
Power Pro 2000 MR	38.2 gr.	40.1 gr.	41.9 gr.	43.8 gr.	45.6 gr.
Alliant RL-17	40.3 gr.	41.9 gr.	43.5 gr.	45.1 gr.	

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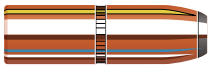
170 GRAIN BULLETS

SECTIONAL DENSITY: 0.256
DIAMETER: 0.308"



170 gr. InterLock® FP
Item No. 3060
C.O.L.: 2.420"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031	31.9 gr.	33.6 gr.	35.2 gr.	36.9 gr.	
H4895	31.7 gr.	33.9 gr.	36.1 gr.	38.3 gr.	
VARGET	35.7 gr.	37.1 gr.	38.6 gr.	40.0 gr.	
IMR 4064	35.8 gr.	37.4 gr.	39.0 gr.	40.6 gr.	42.2 gr.
VIHT N-140	36.3 gr.	37.9 gr.	39.5 gr.	41.1 gr.	
Alliant RL-15	36.8 gr.	38.3 gr.	39.9 gr.	41.4 gr.	
Alliant RL-17	40.4 gr.	41.9 gr.	43.4 gr.	44.9 gr.	

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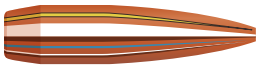
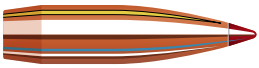
178-180 GRAIN BULLETS

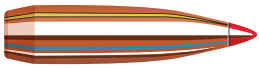
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



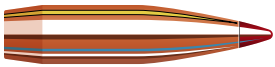
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.600"
G1 B.C.: 0.530



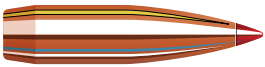
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.600"
G1 B.C.: 0.515
G7 B.C.: 0.259



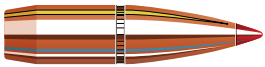
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.600"
G1 B.C.: 0.495



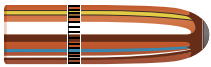
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.600"
G1 B.C.: 0.545
G7 B.C.: 0.275



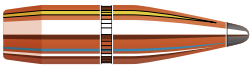
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.600"
G1 B.C.: 0.480



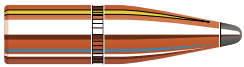
180 gr. SST®
Item No. 30702
C.O.L.: 2.600"
G1 B.C.: 0.480



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.565"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.600"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.600"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	29.8 gr.	31.8 gr.	33.8 gr.	35.7 gr.	
VARGET	31.7 gr.	33.8 gr.	35.8 gr.	37.9 gr.	
IMR 4064	33.9 gr.	35.7 gr.	37.5 gr.	39.2 gr.	
VIHT N-140	33.4 gr.	35.4 gr.	37.3 gr.	39.3 gr.	
Alliant RL-15	34.5 gr.	36.3 gr.	38.0 gr.	39.7 gr.	
Alliant RL-17	38.0 gr.	39.7 gr.	41.3 gr.	43.0 gr.	44.6 gr.

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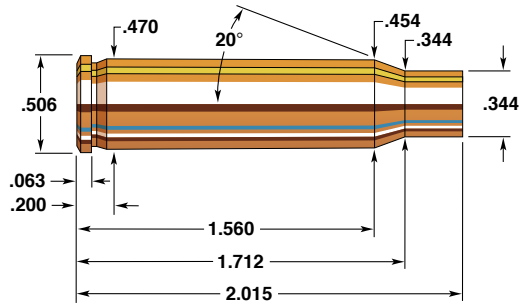
*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



307 Winchester

Rifle:	USRAC Model 94 AE	**Bullet Diameter:**	0.308"
Barrel:	20", 1 in 12" Twist	**Maximum COL:**	2.560"
Case:	Winchester	**Max. Case Length:**	2.015"
Primer:	Winchester WLR	**Case Trim Length:**	2.005"

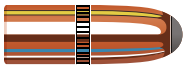
In 1982, the U. S. Repeating Arms Company, corporate successor to Winchester, introduced two new calibers for the beefed up M94 Angle Eject rifle. This new reinforced rifle was designed to handle the relatively high pressure of the 375 Winchester (52,000 C.U.P). It was appropriate, therefore, to use this rifle for the new 307 Winchester cartridge. The 307 is externally similar to the 308 Winchester, except that the 307 is rimmed. 308 dies and #33 shell holder (although sometimes a #2 shell holder for 30-30 type cases will work) can be used to reload the 307. Because of the thicker case walls, however, the 307 has a smaller internal capacity. In tubular magazines, only FTX®, Round Nose or Flat Point bullets should be used and should be crimped in place when possible to prevent bullets from being pushed deeper during recoil.

The 307 Winchester provides a considerable improvement over the 30-30 Winchester, offering flatter trajectory and greater power. The test rifle exhibited very good accuracy for lever actions with 1½" to 2" groups being common. WIN 748 and IMR 4064 powders and the Hornady 170-grain Flat Point bullet provided excellent results with moderate recoil. The U. S. Repeating Arms Company has produced an accurate, potent hunting rifle and cartridge.

The advent of LEVERevolution® ammunition and the FTX® bullet finally allows 307 Winchester owners the ability to wring all the performance possible out of this fine cartridge. The 160 grain FTX® bullet can be loaded to 2500 fps with Hodgdon VARGET and we found the load delivered exceptional accuracy. The streamlined profile of the FTX® bullet allows the 307 Winchester to SAFELY realize the potential its designers intended.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.226
DIAMETER: 0.308"



150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.530"
G1 B.C.: 0.186

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
Accurate 2460		36.6 gr.	38.3 gr.	40.0 gr.	
IMR 8208 XBR	36.5 gr.	38.0 gr.	39.6 gr.		
IMR 4064	38.3 gr.	39.7 gr.	41.1 gr.		
LEVERevolution	41.0 gr.	42.3 gr.	43.6 gr.	44.9 gr.	45.5 gr.
WIN 748	41.1 gr.	42.3 gr.	43.5 gr.		
H414	45.6 gr.	48.8 gr.			

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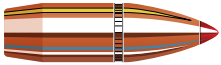
160 GRAIN BULLETS

SECTIONAL DENSITY: 0.241
DIAMETER: 0.308"



160 gr. FTX® (30-30)
Item No. 30395
C.O.L.: 2.525"
G1 B.C.: 0.330

	VELOCITY (FPS – feet per second)							
POWDER	**2200**	**2250**	**2300**	**2350**	**2400**	**2450**	**2500**	**2550**
TAC	33.8 gr.	34.7 gr.	35.5 gr.	36.4 gr.	37.2 gr.	38.1 gr.	38.9 gr.	
IMR 8208 XBR	33.9 gr.	34.9 gr.	35.9 gr.	36.9 gr.	37.9 gr.			
VIHT N-135	35.0 gr.	35.6 gr.	36.3 gr.	36.9 gr.	37.5 gr.	38.2 gr.		
IMR 4895	35.9 gr.	36.4 gr.	37.0 gr.	37.5 gr.	38.0 gr.	38.6 gr.		
H4895	35.9 gr.	36.5 gr.	37.1 gr.	37.7 gr.				
IMR 4064	36.0 gr.	36.8 gr.	37.7 gr.	38.5 gr.	39.3 gr.	40.2 gr.		
VARGET	36.8 gr.	37.6 gr.	38.4 gr.	39.2 gr.	40.1 gr.	40.9 gr.	41.7 gr.	
LEVERevolution	37.1 gr.	37.9 gr.	38.7 gr.	39.4 gr.	40.2 gr.	41.0 gr.	41.7 gr.	42.5 gr.
WIN 748	38.2 gr.	38.7 gr.	39.2 gr.	39.7 gr.	40.2 gr.	40.7 gr.		
Alliant RL-15	37.6 gr.	38.3 gr.	39.0 gr.	39.8 gr.	40.5 gr.	41.2 gr.		
BL-C(2)	39.0 gr.	39.5 gr.	40.1 gr.	40.6 gr.	41.2 gr.	41.7 gr.		

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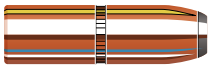
170 GRAIN BULLETS

SECTIONAL DENSITY: 0.256
DIAMETER: 0.308"



170 gr. InterLock® FP
Item No. 3060
C.O.L.: 2.518"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)			
POWDER	**2200**	**2300**	**2400**	**2500**
Accurate 2460	34.1 gr.	35.8 gr.	37.4 gr.	39.0 gr.
IMR 8208 XBR	35.3 gr.	37.0 gr.	38.7 gr.	
IMR 4064	36.9 gr.	38.4 gr.	39.8 gr.	41.2 gr.
LEVERevolution	37.7 gr.	39.0 gr.	40.4 gr.	
WIN 748	38.9 gr.	40.1 gr.	41.3 gr.	
H414	43.9 gr.	46.3 gr.		

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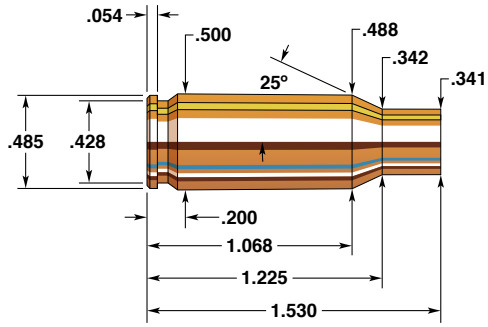


30 Remington AR

Rifle:	Remington R-15	**Bullet Diameter:**	0.308"
Barrel:	22", 1 in 10" Twist	**Maximum COL:**	2.260"
Case:	Remington	**Max. Case Length:**	1.530"
Primer:	WSR	**Case Trim Length:**	1.520"

The 30 Remington AR is an exceptional cartridge with a VERY confusing name, especially for shooters who are familiar with the 30 Remington. The 30 Remington AR and the original 30 Remington - the long obsolete, rimless answer to the 30-30 that was introduced in 1906 - could not be more different than this modern iteration. While both are centerfire 30 caliber cartridges that wear the Remington name, the 30 Remington AR is over 100 years newer and delivers a few hundred feet-per-second increase in muzzle velocity over the original.

In recent times, the shooting world seems to be hot for any AR or Modern Sporting Rifle (MSR), yet the market seems to have met the 30 Remington AR's introduction with a yawn and a stretch, followed shortly by snoring. In our opinion, this is a definite oversight.

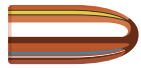
The MSR faithful should take note of this cartridge, considering that when stoking a 160 grain FTX® (308 Marlin Express) bullet with Hodgdon's LEVERevolution® propellant performance is nipping at the heels of the 308 Winchester. While there are big bore AR-15 platform cartridges (like our excellent 450 Bushmaster and the 50 Beowulf®), the fact that the 30 Remington AR not only delivers similar muzzle energy BUT does it with a lighter, high BC bullet makes it a cartridge that is very capable of taking large game at longer ranges than its big bore counterparts.

Also interesting to note is the way that Remington melded parts from both the small and large frame MSR's to create a unique platform for this cartridge. Will the 30 Remington AR become a popular sporting round? Only time will answer that question. The 30 Remington AR is certainly a cartridge that deserves a strong look by any deer hunter choosing an MSR.

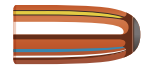
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.175"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.175"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.175"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.175"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)						
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 2015	30.7 gr.	32.2 gr.	33.7 gr.	35.1 gr.	36.6 gr.	38.1 gr.	
Alliant RL-10X	31.6 gr.	33.0 gr.	34.4 gr.	35.8 gr.	37.1 gr.	38.5 gr.	
H322	32.5 gr.	33.9 gr.	35.2 gr.	36.5 gr.	37.8 gr.	39.1 gr.	
H335	34.7 gr.	35.9 gr.	37.2 gr.	38.4 gr.	39.7 gr.	40.9 gr.	42.1 gr.
Benchmark	35.2 gr.	36.5 gr.	37.7 gr.	38.9 gr.	40.2 gr.		
IMR 8208 XBR	35.6 gr.	36.8 gr.	38.0 gr.	39.3 gr.	40.5 gr.		

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130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

130 gr. SP
Item No. 3020
C.O.L.: 2.175"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
Alliant RL-10X	30.7 gr.	32.1 gr.	33.5 gr.	34.8 gr.	36.2 gr.	
Accurate 2015	30.5 gr.	32.1 gr.	33.7 gr.	35.2 gr.	36.8 gr.	
H322	31.9 gr.	33.3 gr.	34.6 gr.	36.0 gr.	37.3 gr.	
LEVERevolution	32.5 gr.	34.1 gr.	35.7 gr.	37.3 gr.	38.9 gr.	40.5 gr.
H335	33.6 gr.	35.0 gr.	36.5 gr.	37.9 gr.	39.4 gr.	
Benchmark	33.8 gr.	35.2 gr.	36.6 gr.	37.9 gr.		
IMR 8208 XBR	34.3 gr.	35.6 gr.	36.8 gr.	38.0 gr.		

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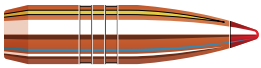
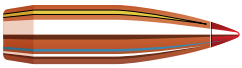
150-155 GRAIN BULLETS

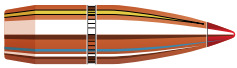
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



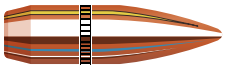
150 gr. GMX®
Item No. 30370
C.O.L.: 2.260"
G1 B.C.: 0.415



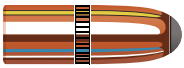
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.260"
G1 B.C.: 0.415



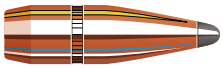
150 gr. SST®
Item No. 30302
C.O.L.: 2.260"
G1 B.C.: 0.415



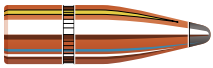
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.210"
G1 B.C.: 0.398



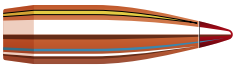
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.260"
G1 B.C.: 0.186



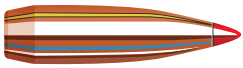
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.260"
G1 B.C.: 0.349



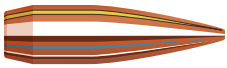
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.260"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.260"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.260"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.260"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
Alliant RL-10X	30.3 gr.	31.7 gr.	33.2 gr.	34.6 gr.	
Accurate 2015	30.0 gr.	31.6 gr.	33.1 gr.	34.7 gr.	
H322	30.5 gr.	32.0 gr.	33.5 gr.	35.0 gr.	36.5 gr.
LEVERevolution	31.9 gr.	33.4 gr.	35.0 gr.	36.5 gr.	38.0 gr.
IMR 8208 XBR	32.8 gr.	34.3 gr.	35.7 gr.	37.2 gr.	
H335	32.4 gr.	34.2 gr.	35.9 gr.	37.6 gr.	
TAC	33.2 gr.	34.7 gr.	36.1 gr.	37.6 gr.	38.1 gr.

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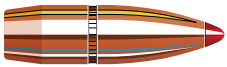
***NOTE:** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^NOTE: *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

160 GRAIN BULLETS

SECTIONAL DENSITY: 0.241
DIAMETER: 0.308"



160 gr. FTX®
(Marlin Express)
Item No. 30396
C.O.L.: 2.195"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
H322	30.8 gr.	32.2 gr.	33.6 gr.	35.0 gr.	
LEVERevolution	32.2 gr.	33.7 gr.	35.2 gr.	36.7 gr.	38.2 gr.
IMR 8208 XBR	32.8 gr.	34.1 gr.	35.5 gr.	36.8 gr.	
Benchmark	32.9 gr.	34.3 gr.	35.7 gr.	37.1 gr.	
Alliant RL-15	34.0 gr.	35.5 gr.	37.0 gr.	38.5 gr.	
VARGET	34.9 gr.	36.3 gr.	37.8 gr.		
Power Pro 2000 MR	36.6 gr.	38.4 gr.	40.2 gr.		

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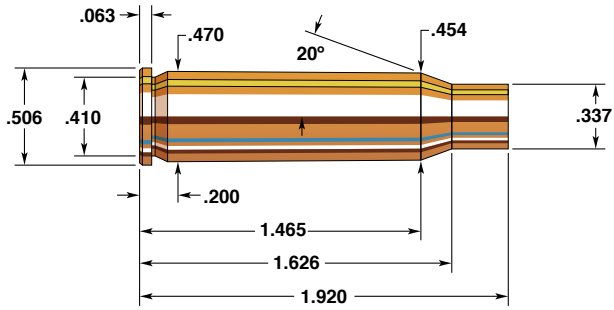


308 Marlin Express

Rifle:	MARLIN MX	**Bullet Diameter:**	0.308"
Barrel:	22", Factory	**Maximum COL:**	2.600"
Case:	Hornady	**Max. Case Length:**	1.920"
Primer:	WLR	**Case Trim Length:**	1.910"

The 308 Marlin Express was introduced in 2007. The cartridge was designed around the Flex-Tip bullets, introduced in 2006 by Hornady. These soft, polymer tip bullets allow the use of pointed bullets in a lever gun tubular magazine with no risk of primer detonation during recoil. The 308 Marlin Express was designed to maximize the envelope of the 336 Marlin and M94 Winchester with a 2.600" C.O.L. and size the case length such that the best compromise between case capacity and ogive length could be achieved. Making the case shorter and lengthening the ogive resulted in a very high ballistic coefficient bullet, .395 B.C., making for impressive downrange performance.

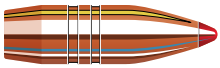
A propellant was developed to maximize the performance of the cartridge without having to use high pressures. Earlier attempts to improve the performance of lever gun cartridges ran at bolt gun pressures. Although the rifles designed for these cartridges were strong enough to take these pressures, it wasn't possible to achieve reliable extraction with the non-camming bolt of the lever gun. Consequently, the 307 and 356 Winchester were downloaded to achieve reliable extraction and never reached their performance potential.

The 308 Marlin Express was designed for a maximum average pressure of 47,500 psi. With the new propellant designs and high B.C. 160 grain FTX® bullet, the cartridge is able to achieve virtually 308 Winchester performance at the muzzle and downrange. The cartridge is a devastating deer and antelope cartridge for 300 to 350 yards and has the accuracy potential for these long shots. Elk have been reliably taken with the cartridge from 200-250 yards.

With the availability of LEVERevolution® propellant through Hodgdon, factory ballistics can now be achieved.

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.211
DIAMETER: 0.308"



140 gr. MonoFlex® (Marlin Express)
Item No. 30311
C.O.L.: 2.583"
G1 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
IMR 8208 XBR	34.8 gr.	36.1 gr.	37.4 gr.	38.8 gr.	39.4 gr.	
H4895	35.0 gr.	36.4 gr.	37.7 gr.	39.0 gr.		
TAC	35.2 gr.	36.7 gr.	38.1 gr.	39.5 gr.		
Accurate 2520	36.1 gr.	37.7 gr.	39.2 gr.	40.7 gr.		
LEVERevolution	34.5 gr.	36.8 gr.	39.0 gr.	41.3 gr.	42.5 gr.	43.6 gr.
WIN 748	36.9 gr.	38.4 gr.	39.9 gr.	41.3 gr.		
VARGET	37.3 gr.	38.7 gr.	40.1 gr.	41.5 gr.		
NORMA 203 B	37.2 gr.	38.7 gr.	40.2 gr.	41.7 gr.		
Alliant RL-15	36.8 gr.	38.6 gr.	40.3 gr.	42.1 gr.		
Power Pro 2000 MR	39.0 gr.	40.6 gr.	42.2 gr.	43.8 gr.	44.6 gr.	

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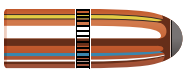
150 GRAIN BULLETS

SECTIONAL DENSITY: 0.226
DIAMETER: 0.308"



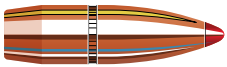
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.425"
G1 B.C.: 0.186

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
H335	35.7 gr.	37.2 gr.	38.6 gr.		
TAC	36.1 gr.	37.5 gr.	39.0 gr.		
H4895	36.2 gr.	37.6 gr.	39.1 gr.		
IMR 8208 XBR	36.8 gr.	38.0 gr.	39.2 gr.	40.4 gr.	
VARGET	37.5 gr.	39.6 gr.	41.7 gr.		
Alliant RL-15	38.8 gr.	40.5 gr.	42.1 gr.		
LEVERevolution	39.3 gr.	40.7 gr.	42.2 gr.	43.6 gr.	45.0 gr.
WIN 748	39.4 gr.	40.9 gr.	42.5 gr.		
BL-C(2)	40.0 gr.	41.4 gr.	42.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

160 GRAIN BULLETS

SECTIONAL DENSITY: 0.241
DIAMETER: 0.308"



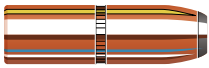
160 gr. FTX® (Marlin Express)
Item No. 30396
C.O.L.: 2.590"
G1 B.C.: 0.395

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
H4895	34.6 gr.	35.8 gr.	37.0 gr.	38.2 gr.	
TAC	33.4 gr.	35.3 gr.	37.2 gr.		
IMR 4064	34.6 gr.	36.1 gr.	37.6 gr.		
IMR 4895	35.1 gr.	36.4 gr.	37.6 gr.		
IMR 8208 XBR	35.0 gr.	36.3 gr.	37.7 gr.		
VARGET	36.3 gr.	37.5 gr.	38.8 gr.		
Alliant RL-15	36.5 gr.	38.0 gr.	39.6 gr.	41.1 gr.	
WIN 748	37.5 gr.	38.6 gr.	39.7 gr.		
LEVERevolution	37.9 gr.	39.1 gr.	40.3 gr.	41.5 gr.	42.6 gr.
BL-C(2)	37.7 gr.	39.2 gr.	40.8 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

170 GRAIN BULLETS

SECTIONAL DENSITY: 0.256
DIAMETER: 0.308"



170 gr. InterLock® FP
Item No. 3060
C.O.L.: 2.405"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)			
POWDER	**2200**	**2300**	**2400**	**2500**
TAC	34.6 gr.	36.5 gr.		
IMR 8208 XBR	35.2 gr.	36.6 gr.	37.9 gr.	
H4895	35.1 gr.	36.8 gr.	38.5 gr.	
IMR 4895	35.4 gr.	36.9 gr.		
IMR 4064	35.6 gr.	37.2 gr.	38.7 gr.	
VARGET	36.0 gr.	38.0 gr.	40.0 gr.	
Alliant RL-15	37.3 gr.	39.1 gr.	41.0 gr.	
LEVERevolution	38.0 gr.	39.3 gr.	40.6 gr.	41.9 gr.
WIN 748	38.1 gr.	39.3 gr.		
BL-C(2)	38.0 gr.	39.4 gr.	40.8 gr.	

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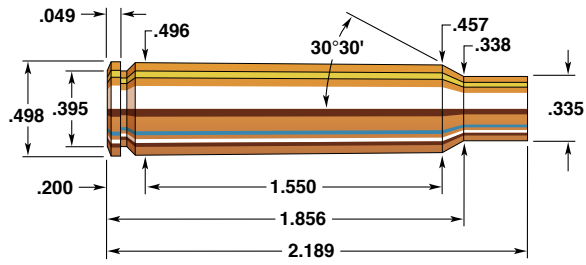


7.5 X 55mm Schmidt Rubin (7.5mm Swiss)

Rifle: . . Schmidt Rubin Model 1896/11
Barrel: . . . . . .30.7", 1 in 10½" Twist
Case: . . . . . Norma
Primer: . . . . . Federal 210
Bullet Diameter: . . . . . 0.308"
Maximum COL: . . . . . 3.059"
Max. Case Length: . . . . . .2.189"
Case Trim Length: . . . . . .2.179"

Though the 7.5mm Schmidt Rubin (7.5 Swiss) cartridge is unlikely to become America's favorite, it has become increasingly popular with large imports of the excellent K31 rifle.

The 7.5mm Schmidt Rubin, officially adopted by the Swiss in 1889, is a distinctive straight pull bolt action rifle which in four basic models (1889, 1896/11, 1911, and 31) was in service from its introduction until the 1970s. (Its replacement, the new Model 57 assault rifle, also fires the standard Model 11/7.5mm Schmidt Rubin cartridge.) If you find an older Schmidt Rubin military rifle for reloading, do have it checked out carefully.

The Model 11/7.5mm Schmidt Rubin cartridge, a more potent version of its predecessor for the 7.5mm rifle, was loaded with a .307" 174 grain bullet to a velocity of 2720 fps. Regular 30 caliber (.308") bullets may be used to reload the cartridge. Reloaders should note, however, that the Model 11 cartridge for which loading data is given is suitable for use only in the newer Model 1896/11, Model 1911, or Model 31 Schmidt Rubin rifles.

Because the case head of the 1911 is not fully supported, overloads can be extremely dangerous. A ruptured case or blown primer can send hot gas back to wreck the action, rifle, and shooter. Use good brass and approach maximum loads cautiously. This situation does not exist in the K31 as it has a fully supported case head.

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

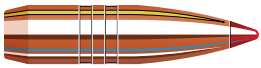
130 gr. SP
Item No. 3020
C.O.L.: 2.815"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031		35.5 gr.	37.4 gr.	39.2 gr.	41.1 gr.	43.0 gr.
IMR 4064		37.7 gr.	39.6 gr.	41.5 gr.	43.4 gr.	45.3 gr.
H4895		38.0 gr.	40.0 gr.	42.0 gr.	44.0 gr.	46.0 gr.
VIHT N-140	35.6 gr.	37.8 gr.	40.0 gr.	42.3 gr.	44.5 gr.	46.7 gr.
Alliant RL-15	37.9 gr.	39.7 gr.	41.5 gr.	43.3 gr.	45.2 gr.	47.0 gr.
IMR 4320		40.4 gr.	42.2 gr.	44.0 gr.	45.8 gr.	47.6 gr.
IMR 4350		45.6 gr.	47.5 gr.	49.3 gr.	51.2 gr.	53.0 gr.

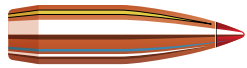
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

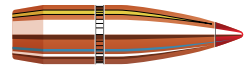
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



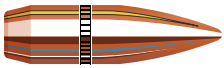
150 gr. GMX®
Item No. 30370
C.O.L.: 2.875"
G1 B.C.: 0.415



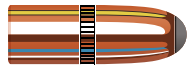
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.875"
G1 B.C.: 0.415



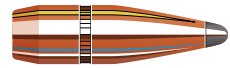
150 gr. SST®
Item No. 30302
C.O.L.: 2.875"
G1 B.C.: 0.415



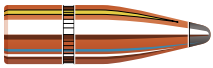
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.820"
G1 B.C.: 0.398



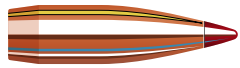
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.560"
G1 B.C.: 0.186



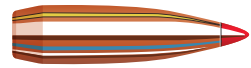
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.875"
G1 B.C.: 0.349



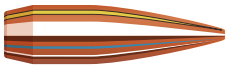
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.875"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.875"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.875"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.875"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 3031		35.4 gr.	37.7 gr.	40.0 gr.	42.2 gr.	
IMR 4064	35.5 gr.	37.6 gr.	39.7 gr.	41.8 gr.	44.0 gr.	46.1 gr.
H4895	36.3 gr.	38.4 gr.	40.5 gr.	42.6 gr.	44.6 gr.	
IMR 4320		38.6 gr.	40.8 gr.	43.1 gr.	45.4 gr.	
IMR 4350		44.8 gr.	46.8 gr.	48.8 gr.	50.8 gr.	52.8 gr.
WIN 760	42.1 gr.	44.4 gr.	46.7 gr.	49.0 gr.	51.3 gr.	53.6 gr.
VIHT N-160	42.0 gr.	44.5 gr.	47.0 gr.	49.5 gr.	52.1 gr.	

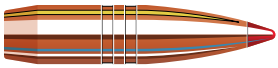
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

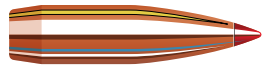
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

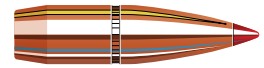
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



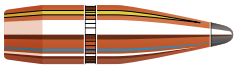
165 gr. GMX®
Item No. 30470
C.O.L.: 2.910"
G1 B.C.: 0.447



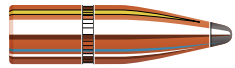
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.910"
G1 B.C.: 0.447



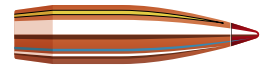
165 gr. SST®
Item No. 30452
C.O.L.: 2.910"
G1 B.C.: 0.447



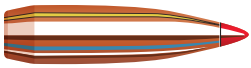
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.910"
G1 B.C.: 0.435



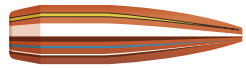
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.910"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.025"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.025"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.025"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	32.4 gr.	34.9 gr.	37.4 gr.	39.9 gr.	42.4 gr.	
IMR 4064	33.7 gr.	36.1 gr.	38.5 gr.	40.8 gr.	43.2 gr.	
H4895	34.5 gr.	36.7 gr.	38.9 gr.	41.1 gr.	43.3 gr.	45.5 gr.
IMR 4320	35.8 gr.	38.0 gr.	40.2 gr.	42.4 gr.	44.6 gr.	46.8 gr.
Accurate 4350	41.9 gr.	43.7 gr.	45.6 gr.	47.4 gr.	49.3 gr.	51.1 gr.
IMR 4350		41.4 gr.	43.9 gr.	46.4 gr.	49.9 gr.	51.4 gr.
VIHT N-160	41.9 gr.	44.2 gr.	46.5 gr.	48.8 gr.	51.1 gr.	

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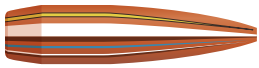
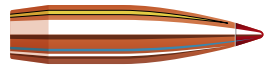
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

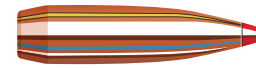
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



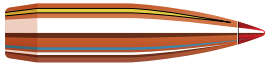
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.025"
G1 B.C.: 0.530



***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.025"
G1 B.C.: 0.515
G7 B.C.: 0.259

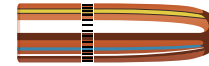


178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.025"
G1 B.C.: 0.495

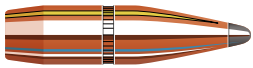


180 gr. InterBond®
Item No. 30709
C.O.L.: 2.900"
G1 B.C.: 0.480

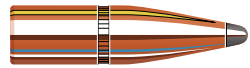
180 gr. SST®
Item No. 30702
C.O.L.: 2.900"
G1 B.C.: 0.480



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.900"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.900"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.900"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031	33.5 gr.	35.6 gr.	37.7 gr.	39.8 gr.	
IMR 4064	34.7 gr.	37.0 gr.	39.3 gr.	41.5 gr.	
H4895	34.8 gr.	37.1 gr.	39.4 gr.	41.6 gr.	
IMR 4320	35.7 gr.	37.8 gr.	39.9 gr.	42.0 gr.	
VIHT N-160	40.0 gr.	41.5 gr.	43.1 gr.	44.6 gr.	
IMR 4350		40.5 gr.	42.8 gr.	45.1 gr.	47.5 gr.
Accurate 4350	41.0 gr.	42.8 gr.	44.6 gr.	46.3 gr.	48.1 gr.

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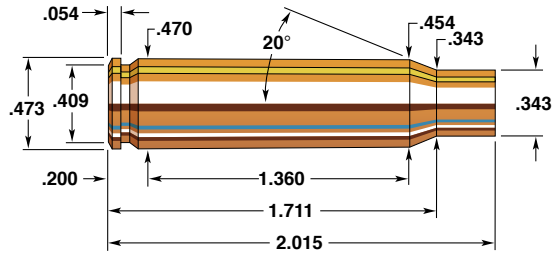
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



308 Winchester

Rifle:	Winchester 70	**Bullet Diameter:**	0.308"
Barrel:	22", 1 in 12" Twist	**Maximum COL:**	2.810"
Case:	Hornady/Frontier	**Max. Case Length:**	2.015"
Primer:	Federal 210	**Case Trim Length:**	2.005"

Accurate, versatile, efficient, and popular is the easiest and best way to describe the 308 Winchester. The 308 has been chambered in every feasible action and provides exceptional performance for everything from bench rest shooting to big game.

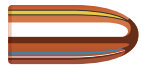
In the beginning, the 308 did not have the sporting appeal of the 30-06—anything the 308 could do, the 30-06 could do a little better. However, when the sporting public realized the accuracy inherent in the cartridge and the numerous medium-sized actions in which it could be chambered, the popularity steadily grew. The 308 is also a popular national match course cartridge, and with the wide range of Hornady 30 caliber bullets, it makes an excellent all around North American big game cartridge.

The 308, as a rule, is not finicky as to the type of powder that works well in it—another reason for its popularity. In our test rifle, all powders listed, gave more than acceptable results, with IMR 4064 and VARGET providing the best results throughout the range of bullets.

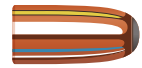
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.740"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.515"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.515"
G1 B.C.: 0.150

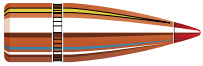
110 gr. SP
Item No. 3010
C.O.L.: 2.690"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4198	32.7 gr.	34.4 gr.	36.2 gr.	38.0 gr.	39.7 gr.	
H4198	33.0 gr.	34.9 gr.	36.9 gr.	38.9 gr.	40.8 gr.	42.8 gr.
Alliant RL-7	33.3 gr.	35.4 gr.	37.4 gr.	39.5 gr.	41.6 gr.	
H322	35.3 gr.	37.7 gr.	40.1 gr.	42.6 gr.	45.0 gr.	47.4 gr.
Accurate 2015	39.8 gr.	41.2 gr.	42.7 gr.	44.1 gr.	45.6 gr.	47.0 gr.
IMR 3031	39.9 gr.	41.5 gr.	43.2 gr.	44.8 gr.	46.4 gr.	48.1 gr.
IMR 4895	43.9 gr.	45.5 gr.	47.1 gr.	48.7 gr.	50.3 gr.	51.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 2.730"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
VIHT N-140	39.0 gr.	40.5 gr.	41.9 gr.	43.3 gr.	44.7 gr.	
Benchmark	41.6 gr.	42.9 gr.	44.1 gr.	45.4 gr.	46.6 gr.	
IMR 8208 XBR	40.7 gr.	42.2 gr.	43.7 gr.	45.2 gr.	46.7 gr.	48.2 gr.
Accurate 2460	41.8 gr.	43.2 gr.	44.6 gr.	46.1 gr.	47.5 gr.	
H4895	42.0 gr.	43.5 gr.	44.9 gr.	46.4 gr.	47.8 gr.	
TAC	40.1 gr.	42.0 gr.	44.0 gr.	46.0 gr.	47.9 gr.	
WIN 748	43.1 gr.	45.1 gr.	47.0 gr.	49.0 gr.	50.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

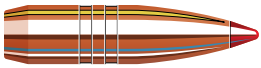
130 gr. SP
Item No. 3020
C.O.L.: 2.690"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
VIHT N-130	32.4 gr.	34.7 gr.	37.0 gr.	39.3 gr.		
Accurate 2015	37.3 gr.	38.8 gr.	40.4 gr.	41.9 gr.	43.5 gr.	
H322	35.7 gr.	37.8 gr.	39.9 gr.	42.0 gr.	44.0 gr.	
Accurate 2495	37.6 gr.	39.7 gr.	41.7 gr.	43.8 gr.	45.9 gr.	
H4895	40.0 gr.	41.6 gr.	43.3 gr.	44.9 gr.	46.6 gr.	48.2 gr.
IMR 8208 XBR	42.0 gr.	43.3 gr.	44.6 gr.	45.9 gr.	47.2 gr.	48.4 gr.
IMR 4895	41.0 gr.	42.7 gr.	44.4 gr.	46.1 gr.	47.7 gr.	49.4 gr.
IMR 4320	41.3 gr.	42.9 gr.	44.6 gr.	46.2 gr.	47.8 gr.	
VIHT N-140	41.1 gr.	43.0 gr.	44.8 gr.	46.6 gr.	48.5 gr.	
Alliant RL-15	42.0 gr.	43.6 gr.	45.3 gr.	46.9 gr.	48.5 gr.	50.1 gr.
WIN 748	43.4 gr.	45.2 gr.	47.1 gr.	48.9 gr.	50.8 gr.	52.6 gr.

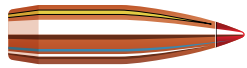
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

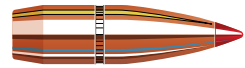
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



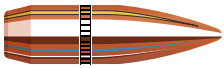
150 gr. GMX®
Item No. 30370
C.O.L.: 2.735"
G1 B.C.: 0.415



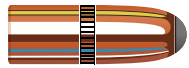
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.735"
G1 B.C.: 0.415



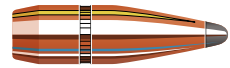
150 gr. SST®
Item No. 30302
C.O.L.: 2.735"
G1 B.C.: 0.415



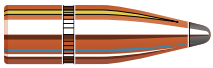
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.700"
G1 B.C.: 0.398



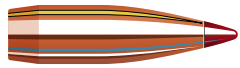
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.520"
G1 B.C.: 0.186



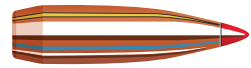
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.735"
G1 B.C.: 0.349



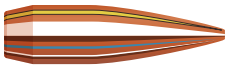
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.735"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.800"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.800"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.800"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
Accurate 2495	36.8 gr.	38.4 gr.	40.0 gr.	41.7 gr.	43.3 gr.	
SW Tactical Rifle	37.1 gr.	38.8 gr.	40.5 gr.	42.3 gr.	44.0 gr.	45.8 gr.
H4895	37.2 gr.	38.9 gr.	40.6 gr.	42.3 gr.	44.0 gr.	
IMR 8208 XBR	39.0 gr.	40.3 gr.	41.6 gr.	42.9 gr.	44.2 gr.	
Accurate 2460	38.0 gr.	39.6 gr.	41.2 gr.	42.9 gr.	44.5 gr.	
IMR 4895	37.7 gr.	39.5 gr.	41.2 gr.	43.0 gr.	44.7 gr.	46.4 gr.
VARGET	35.9 gr.	38.2 gr.	40.4 gr.	42.6 gr.	44.9 gr.	
IMR 4064	38.4 gr.	40.0 gr.	41.7 gr.	43.3 gr.	44.9 gr.	
Alliant RL-15	38.3 gr.	40.1 gr.	41.9 gr.	43.6 gr.	45.4 gr.	47.2 gr.
VIHT N-140	39.3 gr.	40.9 gr.	42.6 gr.	44.2 gr.	45.8 gr.	
WIN 748	40.3 gr.	41.9 gr.	43.5 gr.	45.1 gr.	46.7 gr.	
CFE 223	42.4 gr.	43.9 gr.	45.3 gr.	46.7 gr.	48.2 gr.	49.6 gr.
Power Pro 2000 MR	40.1 gr.	42.3 gr.	44.5 gr.	46.7 gr.	48.9 gr.	51.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

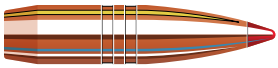
***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

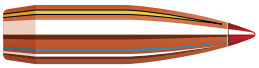
INDICATES MAXIMUM LOAD — USE WITH CAUTION

165-168 GRAIN BULLETS

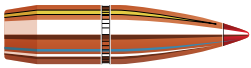
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



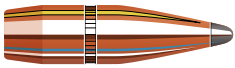
165 gr. GMX®
Item No. 30470
C.O.L.: 2.750"
G1 B.C.: 0.447



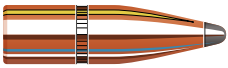
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.750"
G1 B.C.: 0.447



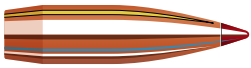
165 gr. SST®
Item No. 30452
C.O.L.: 2.750"
G1 B.C.: 0.447



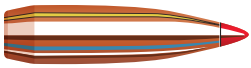
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.750"
G1 B.C.: 0.435



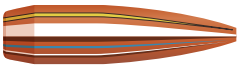
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.750"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.800"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.800"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.800"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
Accurate 2495	33.1 gr.	35.0 gr.	36.9 gr.	38.8 gr.	40.7 gr.		
SW Tactical Rifle	34.3 gr.	35.9 gr.	37.5 gr.	39.1 gr.	40.7 gr.	42.3 gr.	43.9 gr.
IMR 8208 XBR	33.2 gr.	35.2 gr.	37.2 gr.	39.2 gr.	41.2 gr.	43.2 gr.	
IMR 4895	35.0 gr.	36.6 gr.	38.3 gr.	40.0 gr.	41.6 gr.	43.3 gr.	
VARGET	32.6 gr.	34.9 gr.	37.1 gr.	39.4 gr.	41.7 gr.	44.0 gr.	
H4895	35.1 gr.	36.8 gr.	38.4 gr.	40.1 gr.	41.7 gr.	43.3 gr.	
IMR 4320	33.9 gr.	35.9 gr.	38.0 gr.	40.1 gr.	42.2 gr.		
Alliant RL-15	35.2 gr.	37.0 gr.	38.8 gr.	40.7 gr.	42.5 gr.	44.3 gr.	
VIHT N-150	36.3 gr.	38.2 gr.	40.2 gr.	42.2 gr.	44.1 gr.	46.1 gr.	
CFE 223	38.3 gr.	39.7 gr.	41.2 gr.	42.7 gr.	44.2 gr.	45.7 gr.	47.2 gr.
Power Pro 2000 MR	35.9 gr.	38.2 gr.	40.7 gr.	42.9 gr.	45.2 gr.	47.6 gr.	50.0 gr.
Alliant RL-17	41.2 gr.	42.8 gr.	44.4 gr.	46.0 gr.	47.5 gr.	49.1 gr.	

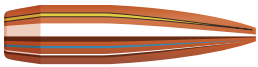
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

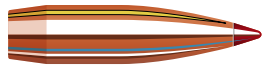
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

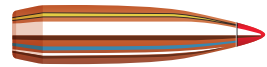
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



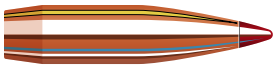
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.800"
G1 B.C.: 0.530



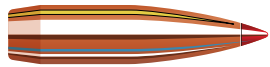
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.800"
G1 B.C.: 0.515
G7 B.C.: 0.259



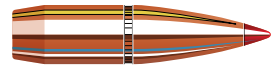
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.800"
G1 B.C.: 0.495



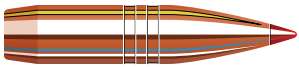
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.800"
G1 B.C.: 0.545
G7 B.C.: 0.275



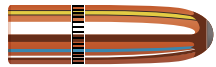
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.740"
G1 B.C.: 0.480



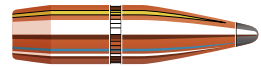
180 gr. SST®
Item No. 30702
C.O.L.: 2.740"
G1 B.C.: 0.480



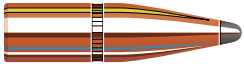
180 gr. GMX®
Item No. 30193
C.O.L.: 2.735"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.730"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.740"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.740"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**	**2500**	**2550**
Accurate 2495	34.2 gr.	35.9 gr.	37.7 gr.	39.4 gr.	40.2 gr.		
IMR 8208 XBR	33.3 gr.	35.3 gr.	37.4 gr.	39.4 gr.	40.5 gr.		
H4895	33.6 gr.	35.6 gr.	37.7 gr.	39.7 gr.	40.7 gr.		
Accurate 2460	34.7 gr.	36.4 gr.	38.2 gr.	39.9 gr.	40.8 gr.	41.7 gr.	42.5 gr.
TAC	33.6 gr.	35.7 gr.	37.8 gr.	39.9 gr.	40.9 gr.	42.0 gr.	
VARGET	35.0 gr.	37.1 gr.	39.2 gr.	41.3 gr.	42.4 gr.		
Accurate 2520	35.2 gr.	37.4 gr.	39.6 gr.	41.8 gr.	42.9 gr.	44.0 gr.	
WIN 748	38.2 gr.	40.1 gr.	41.9 gr.	43.8 gr.	44.7 gr.	45.7 gr.	
Power Pro 2000 MR	39.5 gr.	41.3 gr.	43.0 gr.	44.8 gr.	45.6 gr.	46.5 gr.	
Alliant RL-17	41.7 gr.	43.5 gr.	45.3 gr.	47.1 gr.	48.9 gr.		

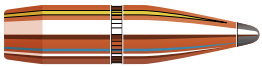
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



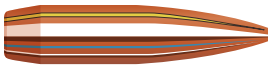
190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.745"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
Accurate 2495	32.3 gr.	34.2 gr.	36.1 gr.	38.0 gr.		
H4895	32.1 gr.	34.1 gr.	36.1 gr.	38.1 gr.	40.1 gr.	
VARGET	31.3 gr.	33.7 gr.	36.1 gr.	38.5 gr.	40.9 gr.	
IMR 4064	33.6 gr.	35.4 gr.	37.3 gr.	39.1 gr.	41.0 gr.	
IMR 4895	33.8 gr.	35.6 gr.	37.3 gr.	39.1 gr.	40.9 gr.	
Alliant RL-15	34.1 gr.	35.9 gr.	37.8 gr.	39.6 gr.	41.4 gr.	
VIHT N-150	34.4 gr.	36.5 gr.	38.6 gr.	40.6 gr.	42.7 gr.	
Power Pro 2000 MR	35.6 gr.	37.7 gr.	39.9 gr.	42.1 gr.	44.2 gr.	46.4 gr.
WIN 760	37.5 gr.	39.9 gr.	42.3 gr.	44.8 gr.	47.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 2.800"
G1 B.C.: 0.550
G7 B.C.: 0.311

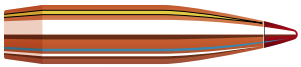
	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
H4895	34.9 gr.	36.0 gr.	37.2 gr.	38.4 gr.	39.6 gr.	
IMR 8208 XBR	34.2 gr.	35.6 gr.	37.1 gr.	38.5 gr.	39.9 gr.	
Accurate 2520	34.6 gr.	36.1 gr.	37.6 gr.	39.2 gr.	40.7 gr.	
TAC	35.1 gr.	36.5 gr.	37.9 gr.	39.3 gr.	40.7 gr.	
NORMA 203 B	35.1 gr.	36.7 gr.	38.2 gr.	39.8 gr.	41.4 gr.	
WIN 748	36.6 gr.	37.9 gr.	39.2 gr.	40.5 gr.	41.9 gr.	
VARGET	35.1 gr.	36.8 gr.	38.6 gr.	40.3 gr.	42.0 gr.	
IMR 4064	36.4 gr.	37.8 gr.	39.2 gr.	40.6 gr.	42.0 gr.	
Alliant RL-15	35.8 gr.	37.4 gr.	39.0 gr.	40.6 gr.	42.3 gr.	
VIHT N-140	35.7 gr.	37.4 gr.	39.0 gr.	40.7 gr.	42.4 gr.	
CFE 223	38.5 gr.	39.7 gr.	41.0 gr.	42.2 gr.	43.4 gr.	44.6 gr.
Power Pro 2000 MR	36.6 gr.	38.4 gr.	40.3 gr.	42.1 gr.	44.0 gr.	45.8 gr.
Alliant RL-17	39.3 gr.	41.1 gr.	42.9 gr.	44.7 gr.	46.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 2.800"
G1 B.C.: 0.626
G7 B.C.: 0.315

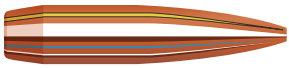
	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2350**	**2400**	**2450**
IMR 8208 XBR	33.4 gr.	35.6 gr.	37.8 gr.	38.9 gr.		
H4895	33.8 gr.	36.0 gr.	38.2 gr.			
IMR 4166	35.6 gr.	37.4 gr.	39.3 gr.	40.2 gr.	41.2 gr.	
VARGET	34.9 gr.	37.2 gr.	39.4 gr.	40.5 gr.		
IMR 4064	36.1 gr.	37.9 gr.	39.7 gr.	40.7 gr.	41.6 gr.	
Accurate 2520	35.3 gr.	37.8 gr.	40.4 gr.	41.7 gr.		
Alliant RL-15	37.2 gr.	38.9 gr.	40.6 gr.	41.4 gr.	42.3 gr.	
WIN 748	37.4 gr.	39.0 gr.	40.6 gr.	41.5 gr.	42.3 gr.	
Power Pro 2000 MR	39.3 gr.	41.2 gr.	43.1 gr.	44.1 gr.	45.0 gr.	46.0 gr.
Alliant RL-17	40.9 gr.	42.6 gr.	44.3 gr.	45.1 gr.	46.0 gr.	46.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

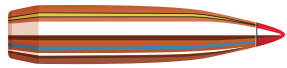
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

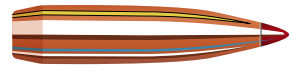
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 2.800"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 2.800"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 2.800"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2350**	**2400**	**2450**
VARGET	34.9 gr.	37.4 gr.	40.0 gr.			
IMR 4064	36.2 gr.	38.1 gr.	40.0 gr.	41.0 gr.		
Alliant RL-15	38.2 gr.	39.9 gr.	41.5 gr.	42.4 gr.	43.2 gr.	
WIN 748	37.9 gr.	39.8 gr.	41.7 gr.	42.7 gr.	43.7 gr.	44.6 gr.
Power Pro 2000 MR	38.4 gr.	40.5 gr.	42.6 gr.	43.6 gr.	44.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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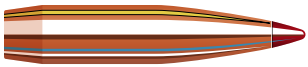
212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.000"
G1 B.C.: 0.673
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2350**	**2400**
H4895	32.6 gr.	35.0 gr.	37.4 gr.	39.7 gr.		
VARGET	34.1 gr.	36.4 gr.	38.7 gr.	41.0 gr.	42.2 gr.	
IMR 4064	34.6 gr.	36.9 gr.	39.1 gr.	41.4 gr.		
Accurate 2520	34.4 gr.	36.8 gr.	39.2 gr.	41.6 gr.		
Alliant RL-15	36.0 gr.	37.9 gr.	39.8 gr.	41.7 gr.	42.6 gr.	43.6 gr.
WIN 748	36.6 gr.	38.4 gr.	40.1 gr.	41.9 gr.	42.7 gr.	43.6 gr.
Power Pro 2000 MR	38.3 gr.	40.1 gr.	42.0 gr.	43.8 gr.	44.7 gr.	45.7 gr.

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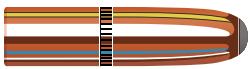
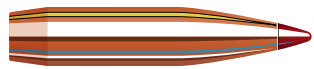
220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 2.735"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 2.800"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**2000**	**2100**	**2200**	**2250**
VARGET	34.3 gr.	36.2 gr.	38.1 gr.	40.1 gr.	
Alliant RL-15	35.1 gr.	37.0 gr.	38.8 gr.	40.7 gr.	41.6 gr.
IMR 4064	34.3 gr.	36.6 gr.	38.8 gr.	41.0 gr.	42.1 gr.
WIN 748	36.1 gr.	37.8 gr.	39.5 gr.	41.2 gr.	
CFE 223	37.0 gr.	38.9 gr.	40.7 gr.	42.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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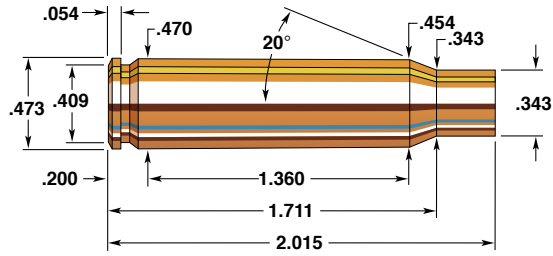


308 Winchester Service Rifle

Rifle:	M1A	**Bullet Diameter:**	0.308"
Barrel:	.22", 1 in 10" Twist	**Maximum COL:**	.2.810"
Case:	.Hornady/Frontier	**Max. Case Length:**	.2.015"
Primer:	Winchester WLR	**Case Trim Length:**	2.005"

The M1A/M14 is on of the best known of all the service rifles. The rifle was made popular by Springfield Armory, Inc. by converting the M-14 receiver to semi-automatic fire only and providing a very high quality firearm with all the tricks for accurizing used by the military service rifle teams.

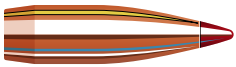
The M1A's popularity has declined recently because of the growing popularity of the AR-15 but still is a rifle which in the hands of an experienced shooter, with good ammunition, provides excellent performance and has to be considered the long range service rifle of choice. Many of the loads we tested in our scoped M1A Super Match provided accuracy well under one minute-of-angle.

Hornady provides an outstanding selection of bullets for the M1A shooter. The 155 grain ELD® Match provides a lightweight low recoil load with a high ballistic coefficient that fights air resistance well. The 168 and 178 grain ELD® Match bullets are also very low drag designs that allow superior long range shooting with less wind drift than has been possible with traditional BTHP designs.

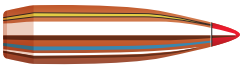
We achieved outstanding test performance with VIHT N-135, VIHT N-140, and VIHT N-150. Good results were also obtained with RL-15 and VARGET.

155 GRAIN BULLETS

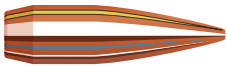
SECTIONAL DENSITY: 0.233
DIAMETER: 0.308"



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.800"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.800"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.800"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
VIHT N-135	35.8 gr.	37.1 gr.	38.4 gr.	39.7 gr.	41.0 gr.	42.3 gr.
H4895	37.2 gr.	38.3 gr.	39.5 gr.	40.6 gr.	41.8 gr.	42.9 gr.
Accurate 2495	36.7 gr.	38.0 gr.	39.4 gr.	40.8 gr.	42.1 gr.	43.5 gr.
IMR 4064	37.9 gr.	39.0 gr.	40.0 gr.	41.1 gr.	42.1 gr.	43.2 gr.
Accurate 2520	37.0 gr.	38.3 gr.	39.6 gr.	40.9 gr.	42.2 gr.	
IMR 4895	37.6 gr.	38.8 gr.	39.9 gr.	41.1 gr.	42.2 gr.	43.4 gr.
VARGET	37.6 gr.	39.0 gr.	40.4 gr.	41.8 gr.	43.2 gr.	
VIHT N-140	37.6 gr.	39.0 gr.	40.4 gr.	41.8 gr.	43.2 gr.	44.6 gr.
Alliant RL-15	37.9 gr.	39.2 gr.	40.5 gr.	41.9 gr.	43.2 gr.	44.6 gr.
VIHT N-150	37.6 gr.	39.2 gr.	40.7 gr.	42.2 gr.	43.8 gr.	45.3 gr.
WIN 748	39.5 gr.	40.6 gr.	41.8 gr.	42.9 gr.	44.0 gr.	45.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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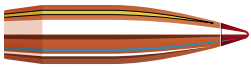
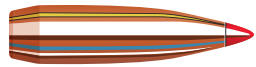
168 GRAIN BULLETS

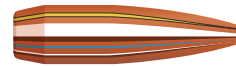
SECTIONAL DENSITY: 0.253
DIAMETER: 0.308"



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.800"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.800"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.800"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
VIHT N-135	34.2 gr.	35.7 gr.	37.3 gr.	38.9 gr.	40.5 gr.	
H4895	34.8 gr.	36.2 gr.	37.6 gr.	39.1 gr.	40.5 gr.	41.9 gr.
Accurate 2520	35.3 gr.	36.7 gr.	38.1 gr.	39.6 gr.	41.0 gr.	
VARGET	35.5 gr.	37.0 gr.	38.4 gr.	39.9 gr.	41.3 gr.	42.7 gr.
Accurate 2495	34.9 gr.	36.5 gr.	38.1 gr.	39.8 gr.	41.4 gr.	
IMR 4895	36.0 gr.	37.3 gr.	38.7 gr.	40.0 gr.	41.4 gr.	
IMR 4064	36.1 gr.	37.4 gr.	38.8 gr.	40.2 gr.	41.6 gr.	
Alliant RL-15	37.5 gr.	38.7 gr.	39.8 gr.	40.9 gr.	42.0 gr.	
VIHT N-140	37.2 gr.	38.5 gr.	39.7 gr.	40.9 gr.	42.1 gr.	
VIHT N-150	37.5 gr.	38.8 gr.	40.1 gr.	41.4 gr.	42.8 gr.	
WIN 748	38.0 gr.	39.3 gr.	40.6 gr.	41.8 gr.	43.1 gr.	

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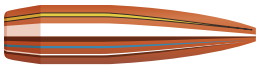
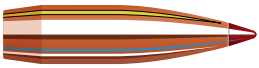
178 GRAIN BULLETS

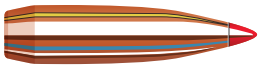
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.800"
G1 B.C.: 0.530



***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.800"
G1 B.C.: 0.515
G7 B.C.: 0.259



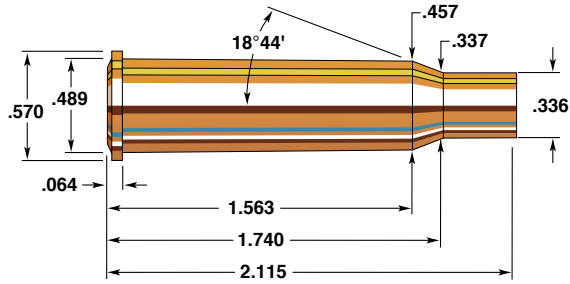
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.800"
G1 B.C.: 0.495

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
VIHT N-135	31.4 gr.	33.0 gr.	34.6 gr.	36.2 gr.	37.8 gr.	39.4 gr.
H4895	34.5 gr.	35.5 gr.	36.6 gr.	37.6 gr.	38.6 gr.	39.7 gr.
IMR 4064	33.6 gr.	35.0 gr.	36.3 gr.	37.7 gr.	39.0 gr.	
IMR 4895	34.5 gr.	35.6 gr.	36.8 gr.	37.9 gr.	39.0 gr.	40.1 gr.
VARGET	33.0 gr.	34.6 gr.	36.1 gr.	37.6 gr.	39.1 gr.	40.6 gr.
Accurate 2520	33.1 gr.	34.6 gr.	36.1 gr.	37.6 gr.	39.1 gr.	
Alliant RL-15	34.8 gr.	36.1 gr.	37.3 gr.	38.5 gr.	39.8 gr.	41.0 gr.
VIHT N-140	34.8 gr.	36.1 gr.	37.3 gr.	38.5 gr.	39.8 gr.	41.0 gr.
VIHT N-150	34.0 gr.	35.6 gr.	37.2 gr.	38.8 gr.	40.4 gr.	42.0 gr.
WIN 748	36.1 gr.	37.2 gr.	38.4 gr.	39.5 gr.	40.6 gr.	41.8 gr.
BL-C(2)	36.9 gr.	38.2 gr.	39.5 gr.	40.8 gr.	42.1 gr.	43.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.



7.62 X 54R

Rifle:. . . . . Mosin Nagant/M 39
Barrel:. . . . . 26½", 1 in 10" Twist
Case:. . . . . Norma
Primer: . . . . . Federal 210
Bullet Diameter:. . . . . 0.308 – 0.312"
Maximum COL: . . . . . 3.048"
Max. Case Length:. . . . . 2.115"
Case Trim Length: . . . . . 2.105"

In 1891, the Czar's Russian army adopted the Mosin-Nagant Model 91 rifle chambered for the 7.62 C 54R (7.62mm Russian), it remained the standard military cartridge through both world wars. During this period guns were manufactured for the Soviets by a plethora of different companies, including Remington, Winchester, and New England Westinghouse. Finland's military also adopted the cartridge and manufactured Mosin-Nagant rifles, some of which have been imported into the U.S. for sale to civilians. C.I.P., Europe's equivalent to our SAAMI, lists two cartridges that can be used in guns chambered for the 7.62mm Russian. The 7.62 x 53R which has a groove diameter of .308" and most commonly found in guns of Finnish origin and the 7.62 x 54R which has a groove diameter of .312", commonly used by the Russians.

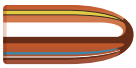
The majority of guns coming into the country recently have groove diameters that range from .311" to .312". Therefore, data is included for bullets that are the proper diameter for these guns, which will enhance their accuracy and performance. We chose to retain data utilizing .308" diameter bullets which makes this published data some of the most inclusive available, with regard to this cartridge.

We obtained acceptable results with all powders tested, but best accuracy was obtained with VIHT N-135 and VIHT N-140. Matching the proper bullet diameter to rifle groove diameter will have a positive effect on accuracy. However, one must be careful not to use .310" and .312" bullets in rifles with a .308" barrel, as dangerous pressures can result.

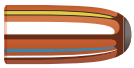
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.715"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.530"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.530"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.715"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 2015	42.5 gr.	44.0 gr.	45.5 gr.	47.0 gr.	48.4 gr.	
IMR 3031	43.2 gr.	44.8 gr.	46.4 gr.	48.0 gr.	49.6 gr.	
H4895	44.6 gr.	46.4 gr.	48.3 gr.	50.1 gr.	52.0 gr.	53.9 gr.
VARGET	42.2 gr.	44.8 gr.	47.4 gr.	49.9 gr.	52.5 gr.	
IMR 4895	45.6 gr.	47.4 gr.	49.2 gr.	51.1 gr.	52.9 gr.	
VIHT N-140	45.6 gr.	47.5 gr.	49.3 gr.	51.2 gr.	53.1 gr.	
WIN 748	49.2 gr.	50.8 gr.	52.4 gr.	54.0 gr.	55.6 gr.	57.3 gr.

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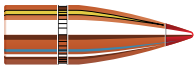
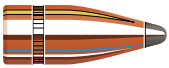
123 GRAIN BULLETS

SECTIONAL DENSITY: 0.183
DIAMETER: 0.310"



123 gr. SST®
Item No. 3142
C.O.L.: 2.780"
G1 B.C.: 0.295



123 gr. InterLock® SP
Item No. 3140
C.O.L.: 2.780"
G1 B.C.: 0.252

	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 2495	41.2 gr.	42.5 gr.	43.7 gr.	45.0 gr.	46.3 gr.	47.6 gr.	48.8 gr.
IMR 3031	40.3 gr.	41.9 gr.	43.4 gr.	44.9 gr.	46.4 gr.	48.0 gr.	
VIHT N-135	41.2 gr.	42.7 gr.	44.1 gr.	45.5 gr.	46.9 gr.	48.4 gr.	49.8 gr.
H4895	42.3 gr.	43.9 gr.	45.5 gr.	47.0 gr.	48.6 gr.	50.2 gr.	51.7 gr.
Alliant RL-15	42.6 gr.	44.2 gr.	45.8 gr.	47.3 gr.	48.9 gr.	50.5 gr.	52.0 gr.
IMR 4895	44.1 gr.	45.4 gr.	46.8 gr.	48.1 gr.	49.4 gr.	50.7 gr.	
WIN 748	41.6 gr.	43.5 gr.	45.5 gr.	47.4 gr.	49.4 gr.	51.3 gr.	
IMR 4064	45.7 gr.	46.9 gr.	48.0 gr.	49.2 gr.	50.4 gr.	51.6 gr.	52.8 gr.
VIHT N-150	46.0 gr.	47.2 gr.	48.4 gr.	49.5 gr.	50.7 gr.	51.9 gr.	53.0 gr.
VARGET	42.9 gr.	44.7 gr.	46.5 gr.	48.4 gr.	50.2 gr.	52.0 gr.	

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130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

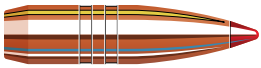
130 gr. SP
Item No. 3020
C.O.L.: 2.815"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
Accurate 2015	41.4 gr.	42.9 gr.	44.5 gr.	46.0 gr.		
VARGET	42.0 gr.	43.9 gr.	45.8 gr.	47.6 gr.	49.5 gr.	
IMR 4320	41.8 gr.	44.1 gr.	46.4 gr.	48.6 gr.		
Alliant RL-15	42.9 gr.	45.0 gr.	47.1 gr.	49.2 gr.	51.4 gr.	
VIHT N-140	43.6 gr.	45.6 gr.	47.6 gr.	49.7 gr.	51.7 gr.	
WIN 748	46.5 gr.	48.4 gr.	50.4 gr.	52.4 gr.	54.3 gr.	56.3 gr.

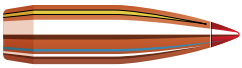
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

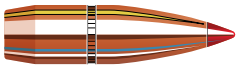
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



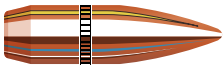
150 gr. GMX®
Item No. 30370
C.O.L.: 2.820"
G1 B.C.: 0.415



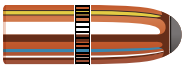
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.820"
G1 B.C.: 0.415



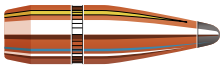
150 gr. SST®
Item No. 30302
C.O.L.: 2.820"
G1 B.C.: 0.415



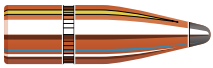
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.850"
G1 B.C.: 0.398



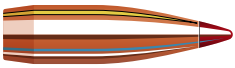
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.595"
G1 B.C.: 0.186



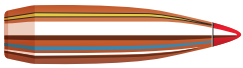
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.825"
G1 B.C.: 0.349



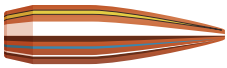
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.825"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.825"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.825"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.825"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
Accurate 2015	36.5 gr.	38.2 gr.	39.9 gr.	41.5 gr.	43.2 gr.	44.9 gr.
H4895	36.2 gr.	38.3 gr.	40.3 gr.	42.4 gr.	44.4 gr.	46.5 gr.
VARGET	37.2 gr.	39.0 gr.	40.9 gr.	42.8 gr.	44.7 gr.	46.5 gr.
IMR 4320	38.0 gr.	39.9 gr.	41.7 gr.	43.6 gr.	45.4 gr.	
VIHT N-140	38.8 gr.	40.5 gr.	42.3 gr.	44.1 gr.	45.9 gr.	47.7 gr.
IMR 4895	39.0 gr.	40.7 gr.	42.4 gr.	44.2 gr.	45.9 gr.	47.6 gr.
Alliant RL-15	38.9 gr.	40.7 gr.	42.6 gr.	44.5 gr.	46.4 gr.	48.2 gr.
WIN 760	45.4 gr.	47.6 gr.	49.8 gr.	51.9 gr.	54.1 gr.	56.2 gr.

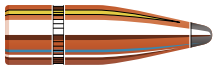
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.220
DIAMETER: 0.312"



150 gr. InterLock® SP
Item No. 3120
C.O.L.: 2.840"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
Accurate 2495	38.8 gr.	40.7 gr.	42.6 gr.	44.5 gr.	
VIHT N-135	40.4 gr.	42.1 gr.	43.8 gr.	45.5 gr.	
H4895	39.7 gr.	42.0 gr.	44.3 gr.	46.6 gr.	48.9 gr.
IMR 4895	41.7 gr.	43.3 gr.	45.0 gr.	46.6 gr.	48.3 gr.
Alliant RL-15	41.6 gr.	43.4 gr.	45.1 gr.	46.8 gr.	
VARGET	42.0 gr.	43.8 gr.	45.7 gr.	47.6 gr.	49.5 gr.
VIHT N-150	42.4 gr.	44.2 gr.	46.0 gr.	47.8 gr.	49.7 gr.
WIN 748	42.1 gr.	44.1 gr.	46.0 gr.	47.9 gr.	49.9 gr.
IMR 4064	42.1 gr.	44.1 gr.	46.0 gr.	48.0 gr.	49.9 gr.
H380	46.8 gr.	48.6 gr.	50.5 gr.	52.4 gr.	54.3 gr.

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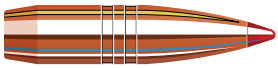
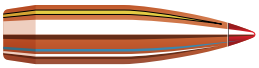
165-168 GRAIN BULLETS

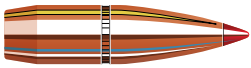
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



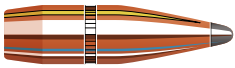
165 gr. GMX®
Item No. 30470
C.O.L.: 2.820"
G1 B.C.: 0.447



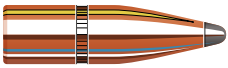
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.820"
G1 B.C.: 0.447



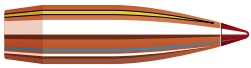
165 gr. SST®
Item No. 30452
C.O.L.: 2.820"
G1 B.C.: 0.447



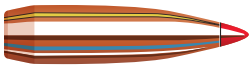
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.815"
G1 B.C.: 0.435



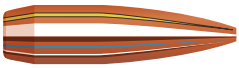
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.815"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.820"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.820"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.820"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
H4895	37.6 gr.	39.6 gr.	41.7 gr.	43.7 gr.		
IMR 4895	38.3 gr.	40.3 gr.	42.3 gr.	44.4 gr.		
IMR 4064	39.5 gr.	41.4 gr.	43.2 gr.	45.1 gr.		
VIHT N-140	39.0 gr.	41.1 gr.	43.2 gr.	45.3 gr.		
Alliant RL-15	40.1 gr.	41.9 gr.	43.7 gr.	45.5 gr.	47.3 gr.	
Accurate 2495	41.4 gr.	43.2 gr.	45.1 gr.	47.0 gr.	48.8 gr.	
H380	42.7 gr.	45.4 gr.	48.2 gr.	50.9 gr.	53.6 gr.	56.3 gr.
WIN 760	46.5 gr.	48.5 gr.	50.5 gr.	52.5 gr.	54.6 gr.	

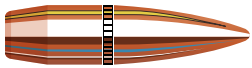
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

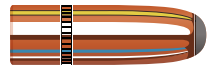
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

174 GRAIN BULLETS

SECTIONAL DENSITY: 0.255-0.258
DIAMETER: 0.3105-0.312"



174 gr. FMJ-BT
Item No. 3131
C.O.L.: 2.855"
G1 B.C.: 0.470



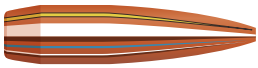
174 gr. InterLock® RN
Item No. 3130
C.O.L.: 2.855"
G1 B.C.: 0.262

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
Accurate 2495	35.7 gr.	37.5 gr.	39.2 gr.	41.0 gr.		
H4895	36.8 gr.	38.6 gr.	40.4 gr.	42.2 gr.	44.0 gr.	
VIHT N-135	36.9 gr.	38.8 gr.	40.6 gr.	42.4 gr.		
IMR 4895	38.5 gr.	40.1 gr.	41.7 gr.	43.3 gr.	44.9 gr.	
IMR 4064	37.2 gr.	39.3 gr.	41.4 gr.	43.6 gr.	45.7 gr.	
WIN 748	38.8 gr.	40.4 gr.	42.0 gr.	43.6 gr.	45.3 gr.	
Alliant RL-15	37.8 gr.	39.7 gr.	41.7 gr.	43.7 gr.	45.6 gr.	
VIHT N-150	38.5 gr.	40.5 gr.	42.5 gr.	44.4 gr.	46.4 gr.	
VARGET	39.3 gr.	41.0 gr.	42.8 gr.	44.5 gr.	46.2 gr.	
WIN 760	42.1 gr.	44.2 gr.	46.2 gr.	48.2 gr.	50.3 gr.	52.3 gr.

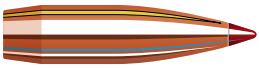
Create custom ballistic tables using our online calculators at hornady.com/ballistics

178-180 GRAIN BULLETS

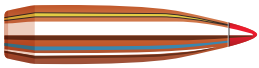
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



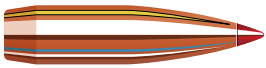
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.840"
G1 B.C.: 0.530



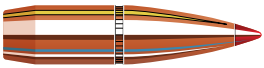
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.840"
G1 B.C.: 0.515
G7 B.C.: 0.259



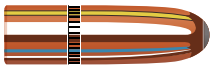
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.840"
G1 B.C.: 0.495



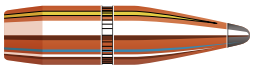
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.840"
G1 B.C.: 0.480



180 gr. SST®
Item No. 30702
C.O.L.: 2.840"
G1 B.C.: 0.480



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.790"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.850"
G1 B.C.: 0.452

180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.850"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
H4895	34.0 gr.	36.2 gr.	38.4 gr.	40.6 gr.	42.8 gr.	
IMR 4064	35.9 gr.	38.0 gr.	40.2 gr.	42.4 gr.	44.6 gr.	
Alliant RL-15	36.7 gr.	38.7 gr.	40.7 gr.	42.6 gr.	44.6 gr.	46.6 gr.
Accurate 2495	38.4 gr.	40.2 gr.	41.9 gr.	43.7 gr.	45.4 gr.	47.1 gr.
H380	38.7 gr.	41.5 gr.	44.2 gr.	46.9 gr.	49.7 gr.	52.4 gr.
IMR 4350	42.4 gr.	44.5 gr.	46.5 gr.	48.6 gr.	50.6 gr.	52.7 gr.
WIN 760	42.3 gr.	44.5 gr.	46.7 gr.	48.8 gr.	51.0 gr.	53.2 gr.
VIHT N-160	44.9 gr.	46.7 gr.	48.5 gr.	50.3 gr.	52.1 gr.	53.9 gr.

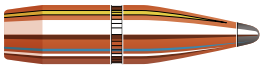
Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.840"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
Alliant RL-15	36.2 gr.	38.3 gr.	40.4 gr.	42.6 gr.	44.7 gr.	
IMR 4064	33.6 gr.	36.4 gr.	39.3 gr.	42.1 gr.	44.9 gr.	
Accurate 2495	38.5 gr.	40.2 gr.	42.0 gr.	43.7 gr.	45.5 gr.	
H4350	39.5 gr.	42.0 gr.	44.5 gr.	47.0 gr.	49.5 gr.	
WIN 760	42.8 gr.	44.5 gr.	46.2 gr.	48.0 gr.	49.7 gr.	
H380	40.9 gr.	43.2 gr.	45.4 gr.	47.7 gr.	50.0 gr.	52.3 gr.
IMR 4350	42.2 gr.	44.1 gr.	46.1 gr.	48.0 gr.	50.0 gr.	
VIHT N-160	43.3 gr.	45.3 gr.	47.4 gr.	49.4 gr.	51.5 gr.	

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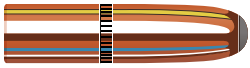
220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 2.840"
G1 B.C.: 0.300

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4064	36.7 gr.	38.9 gr.	41.1 gr.		
H4350	39.9 gr.	42.2 gr.	44.6 gr.	47.0 gr.	
Accurate 4350	41.0 gr.	42.9 gr.	44.7 gr.	46.6 gr.	
IMR 4350	40.3 gr.	42.8 gr.	45.4 gr.	48.0 gr.	
WIN 760	41.8 gr.	43.7 gr.	45.6 gr.	47.5 gr.	
VIHT N-160		44.6 gr.	46.9 gr.	49.2 gr.	51.4 gr.
Alliant RL-19		46.8 gr.	49.0 gr.	51.2 gr.	
H4831		48.0 gr.	50.6 gr.	53.1 gr.	55.7 gr.

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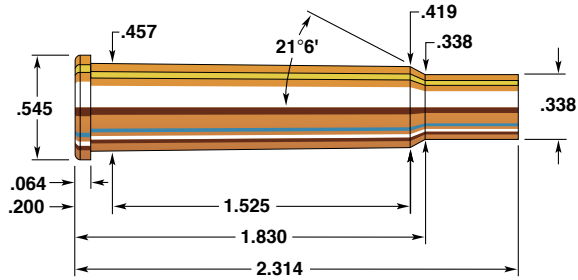


30-40 Krag

Rifle:	Springfield Model 1896	**Bullet Diameter:**	0.308"
Barrel:	.30", 1 in 10" Twist	**Maximum COL:**	3.089"
Case:	Norma	**Max. Case Length:**	2.314"
Primer:	Federal 210	**Case Trim Length:**	2.304"

The 30-40 Krag entered U.S. Military service in 1892 in the first smokeless powder repeater adopted by the U.S. Army, the Model 1892 Krag. This rifle was a somewhat improved version of the Danish Krag-Jorgenson Model 1889, and later was modified into the U.S. Krag Models 1896 and 1898.

Although the 30-40 represented quite an advance over previous U.S. service cartridges, it was never adopted by the Navy or Marine Corps and was superseded in 1903 by the 30-03 cartridge which became the vastly superior 30-06 so familiar to shooters today.

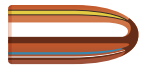
The Krag action is exceptionally smooth, though its strength is limited. As with all older military rifles, careful inspection of the firearm by a knowledgeable gunsmith is highly recommended. The Model 1895 Winchester lever action, which was discontinued in 1936, can withstand somewhat higher pressures. Ruger produced its Number 3 single shot rifle and Browning made an excellent replica of the Model 1895, both in 30-40 Krag and both useful and accurate hunting rifles. Loaded to 2000 fps with the 220 grain Hornady Round Nose, the 30-40 is certainly adequate for large species of North American game.

Many later military and commercial developments have displaced the 30-40 from its former position of popularity, but it is still a commonly used and effective cartridge.

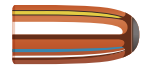
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.880"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.715"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.715"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.880"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 3031	37.6 gr.	38.7 gr.	39.9 gr.	41.0 gr.	
IMR 4320		41.3 gr.	42.9 gr.	44.5 gr.	
H4895	40.4 gr.	42.1 gr.	43.7 gr.	45.4 gr.	47.1 gr.
IMR 4064	41.4 gr.	42.7 gr.	43.9 gr.	45.2 gr.	46.5 gr.
H380	40.5 gr.	42.3 gr.	44.1 gr.	45.9 gr.	47.7 gr.
VIHT N-140	40.3 gr.	42.4 gr.	44.5 gr.	46.6 gr.	
Accurate 2700	41.3 gr.	43.3 gr.	45.3 gr.		

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130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

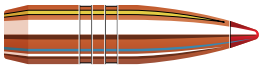
130 gr. SP
Item No. 3020
C.O.L.: 2.975"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 3031		36.4 gr.	37.9 gr.		
H4895	38.2 gr.	39.9 gr.	41.5 gr.	43.2 gr.	
IMR 4064	38.7 gr.	40.2 gr.	41.6 gr.	43.0 gr.	
VIHT N-140	38.6 gr.	40.4 gr.	42.1 gr.		
H380		41.9 gr.	43.0 gr.	44.9 gr.	46.8 gr.
Accurate 2495	36.6 gr.	40.0 gr.	43.4 gr.		
IMR 4350	45.8 gr.	47.3 gr.	48.8 gr.		

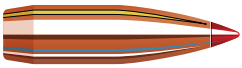
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

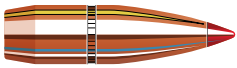
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



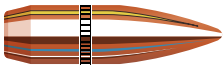
150 gr. GMX®
Item No. 30370
C.O.L.: 3.030"
G1 B.C.: 0.415



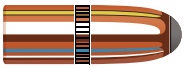
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.030"
G1 B.C.: 0.415



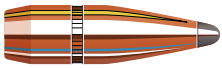
150 gr. SST®
Item No. 30302
C.O.L.: 3.030"
G1 B.C.: 0.415



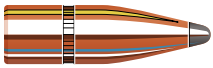
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.030"
G1 B.C.: 0.398



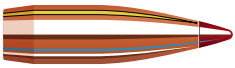
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.905"
G1 B.C.: 0.186



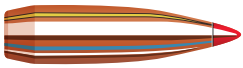
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.030"
G1 B.C.: 0.349



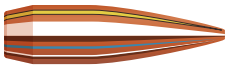
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.030"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.030"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.030"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.030"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)			
POWDER	**2200**	**2300**	**2400**	**2500**
IMR 3031	34.0 gr.	35.2 gr.	36.4 gr.	
IMR 4064		37.8 gr.	39.5 gr.	41.2 gr.
VIHT N-140	35.4 gr.	37.4 gr.	39.5 gr.	41.5 gr.
IMR 4320	36.3 gr.	38.0 gr.	39.6 gr.	
H380	38.0 gr.	39.7 gr.	41.3 gr.	43.0 gr.
IMR 4350	41.7 gr.	43.4 gr.	45.1 gr.	46.8 gr.
WIN 760	42.7 gr.	44.4 gr.	46.1 gr.	47.8 gr.

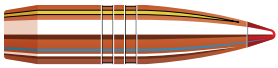
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

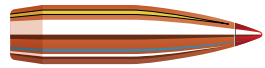
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

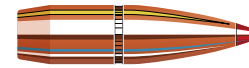
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



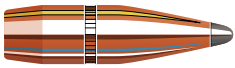
165 gr. GMX®
Item No. 30470
C.O.L.: 3.025"
G1 B.C.: 0.447



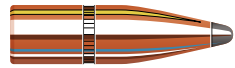
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.025"
G1 B.C.: 0.447



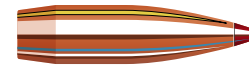
165 gr. SST®
Item No. 30452
C.O.L.: 3.025"
G1 B.C.: 0.447



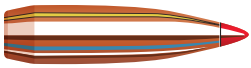
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.025"
G1 B.C.: 0.435



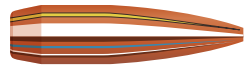
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.025"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.025"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.025"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.025"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
H4895	33.5 gr.	35.2 gr.	36.9 gr.		
IMR 4064	34.3 gr.	35.8 gr.	37.4 gr.		
H380			38.0 gr.	39.8 gr.	41.6 gr.
Accurate 4350	38.3 gr.	40.1 gr.	41.9 gr.	43.7 gr.	
IMR 4350	39.8 gr.	41.3 gr.	42.8 gr.		
VIHT N-160	41.1 gr.	42.7 gr.	44.4 gr.	46.0 gr.	47.7 gr.
H4831			44.8 gr.	47.0 gr.	49.1 gr.

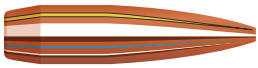
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

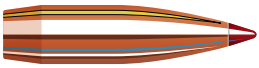
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

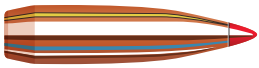
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



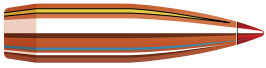
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.025"
G1 B.C.: 0.530



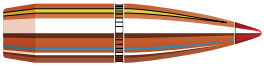
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.025"
G1 B.C.: 0.515
G7 B.C.: 0.259



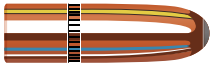
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.025"
G1 B.C.: 0.495



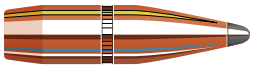
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.025"
G1 B.C.: 0.480



180 gr. SST®
Item No. 30702
C.O.L.: 3.025"
G1 B.C.: 0.480



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.080"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.025"
G1 B.C.: 0.452

180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.025"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**
H4895	31.8 gr.	33.5 gr.	35.1 gr.		
IMR 4064	32.6 gr.	34.2 gr.	35.8 gr.	37.4 gr.	
H380	34.9 gr.	36.3 gr.	37.6 gr.	39.0 gr.	40.4 gr.
IMR 4350	38.9 gr.	40.1 gr.	41.3 gr.	42.6 gr.	
VIHT N-160	39.5 gr.	41.0 gr.	42.5 gr.	44.1 gr.	
H4831	41.5 gr.	42.9 gr.	44.2 gr.	45.6 gr.	47.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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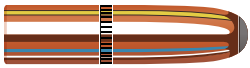
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

220 GRAIN BULLETS

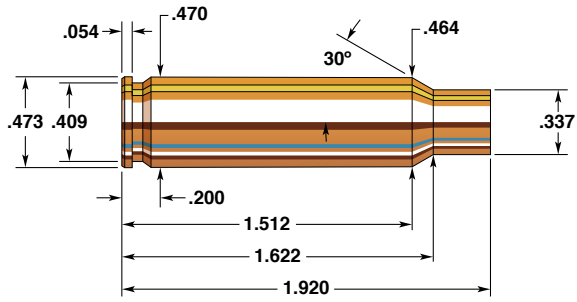
SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.080"
G1 B.C.: 0.300

	VELOCITY (FPS – feet per second)				
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**
Alliant RL-15	28.3 gr.	30.1 gr.	32.0 gr.	33.8 gr.	
IMR 4064	29.3 gr.	31.0 gr.	32.7 gr.	34.4 gr.	
H4895	30.0 gr.	31.5 gr.	33.1 gr.		
H380	31.4 gr.	32.9 gr.	34.4 gr.	36.0 gr.	38.0 gr.
WIN 760	33.4 gr.	35.1 gr.	36.9 gr.	38.6 gr.	40.4 gr.
IMR 4350	34.5 gr.	36.0 gr.	37.5 gr.	39.9 gr.	40.5 gr.
VIHT N-160	34.5 gr.	36.4 gr.	38.3 gr.	40.2 gr.	42.1 gr.
H4831	37.0 gr.	38.4 gr.	39.8 gr.	41.1 gr.	42.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



30 TC

Rifle:	TC Encore	**Bullet Diameter:**	0.308"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	2.660"
Case:	Hornady/Frontier	**Max. Case Length:**	1.920"
Primer:	WLR	**Case Trim Length:**	1.910"

The 30 TC was developed in conjunction with Thompson Center for their ICON rifle and delivers in excess of standard 30-06 performance from a cartridge case that is smaller than the 308 Winchester. Factory ammunition used an early iteration of Superformance® propellant and it was key step in the evolution of the Superformance® propellant technology that we use today.

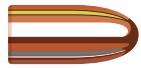
Loading the 30 TC is a simple, straight forward proposition and canister propellants will allow the handloader to get within 50 feet per second of factory loaded ammunition. We experienced excellent accuracy with both A 2520 and Hodgdon BL-C2. Any game animal in North America and South African plains game are well within the scope of the 30 TC's capabilities and any hunter with a 30 TC in his hands can be confident that it's plenty of gun.

Bullet selection for the 30 TC is broad and deep when it comes to 30 caliber Hornady bullets, from the 110 grain V-MAX® to the 190 grain BTSP there is a bullet to suite any game or target. Factory ammo features the 150 and 165 grain SST® bullets and they are great choices, however if the handloader is going after heavier game like elk or bear the 180 grain SST® or Spire Point are also very, very good choices.

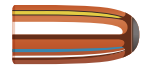
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.575"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.575"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.575"
G1 B.C.: 0.150

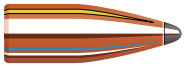
110 gr. SP
Item No. 3010
C.O.L.: 2.575"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
Alliant RL-10X	37.4 gr.	39.4 gr.	41.3 gr.	43.2 gr.	45.1 gr.	
Accurate 2230	38.2 gr.	40.3 gr.	42.5 gr.	44.6 gr.	46.7 gr.	
H322	39.9 gr.	41.6 gr.	43.4 gr.	45.1 gr.	46.9 gr.	
TAC	41.6 gr.	43.4 gr.	45.2 gr.	47.0 gr.	48.7 gr.	50.5 gr.
H335	41.8 gr.	43.6 gr.	45.4 gr.	47.2 gr.	49.1 gr.	50.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"



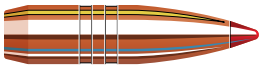
130 gr. SP
Item No. 3020
C.O.L.: 2.580"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
Alliant RL-10X	36.4 gr.	38.1 gr.	39.9 gr.	41.7 gr.	
Accurate 2460	39.2 gr.	41.1 gr.	43.1 gr.	45.0 gr.	47.0 gr.
TAC	38.9 gr.	41.0 gr.	43.0 gr.	45.1 gr.	47.1 gr.
H335	40.0 gr.	41.8 gr.	43.6 gr.	45.4 gr.	47.2 gr.
IMR 4895	40.4 gr.	42.2 gr.	44.0 gr.	45.8 gr.	
H4895	41.2 gr.	42.7 gr.	44.3 gr.	45.9 gr.	47.5 gr.

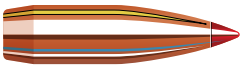
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

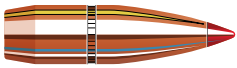
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



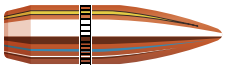
150 gr. GMX®
Item No. 30370
C.O.L.: 2.645"
G1 B.C.: 0.415



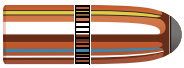
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.645"
G1 B.C.: 0.415



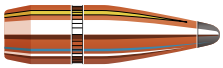
150 gr. SST®
Item No. 30302
C.O.L.: 2.645"
G1 B.C.: 0.415



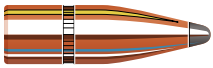
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.645"
G1 B.C.: 0.398



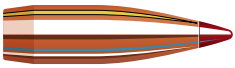
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.645"
G1 B.C.: 0.186



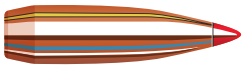
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.645"
G1 B.C.: 0.349



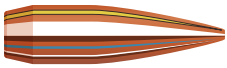
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.645"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.645"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.645"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.645"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**
Alliant RL-10X	34.6 gr.	36.5 gr.	38.4 gr.			
TAC	36.6 gr.	38.5 gr.	40.4 gr.	42.3 gr.	44.2 gr.	45.2 gr.
H4895	38.0 gr.	39.6 gr.	41.3 gr.	43.0 gr.		
IMR 4895	38.4 gr.	40.0 gr.	41.6 gr.	43.2 gr.		
VIHT N-140	40.0 gr.	41.8 gr.	43.6 gr.	45.4 gr.		
Accurate 2520	40.3 gr.	42.2 gr.	44.1 gr.	46.1 gr.	48.0 gr.	
WIN 748	40.6 gr.	42.3 gr.	44.1 gr.	45.8 gr.	47.5 gr.	
BL-C(2)	41.4 gr.	43.1 gr.	44.8 gr.	46.5 gr.	48.2 gr.	49.0 gr.

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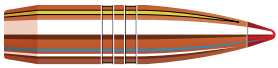
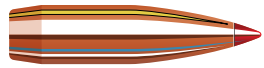
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

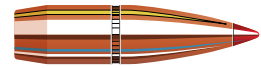
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



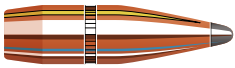
165 gr. GMX®
Item No. 30470
C.O.L.: 2.645"
G1 B.C.: 0.447



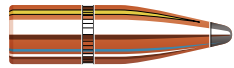
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.645"
G1 B.C.: 0.447



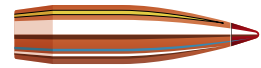
165 gr. SST®
Item No. 30452
C.O.L.: 2.645"
G1 B.C.: 0.447



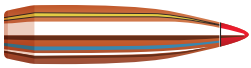
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.645"
G1 B.C.: 0.435



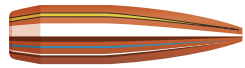
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.645"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.645"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.645"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.645"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
TAC	36.3 gr.	38.3 gr.	40.2 gr.	42.1 gr.	
H4895	37.0 gr.	38.8 gr.	40.6 gr.	42.4 gr.	
IMR 4895	37.2 gr.	39.0 gr.	40.7 gr.	42.5 gr.	
VIHT N-140	39.1 gr.	40.7 gr.	42.3 gr.	43.8 gr.	
VARGET	38.0 gr.	40.0 gr.	42.0 gr.	44.0 gr.	
WIN 748	39.7 gr.	41.2 gr.	42.7 gr.	44.1 gr.	45.6 gr.
Accurate 2520	38.7 gr.	40.8 gr.	42.8 gr.	44.9 gr.	46.9 gr.
BL-C(2)	40.2 gr.	41.8 gr.	43.4 gr.	45.0 gr.	

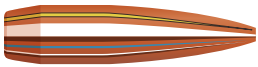
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

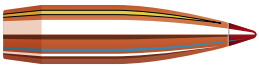
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

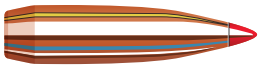
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



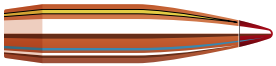
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.645"
G1 B.C.: 0.530



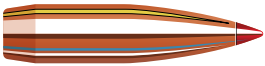
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.645"
G1 B.C.: 0.515
G7 B.C.: 0.259



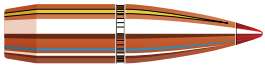
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.645"
G1 B.C.: 0.495



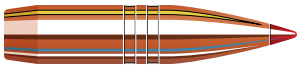
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.645"
G1 B.C.: 0.545
G7 B.C.: 0.275



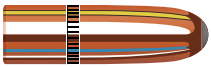
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.645"
G1 B.C.: 0.480



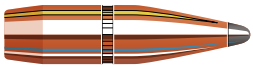
180 gr. SST®
Item No. 30702
C.O.L.: 2.645"
G1 B.C.: 0.480



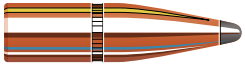
180 gr. GMX®
Item No. 30193
C.O.L.: 2.645"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.645"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.645"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.645"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2550**	**2600**
TAC	34.8 gr.	36.6 gr.	38.4 gr.	40.3 gr.	41.2 gr.	
H4895	34.6 gr.	36.6 gr.	38.7 gr.	40.7 gr.	41.7 gr.	
IMR 4895	35.0 gr.	37.0 gr.	39.0 gr.	41.0 gr.	42.0 gr.	
VARGET	36.8 gr.	38.7 gr.	40.5 gr.	42.3 gr.	43.2 gr.	
WIN 748	37.9 gr.	39.4 gr.	40.9 gr.	42.3 gr.	43.1 gr.	43.8 gr.
VIHT N-140	37.5 gr.	39.2 gr.	41.0 gr.	42.7 gr.		
BL-C(2)	38.5 gr.	39.9 gr.	41.4 gr.	42.9 gr.	43.7 gr.	44.4 gr.
Accurate 2520	36.6 gr.	38.8 gr.	41.0 gr.	43.2 gr.	44.3 gr.	45.5 gr.

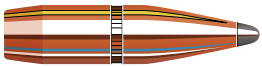
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

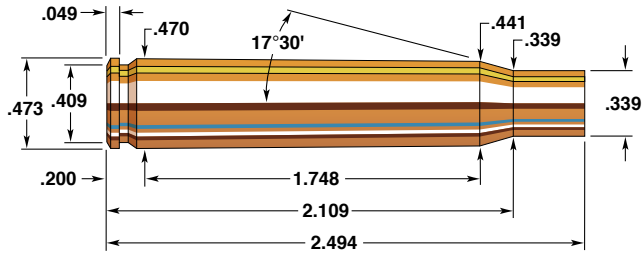
SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.645"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2550**
TAC	34.2 gr.	36.2 gr.	38.3 gr.	40.3 gr.	
H4895	28.0 gr.	33.3 gr.	38.5 gr.		
IMR 4895	34.6 gr.	36.6 gr.	38.6 gr.	40.5 gr.	
VARGET	35.4 gr.	37.5 gr.	39.7 gr.	41.8 gr.	
VIHT N-140	36.9 gr.	38.6 gr.	40.3 gr.	41.9 gr.	
WIN 748	37.0 gr.	38.8 gr.	40.5 gr.	42.3 gr.	43.2 gr.
Accurate 2520	36.9 gr.	38.9 gr.	40.8 gr.	42.7 gr.	43.7 gr.
BL-C(2)	38.0 gr.	39.8 gr.	41.5 gr.	43.3 gr.	44.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



30-06 Springfield

Rifle:	Winchester Model 70	**Bullet Diameter:**	0.308"
Barrel:	23¾", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Hornady/Frontier	**Max. Case Length:**	2.494"
Primer:	WLR	**Case Trim Length:**	2.484"

The initial development date of this cartridge was 1903, but the standard dimensions as we know them today were introduced in 1906. This military round was designated the "ball cartridge, caliber .30, Model of 1906," hence the title 30-06. After two World Wars and Korea, the 30-06 Springfield was destined to become the most popular centerfire cartridge ever introduced in America. It is or has been offered in every conceivable type of firearm from lever actions to semi automatics to single shots. It is safe to conclude that this single cartridge has been the most influential cartridge of the 20th century and will continue to hold sway well into the new millennium.

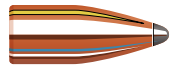
Because of the extremely wide range of bullet weights available for this round, the versatility of the 30-06 is unmatched. It provides adequate power for virtually all North American game with tolerable recoil.

Not all powders listed gave optimum results throughout the range of bullets, mainly because the weights vary by such a large amount (110 grain-225 grain). The 30-06 has the largest variety of suitable powders of the cartridges listed in the Hornady Handbook, which illustrates the efficiency of the cartridge. Best results in our rifle were obtained using VARGET and IMR 4831. H 414 and IMR 4350 also gave very good results, and no powders listed gave less than acceptable results.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.170"
G1 B.C.: 0.290



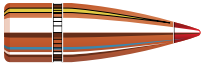
110 gr. SP
Item No. 3010
C.O.L.: 3.170"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3350**	**3400**
IMR 3031	47.2 gr.	49.4 gr.	51.6 gr.	53.8 gr.	54.9 gr.	
H4895	47.7 gr.	50.6 gr.	53.4 gr.	56.3 gr.	57.7 gr.	59.1 gr.
Accurate 2495	53.0 gr.	54.6 gr.	56.2 gr.			
VARGET	51.4 gr.	53.9 gr.	56.4 gr.	58.9 gr.	60.1 gr.	
IMR 4064	52.7 gr.	54.7 gr.	56.8 gr.	58.8 gr.	59.9 gr.	
Alliant RL-15	54.7 gr.	56.4 gr.	58.0 gr.	59.6 gr.	60.4 gr.	
WIN 760	60.3 gr.	62.0 gr.	63.7 gr.	65.4 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 3.220"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 3031	41.8 gr.	44.2 gr.	46.5 gr.	48.9 gr.	51.3 gr.	53.6 gr.	
H4895	44.5 gr.	46.6 gr.	48.7 gr.	50.7 gr.	52.8 gr.	54.9 gr.	56.9 gr.
Accurate 2495	47.5 gr.	49.2 gr.	51.0 gr.	52.7 gr.	54.5 gr.		
VARGET	46.0 gr.	48.3 gr.	50.7 gr.	53.1 gr.	55.4 gr.	57.8 gr.	
IMR 4064	48.3 gr.	50.4 gr.	52.5 gr.	54.6 gr.	56.7 gr.	58.7 gr.	
Alliant RL-15	49.7 gr.	51.6 gr.	53.4 gr.	55.3 gr.	57.1 gr.	59.0 gr.	
WIN 760	54.9 gr.	56.9 gr.	58.9 gr.	60.9 gr.	62.9 gr.	64.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

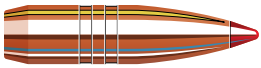
130 gr. SP
Item No. 3020
C.O.L.: 3.150"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3150**
IMR 3031	44.4 gr.	46.4 gr.	48.4 gr.	50.4 gr.	52.4 gr.	
Accurate 2495	46.0 gr.	47.6 gr.	49.2 gr.	50.8 gr.	52.4 gr.	
H4895	44.2 gr.	46.5 gr.	48.8 gr.	51.1 gr.	53.4 gr.	54.6 gr.
VARGET	46.8 gr.	49.0 gr.	51.2 gr.	53.4 gr.	55.6 gr.	
IMR 4064	47.5 gr.	49.8 gr.	52.1 gr.	54.4 gr.	56.7 gr.	
Alliant RL-15	49.6 gr.	51.5 gr.	53.5 gr.	55.4 gr.	57.3 gr.	
WIN 760	55.3 gr.	57.3 gr.	59.3 gr.	61.3 gr.	63.3 gr.	

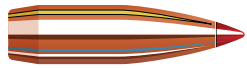
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

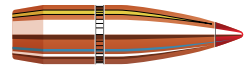
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



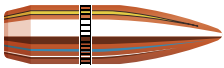
150 gr. GMX®
Item No. 30370
C.O.L.: 3.210"
G1 B.C.: 0.415



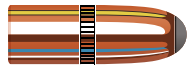
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.210"
G1 B.C.: 0.415



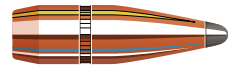
150 gr. SST®
Item No. 30302
C.O.L.: 3.210"
G1 B.C.: 0.415



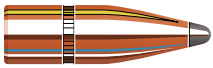
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.185"
G1 B.C.: 0.398



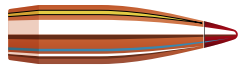
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.000"
G1 B.C.: 0.186



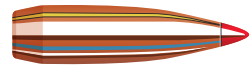
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.210"
G1 B.C.: 0.349



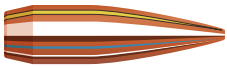
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.210"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.210"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.210"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.210"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**
IMR 4064	44.7 gr.	46.9 gr.	49.1 gr.	51.3 gr.	53.4 gr.	54.5 gr.	55.6 gr.
VARGET	44.9 gr.	47.1 gr.	49.2 gr.	51.4 gr.	53.6 gr.		
VIHT N-140	46.5 gr.	48.2 gr.	49.9 gr.	51.6 gr.	53.3 gr.		
Accurate 2495	45.1 gr.	47.3 gr.	49.6 gr.	51.8 gr.			
Alliant RL-15	47.1 gr.	49.1 gr.	51.0 gr.	52.9 gr.	54.9 gr.	55.8 gr.	
BIG GAME	48.4 gr.	50.9 gr.	53.3 gr.	55.7 gr.	58.2 gr.	59.4 gr.	60.7 gr.
IMR 4007 SSC	50.6 gr.	52.7 gr.	54.7 gr.	56.8 gr.	58.9 gr.		
Alliant RL-17	50.9 gr.	52.9 gr.	55.0 gr.	57.0 gr.	59.1 gr.	60.1 gr.	61.1 gr.
WIN 760	51.9 gr.	53.7 gr.	55.5 gr.	57.3 gr.	59.1 gr.	60.0 gr.	
H4350	51.1 gr.	53.5 gr.	55.8 gr.	58.1 gr.	60.4 gr.	61.6 gr.	
NORMA URP	51.9 gr.	54.0 gr.	56.2 gr.	58.3 gr.	60.5 gr.		
IMR 4451	52.0 gr.	54.1 gr.	56.2 gr.	58.3 gr.	60.5 gr.		
SUPERFORMANCE	56.4 gr.	58.1 gr.	59.7 gr.	61.4 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

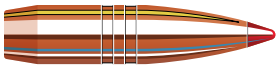
***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

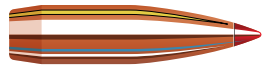
INDICATES MAXIMUM LOAD — USE WITH CAUTION

165-168 GRAIN BULLETS

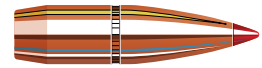
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



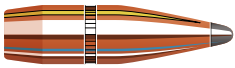
165 gr. GMX®
Item No. 30470
C.O.L.: 3.210"
G1 B.C.: 0.447



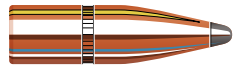
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.210"
G1 B.C.: 0.447



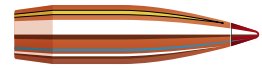
165 gr. SST®
Item No. 30452
C.O.L.: 3.210"
G1 B.C.: 0.447



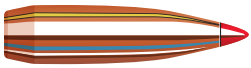
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.210"
G1 B.C.: 0.435



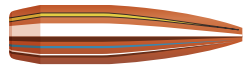
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.210"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.220"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.220"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.220"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)						
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**
VARGET	42.2 gr.	44.6 gr.	47.0 gr.	49.3 gr.	51.7 gr.		
IMR 4064	42.4 gr.	44.9 gr.	47.2 gr.	49.6 gr.	51.9 gr.		
Accurate 2495	44.0 gr.	45.9 gr.	47.8 gr.	49.7 gr.			
Alliant RL-15	44.8 gr.	46.7 gr.	48.6 gr.	50.5 gr.	52.4 gr.	54.2 gr.	
BIG GAME	47.8 gr.	49.9 gr.	52.0 gr.	54.1 gr.	56.2 gr.	58.3 gr.	
Hybrid 100V	47.7 gr.	49.9 gr.	52.2 gr.	54.5 gr.	56.8 gr.		
Alliant RL-17	48.9 gr.	50.7 gr.	52.6 gr.	54.5 gr.	56.4 gr.	58.3 gr.	59.2 gr.
IMR 4007 SSC	49.1 gr.	50.9 gr.	52.7 gr.	54.5 gr.	56.3 gr.		
NORMA URP	49.7 gr.	51.6 gr.	53.5 gr.	55.5 gr.	57.4 gr.	59.3 gr.	
WIN 760	50.1 gr.	52.0 gr.	53.9 gr.	55.8 gr.	57.6 gr.		
H4350	49.1 gr.	51.5 gr.	53.8 gr.	56.1 gr.	58.5 gr.		
IMR 4451	49.5 gr.	51.7 gr.	53.9 gr.	56.1 gr.	58.4 gr.		
VIHT N-160	52.7 gr.	54.5 gr.	56.4 gr.	58.2 gr.	60.0 gr.		
Power Pro 4000 MR	52.8 gr.	55.0 gr.	57.2 gr.	59.3 gr.			
SUPERFORMANCE	54.3 gr.	56.2 gr.	58.1 gr.	60.0 gr.	61.9 gr.		

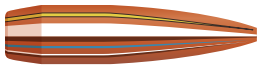
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

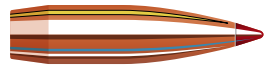
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

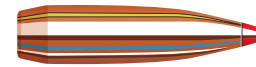
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



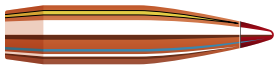
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.220"
G1 B.C.: 0.530



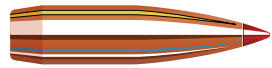
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.220"
G1 B.C.: 0.515
G7 B.C.: 0.259



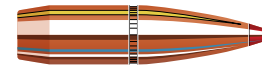
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.220"
G1 B.C.: 0.495



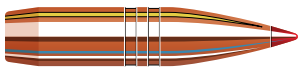
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.220"
G1 B.C.: 0.545
G7 B.C.: 0.275



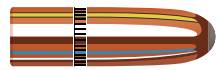
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.210"
G1 B.C.: 0.480



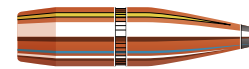
180 gr. SST®
Item No. 30702
C.O.L.: 3.220"
G1 B.C.: 0.480



180 gr. GMX®
Item No. 30193
C.O.L.: 3.210"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.210"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.225"
G1 B.C.: 0.452

180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.225"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)						
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**	**2750**
IMR 4064	43.1 gr.	45.1 gr.	47.0 gr.	49.0 gr.	50.0 gr.		
Alliant RL-15	43.5 gr.	45.5 gr.	47.6 gr.	49.6 gr.			
Power Pro 2000 MR	45.1 gr.	47.0 gr.	48.9 gr.	50.7 gr.	51.7 gr.		
H414	46.1 gr.	48.3 gr.	50.4 gr.	52.6 gr.	53.6 gr.	54.7 gr.	
Alliant RL-17	47.0 gr.	48.9 gr.	50.9 gr.	52.8 gr.	53.7 gr.	54.7 gr.	55.7 gr.
IMR 4007 SSC	47.0 gr.	49.1 gr.	51.2 gr.	53.3 gr.	54.4 gr.	55.4 gr.	56.5 gr.
WIN 760	46.9 gr.	49.1 gr.	51.2 gr.	53.4 gr.	54.5 gr.		
IMR 4451	46.6 gr.	48.9 gr.	51.2 gr.	53.6 gr.	54.7 gr.	55.9 gr.	
H4350	46.5 gr.	49.1 gr.	51.6 gr.	54.1 gr.	55.3 gr.		
NORMA URP	47.7 gr.	49.9 gr.	52.1 gr.	54.2 gr.	55.3 gr.	56.4 gr.	
IMR 4350	48.4 gr.	50.4 gr.	52.3 gr.	54.3 gr.			
Hybrid 100V	48.5 gr.	50.5 gr.	52.4 gr.	54.4 gr.			
SUPERFORMANCE	48.9 gr.	51.2 gr.	53.5 gr.	55.9 gr.	57.0 gr.	58.2 gr.	59.3 gr.
VIHT N-160	49.7 gr.	52.0 gr.	54.2 gr.	56.5 gr.			
Hunter	50.4 gr.	52.7 gr.	55.1 gr.	57.5 gr.	58.7 gr.	59.9 gr.	
Alliant RL-19	52.9 gr.	55.1 gr.	57.3 gr.	59.6 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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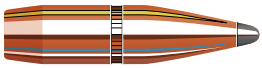
^**NOTE:** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

INDICATES MAXIMUM LOAD — USE WITH CAUTION

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 3.210"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)						
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Alliant RL-15	42.2 gr.	44.1 gr.	45.9 gr.	47.7 gr.			
BIG GAME	43.9 gr.	46.2 gr.	48.4 gr.	50.7 gr.			
Alliant RL-17	44.9 gr.	47.0 gr.	49.0 gr.	51.1 gr.	53.2 gr.	54.3 gr.	
H414	46.1 gr.	47.7 gr.	49.4 gr.	51.1 gr.	52.7 gr.		
IMR 4007 SSC	45.7 gr.	47.5 gr.	49.3 gr.	51.2 gr.			
WIN 760	46.2 gr.	47.9 gr.	49.6 gr.	51.3 gr.			
Hybrid 100V	45.4 gr.	47.5 gr.	49.6 gr.	51.7 gr.			
NORMA URP	46.8 gr.	48.5 gr.	50.3 gr.	52.1 gr.	53.9 gr.	54.8 gr.	
IMR 4451	45.5 gr.	47.7 gr.	49.9 gr.	52.2 gr.	54.4 gr.		
H4350	45.8 gr.	48.1 gr.	50.3 gr.	52.6 gr.	54.8 gr.		
VIHT N-160	49.6 gr.	51.4 gr.	53.1 gr.	54.9 gr.			
SUPERFORMANCE	50.1 gr.	51.7 gr.	53.3 gr.	55.0 gr.	56.6 gr.	57.4 gr.	58.3 gr.
Power Pro 4000 MR	47.8 gr.	50.3 gr.	52.7 gr.	55.1 gr.	57.5 gr.	58.7 gr.	
IMR 4831	50.4 gr.	52.2 gr.	54.1 gr.	56.0 gr.			
Alliant RL-19	51.7 gr.	53.6 gr.	55.5 gr.	57.3 gr.	59.2 gr.		

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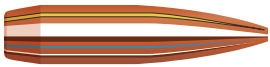
195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.210"
G1 B.C.: 0.550
G7 B.C.: 0.311

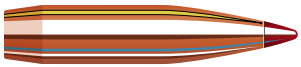
	VELOCITY (FPS – feet per second)						
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Alliant RL-15	41.3 gr.	43.4 gr.	45.5 gr.	47.6 gr.			
H414	45.2 gr.	46.9 gr.	48.5 gr.	50.2 gr.	51.9 gr.		
WIN 760	45.4 gr.	47.1 gr.	48.8 gr.	50.5 gr.	52.2 gr.		
Alliant RL-17	44.2 gr.	46.3 gr.	48.5 gr.	50.7 gr.	52.9 gr.	54.0 gr.	55.1 gr.
IMR 4007 SSC	45.9 gr.	47.8 gr.	49.6 gr.	51.5 gr.	53.3 gr.	54.3 gr.	
Hybrid 100V	45.5 gr.	47.5 gr.	49.5 gr.	51.6 gr.	53.6 gr.		
IMR 4451	44.3 gr.	46.9 gr.	49.5 gr.	52.1 gr.			
NORMA URP	46.4 gr.	48.3 gr.	50.2 gr.	52.1 gr.	54.0 gr.	54.9 gr.	
Accurate 4350	45.9 gr.	48.2 gr.	50.5 gr.	52.8 gr.	55.1 gr.		
SUPERFORMANCE	48.1 gr.	50.0 gr.	51.9 gr.	53.9 gr.	55.8 gr.	56.8 gr.	57.7 gr.
Power Pro 4000 MR	47.6 gr.	50.0 gr.	52.3 gr.	54.7 gr.	57.1 gr.		
VIHT N-160	49.5 gr.	51.4 gr.	53.2 gr.	55.0 gr.	56.8 gr.		
IMR 4831	50.7 gr.	52.4 gr.	54.2 gr.	56.0 gr.			
Alliant RL-19	50.9 gr.	53.0 gr.	55.1 gr.	57.2 gr.	59.3 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.340"
G1 B.C.: 0.626
G7 B.C.: 0.315

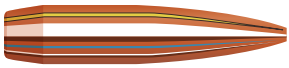
	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-15	42.3 gr.	44.3 gr.	46.3 gr.			
H414	44.6 gr.	46.6 gr.	48.5 gr.	50.4 gr.		
WIN 760	44.6 gr.	46.5 gr.	48.5 gr.	50.4 gr.		
Alliant RL-17	44.3 gr.	46.5 gr.	48.7 gr.	50.9 gr.	53.1 gr.	54.3 gr.
IMR 4007 SSC	45.2 gr.	47.2 gr.	49.2 gr.	51.2 gr.		
Hybrid 100V	44.9 gr.	47.2 gr.	49.5 gr.	51.9 gr.		
H4350	45.0 gr.	47.4 gr.	49.8 gr.	52.3 gr.		
NORMA URP	45.9 gr.	47.9 gr.	49.9 gr.	51.9 gr.	53.9 gr.	
IMR 4451	45.8 gr.	47.9 gr.	50.1 gr.	52.2 gr.		
IMR 4350	46.8 gr.	48.8 gr.	50.8 gr.			
SUPERFORMANCE	46.9 gr.	49.1 gr.	51.2 gr.	53.4 gr.	55.6 gr.	56.7 gr.
Power Pro 4000 MR	47.6 gr.	50.1 gr.	52.5 gr.	55.0 gr.	57.5 gr.	
IMR 4831	48.5 gr.	50.5 gr.	52.5 gr.	54.4 gr.		
VIHT N-160	48.8 gr.	50.6 gr.	52.5 gr.	54.3 gr.		
Accurate 4350	48.9 gr.	50.7 gr.	52.5 gr.	54.3 gr.		
Alliant RL-19	50.6 gr.	52.5 gr.	54.3 gr.	56.2 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

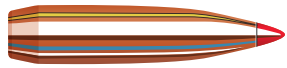
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

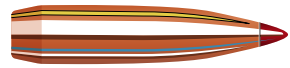
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 3.340"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.340"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.340"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-15	40.4 gr.	42.5 gr.	44.7 gr.	46.8 gr.	49.0 gr.		
WIN 760	43.7 gr.	45.6 gr.	47.5 gr.	49.4 gr.	51.3 gr.		
H414	44.9 gr.	46.4 gr.	47.9 gr.	49.5 gr.	51.0 gr.		
Alliant RL-17	43.1 gr.	45.3 gr.	47.4 gr.	49.6 gr.	51.7 gr.	53.9 gr.	
Hybrid 100V	43.2 gr.	45.4 gr.	47.6 gr.	49.8 gr.	51.9 gr.		
IMR 4007 SSC	43.9 gr.	46.0 gr.	48.0 gr.	50.0 gr.	52.1 gr.		
H4350	42.3 gr.	44.9 gr.	47.6 gr.	50.3 gr.	52.9 gr.		
NORMA URP	44.6 gr.	46.5 gr.	48.4 gr.	50.4 gr.	52.3 gr.		
IMR 4451	44.2 gr.	46.3 gr.	48.5 gr.	50.6 gr.			
SUPERFORMANCE	46.1 gr.	48.0 gr.	49.9 gr.	51.9 gr.	53.8 gr.	55.7 gr.	56.7 gr.
Power Pro 4000 MR	45.9 gr.	48.3 gr.	50.7 gr.	53.1 gr.	55.5 gr.		
VIHT N-160	48.3 gr.	50.0 gr.	51.8 gr.	53.6 gr.	55.4 gr.		
IMR 4831	48.7 gr.	50.7 gr.	52.7 gr.	54.6 gr.	56.6 gr.		
Alliant RL-19	48.8 gr.	50.9 gr.	53.1 gr.	55.2 gr.	57.3 gr.	59.4 gr.	

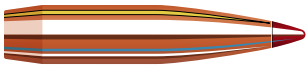
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.400"
G1 B.C.: 0.673
G7 B.C.: 0.336

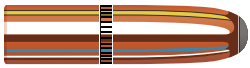
	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2550**	**2600**
Alliant RL-15	40.0 gr.	41.9 gr.	43.7 gr.	45.6 gr.			
H414	43.7 gr.	45.5 gr.	47.3 gr.	49.1 gr.			
Alliant RL-17	43.1 gr.	45.1 gr.	47.2 gr.	49.3 gr.	51.3 gr.	52.3 gr.	
Hybrid 100V	43.6 gr.	45.7 gr.	47.9 gr.	50.0 gr.	52.1 gr.	53.1 gr.	
IMR 4007 SSC	43.5 gr.	45.8 gr.	48.0 gr.	50.3 gr.			
WIN 760	43.7 gr.	45.9 gr.	48.1 gr.	50.3 gr.			
IMR 4451	44.3 gr.	46.4 gr.	48.5 gr.	50.5 gr.			
NORMA URP	45.3 gr.	47.2 gr.	49.1 gr.	51.0 gr.	52.9 gr.		
H4350	45.0 gr.	47.0 gr.	49.1 gr.	51.1 gr.	53.2 gr.		
SUPERFORMANCE	46.9 gr.	48.8 gr.	50.7 gr.	52.5 gr.	54.4 gr.	55.4 gr.	56.3 gr.
Power Pro 4000 MR	46.4 gr.	48.6 gr.	50.7 gr.	52.9 gr.	55.1 gr.		
VIHT N-160	47.5 gr.	49.4 gr.	51.3 gr.	53.1 gr.	55.0 gr.		
IMR 4831	46.2 gr.	48.9 gr.	51.7 gr.	54.4 gr.			
Alliant RL-19	47.6 gr.	50.0 gr.	52.3 gr.	54.7 gr.	57.0 gr.	58.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

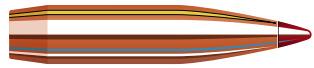
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.210"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.340"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2550**
Alliant RL-15	41.1 gr.	43.4 gr.	45.7 gr.			
Alliant RL-17	42.3 gr.	44.8 gr.	47.4 gr.	50.0 gr.		
H414	43.8 gr.	45.7 gr.	47.6 gr.			
WIN 760	43.9 gr.	45.8 gr.	47.8 gr.	49.7 gr.		
IMR 4007 SSC	44.0 gr.	46.3 gr.	48.5 gr.	50.7 gr.		
H4350	43.7 gr.	46.2 gr.	48.7 gr.	51.1 gr.		
Hybrid 100V	44.7 gr.	46.9 gr.	49.0 gr.	51.1 gr.		
IMR 4451	44.8 gr.	46.9 gr.	49.1 gr.			
NORMA URP	45.4 gr.	47.3 gr.	49.3 gr.	51.2 gr.		
SUPERFORMANCE	46.1 gr.	48.2 gr.	50.3 gr.	52.4 gr.	54.5 gr.	55.6 gr.
VIHT N-160	47.5 gr.	49.4 gr.	51.3 gr.	53.2 gr.		
Power Pro 4000 MR	46.9 gr.	49.2 gr.	51.5 gr.	53.8 gr.		
IMR 4831	48.4 gr.	50.4 gr.	52.5 gr.	54.5 gr.		
Alliant RL-19	48.6 gr.	51.0 gr.	53.3 gr.	55.7 gr.	58.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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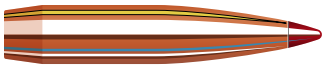
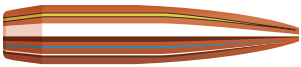
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.340"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.340"
G1 B.C.: 0.670
G7 B.C.: 0.336

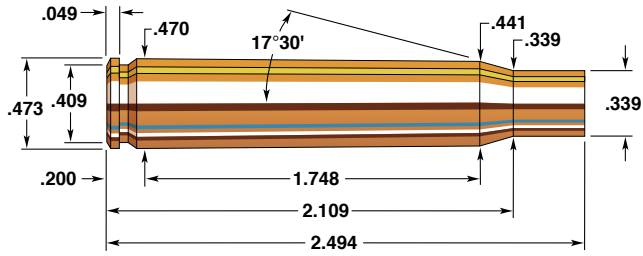
VELOCITY (FPS – feet per second)

POWDER	2000	2100	2200	2300	2400	2450	2500
Alliant RL-15	39.0 gr.	41.2 gr.	43.4 gr.	45.6 gr.			
BIG GAME	40.3 gr.	42.6 gr.	44.9 gr.	47.2 gr.	49.5 gr.		
Alliant RL-17	39.5 gr.	42.3 gr.	45.0 gr.	47.8 gr.	50.6 gr.		
H414	43.3 gr.	44.9 gr.	46.6 gr.	48.2 gr.	49.8 gr.		
IMR 4007 SSC	42.7 gr.	44.7 gr.	46.7 gr.	48.7 gr.			
IMR 4451	41.9 gr.	44.2 gr.	46.5 gr.	48.8 gr.			
NORMA URP	42.7 gr.	44.8 gr.	46.8 gr.	48.8 gr.	50.9 gr.	51.9 gr.	
Hybrid 100V	42.6 gr.	44.8 gr.	46.9 gr.	49.1 gr.	51.2 gr.		
H4350	39.6 gr.	42.9 gr.	46.1 gr.	49.4 gr.			
SUPERFORMANCE	46.3 gr.	48.0 gr.	49.7 gr.	51.4 gr.	53.1 gr.	54.0 gr.	54.8 gr.
Power Pro 4000 MR	44.8 gr.	47.1 gr.	49.3 gr.	51.6 gr.	53.9 gr.	55.0 gr.	
VIHT N-160	46.9 gr.	48.7 gr.	50.5 gr.	52.3 gr.	54.0 gr.		
IMR 4831	45.7 gr.	47.9 gr.	50.2 gr.	52.5 gr.	54.7 gr.		
Alliant RL-19	47.8 gr.	49.7 gr.	51.5 gr.	53.4 gr.	55.3 gr.	56.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



M1 Garand

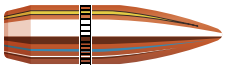
Rifle:	M1 Garand	**Bullet Diameter:**	0.308"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Hornady/Frontier	**Max. Case Length:**	2.494"
Primer:	Winchester WLR	**Case Trim Length:**	2.484"

The M1 Garand has probably the most colorful history of any service rifle. It is a solid, strong design that provides outstanding reliability and performance. The M1 should by no means be overlooked as a service match rifle. An M1 Garand with a quality barrel, a properly assembled and bedded receiver, and shooting carefully prepared reloads, is easily capable of shooting one-minute-of-angle or better. Because of the 30-06 Springfield's capability to handle heavier bullets than the 308, the Garand can make an excellent long range rifle. Re-barreling the Garand in 308 is a common and safe practice, and usually can provide somewhat better accuracy than the 30-06. However, propellants that are at the slower end of the spectrum for the 308 for a given bullet weight are usually required to provide reliable functioning.

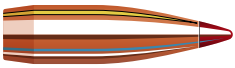
Hornady offers an outstanding selection of bullets for the M1 shooter. The 155 grain ELD® Match and BTHP bullets provide lightweight low recoil loads with high ballistic coefficients that can resist the wind. The 168 and 178 grain ELD® Match and BTHP bullets provide very long distance designs that the 30-06 can use extremely well in 1000 yard shooting. In testing we achieved our best performance with VIHT N-150 powder. Good results were also obtained with VIHT N-140 and H 4895.

150-155 GRAIN BULLETS

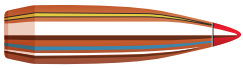
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



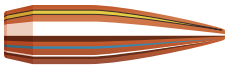
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.185"
G1 B.C.: 0.398



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.240"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.240"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.210"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**
H335	36.9 gr.	39.6 gr.	42.4 gr.	45.1 gr.	46.4 gr.
Accurate 2495	40.5 gr.	42.6 gr.	44.6 gr.		
Accurate 2520	41.9 gr.	43.3 gr.	44.8 gr.	46.2 gr.	
VIHT N-135	40.8 gr.	42.8 gr.	44.9 gr.	46.9 gr.	47.9 gr.
VARGET	42.3 gr.	44.2 gr.	46.2 gr.		
H4895	43.2 gr.	44.8 gr.	46.4 gr.		

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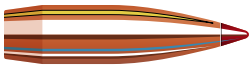
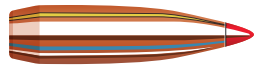
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

168 GRAIN BULLETS

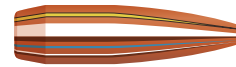
SECTIONAL DENSITY: 0.253
DIAMETER: 0.308"



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.240"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.240"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.240"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
Accurate 2495	37.7 gr.	40.3 gr.	42.9 gr.	45.5 gr.	
VIHT N-135	41.1 gr.	42.7 gr.	44.4 gr.	46.0 gr.	
H4895	39.8 gr.	42.0 gr.	44.2 gr.	46.4 gr.	
WIN 748	41.1 gr.	42.9 gr.	44.8 gr.	46.6 gr.	48.4 gr.
VARGET	40.3 gr.	42.5 gr.	44.7 gr.	47.0 gr.	
IMR 4895	39.6 gr.	42.1 gr.	44.6 gr.	47.1 gr.	
IMR 4064	41.4 gr.	43.3 gr.	45.2 gr.	47.2 gr.	
VIHT N-140	42.0 gr.	43.9 gr.	45.7 gr.	47.5 gr.	
Alliant RL-15	43.2 gr.	44.6 gr.	46.0 gr.	47.5 gr.	
VIHT N-150	41.4 gr.	43.5 gr.	45.6 gr.	47.7 gr.	
BL-C(2)	41.4 gr.	43.5 gr.	45.6 gr.	47.8 gr.	

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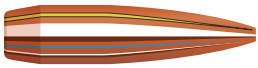
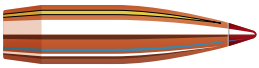
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178 GRAIN BULLETS

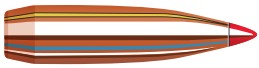
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.240"
G1 B.C.: 0.530



***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.240"
G1 B.C.: 0.515
G7 B.C.: 0.259



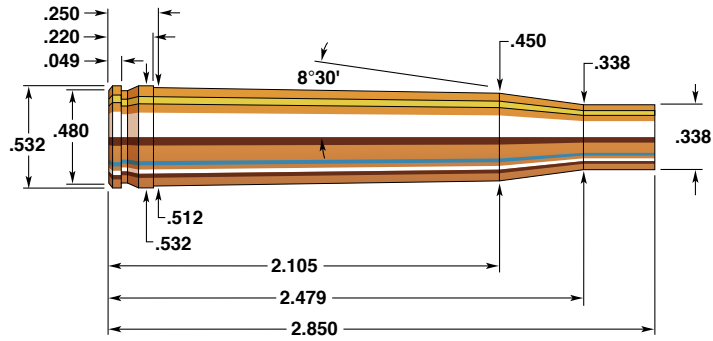
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.240"
G1 B.C.: 0.495

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2550**
VIHT N-135	38.1 gr.	40.2 gr.	42.4 gr.	44.5 gr.	
VARGET	37.9 gr.	40.3 gr.	42.7 gr.	45.2 gr.	46.4 gr.
H4895	38.2 gr.	40.5 gr.	42.9 gr.	45.2 gr.	46.4 gr.
IMR 4895	39.8 gr.	41.6 gr.	43.4 gr.	45.2 gr.	46.1 gr.
WIN 748	40.1 gr.	41.8 gr.	43.5 gr.	45.3 gr.	
VIHT N-140	39.4 gr.	41.5 gr.	43.6 gr.	45.7 gr.	46.7 gr.
IMR 4064	39.5 gr.	41.6 gr.	43.6 gr.	45.7 gr.	46.7 gr.
VIHT N-150	38.7 gr.	41.1 gr.	43.6 gr.	46.1 gr.	47.3 gr.
BL-C(2)	40.4 gr.	42.4 gr.	44.4 gr.	46.4 gr.	47.4 gr.
Alliant RL-15	40.4 gr.	42.5 gr.	44.5 gr.	46.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



300 H & H Magnum

Rifle:	Ruger #1	**Bullet Diameter:**	0.308"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.600"
Case:	Hornady	**Max. Case Length:**	2.850"
Primer:	CCI 250	**Case Trim Length:**	2.840"

Produced as a factory cartridge in the U.S. by the Western Cartridge Company from 1925 on, the 300 H&H was available only in custom American rifles until 1937, when Winchester chambered its Model 70 for the round. Its American fortunes received their biggest boost when the cartridge was used to win the 1000 yard Wimbledon match in 1935. The 300 H & H has put in strong appearances in many National Matches since.

Adequate for nearly all game but the largest and meanest species of Africa and Asia, the cartridge was designed by the well known London firm of Holland & Holland and introduced following WW I. Originally known as the Holland's Super 30, the 300 H & H will develop slightly higher velocities than the 30-06, and unlike later 30 caliber magnums it will deliver respectable accuracy with bullets lighter than 150 grain. The very extensive selection of 30 caliber Hornady Bullets permit the reloader to exploit the full potential of the 300 H & H for game, varmint, and target shooting.

The 300 H & H case, originally developed from the 375 H & H, has formed the basis of many notable cartridge developments, most important among them the original series of Weatherby magnum cartridges.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.435"
G1 B.C.: 0.290

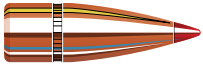
110 gr. SP
Item No. 3010
C.O.L.: 3.435"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
VARGET	51.2 gr.	55.1 gr.	59.1 gr.	63.0 gr.	
IMR 4064	55.1 gr.	57.9 gr.	60.8 gr.	63.6 gr.	
Alliant RL-15	58.8 gr.	61.3 gr.	63.8 gr.	66.3 gr.	
Alliant RL-17	63.7 gr.	65.8 gr.	68.0 gr.	70.1 gr.	72.3 gr.
H4350	64.8 gr.	67.3 gr.	69.7 gr.	72.2 gr.	74.6 gr.
IMR 4451	64.2 gr.	67.3 gr.	70.3 gr.	73.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 3.570"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
VARGET	52.8 gr.	55.1 gr.	57.4 gr.	59.6 gr.	61.9 gr.
IMR 4064	52.6 gr.	55.6 gr.	58.5 gr.	61.5 gr.	
Alliant RL-15	54.9 gr.	57.7 gr.	60.5 gr.	63.4 gr.	
Alliant RL-17	60.3 gr.	62.5 gr.	64.7 gr.	66.9 gr.	69.1 gr.
H4350	60.6 gr.	63.0 gr.	65.4 gr.	67.9 gr.	70.3 gr.
IMR 4451	61.2 gr.	64.1 gr.	66.9 gr.	69.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

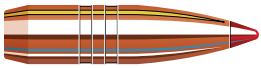
130 gr. SP
Item No. 3020
C.O.L.: 3.435"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4064	52.5 gr.	55.5 gr.	58.5 gr.		
VIHT N-140	53.7 gr.	56.3 gr.	58.9 gr.		
Alliant RL-15	56.2 gr.	58.5 gr.	60.9 gr.	63.2 gr.	
Alliant RL-17	59.9 gr.	62.1 gr.	64.4 gr.	66.6 gr.	
H4350	59.7 gr.	62.6 gr.	65.5 gr.		
Alliant RL-19	63.9 gr.	66.1 gr.	68.3 gr.	70.6 gr.	72.9 gr.

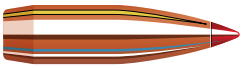
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

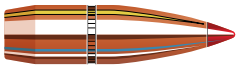
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



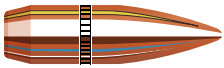
150 gr. GMX®
Item No. 30370
C.O.L.: 3.555"
G1 B.C.: 0.415



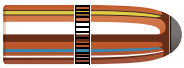
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.555"
G1 B.C.: 0.415



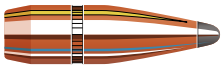
150 gr. SST®
Item No. 30302
C.O.L.: 3.555"
G1 B.C.: 0.415



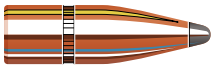
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.550"
G1 B.C.: 0.398



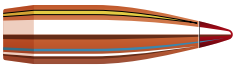
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.325"
G1 B.C.: 0.186



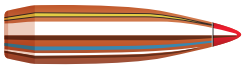
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.555"
G1 B.C.: 0.349



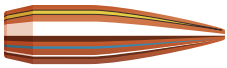
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.555"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.575"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.575"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.555"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3150**	**3200**
Alliant RL-17	57.2 gr.	59.6 gr.	62.0 gr.	64.4 gr.	65.6 gr.	
IMR 4350	58.7 gr.	61.0 gr.	63.2 gr.	65.5 gr.		
H4350	58.6 gr.	61.1 gr.	63.6 gr.			
IMR 4451	59.3 gr.	61.9 gr.	64.5 gr.			
VIHT N-160	59.8 gr.	62.2 gr.	64.7 gr.	67.1 gr.	68.3 gr.	
Alliant RL-19	61.3 gr.	63.6 gr.	66.0 gr.	68.3 gr.	69.5 gr.	
IMR 4831	62.8 gr.	64.8 gr.	66.9 gr.	69.0 gr.	70.0 gr.	
VIHT N-165	65.0 gr.	67.5 gr.	69.9 gr.	72.4 gr.	73.6 gr.	74.9 gr.
H4831 SC	66.3 gr.	68.7 gr.	71.2 gr.	73.6 gr.		

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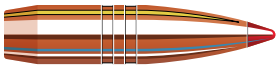
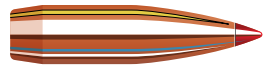
165-168 GRAIN BULLETS

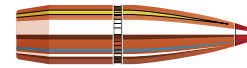
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



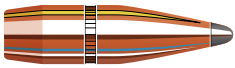
165 gr. GMX®
Item No. 30470
C.O.L.: 3.575"
G1 B.C.: 0.447



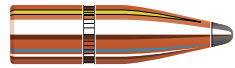
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.575"
G1 B.C.: 0.447



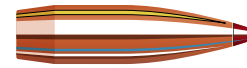
165 gr. SST®
Item No. 30452
C.O.L.: 3.575"
G1 B.C.: 0.447



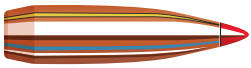
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.575"
G1 B.C.: 0.435



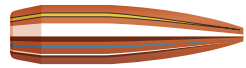
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.575"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.575"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.575"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.575"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	57.2 gr.	59.6 gr.	62.0 gr.	64.3 gr.	
H4350	57.2 gr.	59.7 gr.	62.2 gr.	64.7 gr.	67.2 gr.
IMR 4451	57.8 gr.	60.4 gr.	62.9 gr.	65.5 gr.	
VIHT N-160	58.9 gr.	61.3 gr.	63.7 gr.	66.1 gr.	
Alliant RL-19	59.2 gr.	61.8 gr.	64.5 gr.	67.1 gr.	69.7 gr.
IMR 4831	61.0 gr.	63.2 gr.	65.3 gr.	67.4 gr.	69.5 gr.
Alliant RL-22	62.4 gr.	64.9 gr.	67.4 gr.	69.9 gr.	72.4 gr.
VIHT N-165	63.1 gr.	65.8 gr.	68.5 gr.	71.2 gr.	73.9 gr.
H4831	65.0 gr.	67.6 gr.	70.3 gr.	72.9 gr.	

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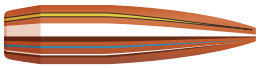
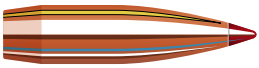
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

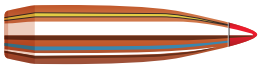
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



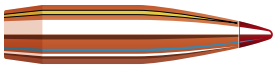
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.545"
G1 B.C.: 0.530



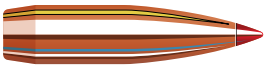
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.545"
G1 B.C.: 0.515
G7 B.C.: 0.259



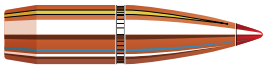
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.545"
G1 B.C.: 0.495



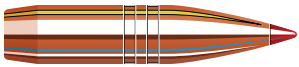
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.655"
G1 B.C.: 0.545
G7 B.C.: 0.275



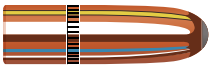
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.545"
G1 B.C.: 0.480



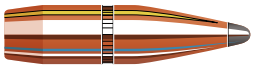
180 gr. SST®
Item No. 30702
C.O.L.: 3.545"
G1 B.C.: 0.480



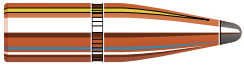
180 gr. GMX®
Item No. 30193
C.O.L.: 3.555"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.510"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.545"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.545"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**
IMR 4350	54.8 gr.	56.8 gr.	58.9 gr.	60.9 gr.	61.9 gr.
VIHT N-160	55.0 gr.	57.2 gr.	59.4 gr.		
H4350	54.5 gr.	57.1 gr.	59.7 gr.	62.2 gr.	
IMR 4451	55.4 gr.	57.6 gr.	59.8 gr.		
Alliant RL-19	56.0 gr.	58.3 gr.	60.7 gr.	63.0 gr.	64.2 gr.
IMR 4831	57.6 gr.	59.9 gr.	62.2 gr.	64.4 gr.	65.6 gr.
Alliant RL-23	55.7 gr.	59.1 gr.	62.5 gr.	65.9 gr.	67.6 gr.
Alliant RL-22	58.0 gr.	60.6 gr.	63.3 gr.	65.9 gr.	67.2 gr.
VIHT N-165	58.5 gr.	61.5 gr.	64.6 gr.	67.6 gr.	
IMR 7828	61.1 gr.	63.6 gr.	66.1 gr.	68.6 gr.	70.0 gr.
Alliant RL-25	61.3 gr.	64.6 gr.	67.9 gr.	71.2 gr.	

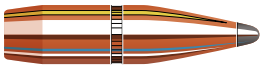
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



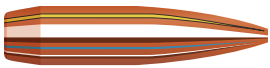
190 gr. InterLock® BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 3.655"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
H4350	49.7 gr.	52.7 gr.	55.8 gr.		
IMR 4831	52.7 gr.	55.4 gr.	58.1 gr.	60.8 gr.	
H4831	57.8 gr.	60.3 gr.	62.7 gr.	65.1 gr.	
Alliant RL-22	57.9 gr.	60.4 gr.	62.9 gr.	65.4 gr.	68.0 gr.
VIHT N-165	59.5 gr.	62.1 gr.	64.7 gr.	67.3 gr.	69.8 gr.
IMR 7828	60.5 gr.	63.1 gr.	65.8 gr.	68.5 gr.	71.1 gr.
Alliant RL-25	63.1 gr.	65.7 gr.	68.4 gr.	71.0 gr.	73.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.600"
G1 B.C.: 0.550
G7 B.C.: 0.311

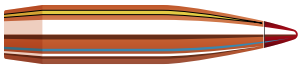
	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**	**2950**
H4350	51.6 gr.	54.3 gr.	57.0 gr.	59.8 gr.	61.1 gr.		
IMR 4451	53.4 gr.	55.9 gr.	58.5 gr.	61.0 gr.			
VIHT N-160	54.6 gr.	56.9 gr.	59.3 gr.	61.6 gr.			
Power Pro 4000 MR	54.2 gr.	56.9 gr.	59.6 gr.	62.3 gr.	63.6 gr.	65.0 gr.	
IMR 4831	55.5 gr.	58.0 gr.	60.5 gr.	62.9 gr.	64.2 gr.		
Alliant RL-22	55.6 gr.	58.2 gr.	60.8 gr.	63.3 gr.	64.6 gr.	65.9 gr.	
Alliant RL-23	56.4 gr.	59.0 gr.	61.6 gr.	64.2 gr.	65.5 gr.		
Alliant RL-26	59.9 gr.	62.1 gr.	64.3 gr.	66.6 gr.	67.7 gr.	68.8 gr.	69.9 gr.
H4831 SC	57.3 gr.	60.6 gr.	63.9 gr.	67.3 gr.			
IMR 7828	58.3 gr.	61.3 gr.	64.3 gr.	67.3 gr.	68.8 gr.		
Alliant RL-25	60.1 gr.	63.0 gr.	65.9 gr.	68.8 gr.	70.2 gr.	71.7 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.600"
G1 B.C.: 0.626
G7 B.C.: 0.315

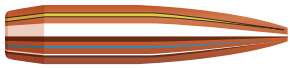
	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2750**	**2800**	**2850**
H4350	53.3 gr.	56.0 gr.	58.7 gr.	60.1 gr.		
Power Pro 4000 MR	54.2 gr.	57.1 gr.	59.9 gr.	61.3 gr.	62.8 gr.	
VIHT N-160	54.5 gr.	57.3 gr.	60.1 gr.			
IMR 4831	56.3 gr.	58.9 gr.	61.5 gr.	62.7 gr.		
Alliant RL-22	57.2 gr.	59.7 gr.	62.1 gr.	63.4 gr.	64.6 gr.	65.9 gr.
VIHT N-165	58.0 gr.	60.7 gr.	63.5 gr.	64.9 gr.	66.2 gr.	
Alliant RL-26	59.7 gr.	61.9 gr.	64.2 gr.	65.3 gr.	66.4 gr.	67.6 gr.
IMR 7828	60.4 gr.	62.9 gr.	65.4 gr.	66.6 gr.		
H4831 SC	59.7 gr.	62.8 gr.	65.9 gr.	67.4 gr.		
Alliant RL-25	61.0 gr.	63.7 gr.	66.4 gr.	67.7 gr.	69.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

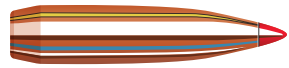
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

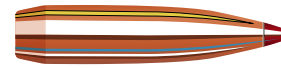
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 3.655"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.600"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.600"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)						
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**	**2800**	**2850**
H4350	50.2 gr.	52.9 gr.	55.5 gr.	58.2 gr.			
Power Pro 4000 MR	53.4 gr.	55.9 gr.	58.4 gr.	60.9 gr.			
IMR 4831	52.8 gr.	55.8 gr.	58.8 gr.	61.8 gr.			
Alliant RL-22	54.3 gr.	56.8 gr.	59.3 gr.	61.9 gr.	63.1 gr.	64.4 gr.	65.7 gr.
Alliant RL-23	55.1 gr.	57.8 gr.	60.5 gr.	63.1 gr.	64.5 gr.		
Alliant RL-26	57.6 gr.	60.0 gr.	62.4 gr.	64.8 gr.	66.0 gr.	67.1 gr.	
H4831 SC	55.5 gr.	58.9 gr.	62.1 gr.	65.5 gr.			
IMR 7828	57.3 gr.	60.1 gr.	62.9 gr.	65.8 gr.			
Alliant RL-25	58.6 gr.	61.4 gr.	64.2 gr.	67.0 gr.	68.4 gr.	69.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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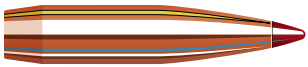
212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.710"
G1 B.C.: 0.673
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**
Power Pro 4000 MR	52.3 gr.	54.9 gr.	57.5 gr.	60.1 gr.	
IMR 4831	53.3 gr.	55.7 gr.	58.1 gr.	60.5 gr.	
Alliant RL-22	53.4 gr.	56.3 gr.	59.1 gr.	61.9 gr.	
Alliant RL-23	53.8 gr.	56.6 gr.	59.4 gr.	62.2 gr.	
Alliant RL-26	56.5 gr.	59.0 gr.	61.5 gr.	64.0 gr.	65.3 gr.
IMR 7828	56.0 gr.	58.8 gr.	61.6 gr.	64.4 gr.	
H4831 SC	55.6 gr.	58.7 gr.	61.9 gr.		
Alliant RL-25	57.7 gr.	60.6 gr.	63.5 gr.	66.4 gr.	67.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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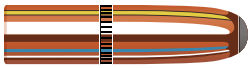
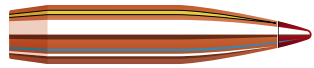
220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.580"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.600"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2550**	**2600**	**2650**
IMR 4350	51.1 gr.	53.7 gr.	56.3 gr.	57.7 gr.		
Power Pro 4000 MR	52.0 gr.	54.8 gr.	57.5 gr.	58.9 gr.	60.3 gr.	
Alliant RL-22	54.5 gr.	57.2 gr.	59.9 gr.	61.2 gr.	62.6 gr.	63.9 gr.
VIHT N-165	55.6 gr.	58.3 gr.	60.9 gr.	62.2 gr.		
Alliant RL-26	56.3 gr.	59.0 gr.	61.7 gr.	63.0 gr.	64.4 gr.	65.7 gr.
H4831 SC	56.0 gr.	58.9 gr.	61.9 gr.	63.3 gr.		
IMR 7828	56.3 gr.	59.1 gr.	61.9 gr.	63.3 gr.		
Alliant RL-25	57.7 gr.	60.5 gr.	63.3 gr.	64.7 gr.	66.1 gr.	67.5 gr.

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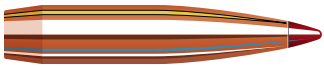
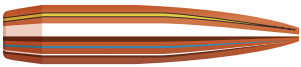
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.655"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.600"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
Power Pro 4000 MR	52.3 gr.	54.7 gr.	57.1 gr.	59.5 gr.	
IMR 4831	52.7 gr.	55.3 gr.	57.9 gr.	60.5 gr.	
Alliant RL-22	52.9 gr.	55.7 gr.	58.5 gr.	61.4 gr.	
Alliant RL-23	53.6 gr.	56.3 gr.	58.9 gr.	61.6 gr.	
Alliant RL-26	56.4 gr.	58.7 gr.	60.9 gr.	63.2 gr.	64.4 gr.
H4831 SC	53.6 gr.	57.3 gr.	61.1 gr.	64.8 gr.	
IMR 7828	55.3 gr.	58.4 gr.	61.6 gr.	64.8 gr.	
Alliant RL-25	57.4 gr.	60.2 gr.	63.0 gr.	65.8 gr.	

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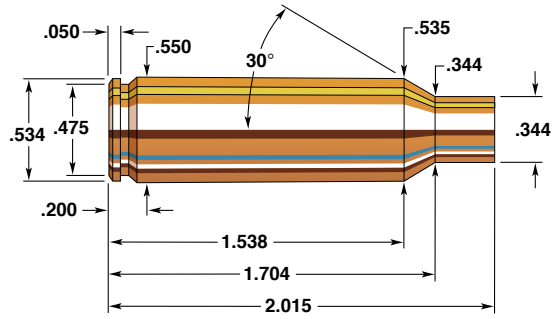
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



300 Remington Short Action Ultra Magnum

Rifle: . . . Remington Model 7 Magnum
Barrel: . . . . . 24", 1 in 10" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 9½ M

Bullet Diameter: . . . . . 0.308"
Maximum COL: . . . . . 2.825"
Max. Case Length: . . . . . 2.015"
Case Trim Length: . . . . . 2.005"

SAUM (Short Action Ultra Mag) cartridges are among the most recent developments in the evolution of the 404 Jeffrey based magnums. The 404 Jeffery was developed by W.J. Jeffery in 1909, the reason for its development was to provide a rim-less, belt-less cartridge designed for optimal function in bolt action rifles while providing ballistic equivalence to the rimmed nitro magnums that were popular at the time. Roughly eighty years later a number of companies began basing high performance, medium bore cartridges designed for bolt action rifles on the 404 Jeffery case.

Due to the design of the 300 SAUM, and the fact that it is a 30 caliber, some thought it stood a good chance of becoming a favorite target round. That said, this cartridge design, when coupled with our exceptionally accurate match bullets, make for an excellent long-range target cartridge. Our extensive line of 30 caliber SST® bullets will perform well with 300 SAUM on most game animals on earth, the exceptions being the largest and most dangerous game.

The 300 SAUM has roughly 15% less case capacity than the 300 Winchester Magnum but velocities generally differ less than 100 fps. We found the 300 SAUM prefers powders with a medium-slow burn rate, and gave the best performance and uniformity with bullets weighing 150 grains and heavier. Powders that performed well in our testing were WIN 760, H 4350, and IMR 4064.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.710"
G1 B.C.: 0.290

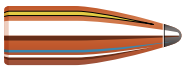
110 gr. SP
Item No. 3010
C.O.L.: 2.710"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)						
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**	**3600**
H4895	52.9 gr.	54.4 gr.	55.8 gr.	57.3 gr.	58.7 gr.	60.2 gr.	61.6 gr.
IMR 4064	53.7 gr.	55.0 gr.	56.4 gr.	57.8 gr.	59.2 gr.	60.5 gr.	61.9 gr.
IMR 4895	53.9 gr.	55.2 gr.	56.6 gr.	58.0 gr.	59.4 gr.	60.7 gr.	62.1 gr.
Alliant RL-15	54.2 gr.	55.8 gr.	57.4 gr.	58.9 gr.	60.5 gr.	62.1 gr.	63.7 gr.
VIHT N-140	55.2 gr.	56.6 gr.	58.0 gr.	59.4 gr.	60.8 gr.	62.2 gr.	63.5 gr.
Accurate 4064	54.8 gr.	56.3 gr.	57.9 gr.	59.4 gr.	61.0 gr.	62.5 gr.	
VARGET	55.3 gr.	56.7 gr.	58.2 gr.	59.6 gr.	61.1 gr.	62.6 gr.	
WIN 748	54.8 gr.	56.7 gr.	58.5 gr.	60.4 gr.	62.3 gr.	64.1 gr.	66.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"



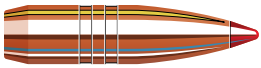
130 gr. SP
Item No. 3020
C.O.L.: 2.710"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4064	51.3 gr.	53.1 gr.	55.0 gr.	56.8 gr.	58.6 gr.	60.5 gr.
IMR 4895	52.3 gr.	53.9 gr.	55.5 gr.	57.0 gr.	58.6 gr.	
H4895	51.7 gr.	53.5 gr.	55.2 gr.	57.0 gr.	58.8 gr.	
VIHT N-140	52.7 gr.	54.4 gr.	56.1 gr.	57.8 gr.	59.5 gr.	
Accurate 4064	52.8 gr.	54.6 gr.	56.5 gr.	58.3 gr.	60.2 gr.	62.1 gr.
Alliant RL-15	52.2 gr.	54.3 gr.	56.3 gr.	58.3 gr.	60.3 gr.	62.3 gr.
VARGET	53.0 gr.	55.0 gr.	56.9 gr.	58.9 gr.	60.9 gr.	
WIN 748	53.8 gr.	55.8 gr.	57.9 gr.	60.0 gr.	62.0 gr.	

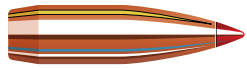
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

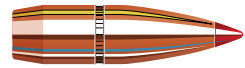
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



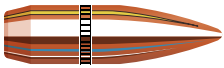
150 gr. GMX®
Item No. 30370
C.O.L.: 2.770"
G1 B.C.: 0.415



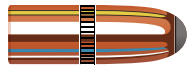
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.770"
G1 B.C.: 0.415



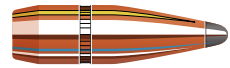
150 gr. SST®
Item No. 30302
C.O.L.: 2.770"
G1 B.C.: 0.415



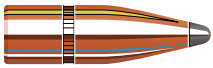
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.770"
G1 B.C.: 0.398



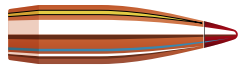
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.545"
G1 B.C.: 0.186



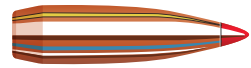
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.770"
G1 B.C.: 0.349



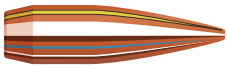
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.770"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.770"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.770"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.770"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4895	48.1 gr.	50.0 gr.	52.0 gr.	53.9 gr.	55.9 gr.	
IMR 4064	49.3 gr.	51.0 gr.	52.7 gr.	54.3 gr.	56.0 gr.	57.6 gr.
H4895	48.2 gr.	50.2 gr.	52.2 gr.	54.2 gr.	56.2 gr.	
Alliant RL-15	49.4 gr.	51.2 gr.	53.0 gr.	54.9 gr.	56.7 gr.	
Accurate 4064	50.7 gr.	52.2 gr.	53.7 gr.	55.2 gr.	56.7 gr.	
VIHT N-140	49.0 gr.	51.1 gr.	53.2 gr.	55.3 gr.	57.5 gr.	
VARGET	50.3 gr.	52.3 gr.	54.2 gr.	56.2 gr.	58.2 gr.	
WIN 748	51.8 gr.	53.6 gr.	55.4 gr.	57.2 gr.	59.1 gr.	
Accurate 4350	56.1 gr.	57.7 gr.	59.3 gr.	61.0 gr.	62.6 gr.	

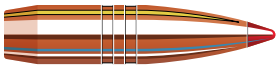
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

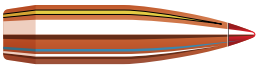
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

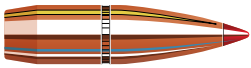
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



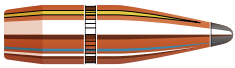
165 gr. GMX®
Item No. 30470
C.O.L.: 2.760"
G1 B.C.: 0.447



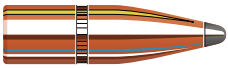
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.760"
G1 B.C.: 0.447



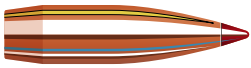
165 gr. SST®
Item No. 30452
C.O.L.: 2.760"
G1 B.C.: 0.447



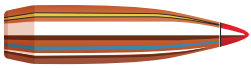
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.760"
G1 B.C.: 0.435



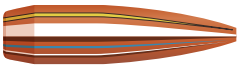
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.760"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.770"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.770"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.770"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4064	48.2 gr.	50.1 gr.	52.1 gr.	54.1 gr.	56.0 gr.	
Alliant RL-15	47.9 gr.	50.2 gr.	52.4 gr.	54.6 gr.	56.8 gr.	
Accurate 4064	49.4 gr.	51.3 gr.	53.3 gr.	55.2 gr.		
VARGET	49.2 gr.	51.3 gr.	53.4 gr.	55.4 gr.	57.5 gr.	
WIN 748	50.3 gr.	52.5 gr.	54.6 gr.	56.8 gr.		
Accurate 4350	54.5 gr.	56.5 gr.	58.4 gr.	60.4 gr.	62.3 gr.	
WIN 760	55.5 gr.	57.5 gr.	59.5 gr.	61.6 gr.	63.6 gr.	65.6 gr.

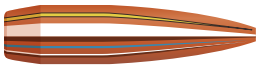
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

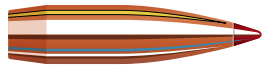
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

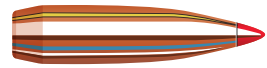
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



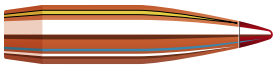
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.755"
G1 B.C.: 0.530



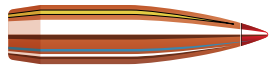
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.755"
G1 B.C.: 0.515
G7 B.C.: 0.259



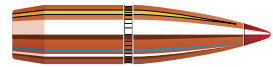
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.755"
G1 B.C.: 0.495



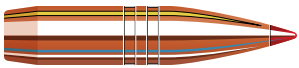
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.760"
G1 B.C.: 0.545
G7 B.C.: 0.275



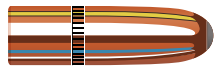
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.755"
G1 B.C.: 0.480



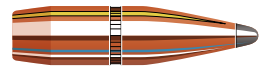
180 gr. SST®
Item No. 30702
C.O.L.: 2.755"
G1 B.C.: 0.480



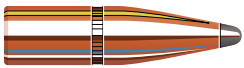
180 gr. GMX®
Item No. 30193
C.O.L.: 2.755"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.720"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.755"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.755"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4064	45.2 gr.	47.2 gr.	49.3 gr.	51.3 gr.	53.4 gr.	
Alliant RL-15	44.6 gr.	47.0 gr.	49.3 gr.	51.7 gr.	54.1 gr.	
VARGET	46.2 gr.	48.4 gr.	50.5 gr.	52.7 gr.	54.9 gr.	
Accurate 4350	51.2 gr.	53.1 gr.	55.1 gr.	57.1 gr.	59.0 gr.	61.0 gr.
H4350	50.1 gr.	52.6 gr.	55.1 gr.	57.6 gr.	60.1 gr.	62.6 gr.
IMR 4350	51.7 gr.	53.9 gr.	56.1 gr.	58.2 gr.	60.4 gr.	62.6 gr.
WIN 760	51.9 gr.	54.2 gr.	56.4 gr.	58.6 gr.	60.8 gr.	63.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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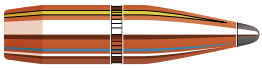
^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



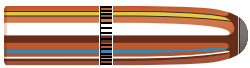
190 gr. InterLock® BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.765"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4064	45.0 gr.	47.1 gr.	49.2 gr.	51.3 gr.		
Alliant RL-15	45.1 gr.	47.5 gr.	50.0 gr.	52.4 gr.		
VARGET	46.0 gr.	48.3 gr.	50.6 gr.	52.9 gr.		
Accurate 4350	50.8 gr.	52.8 gr.	54.8 gr.	56.9 gr.	58.9 gr.	
IMR 4350	49.7 gr.	52.1 gr.	54.6 gr.	57.1 gr.	59.5 gr.	62.0 gr.
H4350	50.0 gr.	52.5 gr.	55.0 gr.	57.6 gr.	60.1 gr.	62.6 gr.
WIN 760	51.7 gr.	54.1 gr.	56.5 gr.	58.8 gr.	61.2 gr.	63.5 gr.

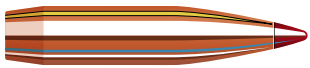
Create custom ballistic tables using our online calculators at hornady.com/ballistics

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 2.745"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 2.770"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
Accurate 4350	48.6 gr.	50.9 gr.	53.2 gr.	55.5 gr.	57.8 gr.	
IMR 4350	48.6 gr.	51.1 gr.	53.5 gr.	56.0 gr.	58.4 gr.	
H4350	48.0 gr.	50.7 gr.	53.3 gr.	55.9 gr.	58.6 gr.	
WIN 760	49.4 gr.	51.9 gr.	54.4 gr.	56.9 gr.	59.4 gr.	61.9 gr.
VIHT N-160	48.6 gr.	51.6 gr.	54.6 gr.	57.5 gr.	60.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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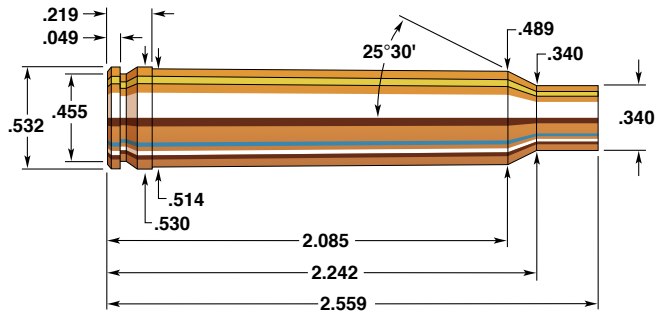


308 Norma Magnum

Rifle:	03-A3 Conversion	**Bullet Diameter:**	0.308"
Barrel:	.24", 1 in 10" Twist	**Maximum COL:**	3.345"
Case:	Norma	**Max. Case Length:**	2.559"
Primer:	Winchester WLRM	**Case Trim Length:**	2.549"

The 308 Norma Magnum is a standardized commercial version of many "short magnum" wildcats developed in the 1940s and 1950s by American experimenters to deliver performance superior to the 30-06 while requiring only a standard length bolt action. Introduced in America by Sweden's Norma Projectilfabrik, which offered unprimed cases and complete chambering specifications, the 308 Norma Magnum quickly caught on in this country as custom gunsmiths brought it to market. The case is essentially the 358 Norma Magnum, (or 338 Winchester Magnum) necked to 30 caliber, and is similar to the wildcat 30-338. The introduction of the 300 Winchester Magnum in factory rifles and the wide availability of ammunition that followed the rifle to market has hurt the popularity of the 308 Norma Magnum.

The 308 Norma is a powerful cartridge which is at its best loaded with slower burning powders and Hornady 165 and 180 grain Spire Points, through the 220 grain Round Nose which can be loaded to a potent 2800 fps. Shot to shot velocity is considerably more uniform with heavier bullets, i.e. 150 grain and up, than with lighter bullets, and those loads are best which most completely fill the case in loading for a specific velocity. The 308 Norma Magnum is first and foremost a big game cartridge, and has power to spare for nearly all North American hunting.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.200"
G1 B.C.: 0.290

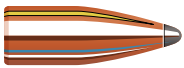
110 gr. SP
Item No. 3010
C.O.L.: 3.200"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)			
POWDER	**3500**	**3600**	**3700**	**3800**
IMR 3031	63.2 gr.	65.5 gr.	67.6 gr.	
IMR 4895	65.1 gr.	67.0 gr.	68.9 gr.	
IMR 4064	65.4 gr.	67.5 gr.	69.6 gr.	
H4895	67.7 gr.	70.0 gr.	72.2 gr.	74.4 gr.
IMR 4320	69.2 gr.	71.2 gr.	73.4 gr.	75.4 gr.
H380	69.0 gr.	71.4 gr.	73.6 gr.	
IMR 4350	76.2 gr.	78.8 gr.	81.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"



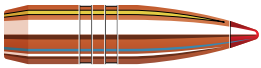
130 gr. SP
Item No. 3020
C.O.L.: 3.275"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
Accurate 2495	54.2 gr.	56.7 gr.	59.1 gr.	61.6 gr.	
IMR 4064	57.1 gr.	59.1 gr.	61.2 gr.	63.2 gr.	65.2 gr.
Alliant RL-15	58.1 gr.	60.2 gr.	62.3 gr.	64.4 gr.	66.5 gr.
IMR 4350	62.7 gr.	65.0 gr.	67.3 gr.	69.6 gr.	71.8 gr.
Accurate 4350	63.8 gr.	66.1 gr.	68.3 gr.	70.6 gr.	72.8 gr.
H4350	64.6 gr.	66.7 gr.	68.8 gr.	70.9 gr.	72.9 gr.
WIN 760	64.0 gr.	66.8 gr.	69.6 gr.	72.3 gr.	
VIHT N-160	65.3 gr.	67.9 gr.	70.4 gr.	73.0 gr.	75.5 gr.

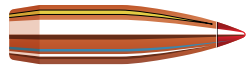
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

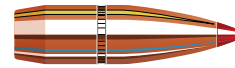
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



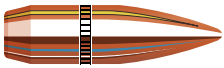
150 gr. GMX®
Item No. 30370
C.O.L.: 3.350"
G1 B.C.: 0.415



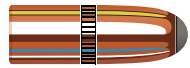
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.350"
G1 B.C.: 0.415



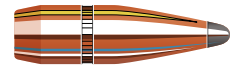
150 gr. SST®
Item No. 30302
C.O.L.: 3.350"
G1 B.C.: 0.415



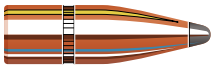
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.250"
G1 B.C.: 0.398



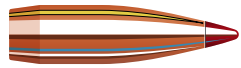
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.120"
G1 B.C.: 0.186



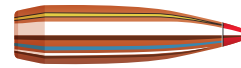
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.350"
G1 B.C.: 0.349



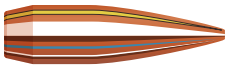
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.350"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.350"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.350"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.350"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 4350	56.3 gr.	59.4 gr.	62.6 gr.	65.7 gr.	68.8 gr.	
IMR 4350	60.0 gr.	62.2 gr.	64.4 gr.	66.6 gr.	68.8 gr.	
IMR 4831	60.3 gr.	62.8 gr.	65.3 gr.	67.8 gr.	70.3 gr.	72.8 gr.
WIN 760	59.0 gr.	62.0 gr.	65.0 gr.	68.1 gr.	71.1 gr.	
VIHT N-160	62.6 gr.	65.2 gr.	67.8 gr.	70.4 gr.	73.0 gr.	
H4831	65.8 gr.	68.3 gr.	70.8 gr.	73.3 gr.	75.7 gr.	
Alliant RL-19	69.3 gr.	71.2 gr.	73.1 gr.	75.0 gr.	76.9 gr.	78.8 gr.

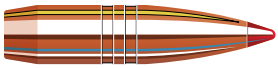
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

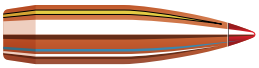
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

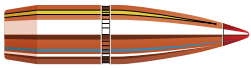
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



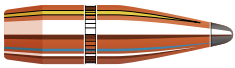
165 gr. GMX®
Item No. 30470
C.O.L.: 3.325"
G1 B.C.: 0.447



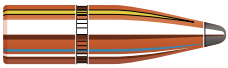
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.325"
G1 B.C.: 0.447



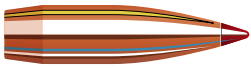
165 gr. SST®
Item No. 30452
C.O.L.: 3.325"
G1 B.C.: 0.447



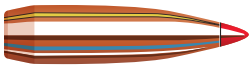
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.325"
G1 B.C.: 0.435



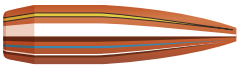
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.325"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.325"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.325"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.325"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	53.9 gr.	57.0 gr.	60.1 gr.	63.2 gr.	
Accurate 4350	55.5 gr.	58.3 gr.	61.0 gr.	63.8 gr.	66.5 gr.
IMR 4831	57.1 gr.	59.9 gr.	62.7 gr.	65.5 gr.	68.3 gr.
VIHT N-160	60.3 gr.	63.1 gr.	65.8 gr.	68.5 gr.	71.2 gr.
Alliant RL-19	64.4 gr.	66.9 gr.	69.4 gr.	72.0 gr.	74.5 gr.
H4831	65.3 gr.	67.8 gr.	70.3 gr.	72.8 gr.	

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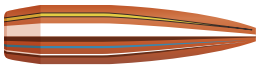
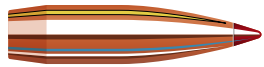
178-180 GRAIN BULLETS

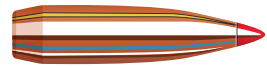
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



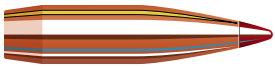
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.345"
G1 B.C.: 0.530



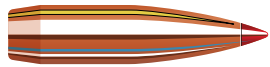
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.345"
G1 B.C.: 0.515
G7 B.C.: 0.259



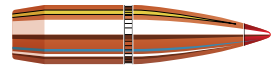
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.345"
G1 B.C.: 0.495



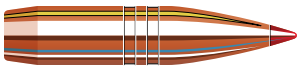
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.345"
G1 B.C.: 0.545
G7 B.C.: 0.275



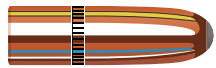
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.345"
G1 B.C.: 0.480



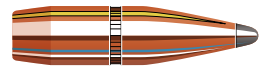
180 gr. SST®
Item No. 30702
C.O.L.: 3.345"
G1 B.C.: 0.480



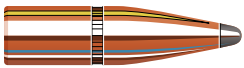
180 gr. GMX®
Item No. 30193
C.O.L.: 3.345"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.310"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.345"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.345"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	55.5 gr.	58.3 gr.	61.1 gr.	63.8 gr.	
Accurate 4350	56.1 gr.	58.7 gr.	61.3 gr.	63.9 gr.	
WIN 760	57.7 gr.	60.3 gr.	63.0 gr.	65.6 gr.	
IMR 4831	59.8 gr.	61.9 gr.	64.0 gr.		
Alliant RL-19	63.8 gr.	66.0 gr.	68.1 gr.	70.2 gr.	72.4 gr.
VIHT N-165	63.7 gr.	66.5 gr.	69.4 gr.	72.3 gr.	75.1 gr.
H1000	69.1 gr.	71.8 gr.	74.5 gr.	77.2 gr.	79.9 gr.

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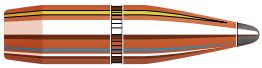
190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



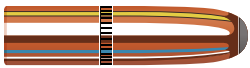
190 gr. InterLock® BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 3.275"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4350	54.8 gr.	57.2 gr.	59.5 gr.	61.9 gr.	64.3 gr.	
IMR 4831	58.3 gr.	60.2 gr.	62.1 gr.	64.0 gr.	65.8 gr.	
VIHT N-160	56.4 gr.	59.0 gr.	61.5 gr.	64.1 gr.		
Alliant RL-22	58.6 gr.	61.6 gr.	64.6 gr.	67.6 gr.	70.6 gr.	73.6 gr.
IMR 7828	60.9 gr.	63.5 gr.	66.1 gr.	68.7 gr.	71.3 gr.	
Alliant RL-25	65.0 gr.	67.4 gr.	69.7 gr.	72.1 gr.	74.5 gr.	76.9 gr.
H1000	63.4 gr.	66.3 gr.	69.3 gr.	72.3 gr.	75.3 gr.	

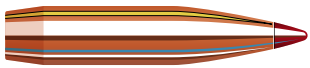
Create custom ballistic tables using our online calculators at hornady.com/ballistics

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.360"
G1 B.C.: 0.300

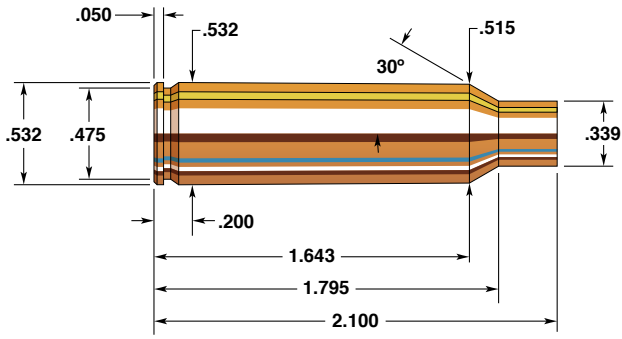


***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.360"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4831	52.7 gr.	55.6 gr.	58.4 gr.	61.2 gr.	64.0 gr.	
Alliant RL-19	58.7 gr.	61.0 gr.	63.4 gr.	65.7 gr.	68.0 gr.	70.3 gr.
Alliant RL-22	56.9 gr.	59.8 gr.	62.7 gr.	65.7 gr.	68.6 gr.	
IMR 7828	56.1 gr.	59.3 gr.	62.6 gr.	65.8 gr.	69.1 gr.	
VIHT N-165	58.0 gr.	60.9 gr.	63.8 gr.	66.6 gr.	69.5 gr.	
Alliant RL-25	60.5 gr.	63.4 gr.	66.3 gr.	69.2 gr.	72.2 gr.	75.1 gr.
H1000	63.2 gr.	66.0 gr.	68.7 gr.	71.5 gr.	74.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



300 Ruger Compact Magnum

Rifle:	Ruger Hawkeye	**Bullet Diameter:**	0.308"
Barrel:	20", 1 in 10" Twist	**Maximum COL:**	2.840"
Case:	Hornady	**Max. Case Length:**	2.100"
Primer:	Fed 210	**Case Trim Length:**	2.090"

A joint development between Hornady and Ruger based on the very successful 375 Ruger, the 300 Ruger Compact Magnum (RCM) is among a new breed of highly efficient cartridges. The 300 RCM is designed to deliver conventional magnum performance from 20" barrels and short action receivers, creating an efficient hunting rifle that is light weight, quick handling and powerful.

Hornady offers a broad selection of 30 caliber bullets suitable for the 300 RCM. On the light weight end of the spectrum the 110 grain V-MAX® and 130 grain SP are great choices for varmints. The 150 and 165 grain bullets offer great versatility and flat trajectories for hunting medium and large game. The GMX® bullets in this weight class are excellent performers and are great choices for hunting in areas where lead bullets are not permitted. The 180 grain InterBond®, GMX®, SST® and SP and 190 grain BTSP bullets are superb choices for large game such as African plains game. The 220 grain RN is a tough, heavy bullet that penetrates deep and provides controlled expansion, a great bullet for heavy boned animals like bison or musk ox.

While shooting data for the 300 RCM we found a number of propellants to deliver very good results, but Hodgdon SUPERFORMANCE® delivered the highest velocities and excellent accuracy and is a top choice for loading the 300 RCM. RL 19 and H 4350 also produced noteworthy results. Data was developed with a Ruger Hawkeye with a 20" barrel, these loads will produce 75 to 100 fps higher velocities when fired from 24" barrels.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.725"
G1 B.C.: 0.290

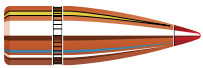
110 gr. SP
Item No. 3010
C.O.L.: 2.720"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4064	54.8 gr.	56.3 gr.	57.8 gr.	59.3 gr.	60.8 gr.	
VARGET	53.3 gr.	55.2 gr.	57.1 gr.	59.1 gr.	61.0 gr.	62.9 gr.
Alliant RL-15	55.5 gr.	57.2 gr.	58.9 gr.	60.5 gr.	62.2 gr.	
BIG GAME	57.9 gr.	60.0 gr.	62.1 gr.	64.3 gr.	66.4 gr.	68.5 gr.
WIN 760	60.3 gr.	62.0 gr.	63.7 gr.	65.4 gr.	67.1 gr.	
Alliant RL-17	60.7 gr.	62.3 gr.	63.9 gr.	65.5 gr.	67.1 gr.	
H414	60.9 gr.	62.4 gr.	64.0 gr.	65.5 gr.	67.1 gr.	
SUPERFORMANCE	64.5 gr.	66.5 gr.	68.4 gr.	70.4 gr.	72.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 2.820"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4064	50.7 gr.	52.5 gr.	54.3 gr.	56.1 gr.	57.9 gr.	59.8 gr.
VARGET	48.8 gr.	51.1 gr.	53.5 gr.	55.9 gr.	58.3 gr.	
Alliant RL-15	52.1 gr.	53.9 gr.	55.7 gr.	57.5 gr.	59.3 gr.	61.0 gr.
BIG GAME	53.4 gr.	55.7 gr.	58.0 gr.	60.2 gr.	62.5 gr.	64.8 gr.
Alliant RL-17	57.4 gr.	58.9 gr.	60.4 gr.	61.9 gr.	63.4 gr.	64.9 gr.
WIN 760	56.5 gr.	58.2 gr.	60.0 gr.	61.8 gr.	63.5 gr.	65.3 gr.
H414	56.0 gr.	58.0 gr.	59.9 gr.	61.9 gr.	63.9 gr.	65.9 gr.
SUPERFORMANCE	60.3 gr.	62.4 gr.	64.6 gr.	66.8 gr.	69.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

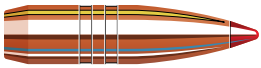
130 gr. SP
Item No. 3020
C.O.L.: 2.760"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
VARGET	49.2 gr.	51.5 gr.	53.8 gr.	56.1 gr.	58.4 gr.	
IMR 4064	50.5 gr.	52.5 gr.	54.6 gr.	56.7 gr.		
Alliant RL-15	51.9 gr.	53.7 gr.	55.6 gr.	57.4 gr.	59.2 gr.	
BIG GAME	53.5 gr.	55.9 gr.	58.3 gr.	60.7 gr.	63.1 gr.	
H414	55.1 gr.	57.0 gr.	58.9 gr.	60.8 gr.	62.7 gr.	64.6 gr.
Alliant RL-17	56.6 gr.	58.2 gr.	59.7 gr.	61.3 gr.	62.9 gr.	
WIN 760	55.9 gr.	57.9 gr.	59.8 gr.	61.7 gr.	63.7 gr.	
SUPERFORMANCE	60.4 gr.	62.3 gr.	64.2 gr.	66.0 gr.	67.9 gr.	69.7 gr.

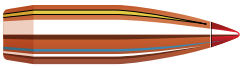
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

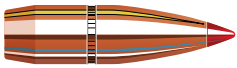
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



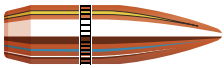
150 gr. GMX®
Item No. 30370
C.O.L.: 2.840"
G1 B.C.: 0.415



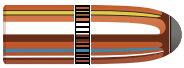
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.840"
G1 B.C.: 0.415



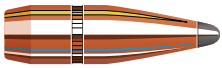
150 gr. SST®
Item No. 30302
C.O.L.: 2.840"
G1 B.C.: 0.415



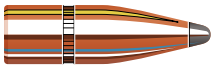
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.800"
G1 B.C.: 0.398



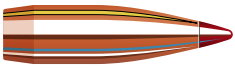
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.615"
G1 B.C.: 0.186



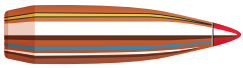
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.840"
G1 B.C.: 0.349



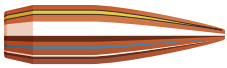
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.840"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.840"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.840"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.840"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)							
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
Alliant RL-15	49.3 gr.	51.1 gr.	53.0 gr.	54.8 gr.	56.7 gr.	57.6 gr.		
BIG GAME	50.2 gr.	52.5 gr.	54.8 gr.	57.1 gr.	59.4 gr.	60.5 gr.		
WIN 760	53.1 gr.	55.0 gr.	57.0 gr.	59.0 gr.	61.0 gr.	62.0 gr.		
H414	53.4 gr.	55.4 gr.	57.3 gr.	59.2 gr.	61.1 gr.	62.1 gr.		
Alliant RL-17	54.0 gr.	55.8 gr.	57.5 gr.	59.3 gr.	61.0 gr.	61.9 gr.		
IMR 4451	51.8 gr.	54.5 gr.	57.1 gr.	59.7 gr.				
IMR 4350	54.9 gr.	56.6 gr.	58.3 gr.	59.9 gr.	61.6 gr.	62.4 gr.		
H4350	53.3 gr.	55.6 gr.	57.9 gr.	60.2 gr.	62.5 gr.			
SUPERFORMANCE	56.8 gr.	58.9 gr.	61.0 gr.	63.1 gr.	65.2 gr.	66.3 gr.	67.3 gr.	68.3 gr.

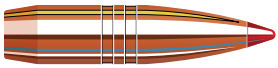
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

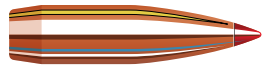
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

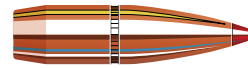
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



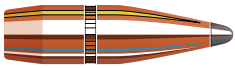
165 gr. GMX®
Item No. 30470
C.O.L.: 2.840"
G1 B.C.: 0.447



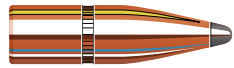
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.840"
G1 B.C.: 0.447



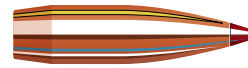
165 gr. SST®
Item No. 30452
C.O.L.: 2.840"
G1 B.C.: 0.447



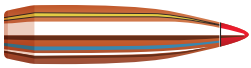
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.820"
G1 B.C.: 0.435



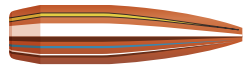
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.820"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.840"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.840"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.840"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)							
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**	**2950**
Alliant RL-17	51.6 gr.	53.5 gr.	55.4 gr.	57.3 gr.	59.2 gr.	60.2 gr.		
WIN 760	50.6 gr.	52.8 gr.	55.1 gr.	57.4 gr.	59.6 gr.	60.8 gr.		
IMR 4350	52.7 gr.	54.5 gr.	56.3 gr.	58.0 gr.	59.8 gr.	60.7 gr.		
IMR 4451	50.2 gr.	52.7 gr.	55.2 gr.	57.6 gr.	60.1 gr.			
Hybrid 100V	51.9 gr.	53.9 gr.	55.9 gr.	58.1 gr.	60.1 gr.	61.2 gr.		
H4350	51.4 gr.	53.6 gr.	55.8 gr.	58.1 gr.	60.3 gr.			
H414	51.9 gr.	54.0 gr.	56.1 gr.	58.3 gr.	60.4 gr.			
Hunter	52.4 gr.	54.6 gr.	56.8 gr.	59.0 gr.	61.2 gr.	62.3 gr.	63.4 gr.	
Alliant RL-19	55.7 gr.	57.5 gr.	59.4 gr.	61.3 gr.	63.1 gr.	64.1 gr.	65.0 gr.	65.9 gr.
SUPERFORMANCE	54.1 gr.	56.5 gr.	58.9 gr.	61.3 gr.	63.7 gr.	64.9 gr.	66.1 gr.	

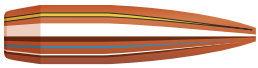
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

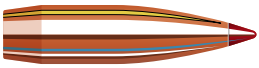
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

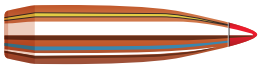
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



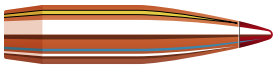
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.840"
G1 B.C.: 0.530



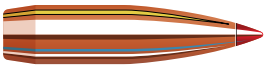
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.840"
G1 B.C.: 0.515
G7 B.C.: 0.259



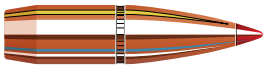
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.840"
G1 B.C.: 0.495



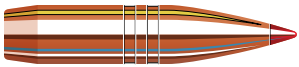
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.840"
G1 B.C.: 0.545
G7 B.C.: 0.275



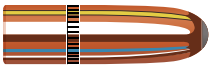
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.840"
G1 B.C.: 0.480



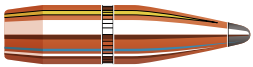
180 gr. SST®
Item No. 30702
C.O.L.: 2.840"
G1 B.C.: 0.480



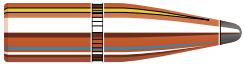
180 gr. GMX®
Item No. 30193
C.O.L.: 2.830"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.615"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.830"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.830"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Alliant RL-17	50.1 gr.	52.2 gr.	54.2 gr.	56.3 gr.		
IMR 4350	50.9 gr.	52.9 gr.	54.8 gr.	56.8 gr.	57.8 gr.	
H414	51.4 gr.	53.3 gr.	55.1 gr.	57.0 gr.	58.0 gr.	
WIN 760	50.9 gr.	53.1 gr.	55.2 gr.	57.4 gr.		
Hybrid 100V	50.4 gr.	52.8 gr.	55.3 gr.	57.7 gr.	58.9 gr.	
H4350	49.7 gr.	52.4 gr.	55.1 gr.	57.8 gr.		
Hunter	51.3 gr.	53.8 gr.	56.2 gr.	58.7 gr.	60.0 gr.	
SUPERFORMANCE	54.6 gr.	56.7 gr.	58.8 gr.	60.9 gr.	61.9 gr.	63.0 gr.

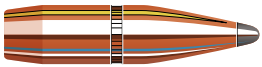
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



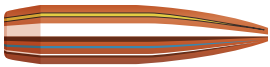
190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.825"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
H414	46.1 gr.	48.5 gr.	50.8 gr.	53.1 gr.	55.5 gr.	
IMR 4350	46.9 gr.	49.1 gr.	51.3 gr.	53.5 gr.	55.7 gr.	
Hybrid 100V	46.9 gr.	49.1 gr.	51.3 gr.	53.5 gr.	55.7 gr.	
WIN 760	47.0 gr.	49.3 gr.	51.5 gr.	53.8 gr.	56.0 gr.	
Accurate 4350	47.4 gr.	49.5 gr.	51.6 gr.	53.8 gr.		
H4350	46.7 gr.	49.3 gr.	52.0 gr.	54.7 gr.		
IMR 4831	48.3 gr.	50.5 gr.	52.8 gr.	55.0 gr.	57.2 gr.	
Hunter	50.2 gr.	52.2 gr.	54.3 gr.	56.3 gr.	58.3 gr.	60.3 gr.
Alliant RL-19	51.8 gr.	53.9 gr.	56.1 gr.	58.3 gr.	60.4 gr.	
SUPERFORMANCE	52.7 gr.	54.6 gr.	56.5 gr.	58.4 gr.	60.3 gr.	62.2 gr.
H4831	51.9 gr.	54.5 gr.	57.2 gr.	59.8 gr.		
WIN Supreme 780	54.3 gr.	56.5 gr.	58.6 gr.	60.8 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 2.840"
G1 B.C.: 0.550
G7 B.C.: 0.311

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Alliant RL-17	48.2 gr.	50.9 gr.	53.6 gr.	56.3 gr.		
H414	48.5 gr.	51.3 gr.	54.1 gr.	56.8 gr.		
Hybrid 100V	51.3 gr.	53.2 gr.	55.1 gr.	56.9 gr.	57.9 gr.	
WIN 760	51.2 gr.	53.3 gr.	55.3 gr.	57.3 gr.		
IMR 4350	51.3 gr.	53.3 gr.	55.3 gr.	57.3 gr.		
H4350	50.3 gr.	52.9 gr.	55.6 gr.	58.3 gr.		
Hunter	50.7 gr.	53.2 gr.	55.8 gr.	58.3 gr.	59.5 gr.	60.8 gr.
IMR 4831	54.0 gr.	55.9 gr.	57.9 gr.	59.8 gr.		
SUPERFORMANCE	54.1 gr.	56.2 gr.	58.2 gr.	60.3 gr.	61.3 gr.	62.3 gr.
Alliant RL-19	55.8 gr.	57.7 gr.	59.7 gr.	61.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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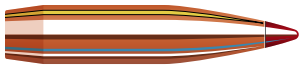
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 2.840"
G1 B.C.: 0.626
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
Alliant RL-17	48.0 gr.	50.3 gr.	52.6 gr.	54.9 gr.		
Hybrid 100V	49.1 gr.	51.5 gr.	53.9 gr.	56.3 gr.		
IMR 4350	50.5 gr.	52.4 gr.	54.4 gr.	56.3 gr.	57.3 gr.	
H4350	49.6 gr.	52.3 gr.	54.9 gr.	57.6 gr.		
WIN 760	51.5 gr.	53.7 gr.	55.9 gr.	58.1 gr.		
SUPERFORMANCE	52.5 gr.	54.7 gr.	56.9 gr.	59.1 gr.	60.2 gr.	61.3 gr.
IMR 4831	54.2 gr.	56.3 gr.	58.3 gr.	60.4 gr.		
Hunter	54.3 gr.	56.3 gr.	58.3 gr.	60.3 gr.	61.3 gr.	
Alliant RL-19	55.3 gr.	57.6 gr.	59.9 gr.	62.3 gr.		
H4831	56.3 gr.	58.7 gr.	61.1 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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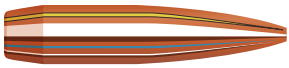
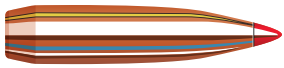
208 GRAIN BULLETS

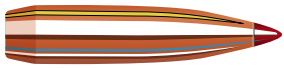
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 2.840"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 2.840"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 2.840"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2550**	**2600**
H414	45.6 gr.	57.8 gr.	50.0 gr.	52.2 gr.			
Hybrid 100V	45.8 gr.	48.0 gr.	50.1 gr.	52.3 gr.	54.5 gr.	55.5 gr.	56.6 gr.
H4350	44.6 gr.	47.2 gr.	49.9 gr.	52.5 gr.	55.1 gr.		
IMR 4451	44.9 gr.	47.4 gr.	49.9 gr.	52.5 gr.	55.0 gr.		
WIN 760	45.7 gr.	48.0 gr.	50.4 gr.	52.8 gr.	55.1 gr.		
IMR 4350	46.4 gr.	48.6 gr.	50.7 gr.	52.9 gr.	55.0 gr.		
IMR 4831	48.4 gr.	50.5 gr.	52.7 gr.	54.8 gr.	56.9 gr.	58.0 gr.	
SUPERFORMANCE	49.6 gr.	51.5 gr.	53.4 gr.	55.3 gr.	57.2 gr.	58.2 gr.	59.1 gr.
Hunter	48.1 gr.	50.5 gr.	53.0 gr.	55.5 gr.	58.0 gr.		
Alliant RL-19	49.9 gr.	51.9 gr.	53.9 gr.	55.9 gr.	57.9 gr.	58.9 gr.	59.9 gr.
H4831	51.3 gr.	53.7 gr.	56.1 gr.	58.5 gr.	60.9 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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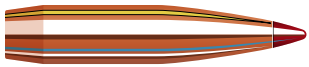
212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.000"
G1 B.C.: 0.673
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**	**2500**	**2550**
H4350	43.9 gr.	46.7 gr.	49.5 gr.	52.3 gr.	53.7 gr.	55.1 gr.	
Alliant RL-17	44.0 gr.	46.8 gr.	49.6 gr.	52.4 gr.	53.7 gr.		
IMR 4451	44.7 gr.	47.3 gr.	49.9 gr.	52.4 gr.	53.7 gr.		
IMR 4350	45.8 gr.	48.1 gr.	50.4 gr.	52.7 gr.	53.9 gr.	55.0 gr.	
WIN 760	45.8 gr.	48.2 gr.	50.5 gr.	52.9 gr.	54.1 gr.		
Hybrid 100V	45.8 gr.	48.2 gr.	50.5 gr.	52.9 gr.	54.1 gr.	55.3 gr.	
H414	45.9 gr.	48.4 gr.	50.9 gr.	53.4 gr.			
SUPERFORMANCE	48.8 gr.	51.0 gr.	53.2 gr.	55.4 gr.	56.5 gr.	57.5 gr.	58.6 gr.
IMR 4831	49.1 gr.	51.3 gr.	53.5 gr.	55.7 gr.	56.8 gr.		
Alliant RL-19	49.5 gr.	51.6 gr.	53.7 gr.	55.8 gr.	56.9 gr.	58.0 gr.	59.0 gr.
Hunter	47.5 gr.	50.4 gr.	53.4 gr.	56.3 gr.	57.8 gr.		
H4831	50.5 gr.	53.1 gr.	55.6 gr.	58.1 gr.	59.4 gr.	60.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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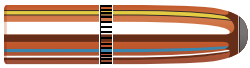
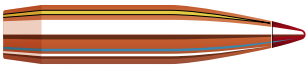
220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 2.820"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 2.840"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**	**2500**
Hybrid 100V	44.2 gr.	46.9 gr.	49.5 gr.	52.1 gr.	53.5 gr.	54.8 gr.
H414	44.9 gr.	47.3 gr.	49.7 gr.	52.1 gr.		
Alliant RL-17	43.0 gr.	46.1 gr.	49.2 gr.	52.3 gr.		
IMR 4451	44.4 gr.	47.1 gr.	49.8 gr.	52.5 gr.		
IMR 4350	46.2 gr.	48.3 gr.	50.4 gr.	52.5 gr.	53.6 gr.	54.7 gr.
H4350	43.4 gr.	46.5 gr.	49.5 gr.	52.6 gr.		
WIN 760	45.3 gr.	47.9 gr.	50.5 gr.	53.0 gr.		
IMR 4831	47.2 gr.	49.5 gr.	51.9 gr.	54.2 gr.	55.4 gr.	
SUPERFORMANCE	49.4 gr.	51.6 gr.	53.8 gr.	55.9 gr.	57.0 gr.	58.1 gr.
Alliant RL-19	49.3 gr.	51.6 gr.	53.8 gr.	56.1 gr.	57.2 gr.	
H4831	50.9 gr.	53.4 gr.	55.8 gr.	58.3 gr.	59.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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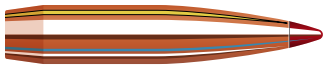
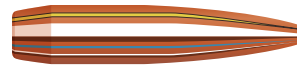
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 2.840"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 2.840"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)						
POWDER	**2100**	**2200**	**2300**	**2350**	**2400**	**2450**	**2500**
Hybrid 100V	44.7 gr.	47.1 gr.	49.6 gr.	50.8 gr.	52.0 gr.	53.2 gr.	54.4 gr.
Alliant RL-17	45.4 gr.	48.0 gr.	50.5 gr.	51.8 gr.	53.1 gr.		
IMR 4451	45.6 gr.	48.1 gr.	50.6 gr.	51.9 gr.	53.1 gr.		
H4350	45.8 gr.	48.4 gr.	51.0 gr.	52.3 gr.	53.5 gr.		
IMR 4350	47.0 gr.	49.2 gr.	51.4 gr.	52.5 gr.	53.5 gr.	54.7 gr.	
WIN 760	46.9 gr.	49.5 gr.	52.1 gr.	53.4 gr.			
H414	47.1 gr.	49.6 gr.	52.2 gr.				
IMR 4831	49.5 gr.	51.5 gr.	53.5 gr.	54.5 gr.	55.5 gr.	56.6 gr.	
Hunter	48.2 gr.	51.1 gr.	54.1 gr.	55.6 gr.	57.1 gr.		
Alliant RL-19	49.9 gr.	52.1 gr.	54.3 gr.	55.3 gr.	56.4 gr.	57.5 gr.	
SUPERFORMANCE	51.0 gr.	52.9 gr.	54.7 gr.	55.7 gr.	56.6 gr.	57.6 gr.	58.5 gr.

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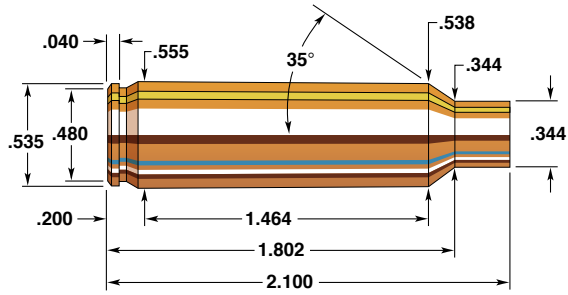


300 Winchester Short Magnum

Rifle:	Winchester Model 70	**Bullet Diameter:**	0.308"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	2.860"
Case:	Winchester	**Max. Case Length:**	2.100"
Primer:	Winchester WLRM	**Case Trim Length:**	2.090"

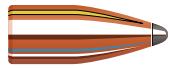
One of the most recently designed cartridges to be offered by Winchester, the 300 WSM is similar to Remington's 300 SAUM. One of the main differences is the platform on which the cartridges are being introduced. The 300 WSM has a bit more case capacity and can produce slightly higher velocities. This is due to the fact that Winchester's short action is capable of holding a cartridge a few tenths of an inch longer than Remington's short action. The Winchester cartridge can hold more powder than the Remington, but the Remington makes up for this in efficiency, turning in top velocities that are usually less than 100 fps slower with the same weight bullet.

Our test rifle performed well with all bullets tested. The cartridge seemed to prefer WIN 760 and IMR 4350 throughout the range of bullet weights. The 150 grain SST® and InterBond® will provide excellent terminal performance for deer and antelope at extended ranges, with the 180 grain SST® being a great choice for elk hunters. It should be noted that the 300 WSM is probably best suited to bullets 150 grains and heavier.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.720"
G1 B.C.: 0.290



110 gr. SP
Item No. 3010
C.O.L.: 2.720"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
IMR 4064	55.6 gr.	58.0 gr.	60.3 gr.	62.7 gr.	65.0 gr.
Alliant RL-15	58.2 gr.	60.3 gr.	62.4 gr.	64.5 gr.	66.7 gr.
VIHT N-150	58.9 gr.	61.2 gr.	63.5 gr.	65.8 gr.	68.0 gr.
BIG GAME	62.9 gr.	65.1 gr.	67.4 gr.	69.6 gr.	71.8 gr.
H414	63.9 gr.	66.2 gr.	68.5 gr.	70.9 gr.	73.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

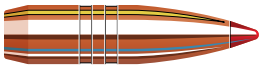
130 gr. SP
Item No. 3020
C.O.L.: 2.720"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
Alliant RL-15	54.9 gr.	57.2 gr.	59.5 gr.	61.8 gr.	64.0 gr.
BIG GAME	59.6 gr.	62.0 gr.	64.4 gr.	66.8 gr.	69.3 gr.
H414	61.0 gr.	63.2 gr.	65.4 gr.	67.7 gr.	69.9 gr.
Accurate 4350	63.2 gr.	64.9 gr.	66.7 gr.	68.5 gr.	70.3 gr.
WIN 760	62.8 gr.	64.9 gr.	67.1 gr.	69.3 gr.	71.4 gr.

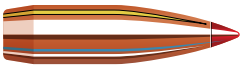
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

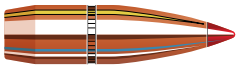
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



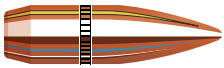
150 gr. GMX®
Item No. 30370
C.O.L.: 2.840"
G1 B.C.: 0.415



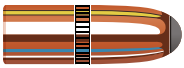
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.840"
G1 B.C.: 0.415



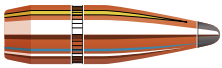
150 gr. SST®
Item No. 30302
C.O.L.: 2.840"
G1 B.C.: 0.415



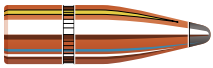
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.800"
G1 B.C.: 0.398



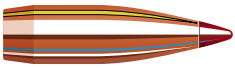
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.615"
G1 B.C.: 0.186



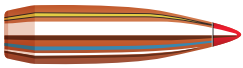
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.840"
G1 B.C.: 0.349



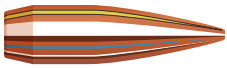
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.840"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.840"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.840"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.840"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)						
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
BIG GAME	56.8 gr.	59.3 gr.	61.7 gr.	64.2 gr.	66.7 gr.		
H414	57.8 gr.	60.3 gr.	62.9 gr.	65.4 gr.	67.9 gr.	69.1 gr.	
Accurate 4350	60.0 gr.	62.0 gr.	64.0 gr.	66.0 gr.	68.0 gr.		
WIN 760	59.3 gr.	61.7 gr.	64.1 gr.	66.6 gr.	69.0 gr.	70.2 gr.	
H4350	58.5 gr.	61.2 gr.	64.0 gr.	66.7 gr.	69.5 gr.	70.9 gr.	
IMR 4350	61.4 gr.	63.4 gr.	65.4 gr.	67.4 gr.	69.5 gr.		
SUPERFORMANCE	63.2 gr.	65.1 gr.	67.1 gr.	68.9 gr.	70.9 gr.	72.8 gr.	74.7 gr.
IMR 4831	63.6 gr.	65.4 gr.	67.2 gr.	69.0 gr.	70.9 gr.		
Alliant RL-19	64.1 gr.	66.1 gr.	68.1 gr.	70.1 gr.	72.1 gr.		
MAGPRO	72.2 gr.	74.6 gr.	77.0 gr.	79.5 gr.			

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***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

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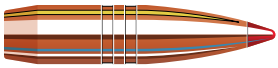
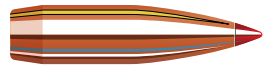
165-168 GRAIN BULLETS

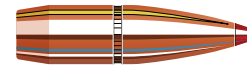
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



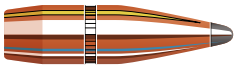
165 gr. GMX®
Item No. 30470
C.O.L.: 2.835"
G1 B.C.: 0.447



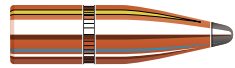
165 gr. InterBond®
Item No. 30459
C.O.L.: 2.835"
G1 B.C.: 0.447



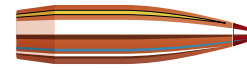
165 gr. SST®
Item No. 30452
C.O.L.: 2.835"
G1 B.C.: 0.447



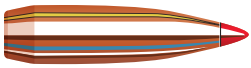
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 2.835"
G1 B.C.: 0.435



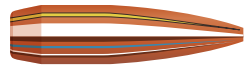
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 2.835"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 2.840"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 2.840"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 2.840"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3150**	**3200**
BIG GAME	56.8 gr.	59.0 gr.	61.2 gr.	63.4 gr.			
H414	56.7 gr.	59.2 gr.	61.8 gr.	64.3 gr.	66.9 gr.		
Accurate 4350	57.8 gr.	60.0 gr.	62.2 gr.	64.5 gr.	66.7 gr.		
H4350	57.0 gr.	59.6 gr.	62.2 gr.	64.9 gr.	67.5 gr.		
WIN 760	57.8 gr.	60.3 gr.	62.8 gr.	65.3 gr.	67.8 gr.	69.1 gr.	
IMR 4350	59.5 gr.	61.5 gr.	63.5 gr.	65.5 gr.	67.6 gr.		
IMR 4831	60.0 gr.	62.2 gr.	64.4 gr.	66.6 gr.	68.7 gr.		
SUPERFORMANCE	60.0 gr.	62.2 gr.	64.4 gr.	66.7 gr.	68.9 gr.	70.0 gr.	71.1 gr.
Alliant RL-19	61.3 gr.	63.5 gr.	65.7 gr.	67.9 gr.	70.1 gr.		
MAGPRO	69.1 gr.	72.0 gr.	74.8 gr.	77.7 gr.	80.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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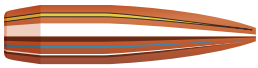
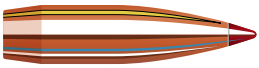
178-180 GRAIN BULLETS

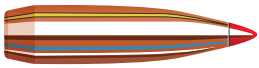
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



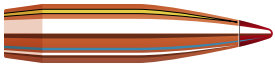
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 2.840"
G1 B.C.: 0.530



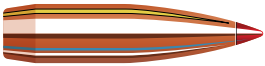
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 2.840"
G1 B.C.: 0.515
G7 B.C.: 0.259



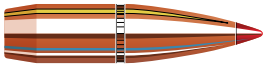
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 2.840"
G1 B.C.: 0.495



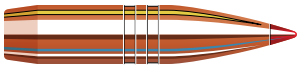
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 2.840"
G1 B.C.: 0.545
G7 B.C.: 0.275



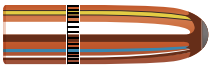
180 gr. InterBond®
Item No. 30709
C.O.L.: 2.840"
G1 B.C.: 0.480



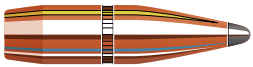
180 gr. SST®
Item No. 30702
C.O.L.: 2.840"
G1 B.C.: 0.480



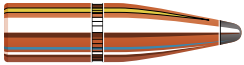
180 gr. GMX®
Item No. 30193
C.O.L.: 2.835"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 2.800"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 2.840"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 2.840"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**	**3100**
VIHT N-550	54.3 gr.	56.5 gr.	58.6 gr.	59.6 gr.	60.7 gr.		
H414	56.5 gr.	58.9 gr.	61.3 gr.	62.5 gr.			
Alliant RL-17	57.0 gr.	59.3 gr.	61.7 gr.	62.9 gr.	64.0 gr.		
NORMA URP	56.5 gr.	59.4 gr.	62.3 gr.	63.7 gr.			
IMR 4350	57.0 gr.	59.6 gr.	62.1 gr.				
VIHT N-160	57.7 gr.	60.2 gr.	62.7 gr.				
H4350	57.3 gr.	60.3 gr.	63.4 gr.				
Hybrid 100V	57.7 gr.	60.3 gr.	62.9 gr.				
IMR 4451	59.4 gr.	61.7 gr.					
SUPERFORMANCE	59.3 gr.	61.9 gr.	64.5 gr.	65.7 gr.	67.0 gr.	68.3 gr.	69.6 gr.
Hunter	61.7 gr.	64.6 gr.	67.6 gr.	69.1 gr.			

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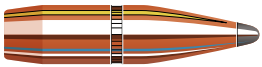
190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



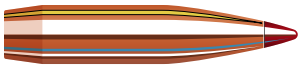
190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 2.830"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
H4350	52.6 gr.	55.3 gr.	57.9 gr.	60.6 gr.	62.0 gr.	
H414	53.2 gr.	55.7 gr.	58.2 gr.	60.7 gr.	62.0 gr.	
Accurate 4350	53.9 gr.	56.2 gr.	58.5 gr.	60.9 gr.	62.0 gr.	
IMR 4350	54.6 gr.	56.9 gr.	59.3 gr.	61.6 gr.	62.8 gr.	
WIN 760	54.2 gr.	56.7 gr.	59.2 gr.	61.7 gr.	63.0 gr.	64.3 gr.
IMR 4831	56.2 gr.	58.3 gr.	60.5 gr.	62.7 gr.	63.8 gr.	64.8 gr.
Alliant RL-19	57.3 gr.	59.5 gr.	61.6 gr.	63.7 gr.	64.8 gr.	65.9 gr.
MAGPRO	61.7 gr.	65.0 gr.	68.3 gr.	71.6 gr.	73.3 gr.	74.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 2.855"
G1 B.C.: 0.626
G7 B.C.: 0.315

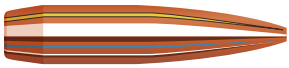
	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**
Alliant RL-17	53.4 gr.	55.5 gr.	57.5 gr.	59.6 gr.	61.7 gr.	62.8 gr.
Hybrid 100V	52.8 gr.	55.2 gr.	57.6 gr.	60.0 gr.	62.5 gr.	
H414	53.5 gr.	55.8 gr.	58.1 gr.	60.4 gr.		
IMR 4350	53.7 gr.	56.0 gr.	58.4 gr.	60.7 gr.	63.1 gr.	
NORMA URP	53.4 gr.	56.0 gr.	58.7 gr.	61.3 gr.	63.9 gr.	
IMR 4451	53.9 gr.	56.5 gr.	59.1 gr.	61.6 gr.		
H4350	53.3 gr.	56.1 gr.	58.9 gr.	61.7 gr.		
WIN 760	54.7 gr.	57.2 gr.	59.7 gr.	62.1 gr.		
VIHT N-160	55.1 gr.	57.8 gr.	60.5 gr.	63.1 gr.		
SUPERFORMANCE	57.2 gr.	59.5 gr.	61.8 gr.	64.1 gr.	66.5 gr.	
Hunter	57.0 gr.	59.5 gr.	61.9 gr.	64.3 gr.	66.8 gr.	68.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

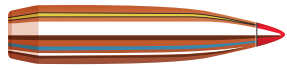
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

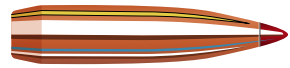
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 2.840"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 2.840"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 2.840"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
Alliant RL-17	51.8 gr.	54.1 gr.	56.4 gr.	58.7 gr.	61.0 gr.	
H4350	51.4 gr.	54.2 gr.	57.0 gr.	59.8 gr.	62.6 gr.	
IMR 4350	52.9 gr.	55.2 gr.	57.5 gr.	59.8 gr.	62.1 gr.	
NORMA URP	52.9 gr.	55.3 gr.	57.7 gr.	60.1 gr.	62.5 gr.	
IMR 4451	52.9 gr.	55.4 gr.	57.9 gr.	60.4 gr.		
Hybrid 100V	54.8 gr.	56.7 gr.	58.6 gr.	60.5 gr.	62.4 gr.	63.4 gr.
IMR 4831	54.9 gr.	57.4 gr.	59.9 gr.	62.3 gr.		
SUPERFORMANCE	55.2 gr.	57.5 gr.	59.9 gr.	62.3 gr.	64.6 gr.	

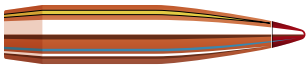
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 2.920"
G1 B.C.: 0.673
G7 B.C.: 0.336

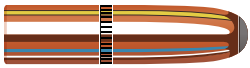
	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
Alliant RL-17	51.7 gr.	53.9 gr.	56.2 gr.	58.4 gr.	60.7 gr.
Hybrid 100V	51.7 gr.	54.3 gr.	56.8 gr.	59.3 gr.	61.8 gr.
H414	51.8 gr.	54.3 gr.	56.8 gr.	59.3 gr.	
IMR 4451	50.9 gr.	53.7 gr.	56.5 gr.	59.4 gr.	62.2 gr.
IMR 4350	52.0 gr.	54.5 gr.	56.9 gr.	59.4 gr.	61.9 gr.
H4350	51.1 gr.	54.0 gr.	56.8 gr.	59.6 gr.	62.5 gr.
NORMA URP	52.1 gr.	54.7 gr.	57.3 gr.	59.9 gr.	
WIN 760	52.5 gr.	55.1 gr.	57.6 gr.	60.1 gr.	
VIHT N-160	52.9 gr.	55.6 gr.	58.3 gr.	61.0 gr.	
Alliant RL-19	55.4 gr.	57.5 gr.	59.7 gr.	61.9 gr.	64.1 gr.
SUPERFORMANCE	56.3 gr.	58.7 gr.	61.2 gr.	63.6 gr.	66.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

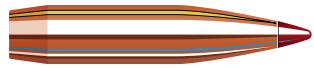
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 2.840"
G1 B.C.: 0.300

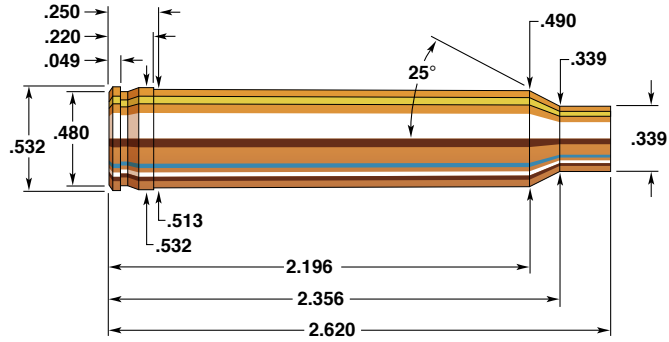


***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 2.860"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2550**	**2600**	**2650**
NORMA URP	49.3 gr.	51.8 gr.	54.4 gr.	55.6 gr.	56.9 gr.	
Alliant RL-17	49.9 gr.	52.3 gr.	54.7 gr.	55.9 gr.	57.2 gr.	58.4 gr.
IMR 4350	49.0 gr.	51.8 gr.	54.6 gr.	56.0 gr.	57.4 gr.	58.7 gr.
H4350	50.9 gr.	53.5 gr.	56.0 gr.	57.3 gr.	58.5 gr.	
Hybrid 100V	51.0 gr.	53.7 gr.	56.3 gr.	57.6 gr.	58.9 gr.	60.3 gr.
VIHT N-160	52.0 gr.	54.9 gr.	57.8 gr.	59.3 gr.		
SUPERFORMANCE	52.9 gr.	55.5 gr.	58.0 gr.	59.3 gr.	60.6 gr.	61.9 gr.
IMR 4831	53.4 gr.	55.8 gr.	58.2 gr.	59.4 gr.	60.6 gr.	
Alliant RL-19	53.5 gr.	56.1 gr.	58.7 gr.	59.9 gr.	61.3 gr.	62.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



300 Winchester Magnum

Rifle:	Remington 700	**Bullet Diameter:**	0.308"
Barrel:	25", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Hornady/Frontier	**Max. Case Length:**	2.620"
Primer:	Winchester WLRM	**Case Trim Length:**	2.610"

In 1963 Winchester introduced the 300 Winchester Magnum. The cartridge is based on the 338 Winchester with the shoulder moved forward by .156" and the case lengthened by .120". The only problem, if it is a problem, is the neck is less than 1 caliber in length. The 300 Winchester Magnum is on par with the 308 Norma Magnum and the 300 Weatherby Magnum, and is capable of taking all North American big game. It has steadily grown in popularity, and because it is chambered by many different arms manufacturers, it enjoys a much greater following than the 308 Norma or the 300 Weatherby. The 300 Winchester Magnum is also used extensively in 600 and 1000 yard matches.

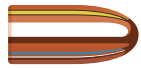
Being a 30 caliber cartridge has its advantages. The wide selection of bullets allows the cartridge a greater range of uses. If the reloader is inclined to do some varminting with his 300 Winchester, he can load the 110 grain V-MAX® to 3700 fps or the 130 grain Spire Point to 3500 fps! For big game, the reloader has bullets from 150 to 220 grains to choose from. The 200 grain ELD-X® bullet is a great all-around hunting bullet that is match-accurate and can be seated to standard MAX COL.

In our rifle IMR 4350 gave very good results with the light bullets, while RL-22 and IMR 7828 gave the best results with the heavier bullets. When using cases of this size, it is imperative that the reloader work with near maximum loads. Reduced loads with slow burning powder can produce dangerous hangfires, large muzzle flashes, and perhaps even dangerously high pressure.

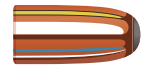
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.300"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 3.125"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 3.125"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 3.300"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
VARGET	53.0 gr.	56.2 gr.	59.4 gr.	62.6 gr.	65.8 gr.	69.0 gr.
IMR 4064	55.7 gr.	58.4 gr.	61.1 gr.	63.8 gr.	66.5 gr.	69.2 gr.
Alliant RL-15	57.2 gr.	59.6 gr.	62.1 gr.	64.5 gr.	67.0 gr.	69.4 gr.
Power Pro 2000 MR	63.3 gr.	65.9 gr.	68.5 gr.	71.0 gr.	73.6 gr.	76.2 gr.
Accurate 4350	66.5 gr.	68.7 gr.	70.9 gr.	73.1 gr.	75.3 gr.	77.5 gr.
IMR 4350	67.5 gr.	69.6 gr.	71.7 gr.	73.8 gr.	75.9 gr.	78.0 gr.
IMR 4007 SSC	71.8 gr.	73.2 gr.	74.7 gr.	76.2 gr.	77.6 gr.	79.1 gr.
H4350	65.1 gr.	68.3 gr.	71.6 gr.	74.8 gr.	78.1 gr.	81.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

130 gr. SP
Item No. 3020
C.O.L.: 3.290"
G1 B.C.: 0.295

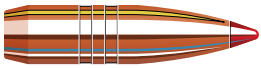
	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
VARGET	53.1 gr.	55.9 gr.	58.7 gr.	61.6 gr.	64.4 gr.	
IMR 4064	53.8 gr.	56.4 gr.	59.1 gr.	61.7 gr.	64.4 gr.	
Alliant RL-15	55.7 gr.	58.1 gr.	60.5 gr.	62.9 gr.	65.3 gr.	
Power Pro 2000 MR	58.5 gr.	61.7 gr.	64.8 gr.	67.9 gr.	71.1 gr.	74.4 gr.
Accurate 4350	61.3 gr.	64.2 gr.	67.0 gr.	69.9 gr.	72.7 gr.	75.6 gr.
IMR 4350	63.6 gr.	66.0 gr.	68.4 gr.	70.8 gr.	73.2 gr.	75.6 gr.
H4350	63.1 gr.	66.0 gr.	68.8 gr.	71.7 gr.	74.5 gr.	77.4 gr.
IMR 4451	65.2 gr.	67.5 gr.	69.9 gr.	72.2 gr.	74.5 gr.	
IMR 4831	64.8 gr.	67.3 gr.	69.7 gr.	72.2 gr.	74.6 gr.	77.1 gr.
IMR 4007 SSC	65.7 gr.	68.1 gr.	70.4 gr.	72.7 gr.	75.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

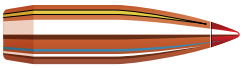
INDICATES MAXIMUM LOAD — USE WITH CAUTION

150-155 GRAIN BULLETS

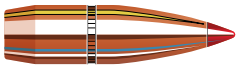
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



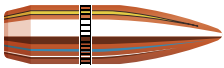
150 gr. GMX®
Item No. 30370
C.O.L.: 3.340"
G1 B.C.: 0.415



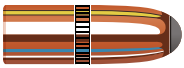
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.340"
G1 B.C.: 0.415



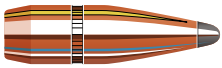
150 gr. SST®
Item No. 30302
C.O.L.: 3.340"
G1 B.C.: 0.415



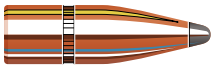
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.315"
G1 B.C.: 0.398



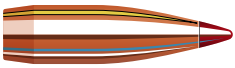
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.115"
G1 B.C.: 0.186



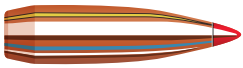
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.340"
G1 B.C.: 0.349



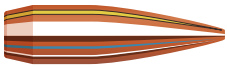
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.340"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.340"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.340"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.340"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4064	50.5 gr.	53.3 gr.	56.2 gr.	59.0 gr.	61.9 gr.	
VARGET	51.3 gr.	54.0 gr.	56.7 gr.	59.4 gr.	62.1 gr.	
IMR 4350	60.3 gr.	62.6 gr.	65.0 gr.	67.3 gr.	69.7 gr.	72.0 gr.
H4350	58.4 gr.	61.5 gr.	64.6 gr.	67.7 gr.	70.8 gr.	73.9 gr.
Accurate 4350	60.6 gr.	63.2 gr.	65.7 gr.	68.3 gr.	70.8 gr.	73.4 gr.
IMR 4451	59.8 gr.	62.6 gr.	65.4 gr.	68.2 gr.	70.9 gr.	
IMR 4831	60.3 gr.	62.9 gr.	65.6 gr.	68.2 gr.	70.9 gr.	73.5 gr.
Alliant RL-17	64.3 gr.	66.1 gr.	67.9 gr.	69.8 gr.	71.6 gr.	73.4 gr.
Hybrid 100V	63.5 gr.	65.5 gr.	67.6 gr.	69.7 gr.	71.8 gr.	
IMR 4007 SSC	63.8 gr.	65.9 gr.	67.9 gr.	70.0 gr.	72.0 gr.	
VIHT N-165	64.4 gr.	67.3 gr.	70.2 gr.	73.1 gr.	76.0 gr.	78.9 gr.
Alliant RL-19	66.8 gr.	69.2 gr.	71.6 gr.	74.0 gr.	76.4 gr.	
Alliant RL-22	69.5 gr.	71.9 gr.	74.3 gr.	76.7 gr.	79.1 gr.	
WIN Supreme 780	70.7 gr.	72.8 gr.	74.9 gr.	77.1 gr.	79.2 gr.	81.3 gr.
MAGPRO	68.5 gr.	72.2 gr.	75.8 gr.	79.4 gr.	83.0 gr.	

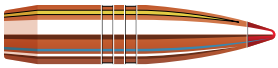
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

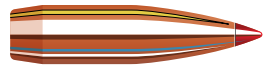
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

165-168 GRAIN BULLETS

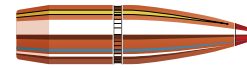
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



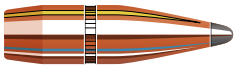
165 gr. GMX®
Item No. 30470
C.O.L.: 3.340"
G1 B.C.: 0.447



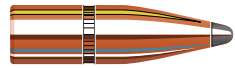
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.340"
G1 B.C.: 0.447



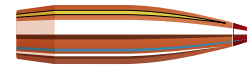
165 gr. SST®
Item No. 30452
C.O.L.: 3.340"
G1 B.C.: 0.447



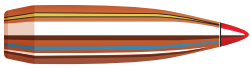
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.340"
G1 B.C.: 0.435



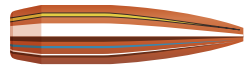
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.340"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.340"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.340"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.340"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4064	51.2 gr.	54.1 gr.	57.0 gr.	59.9 gr.		
IMR 4451	57.4 gr.	60.5 gr.	63.6 gr.	66.7 gr.	69.7 gr.	
IMR 4350	58.1 gr.	61.0 gr.	64.0 gr.	66.9 gr.	69.8 gr.	
Accurate 4350	60.1 gr.	62.5 gr.	64.9 gr.	67.3 gr.	69.7 gr.	
H4350	58.3 gr.	61.5 gr.	64.8 gr.	68.1 gr.	71.4 gr.	
Alliant RL-17	61.7 gr.	63.9 gr.	66.0 gr.	68.1 gr.	70.3 gr.	72.4 gr.
Hybrid 100V	60.8 gr.	63.3 gr.	65.9 gr.	68.4 gr.		
IMR 4831	58.3 gr.	61.7 gr.	65.2 gr.	68.6 gr.	72.0 gr.	
VIHT N-165	61.4 gr.	64.8 gr.	68.3 gr.	71.7 gr.	75.2 gr.	
Alliant RL-19	64.9 gr.	67.3 gr.	69.7 gr.	72.1 gr.	74.5 gr.	
Alliant RL-22	66.9 gr.	69.3 gr.	71.8 gr.	74.2 gr.	76.7 gr.	79.1 gr.
WIN Supreme 780	67.7 gr.	70.0 gr.	72.3 gr.	74.5 gr.	76.8 gr.	79.1 gr.
IMR 7828	67.8 gr.	70.0 gr.	72.3 gr.	74.5 gr.	76.8 gr.	
MAGPRO	66.7 gr.	69.8 gr.	73.0 gr.	76.1 gr.	79.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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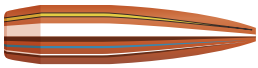
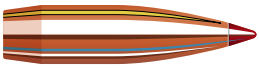
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

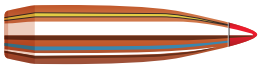
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



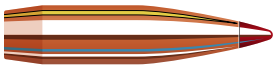
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.340"
G1 B.C.: 0.530



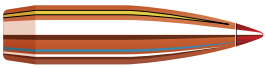
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.340"
G1 B.C.: 0.515
G7 B.C.: 0.259



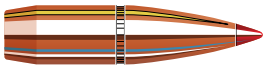
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.340"
G1 B.C.: 0.495



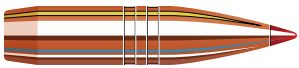
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.340"
G1 B.C.: 0.545
G7 B.C.: 0.275



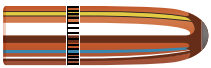
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.340"
G1 B.C.: 0.480



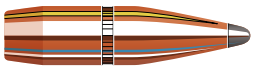
180 gr. SST®
Item No. 30702
C.O.L.: 3.340"
G1 B.C.: 0.480



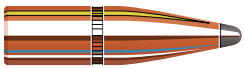
180 gr. GMX®
Item No. 30193
C.O.L.: 3.340"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.305"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.340"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.340"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4451	55.8 gr.	59.0 gr.	62.1 gr.	65.2 gr.	68.4 gr.	
Alliant RL-17	57.8 gr.	60.5 gr.	63.1 gr.	65.8 gr.	68.4 gr.	
H4350	58.0 gr.	61.3 gr.	64.6 gr.	67.9 gr.		
Hybrid 100V	60.1 gr.	62.7 gr.	65.3 gr.	67.9 gr.	70.5 gr.	
Alliant RL-22	56.1 gr.	60.5 gr.	64.9 gr.	69.3 gr.	73.7 gr.	
Power Pro 4000 MR	62.6 gr.	65.2 gr.	67.8 gr.	70.3 gr.	72.9 gr.	
Alliant RL-23	61.1 gr.	64.7 gr.	68.3 gr.	71.9 gr.	75.5 gr.	
Alliant RL-26	62.7 gr.	66.1 gr.	69.5 gr.	72.9 gr.	76.3 gr.	79.8 gr.
H4831	64.0 gr.	67.3 gr.	70.6 gr.	73.8 gr.		
Alliant RL-25	59.1 gr.	64.0 gr.	69.0 gr.	73.9 gr.	78.9 gr.	
IMR 7828	66.4 gr.	69.0 gr.	71.7 gr.	74.3 gr.		

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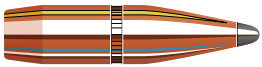
190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



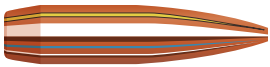
190 gr. InterLock®
BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 3.340"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4451	54.0 gr.	57.1 gr.	60.2 gr.	63.3 gr.	66.4 gr.	
Hybrid 100V	59.0 gr.	60.7 gr.	62.3 gr.	63.9 gr.	65.6 gr.	
Alliant RL-17	57.5 gr.	59.7 gr.	62.0 gr.	64.2 gr.	66.5 gr.	68.7 gr.
Accurate 4350	58.0 gr.	60.5 gr.	63.0 gr.	65.5 gr.		
IMR 4831	59.4 gr.	61.7 gr.	64.0 gr.	66.3 gr.	68.6 gr.	
Power Pro 4000 MR	61.3 gr.	63.4 gr.	65.6 gr.	67.8 gr.	69.9 gr.	72.1 gr.
Alliant RL-23	61.6 gr.	64.3 gr.	67.1 gr.	69.9 gr.	72.7 gr.	
VIHT N-560	57.6 gr.	61.9 gr.	66.2 gr.	70.5 gr.		
WIN Supreme 780	62.1 gr.	65.0 gr.	67.9 gr.	70.7 gr.	73.6 gr.	
Alliant RL-22	63.7 gr.	66.2 gr.	68.7 gr.	71.2 gr.	73.7 gr.	
H4831	63.6 gr.	66.4 gr.	69.2 gr.	72.0 gr.		
IMR 7828	63.7 gr.	66.8 gr.	69.8 gr.	72.8 gr.		
Alliant RL-25	65.3 gr.	68.2 gr.	71.1 gr.	74.0 gr.	76.9 gr.	
IMR 7977	66.7 gr.	69.2 gr.	71.7 gr.	74.2 gr.	76.7 gr.	
H1000	66.8 gr.	70.5 gr.	74.3 gr.	78.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.340"
G1 B.C.: 0.550
G7 B.C.: 0.311

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4451	55.0 gr.	58.0 gr.	60.9 gr.	63.9 gr.	66.8 gr.	
Alliant RL-17	57.4 gr.	59.8 gr.	62.2 gr.	64.6 gr.	67.0 gr.	
IMR 4350	59.3 gr.	61.6 gr.	63.8 gr.	66.0 gr.	68.3 gr.	
H4350	57.6 gr.	60.4 gr.	63.3 gr.	66.1 gr.		
IMR 4831	61.2 gr.	63.4 gr.	65.6 gr.	67.8 gr.	70.0 gr.	
Alliant RL-22	63.5 gr.	65.8 gr.	68.2 gr.	70.5 gr.	72.9 gr.	75.3 gr.
Alliant RL-23	63.1 gr.	65.6 gr.	68.1 gr.	70.6 gr.	73.1 gr.	
VIHT N-560	63.8 gr.	66.0 gr.	68.3 gr.	70.6 gr.	72.8 gr.	75.1 gr.
WIN Supreme 780	64.4 gr.	66.5 gr.	68.7 gr.	70.9 gr.	73.0 gr.	
H4831	62.7 gr.	65.6 gr.	68.4 gr.	71.3 gr.	74.1 gr.	

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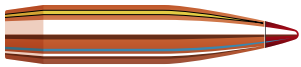
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.340"
G1 B.C.: 0.626
G7 B.C.: 0.315

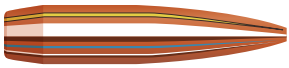
	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
IMR 4451	55.5 gr.	58.3 gr.	61.1 gr.	63.9 gr.		
Alliant RL-17	55.0 gr.	58.2 gr.	61.3 gr.	64.4 gr.	66.0 gr.	
H4350	55.0 gr.	58.5 gr.	62.0 gr.	65.5 gr.		
IMR 4350	57.1 gr.	60.2 gr.	63.3 gr.	66.4 gr.		
IMR 4831	60.0 gr.	62.7 gr.	65.3 gr.	67.9 gr.	69.2 gr.	
Hunter	57.1 gr.	61.1 gr.	65.1 gr.	69.2 gr.		
Alliant RL-22	60.1 gr.	63.4 gr.	66.7 gr.	69.9 gr.	71.6 gr.	73.2 gr.
Alliant RL-23	62.2 gr.	65.1 gr.	67.9 gr.	70.7 gr.	72.1 gr.	
H4831	61.9 gr.	65.3 gr.	68.7 gr.	72.1 gr.	73.8 gr.	
IMR 7828	65.4 gr.	67.8 gr.	70.2 gr.	72.7 gr.	73.9 gr.	
H1000	69.1 gr.	71.5 gr.	73.8 gr.	76.2 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

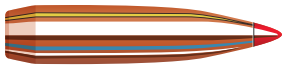
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

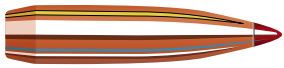
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 3.340"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.340"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.340"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
IMR 4451	53.8 gr.	56.4 gr.	59.0 gr.	61.5 gr.		
H4350	55.6 gr.	58.2 gr.	60.9 gr.	63.5 gr.	66.2 gr.	67.5 gr.
IMR 4350	56.5 gr.	59.0 gr.	61.6 gr.	64.1 gr.	66.7 gr.	
Hunter	56.9 gr.	59.9 gr.	62.8 gr.	65.8 gr.	68.8 gr.	70.2 gr.
IMR 4831	58.0 gr.	60.7 gr.	63.4 gr.	66.0 gr.	68.7 gr.	
VIHT N-160	57.1 gr.	60.1 gr.	63.1 gr.	66.2 gr.	69.2 gr.	
Alliant RL-22	59.2 gr.	62.2 gr.	65.1 gr.	68.0 gr.	70.9 gr.	72.4 gr.
H4831	60.1 gr.	63.0 gr.	66.0 gr.	68.9 gr.		
Alliant RL-23	61.3 gr.	64.0 gr.	66.6 gr.	69.3 gr.	72.0 gr.	
IMR 7828	61.8 gr.	64.3 gr.	66.8 gr.	69.3 gr.	71.8 gr.	73.0 gr.

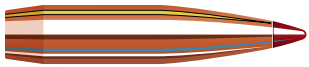
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.500"
G1 B.C.: 0.673
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4451	54.0 gr.	56.4 gr.	58.9 gr.	61.3 gr.	
Alliant RL-17	52.8 gr.	55.7 gr.	58.7 gr.	61.6 gr.	64.6 gr.
H4350	52.9 gr.	56.0 gr.	59.2 gr.	62.3 gr.	65.5 gr.
IMR 4350	54.7 gr.	57.8 gr.	60.8 gr.	63.9 gr.	
Hunter	56.3 gr.	59.4 gr.	62.4 gr.	65.4 gr.	
IMR 4831	55.2 gr.	58.7 gr.	62.3 gr.	65.9 gr.	
Alliant RL-22	55.5 gr.	59.3 gr.	63.1 gr.	66.9 gr.	70.6 gr.
Alliant RL-23	58.5 gr.	61.6 gr.	64.8 gr.	68.0 gr.	71.1 gr.
H4831	57.5 gr.	61.3 gr.	65.0 gr.	68.8 gr.	72.5 gr.
IMR 7828	62.2 gr.	64.9 gr.	67.7 gr.	70.5 gr.	73.2 gr.
H1000	65.3 gr.	68.4 gr.	71.5 gr.	74.5 gr.	77.6 gr.

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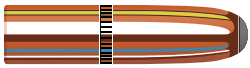
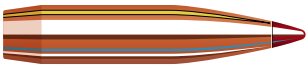
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.340"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.340"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
Hybrid 100V	54.2 gr.	57.7 gr.	61.1 gr.	64.5 gr.		
H4350	54.6 gr.	58.0 gr.	61.4 gr.	64.8 gr.		
IMR 4350	56.2 gr.	59.1 gr.	62.1 gr.	65.0 gr.		
Alliant RL-22	53.7 gr.	58.1 gr.	62.5 gr.	66.9 gr.	71.3 gr.	
Power Pro 4000 MR	59.4 gr.	62.1 gr.	64.8 gr.	67.6 gr.	70.3 gr.	
IMR 4831	59.8 gr.	62.5 gr.	65.3 gr.	68.0 gr.	70.7 gr.	
Alliant RL-23	59.1 gr.	62.5 gr.	65.9 gr.	69.2 gr.	72.6 gr.	
Alliant RL-26	61.5 gr.	64.4 gr.	67.2 gr.	70.1 gr.	73.0 gr.	74.4 gr.
H4831	60.6 gr.	63.8 gr.	67.0 gr.	70.2 gr.	73.4 gr.	
Alliant RL-25	57.3 gr.	61.7 gr.	66.1 gr.	70.5 gr.	74.9 gr.	
IMR 7828	62.2 gr.	65.0 gr.	67.9 gr.	70.7 gr.	73.5 gr.	
H1000	65.9 gr.	69.0 gr.	72.2 gr.	75.3 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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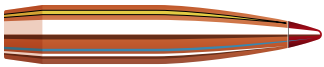
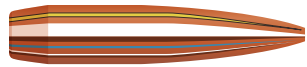
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.340"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.340"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**	**2800**
IMR 4350	55.1 gr.	58.4 gr.	61.6 gr.	64.9 gr.		
Hybrid 100V	58.2 gr.	60.5 gr.	62.8 gr.	65.2 gr.		
Power Pro 4000 MR	58.9 gr.	61.4 gr.	63.9 gr.	66.4 gr.	67.6 gr.	
VIHT N-160	59.5 gr.	62.4 gr.	65.3 gr.	68.2 gr.		
Hunter	59.5 gr.	62.6 gr.	65.7 gr.	68.7 gr.		
H4831 SC	60.4 gr.	63.3 gr.	66.1 gr.	69.0 gr.	70.4 gr.	
Alliant RL-22	60.6 gr.	63.4 gr.	66.3 gr.	69.2 gr.	70.6 gr.	72.0 gr.
IMR 7828 SSC	61.8 gr.	64.5 gr.	67.1 gr.	69.8 gr.	71.1 gr.	
NORMA MRP	62.9 gr.	65.3 gr.	67.8 gr.	70.2 gr.	71.4 gr.	72.7 gr.
MAGPRO	65.1 gr.	68.7 gr.	72.3 gr.	75.9 gr.	77.7 gr.	

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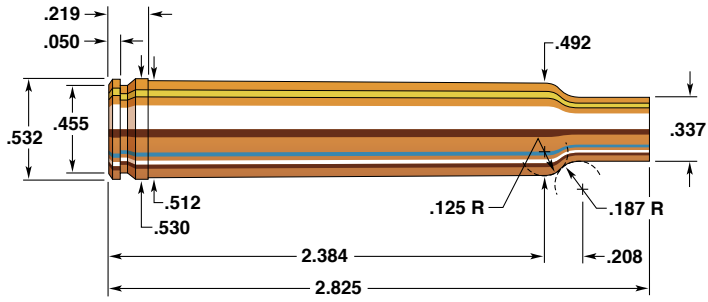
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



300 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.308"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.560"
Case:	Hornady/Frontier	**Max. Case Length:**	2.825"
Primer:	Federal 215	**Case Trim Length:**	2.815"

The 300 Weatherby Magnum is the best known and most widely used cartridge in the powerful Weatherby series. The cartridge is based on an improved 300 H&H case given the famous Weatherby double-radius shoulder. The success of the 300 Weatherby Magnum in downing game at long ranges or hunting dangerous species has done much to confirm Roy Weatherby's theories of the importance of velocity in killing power.

The 300 Weatherby Magnum held its position at the top of the 30 caliber magnum lineup even against such other high intensity cartridges as the 308 Norma and 300 Winchester Magnums, both introduced after it. But it has now been matched and slightly exceeded by recent high power cartridges like the 300 Remington Ultra Mag and the 30-378 Weatherby Magnum.

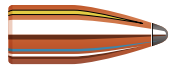
With a full 400 fps top velocity advantage over the 30-06 when shooting 150, 165, or 180 grain Hornady Spire Points, the 300 WM can shoot flatter and place considerably more energy in distant targets than the '06 or its peers. Loaded with the explosive 130 grain Spire Point it is the most powerful Weatherby suitable for varmint shooting.

Slower burning powders (IMR 4350, H 4831, and VIHT N-165) are the most appropriate choices in the big 300 Weatherby Magnum case when hunting weight bullets are used. To ignite the hefty charges of powder required for top velocities the Federal 215 primer is recommended. (The 215, a hot magnum primer, was developed specifically for this task.)

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.430"
G1 B.C.: 0.290



110 gr. SP
Item No. 3010
C.O.L.: 3.430"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**	**3900**
VARGET	65.0 gr.	67.8 gr.	70.6 gr.	73.4 gr.	76.2 gr.	
IMR 4320	65.1 gr.	68.4 gr.	71.8 gr.	75.1 gr.		
Alliant RL-15	69.7 gr.	72.1 gr.	74.4 gr.	76.8 gr.		
IMR 4350	71.2 gr.	74.1 gr.	76.9 gr.	79.7 gr.	82.5 gr.	85.4 gr.
Accurate 4350	74.2 gr.	76.6 gr.	79.0 gr.	81.4 gr.	83.7 gr.	86.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

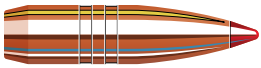
130 gr. SP
Item No. 3020
C.O.L.: 3.430"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 4320	59.1 gr.	62.4 gr.	65.7 gr.	69.0 gr.	72.3 gr.	
VARGET	60.9 gr.	64.3 gr.	67.7 gr.	71.1 gr.		
Alliant RL-15	65.7 gr.	67.5 gr.	69.4 gr.	71.3 gr.	73.1 gr.	
IMR 4350	68.8 gr.	71.5 gr.	74.2 gr.	76.8 gr.	79.5 gr.	82.2 gr.
H4350	70.1 gr.	72.9 gr.	75.7 gr.	78.4 gr.	81.2 gr.	84.0 gr.
Accurate 4350	71.2 gr.	73.7 gr.	76.1 gr.	78.5 gr.	80.9 gr.	
IMR 4831	69.8 gr.	72.8 gr.	75.9 gr.	78.9 gr.	81.9 gr.	85.0 gr.

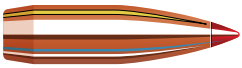
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

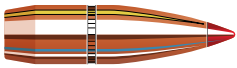
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



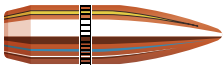
150 gr. GMX®
Item No. 30370
C.O.L.: 3.530"
G1 B.C.: 0.415



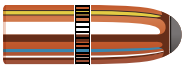
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.530"
G1 B.C.: 0.415



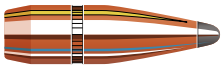
150 gr. SST®
Item No. 30302
C.O.L.: 3.530"
G1 B.C.: 0.415



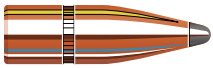
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.500"
G1 B.C.: 0.398



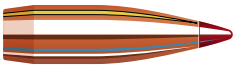
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.340"
G1 B.C.: 0.186



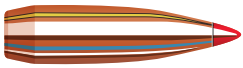
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.530"
G1 B.C.: 0.349



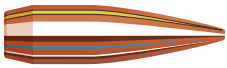
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.530"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.560"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.560"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.560"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)					
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**	**3500**
VARGET	59.6 gr.	62.6 gr.	65.6 gr.	68.5 gr.		
IMR 4350	66.3 gr.	68.9 gr.	71.5 gr.	74.1 gr.	76.7 gr.	79.2 gr.
Accurate 4350	67.4 gr.	69.9 gr.	72.3 gr.	74.7 gr.	77.2 gr.	
H4350	67.5 gr.	70.1 gr.	72.7 gr.	75.3 gr.	77.9 gr.	80.4 gr.
IMR 4831	69.0 gr.	71.4 gr.	73.8 gr.	76.2 gr.	78.6 gr.	81.0 gr.
VIHT N-160	69.9 gr.	72.4 gr.	74.9 gr.	77.4 gr.	79.9 gr.	
Alliant RL-19	74.7 gr.	77.1 gr.	79.5 gr.	82.0 gr.	84.4 gr.	86.8 gr.
H4831	74.4 gr.	77.2 gr.	80.0 gr.	82.9 gr.	85.7 gr.	

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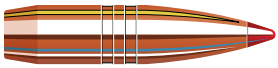
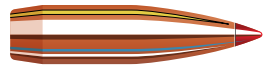
165-168 GRAIN BULLETS

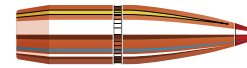
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



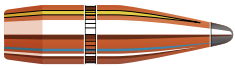
165 gr. GMX®
Item No. 30470
C.O.L.: 3.550"
G1 B.C.: 0.447



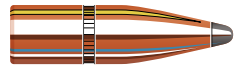
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.550"
G1 B.C.: 0.447



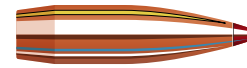
165 gr. SST®
Item No. 30452
C.O.L.: 3.550"
G1 B.C.: 0.447



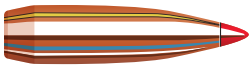
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.550"
G1 B.C.: 0.435



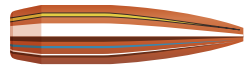
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.550"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.560"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.560"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.560"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4350	64.1 gr.	66.4 gr.	68.7 gr.	71.0 gr.	73.3 gr.	75.6 gr.
Accurate 4350	62.3 gr.	65.2 gr.	68.0 gr.	70.8 gr.	73.6 gr.	76.4 gr.
H4350	63.3 gr.	66.1 gr.	68.8 gr.	71.6 gr.	74.4 gr.	77.1 gr.
IMR 4831	64.9 gr.	67.6 gr.	70.2 gr.	72.8 gr.	75.4 gr.	78.0 gr.
H4831	69.9 gr.	72.7 gr.	75.5 gr.	78.4 gr.	81.2 gr.	84.0 gr.
Alliant RL-19	72.5 gr.	74.7 gr.	76.9 gr.	79.0 gr.	81.2 gr.	83.4 gr.
Alliant RL-22	72.4 gr.	74.7 gr.	77.0 gr.	79.3 gr.	81.7 gr.	84.0 gr.
VIHT N-165	72.9 gr.	75.5 gr.	78.0 gr.	80.5 gr.	83.0 gr.	
IMR 7828	73.8 gr.	76.2 gr.	78.6 gr.	81.0 gr.	83.3 gr.	

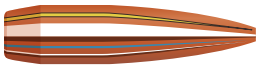
Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

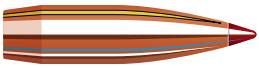
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

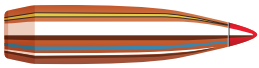
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



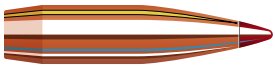
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.546"
G1 B.C.: 0.530



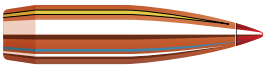
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.546"
G1 B.C.: 0.515
G7 B.C.: 0.259



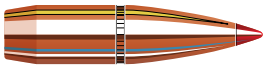
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.546"
G1 B.C.: 0.495



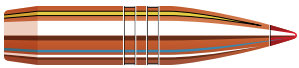
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.546"
G1 B.C.: 0.545
G7 B.C.: 0.275



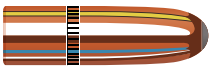
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.546"
G1 B.C.: 0.480



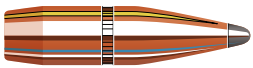
180 gr. SST®
Item No. 30702
C.O.L.: 3.546"
G1 B.C.: 0.480



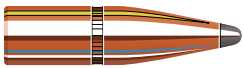
180 gr. GMX®
Item No. 30193
C.O.L.: 3.530"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.510"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.546"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.546"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**	**3100**
IMR 4350	66.4 gr.	68.7 gr.	70.9 gr.	73.1 gr.	74.2 gr.	
H4350	66.2 gr.	68.9 gr.	71.5 gr.	74.2 gr.	75.5 gr.	
IMR 4831	70.7 gr.	72.9 gr.	75.1 gr.	77.3 gr.	78.5 gr.	
Alliant RL-22	72.5 gr.	74.7 gr.	76.9 gr.	79.1 gr.	80.3 gr.	81.4 gr.
H4831	73.1 gr.	75.7 gr.	78.4 gr.	81.0 gr.	82.3 gr.	
IMR 7828	74.4 gr.	76.6 gr.	78.8 gr.	81.0 gr.	82.1 gr.	
Alliant RL-25	75.6 gr.	78.4 gr.	81.1 gr.	83.9 gr.	85.3 gr.	86.7 gr.
MAGNUM	78.8 gr.	82.1 gr.	85.4 gr.	88.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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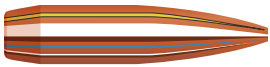
195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.560"
G1 B.C.: 0.550
G7 B.C.: 0.311

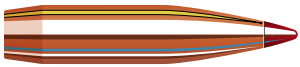
	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**	**3100**
IMR 4350	65.8 gr.	68.5 gr.	71.1 gr.	72.4 gr.			
H4350	62.9 gr.	66.9 gr.	71.0 gr.	73.0 gr.			
IMR 4831	68.4 gr.	70.9 gr.	73.4 gr.	74.6 gr.			
Alliant RL-22	72.7 gr.	74.7 gr.	76.8 gr.	77.8 gr.	78.9 gr.	79.9 gr.	
H4831	73.2 gr.	75.9 gr.	78.7 gr.	80.1 gr.	81.5 gr.		
IMR 7828	74.6 gr.	76.8 gr.	79.0 gr.	80.1 gr.	81.1 gr.	82.2 gr.	
Alliant RL-25	76.7 gr.	78.8 gr.	80.9 gr.	82.0 gr.	83.1 gr.	84.1 gr.	85.2 gr.
RETUMBO	78.4 gr.	80.9 gr.	83.3 gr.	84.6 gr.	85.8 gr.		
MAGNUM	79.1 gr.	82.5 gr.	85.9 gr.	87.6 gr.	89.3 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.560"
G1 B.C.: 0.626
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
IMR 4350	66.2 gr.	68.8 gr.	71.5 gr.			
H4350	62.5 gr.	67.3 gr.	72.1 gr.			
IMR 4831	68.4 gr.	70.9 gr.	73.4 gr.			
Alliant RL-22	71.3 gr.	73.6 gr.	75.9 gr.	77.0 gr.		
IMR 7828	72.6 gr.	75.1 gr.	77.6 gr.	78.8 gr.	80.1 gr.	81.3 gr.
H4831	73.1 gr.	75.8 gr.	78.5 gr.	79.9 gr.		
Alliant RL-25	75.9 gr.	78.1 gr.	80.2 gr.	81.3 gr.	82.3 gr.	
RETUMBO	77.8 gr.	80.2 gr.	82.6 gr.	83.8 gr.		
MAGNUM	80.6 gr.	83.7 gr.	86.7 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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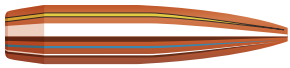
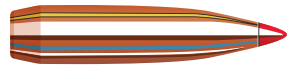
208 GRAIN BULLETS

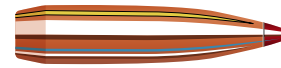
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 3.560"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.560"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.560"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**
H4350	58.3 gr.	63.1 gr.	67.8 gr.	72.6 gr.		
IMR 4350	62.5 gr.	65.9 gr.	69.3 gr.			
IMR 4831	67.0 gr.	69.5 gr.	71.9 gr.	74.4 gr.	75.7 gr.	
Alliant RL-22	70.0 gr.	72.1 gr.	74.2 gr.	76.3 gr.	77.4 gr.	
IMR 7828	71.1 gr.	73.4 gr.	75.6 gr.	77.9 gr.	79.1 gr.	80.2 gr.
H4831 SC	68.9 gr.	72.6 gr.	76.2 gr.	79.9 gr.		
Alliant RL-25	73.7 gr.	75.8 gr.	78.0 gr.	80.1 gr.	81.2 gr.	82.3 gr.
MAGNUM	75.2 gr.	78.1 gr.	80.9 gr.	83.8 gr.	85.3 gr.	86.7 gr.

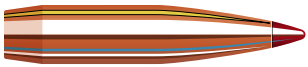
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.700"
G1 B.C.: 0.673
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**
IMR 4831	66.5 gr.	69.0 gr.	71.6 gr.	74.1 gr.	
Alliant RL-22	70.2 gr.	72.5 gr.	74.9 gr.		
H4831	71.1 gr.	73.9 gr.	76.8 gr.	79.6 gr.	
IMR 7828	72.9 gr.	75.1 gr.	77.3 gr.	79.5 gr.	80.6 gr.
Alliant RL-25	74.5 gr.	76.7 gr.	79.0 gr.	81.3 gr.	

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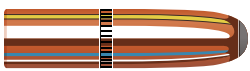
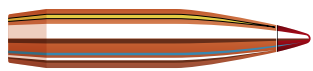
220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.545"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.560"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**	**2900**
H4350	60.7 gr.	63.5 gr.	66.4 gr.	69.2 gr.	70.6 gr.	
IMR 4350	58.5 gr.	63.0 gr.	67.5 gr.			
IMR 4831	64.4 gr.	67.3 gr.	70.1 gr.	73.0 gr.	74.5 gr.	
Alliant RL-22	68.2 gr.	70.5 gr.	72.9 gr.	75.3 gr.	76.5 gr.	
IMR 7828	68.6 gr.	71.2 gr.	73.8 gr.	76.4 gr.	77.7 gr.	
H4831 SC	66.1 gr.	70.0 gr.	73.9 gr.	77.8 gr.		
Alliant RL-25	71.8 gr.	74.1 gr.	76.5 gr.	78.8 gr.	80.0 gr.	
MAGNUM	73.7 gr.	76.7 gr.	79.8 gr.	82.8 gr.	84.3 gr.	85.8 gr.

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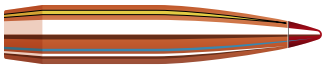
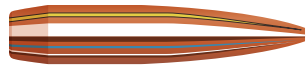
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.560"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.560"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**
H4350	59.3 gr.	63.5 gr.	67.8 gr.		
IMR 4350	61.4 gr.	65.1 gr.	68.8 gr.		
IMR 4831	66.5 gr.	69.0 gr.	71.6 gr.	74.1 gr.	
Alliant RL-22	68.8 gr.	71.1 gr.	73.4 gr.	75.7 gr.	
IMR 7828	68.5 gr.	71.4 gr.	74.4 gr.	77.4 gr.	
H4831 SC	66.8 gr.	70.9 gr.	75.0 gr.		
Alliant RL-25	71.9 gr.	74.4 gr.	76.9 gr.	79.4 gr.	80.6 gr.
MAGNUM	74.4 gr.	77.7 gr.	80.3 gr.	83.2 gr.	84.7 gr.

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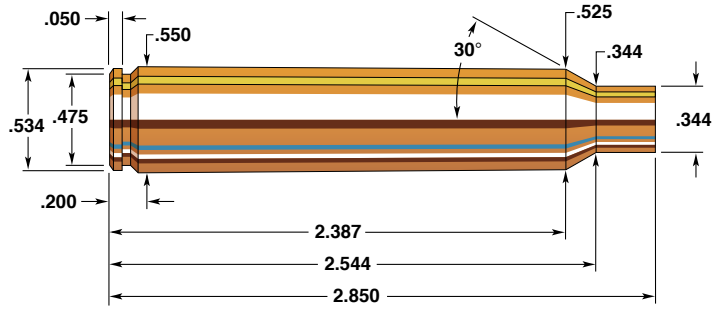


300 Remington Ultra Magnum

Rifle:	Remington 700	**Bullet Diameter:**	0.308"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.600"
Case:	Hornady	**Max. Case Length:**	2.850"
Primer:	Federal 215	**Case Trim Length:**	2.840"

Remington, not to be kept out of the 30 caliber magnum sweepstakes, introduced the powerful new 300 Remington Ultra Mag in 1999. Apparently Remington wanted to enter the new millennium boasting of the ultimate flat-shooting long distance hunting factory round. Use of the beltless 404 Jeffrey case as the basis for the new cartridge gave Remington the means of besting the case capacity of the 300 Weatherby by 13% and that of the 300 Winchester Magnum by 20%.

The 300 Remington Ultra Mag in factory loads can push a 180 grain bullet out at 3300 fps from a 26" barrel. Given the cartridge's preference for slower burning powders, the long barrel helps exploit the full potential of the round.

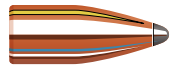
The new 220 grain ELD-X® bullet was designed for cartridges like the 300 Ultra Mag, where you can combine a low drag, accurate hunting bullet with a profile that doesn't require seating past the MAX COL.

The 30 caliber Hornady Bullet line is well suited to getting the best from this powerful new cartridge. Hornady Bullets featuring the exclusive InterLock employ a special imbedded ring in the bullet's jacket, binding core and jacket firmly for best expansion.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 3.500"
G1 B.C.: 0.290



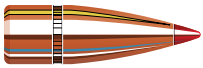
110 gr. SP
Item No. 3010
C.O.L.: 3.500"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)				
POWDER	**3400**	**3500**	**3600**	**3700**	**3800**
VIHT N-160	85.2 gr.	87.4 gr.	89.6 gr.	91.8 gr.	94.0 gr.
IMR 4831	86.6 gr.	88.8 gr.	91.0 gr.	93.2 gr.	95.5 gr.
Alliant RL-22	90.0 gr.	92.0 gr.	93.9 gr.	95.9 gr.	97.9 gr.
H4831	89.6 gr.	92.5 gr.	95.3 gr.	98.1 gr.	101.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.308"



125 gr. SST®
Item No. 3019
C.O.L.: 3.575"
G1 B.C.: 0.305

	VELOCITY (FPS – feet per second)				
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**
VIHT N-160	79.9 gr.	82.4 gr.	84.9 gr.	87.3 gr.	89.8 gr.
IMR 4831	81.3 gr.	83.9 gr.	86.5 gr.	89.1 gr.	91.7 gr.
Alliant RL-22	84.7 gr.	87.0 gr.	89.3 gr.	91.7 gr.	94.0 gr.
IMR 7828	85.8 gr.	88.3 gr.	90.9 gr.	93.4 gr.	95.9 gr.
NORMA MRP	87.0 gr.	89.2 gr.	91.5 gr.	93.7 gr.	95.9 gr.
H4831	84.4 gr.	87.4 gr.	90.4 gr.	93.4 gr.	96.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

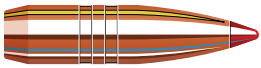
130 gr. SP
Item No. 3020
C.O.L.: 3.520"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**3200**	**3300**	**3400**	**3500**	**3600**	**3700**
IMR 4831	77.8 gr.	80.2 gr.	82.6 gr.	85.0 gr.	87.4 gr.	
H4831	84.8 gr.	87.6 gr.	90.4 gr.	93.2 gr.	96.0 gr.	
Alliant RL-22	87.4 gr.	89.6 gr.	91.9 gr.	94.2 gr.	96.5 gr.	98.8 gr.
IMR 7828	87.4 gr.	89.7 gr.	92.0 gr.	94.3 gr.	96.6 gr.	
VIHT N-165	84.6 gr.	88.1 gr.	91.5 gr.	94.9 gr.	98.3 gr.	101.7 gr.

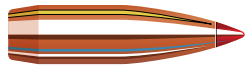
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

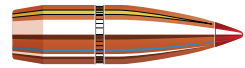
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



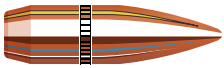
150 gr. GMX®
Item No. 30370
C.O.L.: 3.575"
G1 B.C.: 0.415



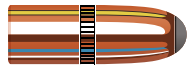
150 gr. InterBond®
Item No. 30309
C.O.L.: 3.575"
G1 B.C.: 0.415



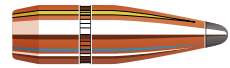
150 gr. SST®
Item No. 30302
C.O.L.: 3.575"
G1 B.C.: 0.415



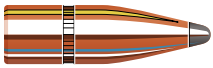
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 3.520"
G1 B.C.: 0.398



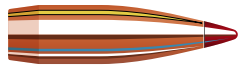
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 3.355"
G1 B.C.: 0.186



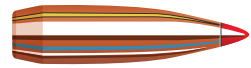
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 3.575"
G1 B.C.: 0.349



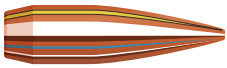
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 3.575"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 3.600"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 3.600"
G1 B.C.: 0.435



^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 3.600"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)						
POWDER	**3100**	**3200**	**3300**	**3400**	**3450**	**3500**	**3550**
IMR 4831	79.7 gr.	82.4 gr.	85.1 gr.	87.9 gr.			
Alliant RL-23	80.8 gr.	83.3 gr.	86.0 gr.	88.6 gr.	89.9 gr.	91.3 gr.	
Alliant RL-22	80.5 gr.	83.5 gr.	86.6 gr.	89.6 gr.	91.1 gr.		
IMR 7828	84.1 gr.	86.5 gr.	88.8 gr.	91.1 gr.	92.2 gr.	93.4 gr.	94.5 gr.
H4831	83.1 gr.	86.0 gr.	88.8 gr.	91.7 gr.	93.1 gr.	94.5 gr.	
Alliant RL-25	85.3 gr.	88.3 gr.	91.3 gr.	94.2 gr.	95.7 gr.	97.2 gr.	
IMR 7977	86.4 gr.	89.1 gr.	91.9 gr.	94.6 gr.	96.0 gr.		
H1000	88.3 gr.	91.4 gr.	94.4 gr.	97.4 gr.	98.9 gr.		
MAGNUM	90.7 gr.	94.6 gr.	98.6 gr.	102.5 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

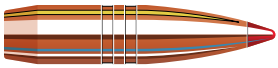
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

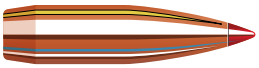
INDICATES MAXIMUM LOAD — USE WITH CAUTION

165-168 GRAIN BULLETS

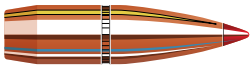
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"



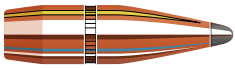
165 gr. GMX®
Item No. 30470
C.O.L.: 3.580"
G1 B.C.: 0.447



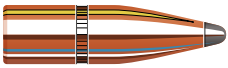
165 gr. InterBond®
Item No. 30459
C.O.L.: 3.565"
G1 B.C.: 0.447



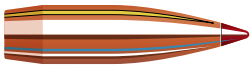
165 gr. SST®
Item No. 30452
C.O.L.: 3.565"
G1 B.C.: 0.447



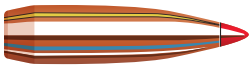
165 gr. InterLock® BTSP
Item No. 3045
C.O.L.: 3.565"
G1 B.C.: 0.435



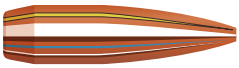
165 gr. InterLock® SP
Item No. 3040
C.O.L.: 3.565"
G1 B.C.: 0.387



***168 gr. ELD® Match**
Item No. 30506
C.O.L.: 3.600"
G1 B.C.: 0.490
G7 B.C.: 0.250



168 gr. A-MAX®
Item No. 30502
C.O.L.: 3.600"
G1 B.C.: 0.475



^168 gr. BTHP Match™
Item No. 30501
C.O.L.: 3.600"
G1 B.C.: 0.450

	VELOCITY (FPS – feet per second)						
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3350**	**3400**
IMR 4831	73.9 gr.	77.1 gr.	80.3 gr.	83.5 gr.			
Alliant RL-23	76.7 gr.	79.6 gr.	82.5 gr.	85.4 gr.	88.3 gr.		
Alliant RL-22	76.5 gr.	79.7 gr.	82.8 gr.	86.0 gr.	89.2 gr.		
IMR 7828	79.0 gr.	81.6 gr.	84.3 gr.	86.9 gr.	89.5 gr.	90.8 gr.	92.1 gr.
H4831	77.8 gr.	81.0 gr.	84.2 gr.	87.3 gr.	90.5 gr.	92.1 gr.	
Alliant RL-25	81.4 gr.	84.3 gr.	87.1 gr.	90.0 gr.	92.9 gr.	94.3 gr.	
IMR 7977	83.0 gr.	85.7 gr.	88.4 gr.	91.1 gr.	93.8 gr.		
RETUMBO	84.3 gr.	87.2 gr.	90.0 gr.	92.9 gr.	95.8 gr.		
H1000	84.3 gr.	87.3 gr.	90.3 gr.	93.3 gr.	96.3 gr.	97.8 gr.	
MAGNUM	88.6 gr.	92.0 gr.	95.5 gr.	99.0 gr.			

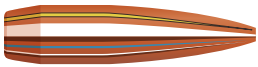
Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

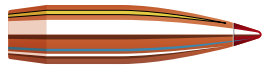
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

178-180 GRAIN BULLETS

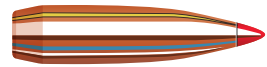
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



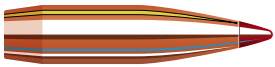
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.600"
G1 B.C.: 0.530



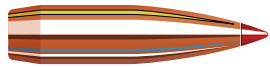
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.600"
G1 B.C.: 0.515
G7 B.C.: 0.259



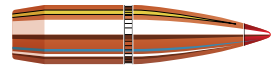
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.600"
G1 B.C.: 0.495



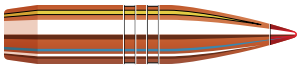
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.600"
G1 B.C.: 0.545
G7 B.C.: 0.275



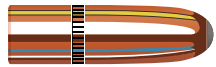
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.575"
G1 B.C.: 0.480



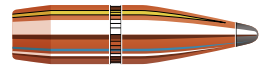
180 gr. SST®
Item No. 30702
C.O.L.: 3.575"
G1 B.C.: 0.480



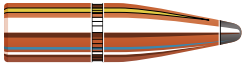
180 gr. GMX®
Item No. 30193
C.O.L.: 3.580"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.545"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.575"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.575"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3250**
IMR 7828	80.3 gr.	83.2 gr.	86.0 gr.	88.9 gr.	
Alliant RL-26	80.6 gr.	83.3 gr.	86.1 gr.	88.8 gr.	90.2 gr.
H4831	78.9 gr.	82.6 gr.	86.4 gr.		
Alliant RL-25	81.1 gr.	84.6 gr.	88.2 gr.	91.7 gr.	
IMR 7977	84.1 gr.	86.8 gr.	89.6 gr.	92.4 gr.	
RETUMBO	84.4 gr.	87.7 gr.	90.9 gr.	94.2 gr.	
H1000	84.9 gr.	88.3 gr.	91.7 gr.	95.1 gr.	
VIHT N-170	81.3 gr.	86.7 gr.	92.1 gr.		
MAGNUM	90.4 gr.	94.4 gr.	98.3 gr.		

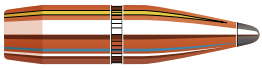
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"



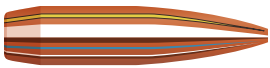
190 gr. InterLock® BTSP *(Discontinued)*
Item No. 3085
C.O.L.: 3.575"
G1 B.C.: 0.491

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 7828	76.3 gr.	79.4 gr.	82.6 gr.	85.8 gr.	89.0 gr.
H1000	77.6 gr.	81.3 gr.	85.0 gr.	88.6 gr.	92.3 gr.
Alliant RL-25	80.1 gr.	83.1 gr.	86.2 gr.	89.2 gr.	92.2 gr.
MAGPRO		83.7 gr.	87.1 gr.	90.5 gr.	
VIHT N-170	81.2 gr.	84.5 gr.	87.8 gr.	91.1 gr.	
RETUMBO	87.6 gr.	90.4 gr.	93.3 gr.	96.1 gr.	98.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.600"
G1 B.C.: 0.550
G7 B.C.: 0.311

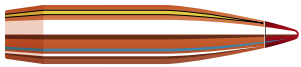
	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**	**3100**
H4831	73.2 gr.	77.2 gr.	81.2 gr.	85.2 gr.	87.2 gr.	
IMR 7828	75.9 gr.	79.5 gr.	83.0 gr.	86.6 gr.		
IMR 7977	75.8 gr.	79.9 gr.	83.9 gr.	87.9 gr.	89.9 gr.	
Alliant RL-25	81.1 gr.	83.9 gr.	86.7 gr.	89.5 gr.	90.9 gr.	
H1000	81.8 gr.	84.7 gr.	87.5 gr.	90.4 gr.	91.9 gr.	93.3 gr.
VIHT N-170	84.1 gr.	86.8 gr.	89.5 gr.	92.2 gr.		
MAGNUM	83.1 gr.	87.0 gr.	91.0 gr.	94.9 gr.		
Alliant RL-33	90.9 gr.	93.1 gr.	95.3 gr.	97.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.595"
G1 B.C.: 0.626
G7 B.C.: 0.315

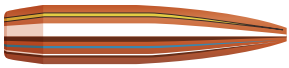
	VELOCITY (FPS – feet per second)						
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**	**3100**	**3150**
IMR 7828	72.9 gr.	76.8 gr.	80.8 gr.	84.7 gr.	86.7 gr.		
Alliant RL-25	78.7 gr.	81.5 gr.	84.2 gr.	86.9 gr.	88.3 gr.	89.7 gr.	
IMR 7977	76.1 gr.	79.9 gr.	83.6 gr.	87.4 gr.	89.2 gr.		
RETUMBO	80.9 gr.	83.8 gr.	86.6 gr.	89.4 gr.	90.8 gr.	92.2 gr.	93.6 gr.
H1000	79.0 gr.	82.5 gr.	86.0 gr.	89.5 gr.	91.2 gr.	92.9 gr.	
VIHT N-170	81.5 gr.	84.4 gr.	87.2 gr.	90.0 gr.	91.5 gr.		
MAGNUM	77.3 gr.	81.9 gr.	86.5 gr.	91.1 gr.	93.3 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

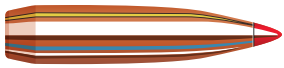
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

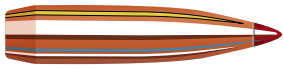
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 3.600"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.595"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.595"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
Alliant RL-26	80.5 gr.	83.3 gr.	86.1 gr.	87.5 gr.	88.9 gr.	
IMR 7828	77.0 gr.	81.4 gr.	85.7 gr.	87.9 gr.		
IMR 7977	76.8 gr.	81.6 gr.	86.5 gr.	88.9 gr.		
Alliant RL-25	83.6 gr.	86.2 gr.	88.8 gr.	90.1 gr.	91.4 gr.	92.7 gr.
RETUMBO	84.1 gr.	87.0 gr.	89.8 gr.	91.3 gr.	92.7 gr.	94.1 gr.
H1000	80.5 gr.	85.1 gr.	89.6 gr.	91.9 gr.	94.2 gr.	
MAGNUM	82.5 gr.	86.9 gr.	91.1 gr.	93.3 gr.		
VIHT N-170	86.9 gr.	89.7 gr.	92.5 gr.	93.9 gr.		

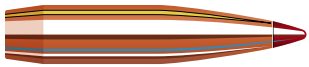
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 3.900"
G1 B.C.: 0.673
G7 B.C.: 0.336

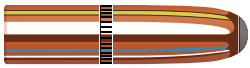
	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**
IMR 7828	74.7 gr.	78.5 gr.	82.3 gr.	86.1 gr.	
Alliant RL-25	76.4 gr.	80.1 gr.	83.9 gr.	87.5 gr.	89.4 gr.
IMR 7977	76.7 gr.	81.1 gr.	85.5 gr.		
H1000	78.5 gr.	82.5 gr.	86.5 gr.	90.5 gr.	
RETUMBO	80.2 gr.	83.5 gr.	86.8 gr.	90.1 gr.	91.7 gr.
VIHT N-170	80.2 gr.	84.1 gr.	88.0 gr.		
MAGNUM	82.1 gr.	85.4 gr.	88.8 gr.	92.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

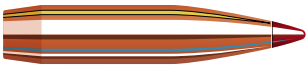
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.575"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.600"
G1 B.C.: 0.650
G7 B.C.: 0.325

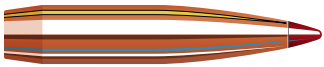
	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**
IMR 7828	72.3 gr.	76.5 gr.	80.9 gr.	85.2 gr.	
Alliant RL-26	76.3 gr.	79.6 gr.	82.8 gr.	86.1 gr.	87.7 gr.
IMR 7977	73.2 gr.	78.3 gr.	83.5 gr.		
Alliant RL-25	77.3 gr.	81.0 gr.	84.7 gr.	88.4 gr.	90.3 gr.
H1000	78.5 gr.	82.5 gr.	86.5 gr.	90.4 gr.	
RETUMBO	80.0 gr.	83.3 gr.	86.6 gr.	89.9 gr.	91.6 gr.
MAGNUM	78.1 gr.	82.9 gr.	87.8 gr.	92.7 gr.	
VIHT N-170	81.2 gr.	84.6 gr.	88.0 gr.	91.3 gr.	93.0 gr.
Alliant RL-33	88.0 gr.	91.3 gr.	94.7 gr.	98.0 gr.	99.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

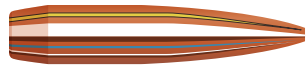
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.600"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.600"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2850**	**2900**
IMR 7828	74.0 gr.	78.0 gr.	82.0 gr.	84.0 gr.	
Alliant RL-26	77.1 gr.	80.0 gr.	82.9 gr.	84.3 gr.	
IMR 7977	76.0 gr.	80.0 gr.	84.0 gr.	85.9 gr.	
Alliant RL-25	79.4 gr.	82.1 gr.	84.9 gr.	86.2 gr.	87.6 gr.
RETUMBO	80.9 gr.	83.6 gr.	86.4 gr.	87.8 gr.	89.1 gr.
H1000	76.5 gr.	81.3 gr.	86.1 gr.	88.5 gr.	
MAGNUM	76.8 gr.	81.7 gr.	86.7 gr.	89.1 gr.	91.6 gr.
VIHT N-170	82.9 gr.	85.7 gr.	88.6 gr.	90.0 gr.	
Alliant RL-33	89.0 gr.	91.6 gr.	94.2 gr.	95.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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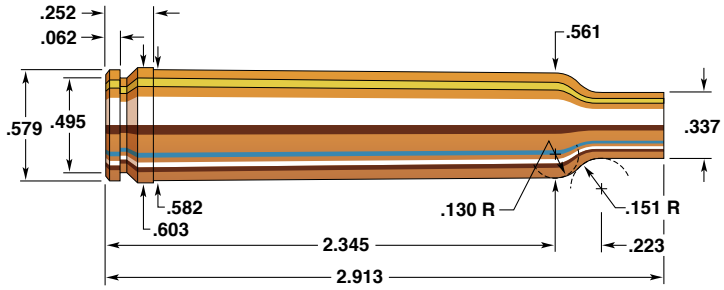
^__NOTE:__ This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.



30-378 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.308"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.648"
Case:	Hornady	**Max. Case Length:**	2.913"
Primer:	Federal 215	**Case Trim Length:**	2.903"

In the 8th Edition of Cartridges of the World (Barnes & McPherson), the editors note that the 30-378 Weatherby Magnum "was developed specifically for use in 1000-yard benchrest competition." The simple expedient of necking down the very large 378 Weatherby Magnum case to take 30 caliber bullets created the new wildcat. Given its pedigree, the 30-378 retains the signature Weatherby double-radius shoulder.

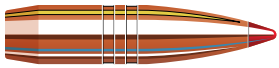
Feeding this powerhouse takes some doing (its capacity is a full third greater than the 300 Weatherby Magnum), but with new slow burning powders the results are excellent. The 30-378 can propel 180 grain and heavier bullets at muzzle velocities from 3000 to 3300 fps.

For long distance shooting, we especially recommend our heavier ELD® Match and ELD-X® bullets.

We do not encourage loadings well below top velocities with any of the slower burning powders. For those who might like to prolong barrel life, cooling down between rounds should be quite helpful.

165 GRAIN BULLETS

SECTIONAL DENSITY: 0.248
DIAMETER: 0.308"



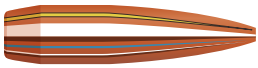
165 gr. GMX®
Item No. 30470
C.O.L.: 3.645"
G1 B.C.: 0.447

	VELOCITY (FPS – feet per second)				
POWDER	**3100**	**3200**	**3300**	**3400**	**3500**
H1000	96.9 gr.	99.8 gr.	102.7 gr.	105.7 gr.	108.6 gr.
MAGNUM		99.2 gr.	102.7 gr.	106.2 gr.	109.7 gr.
RETUMBO	98.5 gr.	101.1 gr.	103.6 gr.	106.2 gr.	108.8 gr.
VIHT N-170	99.2 gr.	102.2 gr.	105.1 gr.	108.1 gr.	
Alliant RL-33	107.0 gr.	109.7 gr.	112.5 gr.	115.3 gr.	118.1 gr.
US 869		110.7 gr.	114.4 gr.	118.1 gr.	121.8 gr.

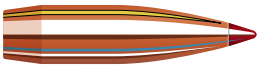
Create custom ballistic tables using our online calculators at hornady.com/ballistics

178-180 GRAIN BULLETS

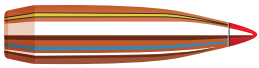
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"



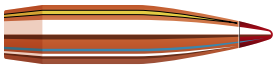
^178 gr. BTHP Match™
Item No. 30715
C.O.L.: 3.630"
G1 B.C.: 0.530



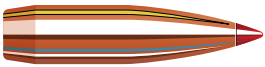
***178 gr. ELD® Match**
Item No. 30713
C.O.L.: 3.630"
G1 B.C.: 0.515
G7 B.C.: 0.259



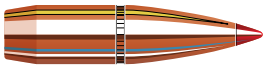
178 gr. A-MAX®
(Discontinued)
Item No. 30712
C.O.L.: 3.630"
G1 B.C.: 0.495



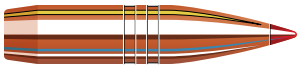
***178 gr. ELD-X®**
Item No. 3074
C.O.L.: 3.630"
G1 B.C.: 0.545
G7 B.C.: 0.275



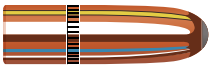
180 gr. InterBond®
Item No. 30709
C.O.L.: 3.630"
G1 B.C.: 0.480



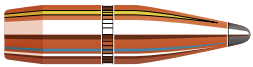
180 gr. SST®
Item No. 30702
C.O.L.: 3.630"
G1 B.C.: 0.480



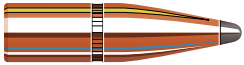
180 gr. GMX®
Item No. 30193
C.O.L.: 3.640"
G1 B.C.: 0.485



180 gr. InterLock® RN
Item No. 3075
C.O.L.: 3.600"
G1 B.C.: 0.241



180 gr. InterLock® BTSP
Item No. 3072
C.O.L.: 3.630"
G1 B.C.: 0.452



180 gr. InterLock® SP
Item No. 3070
C.O.L.: 3.630"
G1 B.C.: 0.425

	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 7977	91.3 gr.	94.7 gr.	98.1 gr.	101.4 gr.	
H1000	96.5 gr.	99.2 gr.	102.0 gr.	104.7 gr.	
RETUMBO	98.2 gr.	100.6 gr.	103.0 gr.	105.5 gr.	107.9 gr.
VIHT N-170	98.7 gr.	101.4 gr.	104.1 gr.	106.7 gr.	
MAGNUM	98.2 gr.	101.3 gr.	104.3 gr.	107.4 gr.	
Alliant RL-33	106.0 gr.	108.6 gr.	111.2 gr.	113.8 gr.	
US 869	107.4 gr.	110.5 gr.	113.5 gr.	116.6 gr.	119.7 gr.

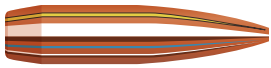
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

195 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.308"



^195 gr. BTHP Match™
Item No. 3095
C.O.L.: 3.645"
G1 B.C.: 0.550
G7 B.C.: 0.311

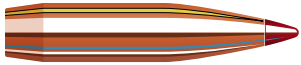
	VELOCITY (FPS – feet per second)				
POWDER	**3000**	**3100**	**3200**	**3300**	**3400**
H1000	96.5 gr.	99.7 gr.	102.9 gr.		
MAGNUM	97.2 gr.	100.2 gr.	103.2 gr.	106.3 gr.	
RETUMBO	97.8 gr.	100.6 gr.	103.5 gr.	106.3 gr.	
VIHT N-170	99.3 gr.	102.5 gr.	105.7 gr.		
US 869	106.9 gr.	109.8 gr.	112.7 gr.	115.7 gr.	118.6 gr.
Alliant RL-33	107.4 gr.	109.8 gr.	112.2 gr.	114.7 gr.	
Alliant RL-50	111.5 gr.	114.2 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.301
DIAMETER: 0.308"



***200 gr. ELD-X®**
Item No. 3076
C.O.L.: 3.645"
G1 B.C.: 0.626
G7 B.C.: 0.315

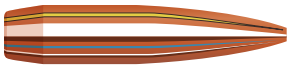
	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
H1000	95.4 gr.	98.1 gr.	100.8 gr.	103.5 gr.	
RETUMBO	96.4 gr.	99.0 gr.	101.5 gr.	104.1 gr.	
VIHT N-170	97.3 gr.	99.8 gr.	102.4 gr.	104.8 gr.	
MAGNUM	94.9 gr.	98.7 gr.	102.4 gr.	106.1 gr.	
Alliant RL-33	104.2 gr.	106.8 gr.	109.3 gr.	111.9 gr.	114.4 gr.
US 869	104.6 gr.	107.8 gr.	110.9 gr.	114.1 gr.	117.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

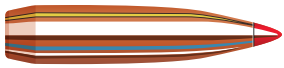
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

208 GRAIN BULLETS

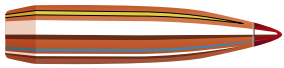
SECTIONAL DENSITY: 0.313
DIAMETER: 0.308"



^208 gr. BTHP Match™
Item No. 30733
C.O.L.: 0.645"
G1 B.C.: 0.620
G7 B.C.: 0.311



^208 gr. A-MAX®
(Discontinued)
Item No. 30732
C.O.L.: 3.645"
G1 B.C.: 0.648
G7 B.C.: 0.325



***208 gr. ELD® Match**
Item No. 30731
C.O.L.: 3.645"
G1 B.C.: 0.670
G7 B.C.: 0.335

	VELOCITY (FPS – feet per second)			
POWDER	**2900**	**3000**	**3100**	**3200**
H1000	92.7 gr.	96.6 gr.	100.5 gr.	
RETUMBO	94.8 gr.	97.7 gr.	100.5 gr.	103.4 gr.
VIHT N-170	96.5 gr.	99.8 gr.	103.1 gr.	
Alliant RL-33	103.5 gr.	106.1 gr.	108.6 gr.	111.2 gr.
US 869	104.4 gr.	107.7 gr.	110.9 gr.	114.1 gr.

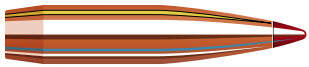
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

212 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.308"



***212 gr. ELD-X®**
Item No. 3077
C.O.L.: 4.000"
G1 B.C.: 0.673
G7 B.C.: 0.336

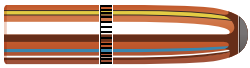
	VELOCITY (FPS – feet per second)			
POWDER	**2900**	**3000**	**3100**	**3200**
H1000	91.7 gr.	96.2 gr.	100.7 gr.	
VIHT N-170	92.4 gr.	96.8 gr.	101.3 gr.	
RETUMBO	93.0 gr.	97.0 gr.	101.0 gr.	
Alliant RL-33	102.1 gr.	105.3 gr.	108.5 gr.	111.7 gr.
US 869	104.1 gr.	107.5 gr.	110.8 gr.	114.1 gr.
Alliant RL-50	104.4 gr.	108.6 gr.	112.7 gr.	
H50BMG	107.3 gr.	110.6 gr.	113.8 gr.	
VIHT 20N29	111.4 gr.	114.9 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

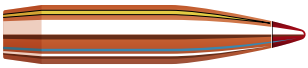
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.331
DIAMETER: 0.308"



220 gr. InterLock® RN
Item No. 3090
C.O.L.: 3.645"
G1 B.C.: 0.300



***220 gr. ELD-X®**
Item No. 3078
C.O.L.: 3.645"
G1 B.C.: 0.650
G7 B.C.: 0.325

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3150**
RETUMBO	92.3 gr.	95.3 gr.	98.2 gr.	101.1 gr.	
MAGNUM	92.2 gr.	96.0 gr.	99.7 gr.		
VIHT N-170	92.2 gr.	96.1 gr.	100.0 gr.		
Alliant RL-33	100.4 gr.	103.2 gr.	106.0 gr.	108.8 gr.	
US 869	103.2 gr.	105.9 gr.	108.6 gr.	111.3 gr.	112.7 gr.
Alliant RL-50	104.5 gr.	107.6 gr.	110.8 gr.		
H50BMG	103.9 gr.	107.6 gr.	111.3 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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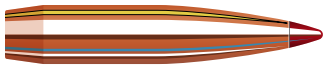
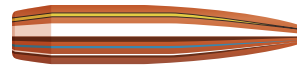
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.339
DIAMETER: 0.308"



***225 gr. ELD® Match**
Item No. 30904
C.O.L.: 3.645"
G1 B.C.: 0.730
G7 B.C.: 0.367



^225 gr. BTHP Match™
Item No. 30903
C.O.L.: 3.645"
G1 B.C.: 0.670
G7 B.C.: 0.336

	VELOCITY (FPS – feet per second)			
POWDER	**2800**	**2900**	**3000**	**3100**
MAGNUM	92.7 gr.	96.2 gr.	99.8 gr.	103.3 gr.
Alliant RL-33	101.2 gr.	103.9 gr.	106.7 gr.	109.4 gr.
US 869	102.5 gr.	105.6 gr.	108.7 gr.	111.8 gr.
Alliant RL-50	105.5 gr.	108.6 gr.	111.8 gr.	115.0 gr.
H50BMG	105.2 gr.	108.8 gr.	112.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

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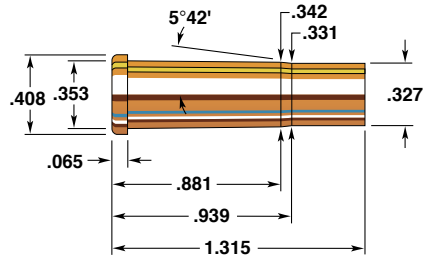
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



32-20 Winchester (32-20 WCF)

Rifle:	Marlin 1894CL	**Bullet Diameter:**	.312"
Barrel:	18½", 1 in 20" Twist	**Maximum COL:**	1.592"
Case:	Remington	**Max. Case Length:**	1.315"
Primer:	Federal 200	**Case Trim Length:**	1.305"

The 32-20 Winchester was introduced in 1892 as a black powder rifle cartridge for varmints and small game. It was suited to this task perfectly. As with several other contemporary cartridges, it was soon chambered in the Colt single action and other revolvers. It became popular, and was offered in other firearms by a variety of manufacturers. In 1895, Winchester necked it down to 25 caliber, forming the 25-20 Winchester Repeater. Thirty-three years later, Winchester carried their cartridge one step further by necking it down to 22 caliber, naming it the 218 Bee. Smokeless powder prompted ammunition manufacturers to produce a high velocity 32-20 load for the Winchester Model 1892 with an 80 grain bullet at 2130 fps.

High velocity loads should not be fired in older revolvers and rifles. Data below was developed in the modern Marlin 1894CL, and should only be used in firearms of comparable strength. Note that previous editions of the *Hornady Handbook of Cartridge Reloading* listed data for .308" diameter bullets. These bullets are no longer the best choice in the 100 grain range due to the addition of the 32 caliber 100 grain HP-XTP®. The 100 grain .312" HP-XTP® is a better choice because it is the diameter that is intended to be used in the 32-20 Winchester. Also, it has a cannelure which helps to ensure that the cartridge overall length will remain consistent. Hornady 85 and 100 grain HP-XTP® bullets are designed for optimum performance between 750 and 1550 fps, and will work best on varmints.

85 GRAIN BULLETS

SECTIONAL DENSITY: 0.125
DIAMETER: 0.312"

85 gr. XTP®
Item No. 32050
C.O.L.: 1.550"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
Alliant 2400		10.5 gr.	11.2 gr.	11.9 gr.	12.6 gr.	
VIHT N-110	9.4 gr.	10.3 gr.	11.2 gr.	12.1 gr.	12.9 gr.	13.8 gr.
Accurate No. 9		11.5 gr.	12.1 gr.	12.7 gr.	13.3 gr.	13.9 gr.
H110		11.2 gr.	12.2 gr.	13.2 gr.	14.2 gr.	
IMR 4227		13.6 gr.	14.3 gr.	15.0 gr.	15.6 gr.	16.3 gr.

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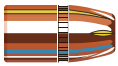
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.147
DIAMETER: 0.312"



100 gr. XTP®
Item No. 32070
C.O.L.: 1.550"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
Accurate No. 9	9.3 gr.	10.2 gr.	11.0 gr.	11.9 gr.	12.7 gr.	
H110		11.0 gr.	12.1 gr.	13.2 gr.	14.3 gr.	15.4 gr.
IMR 4227	12.2 gr.	13.0 gr.	13.8 gr.	14.6 gr.	15.4 gr.	

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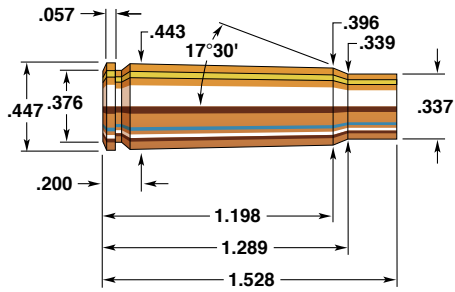


7.62 X 39mm, M43

Rifle:	SKS Carbine	**Bullet Diameter:**	0.308 – 0.310"
Barrel:	20", 1 in 7½" Twist	**Maximum COL:**	2.200"
Case:	Winchester	**Max. Case Length:**	1.528"
Primer:	Winchester WLR	**Case Trim Length:**	1.518"

The Soviet-German battle at Cholm in 1942 saw the introduction of a new cartridge, a new weapon and new military tactic; all German. The new German cartridge, the 8mm Kurz, was of intermediate, not full, rifle power and since most combat occurred at less than 400 yards, an intermediate cartridge was ideal for those ranges. Also, full automatic fire with these intermediate cartridges was far more controllable. The Soviets followed and in 1943 introduced a similar development, the 7.62 x 39mm (M43) cartridge.

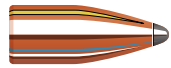
Soviet influence and military aid saw the worldwide spread of SKS carbines, AK-47 rifles, and RPD light machine guns, all chambered for the 7.62 x 39mm. It is currently the official military caliber of countries including China and Finland, and growing more popular. In the U. S. Reloaders can equal but seldom surpass 123 grain FMJ military or factory ballistics due to limited powder capacity. Foreign firearms have a .311" bore and are most accurate with .310" diameter Hornady Bullets. Two expander balls are included in Hornady die sets so .308" bullets can be used in 7.62 x 39mm cases.

This data was developed in a SKS carbine of Chinese origin. The 7.62 x 39mm case has been used by the Soviets to produce a smaller bore cartridge, the 5.45 x 39mm for the new AK-74 carbine. Also, the 22 PPC and 6mm PPC, the superbly accurate bench rest and varmint cartridges, are based on this 60 plus year old design.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.200"
G1 B.C.: 0.290



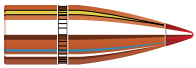
110 gr. SP
Item No. 3010
C.O.L.: 2.200"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 4227	17.3 gr.	18.6 gr.	19.8 gr.			
VIHT N-120	19.3 gr.	20.7 gr.	22.0 gr.	23.4 gr.		
Accurate 1680	19.3 gr.	21.1 gr.	22.9 gr.	24.8 gr.	26.6 gr.	28.5 gr.
IMR 4198	20.3 gr.	21.9 gr.	23.5 gr.	25.0 gr.	26.6 gr.	

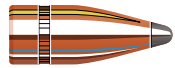
Create custom ballistic tables using our online calculators at hornady.com/ballistics

123 GRAIN BULLETS

SECTIONAL DENSITY: 0.183
DIAMETER: 0.310"



123 gr. SST®
Item No. 3142
C.O.L.: 2.190"
G1 B.C.: 0.295



123 gr. InterLock® SP
Item No. 3140
C.O.L.: 2.190"
G1 B.C.: 0.252

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
VIHT N-120	16.9 gr.	18.5 gr.	20.2 gr.	21.8 gr.		
H4198	17.2 gr.	18.9 gr.	20.6 gr.	22.3 gr.	24.0 gr.	25.7 gr.
Accurate 1680	20.1 gr.	20.8 gr.	22.3 gr.	23.9 gr.		
IMR 4198	22.0 gr.	22.8 gr.	23.7 gr.	24.6 gr.		
Alliant RL-7	21.9 gr.	23.0 gr.	24.2 gr.	25.4 gr.	26.6 gr.	
Accurate 2015	21.5 gr.	22.9 gr.	24.3 gr.	25.7 gr.	27.1 gr.	28.5 gr.
H322	25.0 gr.	26.2 gr.	27.3 gr.	28.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

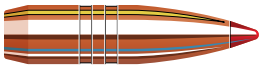
130 gr. SP
Item No. 3020
C.O.L.: 2.180"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
VIHT N-120	18.5 gr.	19.9 gr.	21.3 gr.	22.7 gr.		
H4198	19.2 gr.	20.6 gr.	21.9 gr.	23.2 gr.	24.5 gr.	25.8 gr.
IMR 4198	19.3 gr.	20.7 gr.	22.1 gr.	23.5 gr.	24.8 gr.	
Accurate 1680	19.4 gr.	20.9 gr.	22.4 gr.	23.9 gr.		
Alliant RL-7	20.6 gr.	22.0 gr.	23.3 gr.	24.7 gr.	26.0 gr.	
Accurate 2015	23.0 gr.	24.3 gr.	25.5 gr.	26.8 gr.	28.0 gr.	
IMR 3031	23.5 gr.	25.2 gr.	26.9 gr.			

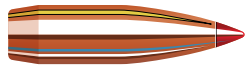
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-155 GRAIN BULLETS

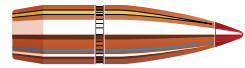
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



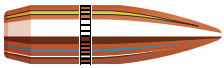
150 gr. GMX®
Item No. 30370
C.O.L.: 2.220"
G1 B.C.: 0.415



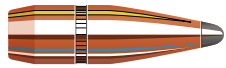
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.200"
G1 B.C.: 0.415



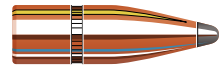
150 gr. SST®
Item No. 30302
C.O.L.: 2.220"
G1 B.C.: 0.415



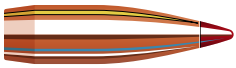
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.200"
G1 B.C.: 0.398



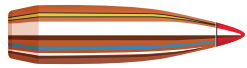
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.200"
G1 B.C.: 0.349



150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.200"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.200"
G1 B.C.: 0.439
G7 B.C.: 0.223

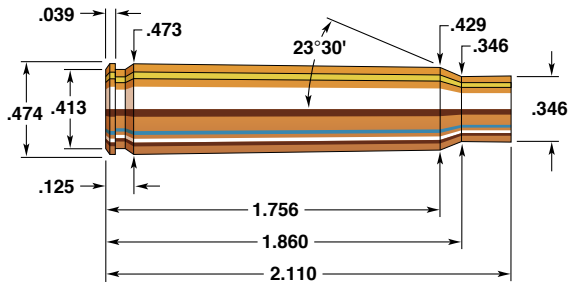


155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.200"
G1 B.C.: 0.435

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
VIHT N-130	13.4 gr.	16.1 gr.	18.7 gr.	21.4 gr.	24.1 gr.	26.8 gr.
H4198	17.4 gr.	18.8 gr.	20.2 gr.	21.5 gr.	22.9 gr.	
Accurate 1680	18.2 gr.	19.4 gr.	20.5 gr.	21.7 gr.	22.9 gr.	
IMR 4198	18.1 gr.	19.4 gr.	20.7 gr.	22.1 gr.	23.4 gr.	
Alliant RL-7	17.9 gr.	19.3 gr.	20.7 gr.	22.2 gr.	23.6 gr.	
Accurate 2015	19.5 gr.	21.0 gr.	22.5 gr.	24.0 gr.	25.5 gr.	27.0 gr.
IMR 3031	21.7 gr.	22.9 gr.	24.1 gr.	25.3 gr.	26.5 gr.	
Accurate 2230	21.7 gr.	23.1 gr.	24.6 gr.	26.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7.65 X 53mm Belgian Mauser

Rifle: . . Argentine Mauser Model 1891
Barrel: . . . . . 29", 1 in 9.8" Twist
Case: . . . . . Norma
Primer: . . . . . Federal 210

Bullet Diameter: . . . . . .0.312"
Maximum COL: . . . . . 2.990"
Max. Case Length: . . . . . .2.110"
Case Trim Length: . . . . . .2.100"

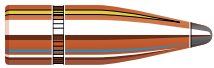
The 7.65mm cartridge, known commercially as the 7.65 x 53mm or 7.65mm Mauser, was designed initially for the Mauserwerke's Model 1889 rifle, the first small-bore, smokeless powder military rifle produced by that firm. Belgium purchased manufacturing rights to the Model 1889 and produced the rifle in several versions up until 1936. Mauser carried design features of the 1889 into its Model 1890 and 1891, arms adopted for military service by Turkey, Argentina, Bolivia, Peru, Paraguay, Ecuador, and Colombia.

Although Winchester and Remington at one time produced production rifles chambered for the 7.65mm Mauser, both discontinued production in the mid-1930s. The cartridge would have remained a virtual unknown in the U.S. had not large numbers of South American Mausers (principally from Argentina and Peru) been imported into the American market in the 1950s and early 1960s and again in the 1990s.

Reloaders using sporters based on the Model 1891 Mauser action should respect its strength limitations. It is not as strong as Mauser's more famous Model 1898, and maximum loads in the '91 should be developed cautiously. Model 1909 Mauser actions are of the stronger Model 1898 design. As with any older rifle and especially with surplus military imports, we recommend it be inspected by a knowledgeable gunsmith.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.220
DIAMETER: 0.312"



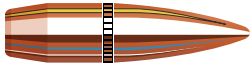
150 gr. InterLock® SP
Item No. 3120
C.O.L.: 2.815"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031		34.4 gr.	36.1 gr.	37.7 gr.	39.4 gr.	41.1 gr.
H4895		36.6 gr.	38.3 gr.	39.9 gr.	41.6 gr.	43.2 gr.
IMR 4064			38.4 gr.	40.3 gr.	42.2 gr.	44.1 gr.
IMR 4320	36.1 gr.	38.1 gr.	40.0 gr.	41.9 gr.	43.8 gr.	
H380		38.0 gr.	40.2 gr.	42.3 gr.	44.4 gr.	
IMR 4350	42.8 gr.	44.6 gr.	46.3 gr.	48.0 gr.	49.8 gr.	

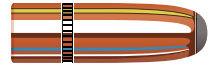
Create custom ballistic tables using our online calculators at hornady.com/ballistics

174 GRAIN BULLETS

SECTIONAL DENSITY: 0.255-0.258
DIAMETER: 0.3105-0.312"



174 gr. FMJ-BT
Item No. 3131
C.O.L.: 2.870"
G1 B.C.: 0.470



174 gr. InterLock® RN
Item No. 3130
C.O.L.: 2.850"
G1 B.C.: 0.262

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031		36.3 gr.	38.1 gr.	39.9 gr.	41.7 gr.
IMR 4064	36.0 gr.	37.9 gr.	39.9 gr.	41.9 gr.	43.8 gr.
H4895	36.5 gr.	38.4 gr.	40.2 gr.	42.0 gr.	43.9 gr.
IMR 4320		38.6 gr.	40.6 gr.	42.6 gr.	44.6 gr.
H380		39.9 gr.	42.2 gr.	44.5 gr.	46.9 gr.
IMR 4350	42.0 gr.	43.9 gr.	45.8 gr.	47.7 gr.	

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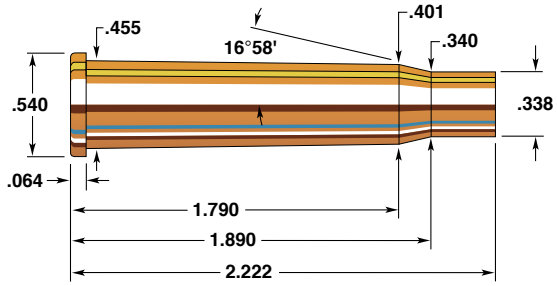


303 British

Rifle:	Enfield #4 Mark 2	**Bullet Diameter:**	0.310 – 0.312"
Barrel:	25¼", 1 in 10" Twist	**Maximum COL:**	3.075"
Case:	Hornady/Frontier	**Max. Case Length:**	2.222"
Primer:	Winchester WLR	**Case Trim Length:**	2.212"

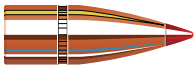
From 1888 to 1950, when it was replaced by the 7.62mm NATO cartridge, the 303 British was the military service cartridge of England and the British Empire. First loaded with 70 grains of blackpowder and a 215 grain Round Nose bullet, the 303's charge was replaced in 1892 with a more modern double-based smokeless powder load of cordite (long extruded strands of powder cut to the full length of the cartridge case chamber). Sporting ammunition in 303 British, loaded with more modern powders, is available from Winchester, Remington, Federal, Norma, and Hornady.

The 303 is roughly equivalent in power to the U.S. 30-40 Krag, itself a military cartridge later adapted to sporting purposes. Loaded with the Hornady 303 caliber 150 grain Spire Point, the 303 British is suitable for most North American hunting up to ranges of 200- 250 yards. For hunting at modest or close range, the 174 grain Round Nose is an effective and quite dependable performer.

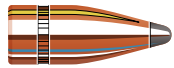
In our testing we found that case life of the 303 British in SMLE (Short Magazine Lee Enfield) actions tended to be short when cases are full length sized. Neck sizing cases will significantly extend case life. Check cases frequently for signs of separation. As with all older military rifles, careful inspection of the firearm by a knowledgeable gunsmith is highly recommended.

123 GRAIN BULLETS

SECTIONAL DENSITY: 0.183
DIAMETER: 0.310"



123 gr. SST®
Item No. 3142
C.O.L.: 2.900"
G1 B.C.: 0.295



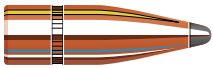
123 gr. InterLock® SP
Item No. 3140
C.O.L.: 2.855"
G1 B.C.: 0.252

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Accurate 2015	35.1 gr.	36.7 gr.	38.4 gr.	40.0 gr.	41.7 gr.	
IMR 3031	37.2 gr.	38.6 gr.	40.1 gr.	41.5 gr.	42.9 gr.	
Accurate 2460	36.5 gr.	38.2 gr.	40.0 gr.	41.7 gr.	43.4 gr.	45.1 gr.
H4895	36.9 gr.	38.6 gr.	40.3 gr.	42.1 gr.	43.8 gr.	45.5 gr.
VIHT N-135	36.9 gr.	38.6 gr.	40.4 gr.	42.1 gr.	43.9 gr.	45.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.220
DIAMETER: 0.312"



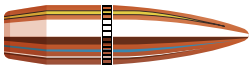
150 gr. InterLock® SP
Item No. 3120
C.O.L.: 2.992"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	30.0 gr.	32.0 gr.	34.0 gr.	36.1 gr.	38.1 gr.	
Accurate 2495	29.1 gr.	31.5 gr.	33.9 gr.	36.3 gr.	38.8 gr.	
H4895	29.9 gr.	32.2 gr.	34.4 gr.	36.7 gr.	38.9 gr.	
IMR 4320	32.8 gr.	34.8 gr.	36.7 gr.	38.7 gr.	40.7 gr.	
VARGET	33.0 gr.	35.0 gr.	36.9 gr.	38.8 gr.	40.8 gr.	
Accurate 2520	33.9 gr.	35.7 gr.	37.5 gr.	39.3 gr.	41.1 gr.	
IMR 4064	32.8 gr.	35.0 gr.	37.2 gr.	39.3 gr.	41.5 gr.	
Alliant RL-15	35.3 gr.	37.0 gr.	38.8 gr.	40.5 gr.	42.2 gr.	43.9 gr.
VIHT N-140	34.7 gr.	36.6 gr.	38.6 gr.	40.5 gr.	42.5 gr.	
WIN 748	33.7 gr.	36.1 gr.	38.5 gr.	40.9 gr.	43.4 gr.	

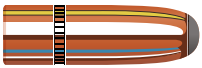
Create custom ballistic tables using our online calculators at hornady.com/ballistics

174 GRAIN BULLETS

SECTIONAL DENSITY: 0.255-0.258
DIAMETER: 0.3105-0.312"



174 gr. FMJ-BT
Item No. 3131
C.O.L.: 2.980"
G1 B.C.: 0.470



174 gr. InterLock® RN
Item No. 3130
C.O.L.: 2.945"
G1 B.C.: 0.262

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
H4895	29.7 gr.	31.6 gr.	33.6 gr.	35.5 gr.	37.4 gr.	
Accurate 2520	30.7 gr.	32.7 gr.	34.8 gr.	36.9 gr.	39.0 gr.	
IMR 4320	31.8 gr.	33.6 gr.	35.4 gr.	37.2 gr.	39.0 gr.	
VARGET	31.6 gr.	33.5 gr.	35.3 gr.	37.2 gr.	39.1 gr.	
IMR 4064	31.4 gr.	33.4 gr.	35.4 gr.	37.3 gr.	39.3 gr.	
WIN 748	32.8 gr.	34.6 gr.	36.4 gr.	38.2 gr.	40.0 gr.	
Alliant RL-15	33.3 gr.	35.0 gr.	36.6 gr.	38.3 gr.	40.0 gr.	
VIHT N-140	33.5 gr.	35.2 gr.	36.9 gr.	38.6 gr.	40.3 gr.	
IMR 4350	37.0 gr.	38.9 gr.	40.8 gr.	42.7 gr.	44.6 gr.	
H414	35.2 gr.	38.0 gr.	40.8 gr.	43.6 gr.	46.4 gr.	49.2 gr.

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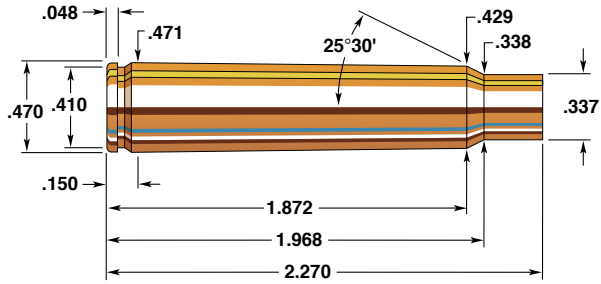


7.7 X 58mm Japanese

Rifle:	Type 99 Arisaka	**Bullet Diameter:**	.0.312"
Barrel:	.25½", 1 in 9½" Twist	**Maximum COL:**	.3.100"
Case:	Norma	**Max. Case Length:**	2.270"
Primer:	Federal 210	**Case Trim Length:**	2.260"

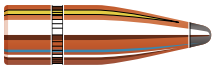
The 7.7mm Japanese was adopted as that nations's service cartridge in 1939. Chambered in the strong, modified Mauser design Type 99 action, the cartridge/rifle combination was intended as a replacement for the older Type 38 Japanese 6.5mm Arisaka. The 7.7mm service round was superior to the cartridge it was intended to replace, but the 6.5mm remained in service during WW II as full conversion to the new rifle could not be achieved.

Type 99's came to this country first as war souvenirs and later as war surplus collected by American occupation forces. The 7.7mm cartridge for which they were designed is similar in power to the 303 British and the 7.65 Mauser, and was loaded for military use with a 184 grain bullet to a velocity of 2390 fps. With the 303 caliber (.312") Hornady 150 grain Spire Point we were able to reach 2700 fps.

In the early years of reloading for the 7.7mm Japanese, shooters had to reform 30-06 cases to make up ammunition. Since there are considerable case dimension differences, the prudent reloader will use Boxer-primed cases now imported to this country from Norma. Eventually, however, we may revert to the former situation. With limited stocks of Type 99s coming on the market, interest in the 7.7mm Japanese continues to decline from its post-war peak. As with all older military rifles, careful inspection of the firearm by a knowledgeable gunsmith is highly recommended.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.220
DIAMETER: 0.312"



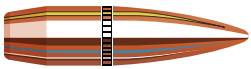
150 gr. InterLock® SP
Item No. 3120
C.O.L.: 3.000"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031		34.4 gr.	36.1 gr.	37.7 gr.	39.4 gr.	41.1 gr.
H4895		36.6 gr.	38.3 gr.	39.9 gr.	41.6 gr.	43.2 gr.
IMR 4064			38.4 gr.	40.3 gr.	42.2 gr.	44.1 gr.
IMR 4320	36.1 gr.	38.1 gr.	40.0 gr.	41.9 gr.	43.8 gr.	
H380		38.0 gr.	40.2 gr.	42.3 gr.	44.4 gr.	
IMR 4350	42.8 gr.	44.6 gr.	46.3 gr.	48.0 gr.	49.8 gr.	
Accurate 4350	45.1 gr.	46.8 gr.	48.6 gr.	50.3 gr.	52.0 gr.	53.8 gr.
VIHT N-160	48.5 gr.	50.0 gr.	51.6 gr.	53.2 gr.	54.8 gr.	56.3 gr.

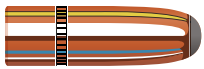
Create custom ballistic tables using our online calculators at hornady.com/ballistics

174 GRAIN BULLETS

SECTIONAL DENSITY: 0.255-0.258
DIAMETER: 0.3105-0.312"



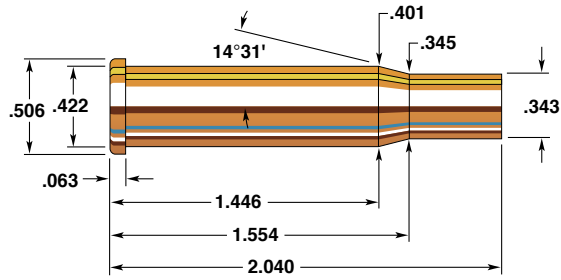
174 gr. FMJ-BT
Item No. 3131
C.O.L.: 3.025"
G1 B.C.: 0.470



174 gr. InterLock® RN
Item No. 3130
C.O.L.: 3.000"
G1 B.C.: 0.262

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 3031		36.3 gr.	38.1 gr.	39.9 gr.	41.7 gr.
IMR 4064	36.0 gr.	37.9 gr.	39.9 gr.	41.9 gr.	43.8 gr.
H4895	36.5 gr.	38.4 gr.	40.2 gr.	42.0 gr.	43.9 gr.
IMR 4320		38.6 gr.	40.6 gr.	42.6 gr.	44.6 gr.
H380		39.9 gr.	42.2 gr.	44.5 gr.	46.9 gr.
IMR 4350	42.0 gr.	43.9 gr.	45.8 gr.	47.7 gr.	
Accurate 4350	46.0 gr.	47.6 gr.	49.3 gr.		
VIHT N-160	47.2 gr.	49.2 gr.	51.3 gr.	53.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



32 Winchester Special

Rifle:	Winchester Model 94	**Bullet Diameter:**	.0.321"
Barrel:	.20", 1 in 16" Twist	**Maximum COL:**	2.565"
Case:	Remington	**Max. Case Length:**	2.040"
Primer:	Federal 210	**Case Trim Length:**	2.030"

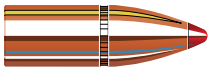
Introduced in Winchester's new Model 94 lever-action, the 32 Winchester Special came to market in 1895. It was an original cartridge design, intended from the outset for smokeless powder factory loads (and smokeless reloads, too), and thought to be able to attract shooters who wanted somewhat more power than the 30-30 Winchester (introduced in 1895 as well) and somewhat less power than the 30 U. S. Army (or 30-40 Krag). It met all these specifications, with initial factory loads achieving 100 fps more velocity than the 30-30.

Those who suppose that so-called "niche marketing" is a late 20th century invention have only to consider Winchester's goal in the late 19th century. Market segmentation is obviously nothing new, nor does it always work. It failed for Winchester with its 32 Winchester Special. Though the new cartridge met with some success, bullet availability has always hampered its acceptance. It never came close to challenging the 30-30 Winchester in popularity and longevity.

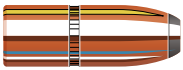
The power of the 32 Winchester Special is clearly very close to that of the 30-30. Hornady makes a 170 grain Flat Point bullet constructed with our famous Inner Groove and InterLock® designs. These features allow uniform, controlled expansion and good weight retention on impact, without shedding the jacket. The 32 Winchester Special is an adequate deer cartridge for ranges up to 150 yards.

165-170 GRAIN BULLETS

SECTIONAL DENSITY: 0.229-0.236
DIAMETER: 0.321"



165 gr. FTX® (32 Win)
Item No. 32005
C.O.L.: 2.545"
G1 B.C.: 0.310



170 gr. InterLock® FP
Item No. 3210
C.O.L.: 2.565"
G1 B.C.: 0.249

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
H4198	23.9 gr.	25.0 gr.	26.1 gr.	27.3 gr.		
TAC		25.8 gr.	28.5 gr.	31.3 gr.		
IMR 3031	27.5 gr.	28.8 gr.	30.2 gr.	31.5 gr.	32.8 gr.	
IMR 8208 XBR		28.6 gr.	30.1 gr.	31.7 gr.		
H4895		28.9 gr.	30.3 gr.	31.7 gr.	33.0 gr.	
Accurate 2460		28.5 gr.	30.2 gr.	32.0 gr.		
IMR 4895		29.6 gr.	30.8 gr.	32.0 gr.		
IMR 4064	30.0 gr.	31.2 gr.	32.6 gr.	34.0 gr.	35.5 gr.	
LEVERevolution			33.1 gr.	35.0 gr.	36.8 gr.	38.5 gr.
IMR 4320	30.9 gr.	32.4 gr.	33.9 gr.	35.4 gr.	36.9 gr.	
H380	30.7 gr.	32.5 gr.	34.4 gr.	36.2 gr.		

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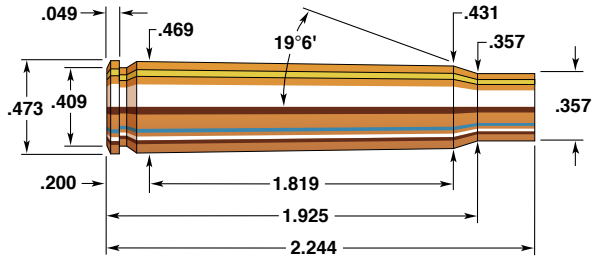

8 X 57mm Mauser

Rifle: . . . . . Mauser Model 1898
Barrel: . . . . . 24", 1 in 9¼" Twist
Case: . . . . . Remington
Primer: . . . . . .Remington 9½
Bullet Diameter: . . . . . 0.323"
Maximum COL: . . . . . 3.250"
Max. Case Length: . . . . . 2.247"
Case Trim Length: . . . . . 2.240"

Nearly all of today's popular cartridges have roots that can be traced back to one of four parent cartridges. Those cartridges are the 375 Holland & Holland, the 30-06 Springfield, the 404 Jeffery, and the 8mm Mauser. However, it is interesting to note the similarities between the 30-06 Springfield and the 8mm Mauser, the 8mm Mauser being 18 years the 30-06 Springfield's senior.

The 8mm Mauser was developed as the German military cartridge by (Peter) Paul Mauser in 1888 and was chambered in the Model 1888 rifle. The Model 1888 rifle used a bore diameter of .318" and the cartridge was identified as the 8 x 57mm J, with the J designating the .318" bore. Design changes were made to the cartridge in 1905, one of which was the bore diameter. It was changed from .318" to .323" and given a new designation, 8 x 57mm JS. There is confusion over the bore diameter change and signification letters to this day. Anyone possessing an 8 x 57mm and wishing to use this data should determine which bore diameter his gun has before proceeding. All data listed here use .323" bullets.

Hornady offers 6 different bullets for use in the 8 x 57mm JS. They are the 150 grain Spire Point, 170 grain Round Nose, 170 grain SST®, 180 grain GMX®, 195 grain Spire Point, and a 196 grain BTHP Match™ bullet. Bullets weighing 150 grains and more performed best with powders such as Varget, WIN 748, and VIHT N-150.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.323"

150 gr. InterLock® SP
Item No. 3232
C.O.L.: 2.975"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031	40.8 gr.	42.6 gr.	44.5 gr.	46.3 gr.	48.2 gr.	
Accurate 2520	41.0 gr.	43.2 gr.	45.4 gr.	47.5 gr.	49.7 gr.	
IMR 4320	40.8 gr.	43.2 gr.	45.6 gr.	48.0 gr.	50.4 gr.	
H4895	41.9 gr.	44.0 gr.	46.1 gr.	48.2 gr.	50.4 gr.	
IMR 4064	43.4 gr.	45.4 gr.	47.3 gr.	49.2 gr.	51.1 gr.	
Accurate 2495	43.1 gr.	45.2 gr.	47.2 gr.	49.2 gr.	51.2 gr.	
VIHT N-140	43.4 gr.	45.4 gr.	47.5 gr.	49.6 gr.	51.7 gr.	
Alliant RL-15	44.1 gr.	46.2 gr.	48.2 gr.	50.3 gr.	52.3 gr.	54.3 gr.
VARGET	43.5 gr.	45.7 gr.	48.0 gr.	50.2 gr.	52.4 gr.	
WIN 748	46.6 gr.	48.5 gr.	50.4 gr.	52.3 gr.	54.2 gr.	56.2 gr.

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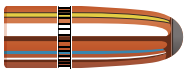
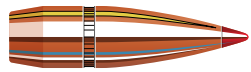
170 GRAIN BULLETS

SECTIONAL DENSITY: 0.233
DIAMETER: 0.323"



170 gr. InterLock® RN
Item No. 3235
C.O.L.: 2.890"
G1 B.C.: 0.217



170 gr. SST®
Item No. 3233
C.O.L.: 3.000"
G1 B.C.: 0.445

	VELOCITY (FPS – feet per second)						
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**	**2750**
IMR 8208 XBR	37.6 gr.	39.5 gr.	41.4 gr.	43.3 gr.	45.2 gr.	47.1 gr.	
TAC	38.0 gr.	39.9 gr.	41.9 gr.	43.9 gr.	45.9 gr.	47.9 gr.	
H4895	38.4 gr.	40.3 gr.	42.3 gr.	44.2 gr.	46.1 gr.	48.1 gr.	
Accurate 2520	38.2 gr.	40.4 gr.	42.7 gr.	44.9 gr.	47.2 gr.	49.4 gr.	
IMR 4320	40.4 gr.	42.2 gr.	44.0 gr.	45.8 gr.	47.6 gr.	49.4 gr.	50.2 gr.
NORMA 202	39.8 gr.	41.7 gr.	43.7 gr.	45.6 gr.	47.6 gr.	49.5 gr.	
WIN 748	42.7 gr.	44.2 gr.	45.6 gr.	47.1 gr.	48.5 gr.	50.0 gr.	
VARGET	41.2 gr.	43.0 gr.	44.7 gr.	46.5 gr.	48.3 gr.	50.1 gr.	51.0 gr.
VIHT N-140	41.6 gr.	43.4 gr.	45.2 gr.	47.0 gr.	48.9 gr.	50.7 gr.	
IMR 4064	40.9 gr.	42.9 gr.	44.9 gr.	46.8 gr.	48.8 gr.	50.8 gr.	51.7 gr.
LEVERevolution	43.7 gr.	45.3 gr.	46.8 gr.	48.4 gr.	49.9 gr.	51.5 gr.	

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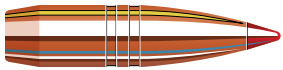
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.323"



180 gr. GMX®
Item No. 3234
C.O.L.: 2.974"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 8208 XBR	39.3 gr.	40.9 gr.	42.5 gr.	44.1 gr.		
TAC	40.4 gr.	41.9 gr.	43.5 gr.	45.1 gr.	46.6 gr.	
IMR 4320	41.3 gr.	42.9 gr.	44.5 gr.	46.1 gr.	47.7 gr.	
Accurate 2520	40.2 gr.	42.2 gr.	44.2 gr.	46.2 gr.	48.2 gr.	
VARGET	40.8 gr.	42.6 gr.	44.5 gr.	46.3 gr.	48.2 gr.	
NORMA 202	41.3 gr.	43.0 gr.	44.8 gr.	46.6 gr.	48.3 gr.	
WIN 748	41.3 gr.	43.1 gr.	44.8 gr.	46.6 gr.	48.3 gr.	
Alliant RL-15	41.5 gr.	43.3 gr.	45.0 gr.	46.8 gr.		
LEVERevolution	41.6 gr.	43.4 gr.	45.1 gr.	46.9 gr.	48.6 gr.	
VIHT N-140	41.9 gr.	43.7 gr.	45.5 gr.	47.4 gr.		
CFE 223	43.1 gr.	44.9 gr.	46.7 gr.	48.5 gr.	50.3 gr.	52.0 gr.

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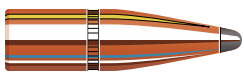
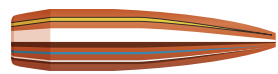
195-196 GRAIN BULLETS

SECTIONAL DENSITY: 0.267-0.268
DIAMETER: 0.323"



195 gr. InterLock® SP
Item No. 3236
C.O.L.: 2.994"
G1 B.C.: 0.410



^196 gr. BTHP Match™
Item No. 3237
C.O.L.: 3.070"
G1 B.C.: 0.525

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
Accurate 2230	38.4 gr.	40.0 gr.	41.6 gr.	43.1 gr.	
Accurate 2520	38.0 gr.	40.0 gr.	42.0 gr.		
Benchmark	39.4 gr.	41.2 gr.	43.0 gr.		
IMR 3031	39.9 gr.	41.5 gr.	43.1 gr.	44.7 gr.	
H4895	40.2 gr.	42.1 gr.	44.0 gr.	45.8 gr.	
VIHT N-135	39.4 gr.	41.8 gr.	44.1 gr.	46.4 gr.	
WIN 748	40.6 gr.	42.7 gr.	44.8 gr.	46.9 gr.	49.0 gr.
IMR 4064	40.9 gr.	43.0 gr.	45.0 gr.	47.0 gr.	
Alliant RL-15	41.2 gr.	43.2 gr.	45.2 gr.	47.3 gr.	
VARGET	42.5 gr.	44.1 gr.	45.7 gr.	47.3 gr.	
VIHT N-150	41.7 gr.	43.7 gr.	45.8 gr.	47.9 gr.	

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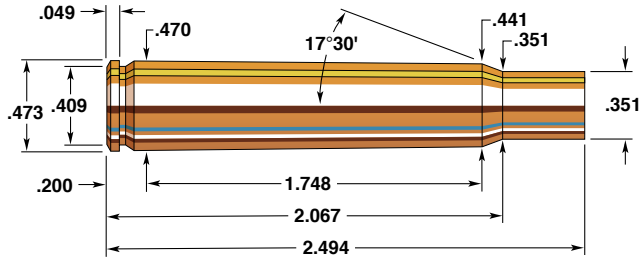
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

INDICATES MAXIMUM LOAD — USE WITH CAUTION



8mm-06

Rifle:	Mauser Model 1898	**Bullet Diameter:**	0.323"
Barrel:	.23½", 1 in 9¼" Twist	**Maximum COL:**	3.228"
Case:	Hornady/Frontier	**Max. Case Length:**	2.494"
Primer:	Winchester WLR	**Case Trim Length:**	2.484"

A fine wildcat it is, and as its name clearly indicates, it's the 30-06 case necked up to 8mm. Necessity played a substantial role in its development and its rise to popularity. Owners of Mauser Model 1898's chambered for the 8 x 57mm found it difficult to obtain 8mm Mauser ammo and cases during and in the first years after WW II. By simply rechambering their Mausers for the necked up '06 case, they solved their ammo problems—and got some added benefits in terms of improved performance. As many surplus military 8mm's reached the U.S. civilian market through the 1950's, the 8mm-06 conversion grew even more popular. While this surge of shooter interest in the 8mm-06 has receded, it left a great many fans of this wildcat in its wake. The 8mm-06 approximates the performance of several European calibers: the 8 x 64mm Brenneke, a sporting cartridge; and the 8 x 63mm, used by some Swedish military units.

Bullet selection for the 8mm-06 is not as extensive as it is for the 30-06, but it is nonetheless adequate. The Hornady 150 grain Spire Point is by far our most popular bullet for the 8mm-06. Efficient and accurate, the 150 grain SP or 170 grain SST® are preferred when game will be hunted at longer ranges. The dependable 170 grain Round Nose is an excellent choice for hunting at close to moderate ranges. The 195 Spire Point is suitable for larger game such as elk and moose.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.323"

150 gr. InterLock® SP
Item No. 3232
C.O.L.: 3.175"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031	42.1 gr.	44.3 gr.	46.4 gr.	48.6 gr.	
Accurate 2520	42.1 gr.	44.4 gr.	46.6 gr.	48.9 gr.	
Accurate 2495	43.5 gr.	45.8 gr.	48.1 gr.	50.4 gr.	
H4895	44.0 gr.	46.2 gr.	48.3 gr.	50.4 gr.	52.6 gr.
IMR 4064	44.9 gr.	47.0 gr.	49.1 gr.	51.2 gr.	53.3 gr.
VARGET	44.6 gr.	46.9 gr.	49.2 gr.	51.6 gr.	
VIHT N-140	45.8 gr.	47.8 gr.	49.9 gr.	51.9 gr.	
Alliant RL-15	46.4 gr.	48.3 gr.	50.3 gr.	52.3 gr.	54.2 gr.
WIN 760	51.6 gr.	54.0 gr.	56.4 gr.	58.7 gr.	61.1 gr.

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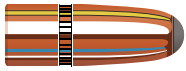
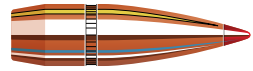
170 GRAIN BULLETS

SECTIONAL DENSITY: 0.233
DIAMETER: 0.323"



170 gr. InterLock® RN
Item No. 3235
C.O.L.: 3.080"
G1 B.C.: 0.217



170 gr. SST®
Item No. 3233
C.O.L.: 3.100"
G1 B.C.: 0.445

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
H4895	40.0 gr.	42.6 gr.	45.1 gr.	47.7 gr.	50.3 gr.
Accurate 2520	38.2 gr.	41.4 gr.	44.6 gr.	47.8 gr.	
IMR 4064	42.0 gr.	44.2 gr.	46.3 gr.	48.5 gr.	50.7 gr.
VARGET	42.8 gr.	45.0 gr.	47.2 gr.	49.5 gr.	
VIHT N-140	42.5 gr.	44.9 gr.	47.3 gr.	49.7 gr.	
Alliant RL-15	43.4 gr.	45.5 gr.	47.7 gr.	49.8 gr.	52.0 gr.
Accurate 2700	47.7 gr.	49.8 gr.	51.9 gr.	54.0 gr.	
IMR 4350	47.2 gr.	50.0 gr.	52.7 gr.	55.4 gr.	58.2 gr.

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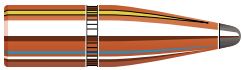
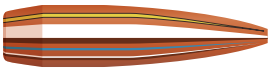
195-196 GRAIN BULLETS

SECTIONAL DENSITY: 0.267-0.268
DIAMETER: 0.323"



195 gr. InterLock® SP
Item No. 3236
C.O.L.: 3.100"
G1 B.C.: 0.410



^196 gr. BTHP Match™
Item No. 3237
C.O.L.: 3.228"
G1 B.C.: 0.525

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
H4895	41.4 gr.	43.9 gr.	46.4 gr.		
IMR 4064	43.2 gr.	45.2 gr.	47.1 gr.	49.1 gr.	
Alliant RL-15	42.9 gr.	45.0 gr.	47.2 gr.	49.3 gr.	
VIHT N-150	42.3 gr.	45.0 gr.	47.7 gr.		
Accurate 2700	45.4 gr.	47.3 gr.	49.1 gr.		
H4350	47.0 gr.	49.3 gr.	51.6 gr.	53.9 gr.	
WIN 760	49.3 gr.	51.4 gr.	53.4 gr.	55.4 gr.	57.4 gr.
Accurate 4350	49.7 gr.	51.6 gr.	53.4 gr.	55.2 gr.	
IMR 4350	49.9 gr.	51.7 gr.	53.4 gr.	55.2 gr.	

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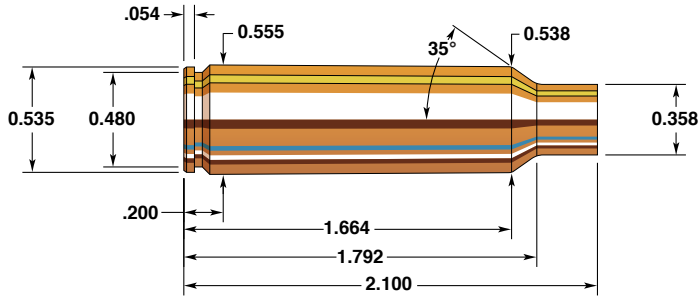
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



325 Winchester Short Magnum

Rifle:	Browning A-Bolt	**Bullet Diameter:**	0.323"
Barrel:	.23", 1 in 10" Twist	**Maximum COL:**	2.860"
Case:	.WW	**Max. Case Length:**	.2.100"
Primer:	WLRM	**Case Trim Length:**	2.090"

An interesting name for Winchester's latest short magnum entry, as not too many 8mm cartridges have been introduced in recent times, the 8mm Remington Magnum being the most notable. It was introduced over 30 years ago in 1977. That said, Winchester may be onto something with the 325 WSM. Bullets that are designed for the 8mm Remington Magnum aren't as many as say, 30 caliber bullets, but they are all very well designed and have excellent sectional density, or length for weight. These bullets are all of rugged construction and will work well on any North American game.

The 325 WSM is a VERY efficient cartridge, in fact, it is the ballistic equal to the 8mm Remington Magnum, both are capable of pushing our 195 grain SP bullet to a maximum velocity of 2800 fps, which is right in line with the 338 Winchester Magnum, in terms of power. For propellants the 325 WSM works very well with H 4350 or RL 19, we experience excellent accuracy with both powders and velocities were very consistent.

For a general use bullet, we recommend our 195 grain SP. The 195 grain SP is a tough bullet that will expand on smaller big game, but is still tough enough for any game North America has to offer. Lighter bullets designed for the 8 x 57mm Mauser will not hold up well on large game like elk at 325 WSM velocities. But for deer and antelope, one would be hard pressed to find a better bullet than our 150 grain SP.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.323"

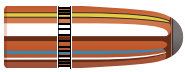
150 gr. InterLock® SP
Item No. 3232
C.O.L.: 2.820"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
H4895	49.7 gr.	52.6 gr.	55.6 gr.	58.6 gr.	61.6 gr.
IMR 4064	53.8 gr.	56.2 gr.	58.6 gr.	60.9 gr.	63.3 gr.
VIHT N-140	55.2 gr.	57.7 gr.	60.2 gr.	62.7 gr.	
BIG GAME	56.6 gr.	59.9 gr.	63.1 gr.	66.3 gr.	69.6 gr.
H414	59.2 gr.	61.9 gr.	64.7 gr.	67.4 gr.	70.1 gr.
Accurate 4350	62.0 gr.	64.1 gr.	66.2 gr.	68.3 gr.	
IMR 4350	62.3 gr.	64.5 gr.	66.7 gr.	68.9 gr.	
WIN 760	60.8 gr.	63.5 gr.	66.3 gr.	69.0 gr.	71.7 gr.
H4350	62.5 gr.	65.1 gr.	67.6 gr.	70.1 gr.	

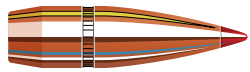
Create custom ballistic tables using our online calculators at hornady.com/ballistics

170 GRAIN BULLETS

SECTIONAL DENSITY: 0.233
DIAMETER: 0.323"



170 gr. InterLock® RN
Item No. 3235
C.O.L.: 2.710"
G1 B.C.: 0.217



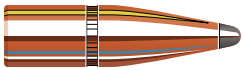
170 gr. SST®
Item No. 3233
C.O.L.: 2.850"
G1 B.C.: 0.445

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
H414	57.1 gr.	60.0 gr.	63.0 gr.	66.0 gr.	68.9 gr.
Accurate 4350	60.3 gr.	62.4 gr.	64.5 gr.	66.6 gr.	
IMR 4350	60.0 gr.	62.3 gr.	64.7 gr.	67.0 gr.	
WIN 760	59.3 gr.	62.0 gr.	64.6 gr.	67.3 gr.	69.9 gr.
H4350	59.3 gr.	62.0 gr.	64.8 gr.	67.5 gr.	
VIHT N-160	63.1 gr.	65.5 gr.	67.8 gr.	70.2 gr.	
IMR 4831	64.8 gr.	66.9 gr.	69.0 gr.	71.1 gr.	
Alliant RL-19	64.7 gr.	67.1 gr.	69.5 gr.	71.8 gr.	
Hunter	63.6 gr.	66.3 gr.	69.1 gr.	71.9 gr.	

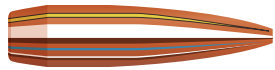
Create custom ballistic tables using our online calculators at hornady.com/ballistics

195-196 GRAIN BULLETS

SECTIONAL DENSITY: 0.267-0.268
DIAMETER: 0.323"



195 gr. InterLock® SP
Item No. 3236
C.O.L.: 2.850"
G1 B.C.: 0.410

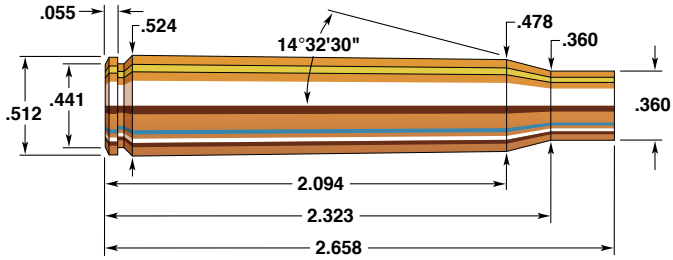


^196 gr. BTHP Match™
Item No. 3237
C.O.L.: 2.850"
G1 B.C.: 0.525

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2850**
H414	55.9 gr.	58.6 gr.	61.2 gr.	63.9 gr.	65.2 gr.
Accurate 4350	57.3 gr.	59.7 gr.	62.0 gr.	64.3 gr.	
IMR 4350	57.9 gr.	60.4 gr.	62.8 gr.	65.2 gr.	
H4350	56.5 gr.	59.5 gr.	62.6 gr.	65.6 gr.	67.1 gr.
WIN 760	58.1 gr.	60.7 gr.	63.3 gr.	65.9 gr.	67.1 gr.
VIHT N-160	60.9 gr.	63.3 gr.	65.6 gr.	67.9 gr.	69.1 gr.
IMR 4831	62.4 gr.	64.6 gr.	66.8 gr.	69.0 gr.	70.1 gr.
Alliant RL-19	61.7 gr.	64.3 gr.	66.8 gr.	69.3 gr.	70.6 gr.
Hunter	62.6 gr.	65.0 gr.	67.4 gr.	69.8 gr.	71.0 gr.
H4831	63.5 gr.	66.4 gr.	69.2 gr.	72.0 gr.	
MAGPRO	68.2 gr.	71.0 gr.	73.8 gr.	76.5 gr.	77.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



8 X 68mm S

Rifle:	Mauser 66	**Bullet Diameter:**	0.323"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	3.425"
Case:	RWS	**Max. Case Length:**	2.658"
Primer:	Federal 215	**Case Trim Length:**	2.648"

Germany's RWS developed this modern cartridge in the late 1930s and it remains among the most powerful and effective cartridges in its class. The 8 x 68mm S is a non-belted magnum that narrowly misses duplicating the ballistics of the 338 Winchester Magnum and the 8mm Remington Magnum. It would, in consequence, make a superb all around big game rifle for North America. Indeed, it has the power to be useful on much African game as well, a fact possibly motivating its developers. Publicity about this hunting potential has been minimal, essentially because few rifles chambered for this round are imported.

Hornady provides three .323" diameter bullets that work very well in the 8 x 68mm S Magnum: The 150 grain Spire Point, the 170 grain Round Nose, and the 195 grain Spire Point. The 195 grain Spire Point is the best bullet choice for most hunting situations that the 8 x 68mm S enthusiast might encounter. This bullet is designed to give controlled expansion at the higher velocities the 8 x 68mm S and the 8mm Remington Magnum cartridges deliver. The Hornady 195 grain Spire Point features our Inner Groove jacket design for controlled expansion and the InterLock ring that binds core and jacket together to prevent separation on impact.

IMR 4350 powder performed best in our tests. Hornady produces dies for the 8 x 68mm S and cases are available from RWS.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.323"

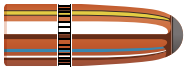
150 gr. InterLock® SP
Item No. 3232
C.O.L.: 3.400"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4350	67.0 gr.	69.2 gr.	71.4 gr.	73.5 gr.	
WIN 760	67.6 gr.	69.8 gr.	72.0 gr.	74.2 gr.	76.4 gr.
IMR 4831	70.4 gr.	72.3 gr.	74.3 gr.		

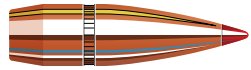
Create custom ballistic tables using our online calculators at hornady.com/ballistics

170 GRAIN BULLETS

SECTIONAL DENSITY: 0.233
DIAMETER: 0.323"



170 gr. InterLock® RN
Item No. 3235
C.O.L.: 3.250"
G1 B.C.: 0.217



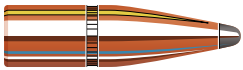
170 gr. SST®
Item No. 3233
C.O.L.: 3.410"
G1 B.C.: 0.445

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	63.6 gr.	65.7 gr.	67.9 gr.	70.0 gr.	72.1 gr.
WIN 760	64.8 gr.	67.2 gr.	69.5 gr.	71.9 gr.	74.3 gr.
IMR 4831	66.8 gr.	69.0 gr.	71.2 gr.	73.4 gr.	75.5 gr.

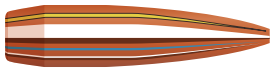
Create custom ballistic tables using our online calculators at hornady.com/ballistics

195-196 GRAIN BULLETS

SECTIONAL DENSITY: 0.267-0.268
DIAMETER: 0.323"



195 gr. InterLock® SP
Item No. 3236
C.O.L.: 3.410"
G1 B.C.: 0.410

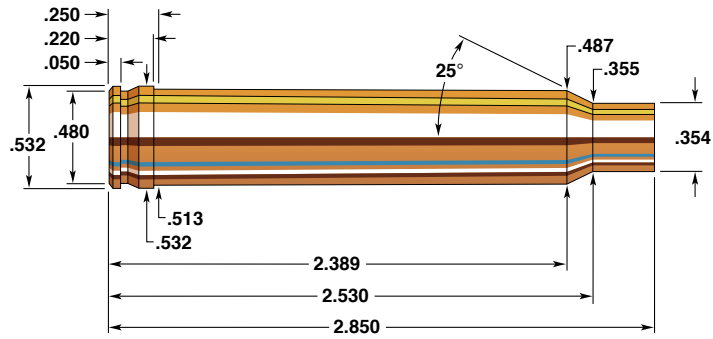


^196 gr. BTHP Match™
Item No. 3237
C.O.L.: 3.410"
G1 B.C.: 0.525

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4350	56.6 gr.	59.4 gr.	62.3 gr.	65.2 gr.	68.1 gr.
H4350	57.0 gr.	59.8 gr.	62.6 gr.	65.4 gr.	68.2 gr.
IMR 4831	60.2 gr.	62.8 gr.	65.3 gr.	67.9 gr.	70.4 gr.
VIHT N-160	62.7 gr.	64.9 gr.	67.0 gr.	69.1 gr.	
NORMA MRP	65.5 gr.	67.6 gr.	69.8 gr.	72.0 gr.	
Alliant RL-19	63.2 gr.	66.2 gr.	69.1 gr.	72.1 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



8mm Remington Magnum

Rifle:	Remington 700	**Bullet Diameter:**	0.323"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	3.600"
Case:	Remington	**Max. Case Length:**	2.850"
Primer:	Remington 9½M	**Case Trim Length:**	2.840"

Remington introduced their 8mm Remington Magnum in 1977 in their Model 700 BDL bolt-action rifle. The company apparently hoped this magnum would become a favorite with North American big game hunters. It certainly enjoyed advantages. The 8mm Magnum surpassed the performance of 300 magnums of its time in its ability to drive heavy bullets at greater velocity. The superior ballistic coefficient of the Hornady 195 grain Spire Point bullet, manufactured expressly for the 8mm Remington Magnum, provides a flatter trajectory with more energy at the target than most 30 caliber bullets fired from comparable magnums. Though 8mm bullet selection wasn't as extensive as that for 30 caliber, there were good choices for North American big game.

This excellent caliber failed, however, to gain sufficient acceptance to rank it as a preferred big game choice. Currently it is available from Remington only as a special order firearm.

The Hornady 195 grain Spire Point has an outstanding .410 ballistic coefficient, allowing it to provide extremely flat trajectories and deliver very high remaining energies over long ranges. In load development, IMR 4831 gave the most uniform results and best accuracy in our test rifle.

150 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.323"

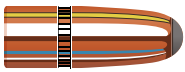
150 gr. InterLock® SP
Item No. 3232
C.O.L.: 3.600"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
IMR 4350	68.2 gr.	70.5 gr.	72.7 gr.	75.0 gr.	77.2 gr.	
Accurate 4350	68.5 gr.	70.9 gr.	73.3 gr.	75.8 gr.	78.2 gr.	
H4350	67.7 gr.	70.6 gr.	73.4 gr.	76.3 gr.	79.2 gr.	82.1 gr.
IMR 4831	69.8 gr.	72.2 gr.	74.7 gr.	77.1 gr.	79.5 gr.	81.9 gr.
WIN 760	75.5 gr.	77.9 gr.	80.2 gr.	82.6 gr.	85.0 gr.	
H4831	74.0 gr.	76.9 gr.	79.9 gr.	82.9 gr.	85.8 gr.	

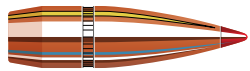
Create custom ballistic tables using our online calculators at hornady.com/ballistics

170 GRAIN BULLETS

SECTIONAL DENSITY: 0.233
DIAMETER: 0.323"



170 gr. InterLock® RN
Item No. 3235
C.O.L.: 3.450"
G1 B.C.: 0.217



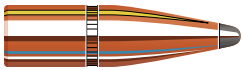
170 gr. SST®
Item No. 3233
C.O.L.: 3.595"
G1 B.C.: 0.445

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	61.5 gr.	64.3 gr.	67.1 gr.	70.0 gr.	72.8 gr.	
Accurate 4350	64.7 gr.	67.2 gr.	69.8 gr.	72.4 gr.		
H4350	64.5 gr.	67.3 gr.	70.2 gr.	73.0 gr.	75.9 gr.	
IMR 4831	65.7 gr.	68.2 gr.	70.7 gr.	73.3 gr.	75.8 gr.	78.4 gr.
VIHT N-165	68.8 gr.	71.8 gr.	74.8 gr.	77.8 gr.	80.8 gr.	83.8 gr.
Alliant RL-19	70.3 gr.	72.8 gr.	75.4 gr.	77.9 gr.	80.4 gr.	83.0 gr.

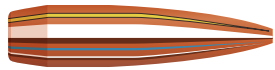
Create custom ballistic tables using our online calculators at hornady.com/ballistics

195-196 GRAIN BULLETS

SECTIONAL DENSITY: 0.267-0.268
DIAMETER: 0.323"



195 gr. InterLock® SP
Item No. 3236
C.O.L.: 3.595"
G1 B.C.: 0.410

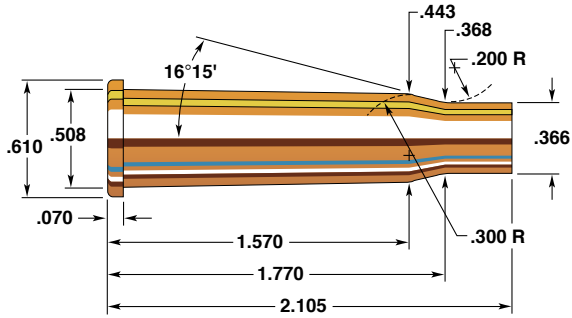


^196 gr. BTHP Match™
Item No. 3237
C.O.L.: 3.595"
G1 B.C.: 0.525

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
H4350	56.0 gr.	61.3 gr.	66.6 gr.	71.9 gr.	
Accurate 4350	62.5 gr.	65.8 gr.	69.1 gr.	72.3 gr.	
Alliant RL-19	67.2 gr.	69.7 gr.	72.3 gr.	74.8 gr.	77.4 gr.
IMR 4831	68.2 gr.	70.6 gr.	73.0 gr.	75.5 gr.	77.9 gr.
VIHT N-165	63.1 gr.	67.3 gr.	71.4 gr.	75.6 gr.	79.7 gr.
H4831	68.9 gr.	71.9 gr.	75.0 gr.	78.1 gr.	81.1 gr.
IMR 7828	72.4 gr.	74.7 gr.	77.1 gr.	79.4 gr.	81.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



33 Winchester

Rifle: . . . . . Winchester Model 1886
Barrel: . . . . . 24", 1 in 12" Twist
Case: . . . . . Remington
Primer: . . . . . WLR
Bullet Diameter: . . . . . 0.338"
Maximum COL: . . . . . 2.690"
Max. Case Length: . . . . . 2.105"
Case Trim Length: . . . . . 2.095"

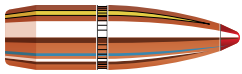
Chambered in Winchester's Model 1886 lever-action, the 33 Winchester arrived on the American shooting scene in 1902. It held a place in the Winchester line until 1936 when the cartridge was superseded by the 348 Winchester and the Model 1886 rifle was replaced by the stronger Model 71. While Marlin chambered it in its Model 95 lever-action and Winchester also chambered it in a single shot action, the round was dropped by the factory in 1940.

The 33 Winchester never had a large following due in part to bullet availability and the introduction of better cartridges shortly after its origin. It was a reasonable choice for moderate range deer and black bear hunting.

Because the 1886 action is not as strong as the more modern lever-actions presently available, maximum loads listed should be approached with considerable caution.

200 GRAIN BULLETS

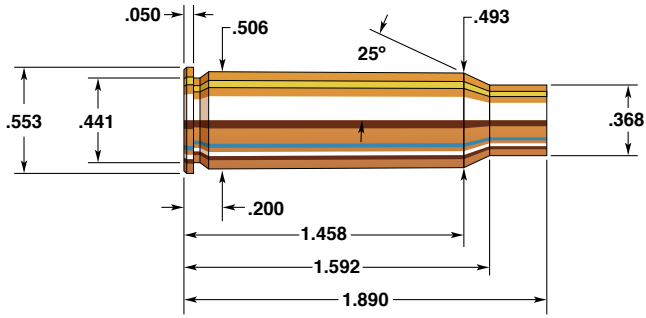
SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. FTX®
(Marlin Express)
Item No. 33104
C.O.L.: 2.690"
G1 B.C.: 0.430

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
H4198	28.0 gr.	30.1 gr.	32.3 gr.	34.5 gr.		
IMR 3031	33.3 gr.	35.0 gr.	36.6 gr.	38.3 gr.	40.0 gr.	
H4895	35.1 gr.	37.1 gr.	38.1 gr.	41.1 gr.	43.1 gr.	45.1 gr.
WIN 748		37.1 gr.	39.1 gr.	41.2 gr.	43.2 gr.	
IMR 4064	35.1 gr.	37.1 gr.	39.2 gr.	41.2 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



338 Marlin Express

Rifle:	Marlin XLR	**Bullet Diameter:**	0.338"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	2.585"
Case:	Hornady	**Max. Case Length:**	1.890"
Primer:	WLR	**Case Trim Length:**	1.880"

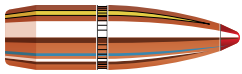
The 338 Marlin Express is the latest in a very successful, pedigreed family of cartridges that have been taking the hunting world by storm over the past three years.

Hornady engineers were charged with getting every ounce of performance out of the Marlin platform, so they delivered a revolutionary medium bore cartridge based loosely on the 376 Steyr, a short action powerhouse. They added an abbreviated rim and shortened the cartridge slightly and necked it down to .338". The resulting cartridge delivers astounding ballistics; with factory ammo driving the very efficient 200 grain FTX® bullet at 2,565 fps from a 24" Marlin XLR. The bullet has a B.C. of .430 and we have had very good results with A 2520 in terms of both velocity and accuracy. The 200 grain FTX® is built tough and designed for hunting large game like elk, moose and bear but is equally at home hunting whitetails.

The 338 Marlin Express is the first ever long-range, big game levergun specific cartridge to hit the market, and opens a new class of hunting to the levergun.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. FTX®
(Marlin Express)
Item No. 33104
C.O.L.: 2.585"
G1 B.C.: 0.430

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2350**	**2400**
Accurate 2520	34.5 gr.	37.0 gr.	39.4 gr.	41.9 gr.	43.1 gr.	44.4 gr.
VARGET	35.3 gr.	37.5 gr.	39.7 gr.	41.9 gr.	43.0 gr.	
IMR 8208 XBR	37.5 gr.	38.8 gr.	40.2 gr.	41.6 gr.	42.0 gr.	
NORMA 203 B	37.0 gr.	38.9 gr.	40.8 gr.	42.6 gr.	43.6 gr.	44.5 gr.
IMR 4320	36.6 gr.	38.7 gr.	40.9 gr.			
Alliant RL-15	38.2 gr.	39.8 gr.	41.4 gr.	43.1 gr.	43.9 gr.	
VIHT N-140	37.7 gr.	39.6 gr.	41.5 gr.	43.3 gr.	44.2 gr.	
WIN 748	38.0 gr.	39.8 gr.	41.5 gr.	43.2 gr.	44.1 gr.	
BL-C(2)	39.3 gr.	41.1 gr.	42.9 gr.	44.7 gr.	45.6 gr.	
LEVERevolution	41.4 gr.	42.8 gr.	44.2 gr.	45.6 gr.	46.4 gr.	47.1 gr.
BIG GAME	41.1 gr.	43.4 gr.	45.6 gr.	47.8 gr.	48.9 gr.	50.1 gr.

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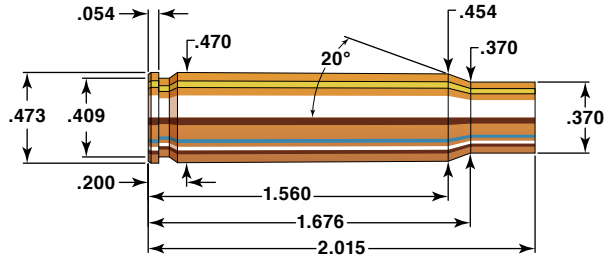


338 Federal

Rifle:	T/C Encore	**Bullet Diameter:**	0.338"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	2.820"
Case:	Federal	**Max. Case Length:**	2.015"
Primer:	Winchester WLR	**Case Trim Length:**	2.000"

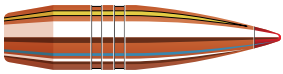
The 308 Winchester has been necked up and down successfully for many years. Smaller calibers such as the 243 Winchester, 260 Remington and 7mm-08 Remington have all experienced varying levels of popularity over the years. Larger calibers based on the 308 Winchester case, such as the 358 Winchester, have not experienced similar success. In 2006, Federal announced their new 338 caliber cartridge based on the 308 Winchester case. The 338 Federal provides a medium bore option in a short, non-magnum cartridge.

While the moderate velocities obtained with the 338 Federal are sufficient for short range hunting of non-dangerous game, it trails the more popular 338 Winchester Magnum by an average of 350 feet per second in similar bullet weights. Another short-action cartridge, the 338 RCM, has a 200 fps advantage out of a shorter 20 inch barrel. That said, what one hunter may call, "under-powdered," another may laud as, "the best brush gun for whitetail ever!"

Lighter bullets offer better range of use than large heavier options. A maximum cartridge overall length of 2.820" doesn't allow for seating out heavier projectiles very far. A 185 grain GMX® or 200 grain SST® bullet at 2,600 fps will make for a nice all-around deer and elk load at moderate range.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"



185 gr. GMX®
Item No. 33270
C.O.L.: 2.815"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-10X	35.5 gr.	37.7 gr.	39.9 gr.	42.0 gr.	
Power Pro 1200 R	35.7 gr.	37.8 gr.	39.9 gr.	42.0 gr.	43.0 gr.
H322	36.1 gr.	38.6 gr.	41.1 gr.		
Accurate LT-32	36.9 gr.	38.8 gr.	40.8 gr.	42.7 gr.	
Accurate 2230	37.3 gr.	39.6 gr.	41.9 gr.	44.2 gr.	45.3 gr.
IMR 3031	37.5 gr.	39.7 gr.			
IMR 8208 XBR	38.2 gr.	40.3 gr.	42.4 gr.	44.4 gr.	
X-TERMINATOR	38.9 gr.	41.1 gr.	43.2 gr.	45.4 gr.	46.5 gr.
TAC	39.6 gr.	41.6 gr.	43.7 gr.	45.7 gr.	46.7 gr.
WIN 748	41.7 gr.	43.9 gr.	45.9 gr.	48.1 gr.	

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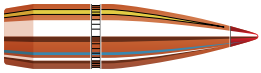
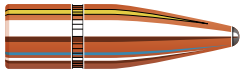
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 2.815"
G1 B.C.: 0.455



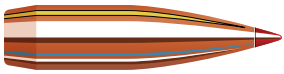
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 2.815"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-10X	32.5 gr.	34.9 gr.	37.3 gr.	39.7 gr.	42.1 gr.	
Power Pro 1200 R	33.4 gr.	35.7 gr.	38.0 gr.	40.3 gr.	42.6 gr.	
H322	33.3 gr.	35.9 gr.	38.4 gr.	41.0 gr.	43.6 gr.	44.8 gr.
Accurate LT-32	34.8 gr.	37.1 gr.	39.4 gr.	41.6 gr.		
IMR 3031	34.9 gr.	37.2 gr.	39.5 gr.	41.7 gr.		
Accurate 2230	35.0 gr.	37.3 gr.	39.6 gr.	41.9 gr.	44.3 gr.	
IMR 8208 XBR	34.7 gr.	37.2 gr.	39.7 gr.	42.2 gr.	44.7 gr.	46.0 gr.
X-TERMINATOR	36.6 gr.	38.7 gr.	40.8 gr.	43.0 gr.	45.1 gr.	46.2 gr.
TAC	36.5 gr.	38.9 gr.	41.3 gr.	43.8 gr.	46.2 gr.	47.4 gr.
WIN 748	41.0 gr.	43.0 gr.	45.0 gr.			

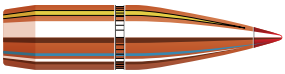
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

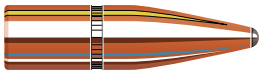
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 2.815"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 2.815"
G1 B.C.: 0.515



225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 2.815"
G1 B.C.: 0.397

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**
Power Pro 1200 R	33.5 gr.	35.8 gr.	38.0 gr.	40.3 gr.	
Alliant RL-10X	33.5 gr.	35.9 gr.	38.3 gr.		
Accurate LT-32	34.9 gr.	37.0 gr.	39.1 gr.	41.3 gr.	
H322	34.0 gr.	36.6 gr.	39.2 gr.	41.8 gr.	
IMR 3031	35.7 gr.	37.8 gr.	39.8 gr.	41.9 gr.	
Accurate 2230	35.3 gr.	37.7 gr.	40.1 gr.	42.5 gr.	
IMR 8208 XBR	35.7 gr.	38.1 gr.	40.5 gr.	42.8 gr.	44.0 gr.
TAC	36.4 gr.	38.5 gr.	40.7 gr.	42.9 gr.	44.0 gr.
X-TERMINATOR	35.8 gr.	38.4 gr.	40.9 gr.	43.5 gr.	44.8 gr.
WIN 748	39.3 gr.	41.1 gr.	43.0 gr.		

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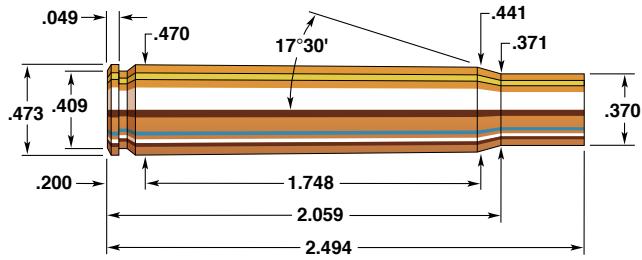


338-06

Rifle:. . . . . 1898 Mauser Custom
Barrel:. . . . . 23½", 1 in 9" Twist
Case:. . . . . .Hornady/Frontier
Primer: . . . . . Winchester WLR
Bullet Diameter:. . . . . 0.338"
Maximum COL: . . . . . 3.340"
Max. Case Length:. . . . . 2.494"
Case Trim Length: . . . . . 2.484"

As can be seen frequently in these pages, bullet availability tends to be one of the most critical success factors for wildcat—and even factory—cartridges. Many wildcatters have watched acceptance of their inventions wither for lack of enough suitable bullets. For that matter, Remington and Winchester have, from time to time, forgotten the correlation between bullet choice and cartridge success.

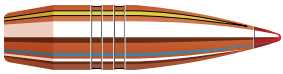
Winchester's introduction of its 338 Winchester Magnum in 1958 sparked a resurgence of interest in 338 caliber. Weatherby followed this lead in 1962 in introducing the powerful 340 Weatherby. And more bullet choices became available to satisfy the growing interest.

Where does a great notion come from? Who originated the 338-06? Apparently with good bullet availability, the 338-06 became an idea whose time had come to many wildcatters at once. The reliability and versatility of the 30-06 cartridge necked up to 338 caliber appealed to many. Implementing this design was quite a simple matter. The resulting ballistics matched the old 333 OKH wildcat from the mid-40s and exceed those of the 35 Whelen.

Hornady bullets can bring the best out of this cartridge; our 200, 225, and 250 grain bullets and the new 185 grain GMX®. These reliable and deadly bullets worked extremely well with VIHT N-150 powder.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"



185 gr. GMX®
Item No. 33270
C.O.L.: 3.320"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
TAC	47.3 gr.	49.4 gr.	51.5 gr.	53.6 gr.	55.8 gr.	
Accurate 2520	48.5 gr.	51.0 gr.	53.6 gr.	56.1 gr.	58.7 gr.	61.2 gr.
Alliant RL-15	50.0 gr.	52.3 gr.	54.5 gr.	56.7 gr.		
IMR 4320	50.2 gr.	52.6 gr.	54.7 gr.	56.9 gr.	59.0 gr.	
Power Pro 2000 MR	51.1 gr.	53.7 gr.	56.3 gr.	58.8 gr.	61.4 gr.	
WIN 748	50.5 gr.	53.3 gr.	56.2 gr.	59.0 gr.		

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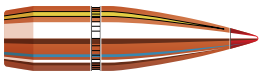
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.320"
G1 B.C.: 0.455

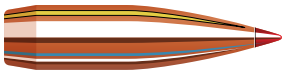
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.310"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
H4895	44.8 gr.	46.8 gr.	48.7 gr.	50.6 gr.	52.5 gr.	
VIHT N-135	44.0 gr.	46.2 gr.	48.5 gr.	50.7 gr.	52.9 gr.	
Accurate 2495	44.5 gr.	46.6 gr.	48.7 gr.	50.8 gr.	52.9 gr.	
Accurate 2520	44.1 gr.	46.5 gr.	48.9 gr.	51.2 gr.	53.6 gr.	
IMR 4895	45.8 gr.	47.9 gr.	50.0 gr.	52.1 gr.	54.3 gr.	56.4 gr.
IMR 4064	47.4 gr.	49.2 gr.	50.9 gr.	52.6 gr.	54.3 gr.	
VARGET	43.5 gr.	46.3 gr.	49.0 gr.	51.8 gr.	54.6 gr.	57.3 gr.
Alliant RL-15	46.2 gr.	48.4 gr.	50.6 gr.	52.7 gr.	54.9 gr.	57.1 gr.
VIHT N-140	46.6 gr.	48.8 gr.	51.0 gr.	53.1 gr.	55.3 gr.	
VIHT N-150	47.5 gr.	49.8 gr.	52.2 gr.	54.5 gr.	56.9 gr.	

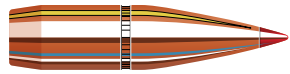
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

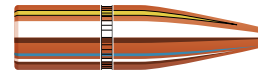
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.310"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.310"
G1 B.C.: 0.515



225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.310"
G1 B.C.: 0.397

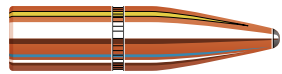
	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
H4895	39.5 gr.	41.9 gr.	44.3 gr.	46.7 gr.	49.0 gr.	
IMR 4895	42.1 gr.	44.3 gr.	46.5 gr.	48.6 gr.	50.8 gr.	53.0 gr.
IMR 4064	42.9 gr.	45.0 gr.	47.1 gr.	49.2 gr.	51.3 gr.	53.4 gr.
VARGET	37.6 gr.	41.0 gr.	44.5 gr.	48.0 gr.	51.4 gr.	
VIHT N-140	40.6 gr.	43.4 gr.	46.1 gr.	48.8 gr.	51.6 gr.	
Alliant RL-15	42.5 gr.	44.8 gr.	47.2 gr.	49.5 gr.	51.9 gr.	54.2 gr.
VIHT N-150	44.4 gr.	46.6 gr.	48.8 gr.	51.0 gr.	53.2 gr.	55.5 gr.
WIN 760	48.0 gr.	50.8 gr.	53.6 gr.	56.4 gr.	59.2 gr.	62.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

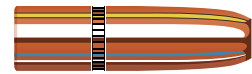
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"

^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.310"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.305"
G1 B.C.: 0.431

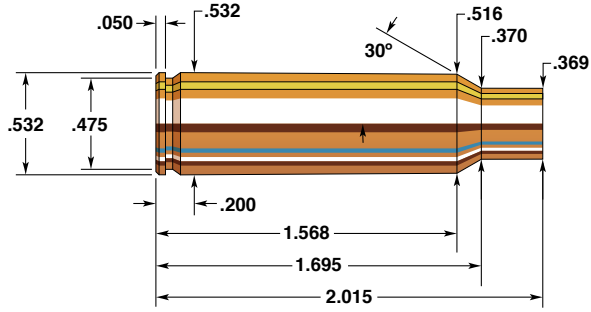


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.320"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
H4895	39.4 gr.	41.8 gr.	44.1 gr.	46.5 gr.	48.9 gr.	
IMR 4064	42.0 gr.	44.2 gr.	46.3 gr.	48.5 gr.	50.7 gr.	
Alliant RL-15	42.0 gr.	44.2 gr.	46.4 gr.	48.7 gr.	50.9 gr.	
VARGET	40.6 gr.	43.2 gr.	45.9 gr.	48.5 gr.	51.1 gr.	
VIHT N-140	41.9 gr.	44.2 gr.	46.5 gr.	48.8 gr.	51.2 gr.	
VIHT N-150	42.6 gr.	45.3 gr.	48.0 gr.	50.7 gr.	53.4 gr.	
WIN 760	45.6 gr.	48.3 gr.	51.0 gr.	53.6 gr.	56.3 gr.	59.0 gr.
H380	45.1 gr.	48.0 gr.	50.8 gr.	53.7 gr.	56.6 gr.	59.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



338 Ruger Compact Magnum

Rifle:	Ruger Hawkeye	**Bullet Diameter:**	0.338"
Barrel:	20", 1 in 10" Twist	**Maximum COL:**	2.840"
Case:	Hornady	**Max. Case Length:**	2.015"
Primer:	WLR	**Case Trim Length:**	2.005"

Based on the 375 Ruger the 338 Ruger Compact Magnum, or 338 RCM, is a very efficient design that delivers 338 Winchester Magnum performance but in a short action, 20" barreled rifle. The “Compact Magnum” concept was devised by hunters looking for rifles that delivered conventional magnum performance but in a well balanced, quick handling package. This concept was realized by Ruger RCM rifles and cutting edge ammunition technology provided by Hornady.

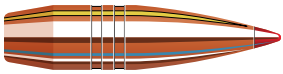
When developing the data for the 338 RCM we found VIHT N-550 to deliver the best performance with bullets 200 grains and heavier. The 185 grain GMX® bullet did very well with Norma 203B and Accurate 2520. Recoil is substantial enough that it is important to crimp the case mouth into the cannelure of the bullets so that they do not become unseated under recoil.

Hornady offers a broad selection of bullets that work well in the 338 RCM. The 185 grain GMX® bullet is a tough, flat shooting bullet suitable for any North American game and African plains game and is also an excellent choice if hunting regulations preclude the use of lead bullets. The 225 grain bullets, SST®, InterBond® and Spire Point are great all around choices and plenty of bullet for any game the 338 RCM is capable of taking. For the largest, toughest game like bison, musk ox or brown bear the 250 grain SP and RN are hard to beat.

The data that follows was developed in a rifle with a 20" barrel, expect velocity gains of 75 to 100 fps if firing them in a rifle with a 24" barrel, such as the Steyr Pro Hunter.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"



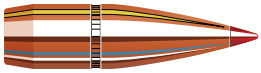
185 gr. GMX®
Item No. 33270
C.O.L.: 2.830"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2750**	**2800**	**2850**
H335	48.5 gr.	50.6 gr.	52.7 gr.	53.7 gr.	54.6 gr.	
Benchmark	48.5 gr.	50.6 gr.	52.7 gr.	53.8 gr.		
TAC	47.9 gr.	50.4 gr.	53.0 gr.	54.3 gr.	55.6 gr.	
IMR 4320	51.5 gr.	53.2 gr.	54.8 gr.	55.7 gr.		
NORMA 203 B	51.0 gr.	53.0 gr.	55.0 gr.	56.0 gr.	57.1 gr.	58.1 gr.
VIHT N-540	51.5 gr.	53.3 gr.	55.1 gr.	56.0 gr.	56.9 gr.	
Alliant RL-15	51.2 gr.	53.2 gr.	55.1 gr.	56.1 gr.	57.1 gr.	
Accurate 2520	50.4 gr.	53.3 gr.	56.1 gr.	57.6 gr.	59.0 gr.	60.4 gr.
WIN 748	51.7 gr.	54.2 gr.	56.6 gr.	57.9 gr.	59.1 gr.	

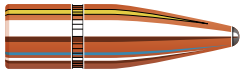
Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 2.845"
G1 B.C.: 0.455



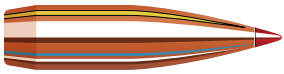
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 2.845"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2850**
IMR 4064	48.6 gr.	50.5 gr.	52.5 gr.	54.4 gr.		
VARGET	46.4 gr.	49.3 gr.	52.3 gr.	55.2 gr.		
Alliant RL-15	49.0 gr.	51.2 gr.	53.5 gr.	55.8 gr.		
Accurate 2520	47.5 gr.	50.6 gr.	53.7 gr.	56.8 gr.		
WIN 748	50.2 gr.	52.6 gr.	54.9 gr.	57.2 gr.	59.6 gr.	
VIHT N-550	54.7 gr.	56.7 gr.	57.8 gr.	60.7 gr.	62.8 gr.	
H414	54.6 gr.	57.0 gr.	59.5 gr.	61.9 gr.		
WIN 760	54.9 gr.	57.2 gr.	59.5 gr.	61.9 gr.	64.3 gr.	65.3 gr.

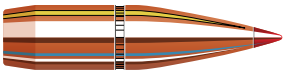
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

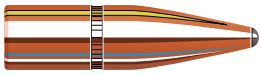
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 2.845"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 2.845"
G1 B.C.: 0.515



225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 2.845"
G1 B.C.: 0.397

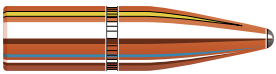
	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
IMR 4064	44.4 gr.	46.6 gr.	48.7 gr.	51.0 gr.		
Alliant RL-15	45.1 gr.	47.1 gr.	49.1 gr.	51.1 gr.		
Accurate 2520	43.1 gr.	46.2 gr.	49.3 gr.	52.4 gr.	55.5 gr.	
BL-C(2)	47.3 gr.	49.3 gr.	51.3 gr.	53.3 gr.	55.4 gr.	
VIHT N-550	49.3 gr.	51.3 gr.	53.4 gr.	55.4 gr.	57.4 gr.	58.5 gr.
BIG GAME	48.8 gr.	51.5 gr.	54.1 gr.	56.7 gr.	59.4 gr.	
H414	49.8 gr.	52.2 gr.	54.6 gr.	57.0 gr.	59.4 gr.	
WIN 760	50.2 gr.	52.7 gr.	55.1 gr.	57.5 gr.	59.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

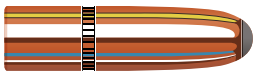
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"

^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 2.845"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 2.845"
G1 B.C.: 0.431

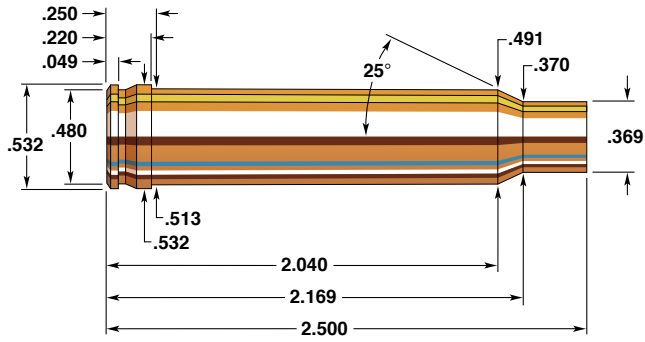


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 2.845"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**	**2500**
IMR 4064	43.9 gr.	46.3 gr.	48.6 gr.	51.0 gr.		
Alliant RL-15	44.1 gr.	46.4 gr.	48.8 gr.	51.1 gr.		
Accurate 2520	41.5 gr.	44.9 gr.	48.3 gr.	51.7 gr.	53.4 gr.	
BL-C(2)	46.2 gr.	48.4 gr.	50.6 gr.	52.9 gr.	54.0 gr.	
VIHT N-550	48.4 gr.	50.5 gr.	52.6 gr.	54.7 gr.	55.7 gr.	56.7 gr.
H414	48.9 gr.	51.3 gr.	53.9 gr.	55.9 gr.	57.0 gr.	
BIG GAME	48.5 gr.	51.0 gr.	53.5 gr.	56.0 gr.	57.2 gr.	
WIN 760	49.4 gr.	51.9 gr.	54.3 gr.	56.7 gr.	57.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



338 Winchester Magnum

Rifle:	Winchester Model 70	**Bullet Diameter:**	0.338"
Barrel:	24", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Hornady/Frontier	**Max. Case Length:**	2.500"
Primer:	Winchester WLRM	**Case Trim Length:**	2.490"

In 1958, Winchester necked down their proprietary 458 magnum cartridge to 338 caliber and introduced the 338 Winchester Magnum in their popular Model 70 rifle. The timing was fortuitous, for the Magnum Era had arrived. Winchester's 264 Magnum came out in 1958, too, and new magnum introductions continued unabated for two decades.

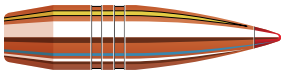
The 338 Winchester Magnum is a splendid performer. As M. L. McPherson has observed, its trajectories with heavy 338 bullets approach those of the 300 magnums, and, more tellingly, "the more efficient [338] bullets deliver more energy to hunted targets at 500 yards than the 30-30 Winchester generates at the muzzle."

This magnum is currently offered in a variety of classic firearms from Remington, Ruger, and Browning among others. Powerful and flat shooting enough for anything on the North American continent, it has come into increasing use on most large African plains species as well.

Hornady offers eight hunting bullets for the 338: the 185 grain GMX®, 200 grain SST® and Spire Point; 225 grain IB, SST® and Spire Point for elk and medium sized game, and the 250 grain Spire Point or Round Nose bullets for heavier, more dangerous game. During our testing, the powders that gave the best overall results were IMR 4831 and RL-19. All powders listed performed satisfactorily.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"



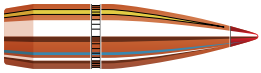
185 gr. GMX®
Item No. 33270
C.O.L.: 3.320"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
Accurate 2700	58.4 gr.	61.1 gr.	63.8 gr.	66.5 gr.	67.8 gr.		
IMR 4007 SSC	58.2 gr.	61.0 gr.	63.8 gr.	66.5 gr.	67.9 gr.		
WIN 760	58.6 gr.	61.3 gr.	64.0 gr.	66.7 gr.	68.1 gr.		
BIG GAME	60.7 gr.	63.1 gr.	65.5 gr.	67.9 gr.	69.1 gr.	70.3 gr.	71.4 gr.
Alliant RL-17	61.8 gr.	64.2 gr.	66.5 gr.	68.9 gr.	70.1 gr.	71.3 gr.	
NORMA 204	61.5 gr.	64.0 gr.	66.5 gr.	69.0 gr.	70.3 gr.		
IMR 4350	61.6 gr.	64.2 gr.	66.8 gr.	69.4 gr.	70.6 gr.	71.9 gr.	
H4350	60.6 gr.	63.6 gr.	66.5 gr.	69.5 gr.	70.9 gr.	72.4 gr.	
VIHT N-560	66.9 gr.	69.2 gr.	71.5 gr.	73.9 gr.	75.0 gr.		

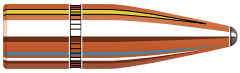
Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.340"
G1 B.C.: 0.455



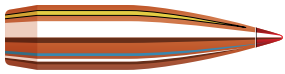
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.340"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	52.8 gr.	55.4 gr.	57.9 gr.	60.5 gr.	63.1 gr.	
VIHT N-150	52.5 gr.	55.6 gr.	58.8 gr.	61.9 gr.	65.1 gr.	
IMR 4350	61.1 gr.	63.6 gr.	65.6 gr.	67.9 gr.	70.1 gr.	72.4 gr.
Accurate 4350	61.2 gr.	63.5 gr.	65.9 gr.	68.2 gr.	70.5 gr.	72.8 gr.
H4350	58.7 gr.	61.7 gr.	64.8 gr.	67.8 gr.	70.8 gr.	73.9 gr.
IMR 4831	61.1 gr.	63.6 gr.	66.0 gr.	68.4 gr.	70.9 gr.	73.3 gr.
VIHT N-160	60.3 gr.	63.3 gr.	66.4 gr.	69.4 gr.	72.5 gr.	75.5 gr.
Alliant RL-19	63.2 gr.	65.8 gr.	68.4 gr.	71.0 gr.	73.7 gr.	76.3 gr.

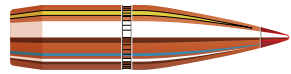
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

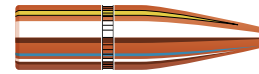
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.320"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.320"
G1 B.C.: 0.515



225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.320"
G1 B.C.: 0.397

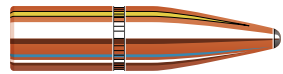
	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4350	57.2 gr.	59.5 gr.	61.8 gr.	64.1 gr.	66.3 gr.	68.6 gr.
Accurate 4350	57.6 gr.	59.9 gr.	62.2 gr.	64.5 gr.	66.8 gr.	69.0 gr.
IMR 4831	58.2 gr.	60.5 gr.	62.8 gr.	65.1 gr.	67.4 gr.	69.8 gr.
H4350	58.0 gr.	60.6 gr.	63.2 gr.	65.8 gr.	68.4 gr.	71.0 gr.
VIHT N-160	58.0 gr.	60.8 gr.	63.6 gr.	66.3 gr.	69.1 gr.	71.9 gr.
Alliant RL-19	61.0 gr.	63.5 gr.	65.9 gr.	68.4 gr.	70.9 gr.	73.3 gr.
H4831	60.9 gr.	64.1 gr.	67.2 gr.	70.4 gr.	73.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

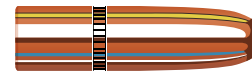
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"

^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.310"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.310"
G1 B.C.: 0.431

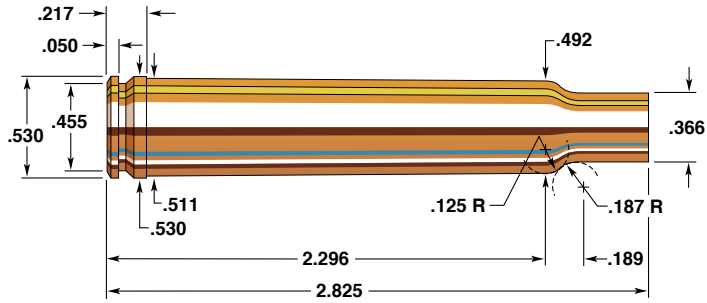


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.340"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**	**2700**
IMR 4350	58.9 gr.	61.4 gr.	64.0 gr.	66.6 gr.	67.8 gr.	
Accurate 4350	59.6 gr.	62.1 gr.	64.6 gr.	67.1 gr.	68.4 gr.	
IMR 4831	60.7 gr.	63.1 gr.	65.5 gr.	67.9 gr.	69.1 gr.	
H4350	59.3 gr.	62.4 gr.	65.5 gr.	68.6 gr.	70.1 gr.	
VIHT N-160	60.1 gr.	63.3 gr.	66.5 gr.	69.6 gr.		
Alliant RL-19	62.9 gr.	65.6 gr.	68.3 gr.	71.0 gr.	72.3 gr.	73.7 gr.
H4831	63.7 gr.	67.0 gr.	70.3 gr.	73.7 gr.	75.3 gr.	
IMR 7828	65.8 gr.	68.6 gr.	71.3 gr.	74.1 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



340 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.338"
Barrel:	26", 1 in 10" Twist	**Maximum COL:**	3.675"
Case:	Weatherby	**Max. Case Length:**	2.825"
Primer:	Federal 215	**Case Trim Length:**	2.815"

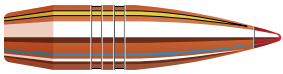
Roy Weatherby created the most powerful commercially available 338 caliber magnum of its time by necking up the 300 Weatherby Magnum case to .338" diameter. This new cartridge came into existence in 1962 and promptly became a popular choice among hunters. Winchester and Weatherby delivered the first one-two punch in the newly appealing 338 caliber arena. Interest has not abated since.

The 340 Weatherby Magnum can do everything the 338 Winchester Magnum can do, and more. With 200 fps more velocity than its predecessor, the 340 Weatherby loaded to 3000 fps with the 225 grain Spire Point is capable of delivering 2000 foot pounds of energy at 500 yards. At long ranges, the 340 Weatherby is ideal for elk, sheep, goats, and any of the African plains animals.

The accuracy of our test rifle was more than adequate for most hunting situations, with groups averaging under 2 inches at 100 yards. Best accuracy and uniformity was obtained using IMR 4831 and RL-19. We typically admonish those reloading Weatherby cartridges never to attempt light loads but rather to keep them in the top to near maximum velocities. Weatherby actions are certainly strong by anyone's standards, but fuller case charges truly can increase powder burning uniformity. That contributes to the accuracy of the load.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"

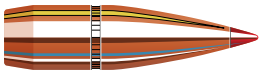


185 gr. GMX®
Item No. 33270
C.O.L.: 3.655"
G1 B.C.: 0.420

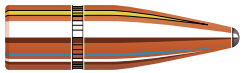
NOTE: USE 200 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.655"
G1 B.C.: 0.455



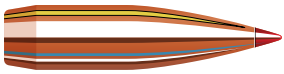
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.655"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4350	77.0 gr.	78.8 gr.	80.5 gr.		
WIN 760	77.0 gr.	79.5 gr.	81.9 gr.	84.3 gr.	
H4350	77.3 gr.	80.2 gr.	83.1 gr.		
IMR 4831	79.0 gr.	81.2 gr.	83.4 gr.	85.6 gr.	
H4831	80.7 gr.	82.2 gr.	84.0 gr.	86.2 gr.	89.9 gr.
Alliant RL-19	79.1 gr.	81.7 gr.	84.2 gr.	86.8 gr.	89.3 gr.
VIHT N-165	84.0 gr.	87.2 gr.	90.4 gr.	93.6 gr.	96.8 gr.

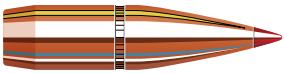
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

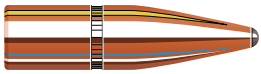
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.655"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.655"
G1 B.C.: 0.515



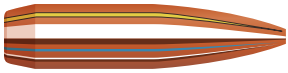
225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.655"
G1 B.C.: 0.397

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
WIN 760	72.5 gr.	74.7 gr.	76.9 gr.		
IMR 4350	72.0 gr.	74.4 gr.	77.0 gr.		
H4350		76.0 gr.	78.6 gr.	81.2 gr.	
IMR 4831	75.3 gr.	77.3 gr.	79.3 gr.	81.3 gr.	
Alliant RL-19			80.1 gr.	82.5 gr.	84.8 gr.
H4831		78.6 gr.	80.3 gr.	82.2 gr.	84.8 gr.
VIHT N-165	78.9 gr.	81.7 gr.	84.5 gr.	87.2 gr.	90.0 gr.
IMR 7828		82.5 gr.	85.6 gr.	88.7 gr.	
Alliant RL-25	86.0 gr.	88.5 gr.	91.0 gr.	93.6 gr.	96.1 gr.

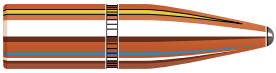
Create custom ballistic tables using our online calculators at hornady.com/ballistics

250 GRAIN BULLETS

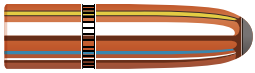
SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"



^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.650"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.650"
G1 B.C.: 0.431

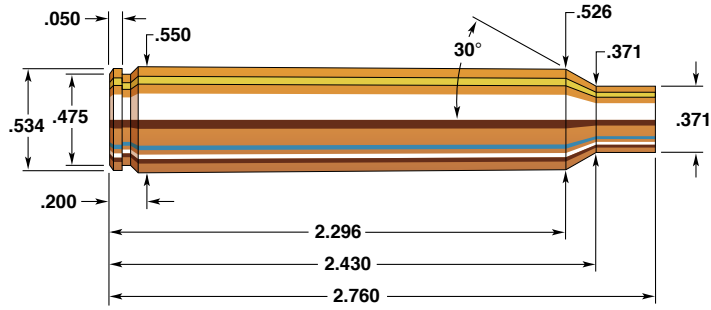


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.670"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4831	74.3 gr.	76.5 gr.	78.7 gr.		
Alliant RL-19	73.5 gr.	76.1 gr.	78.8 gr.	81.5 gr.	84.2 gr.
H4831	75.4 gr.	77.5 gr.	79.6 gr.	81.7 gr.	
VIHT N-165	79.2 gr.	81.4 gr.	83.7 gr.	86.0 gr.	
IMR 7828	78.6 gr.	81.5 gr.	84.3 gr.	87.1 gr.	
Alliant RL-25	82.0 gr.	84.9 gr.	87.9 gr.	90.8 gr.	93.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



338 Remington Ultra Magnum

Rifle: . . . . . Remington Model 700
Barrel: . . . . . 26", 1 in 10" Twist
Case: . . . . . Remington
Primer: . . . . . Remington 9½M

Bullet Diameter: . . . . . 0.338"
Maximum COL: . . . . . 3.600"
Max. Case Length: . . . . . 2.760"
Case Trim Length: . . . . . 2.750"

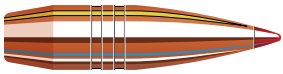
Remington's 338 Ultra Mag is one of the more attractive cartridges in the Ultra Mag line-up, at least in terms of barrel life. It comes from the same lineage as most other recent beltless magnums, the 404 Jeffery. The 338 Ultra Mag is chambered in a number of Remington's Model 700 rifles and is currently available from Winchester's Custom Shop. It is similar in power to the 338-378 Weatherby Magnum and the 338 Lapua, all of which possess ample power to take any game animal in North America. The availability of factory rifles and ammunition should make the 338 Ultra Mag an attractive choice to many sportsmen.

The 338 Ultra Mag is an excellent long range performer, especially with heavier bullets. It is capable of firing our 250 gr. bullets at a velocity of 2900 fps, delivering 2440 ft/lbs of energy at 400 yards. This is more energy than a 30/06 loaded with a 180 grain bullet puts on a target at 100 yards, and the 338 Ultra Mag shoots flatter. We believe this cartridge will prove to be an excellent big game cartridge especially when in situations where shots could reach beyond 300 yards.

Best results were obtained with H 4831 and RL-22. The 250 grain bullets produced the most consistent pressures and velocities, but all bullets shot reasonably well with most groups staying inside 1½" at one hundred yards.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"

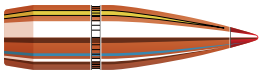


185 gr. GMX®
Item No. 33270
C.O.L.: 3.590"
G1 B.C.: 0.420

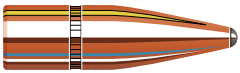
NOTE: USE 200 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.590"
G1 B.C.: 0.455



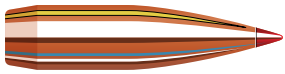
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.585"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)				
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**
IMR 4350	77.9 gr.	80.5 gr.	83.1 gr.	85.7 gr.	
H4350	73.8 gr.	77.9 gr.	82.0 gr.	86.1 gr.	
Accurate 4350	77.9 gr.	80.6 gr.	83.4 gr.	86.1 gr.	
Alliant RL-19	80.7 gr.	83.4 gr.	86.1 gr.	88.8 gr.	
IMR 7828	84.4 gr.	86.9 gr.	89.3 gr.	91.7 gr.	
Alliant RL-22	84.9 gr.	87.5 gr.	90.2 gr.	92.9 gr.	95.5 gr.
VIHT N-165	85.1 gr.	87.7 gr.	90.3 gr.	92.9 gr.	
H4831	84.9 gr.	87.6 gr.	90.3 gr.	93.0 gr.	

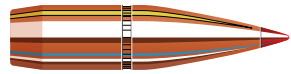
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

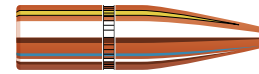
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.590"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.590"
G1 B.C.: 0.515



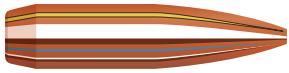
225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.590"
G1 B.C.: 0.397

	VELOCITY (FPS – feet per second)			
POWDER	**2700**	**2800**	**2900**	**3000**
IMR 4350	75.8 gr.	78.7 gr.	81.5 gr.	
H4350	74.7 gr.	78.2 gr.	81.8 gr.	85.4 gr.
Accurate 4350	75.5 gr.	78.6 gr.	81.8 gr.	85.0 gr.
Alliant RL-19	78.1 gr.	81.0 gr.	83.9 gr.	86.8 gr.
H4831	81.4 gr.	84.5 gr.	87.6 gr.	
IMR 7828	82.2 gr.	85.1 gr.	87.9 gr.	
Alliant RL-22	82.5 gr.	85.3 gr.	88.2 gr.	91.0 gr.
VIHT N-165	82.7 gr.	86.0 gr.	89.3 gr.	92.6 gr.
H1000	86.0 gr.	89.5 gr.	93.0 gr.	96.5 gr.

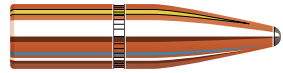
Create custom ballistic tables using our online calculators at hornady.com/ballistics

250 GRAIN BULLETS

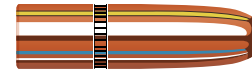
SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"



^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.590"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.580"
G1 B.C.: 0.431

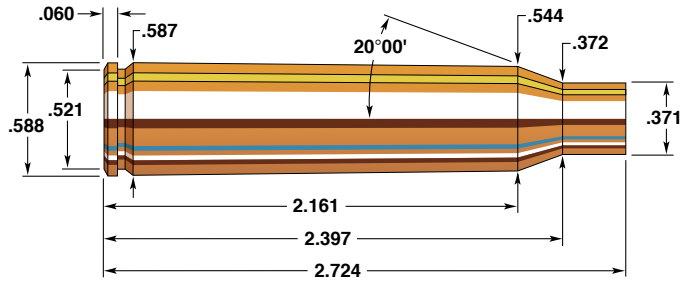


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.605"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)			
POWDER	**2600**	**2700**	**2800**	**2900**
H4350	72.0 gr.	76.4 gr.	80.9 gr.	
IMR 4350	75.0 gr.	78.3 gr.	81.7 gr.	
Accurate 4350	74.9 gr.	78.6 gr.	82.3 gr.	
Alliant RL-19	77.1 gr.	80.7 gr.	84.2 gr.	87.8 gr.
IMR 7828	79.7 gr.	83.3 gr.	86.8 gr.	
H4831	79.7 gr.	83.6 gr.	87.5 gr.	91.4 gr.
VIHT N-165	81.8 gr.	84.9 gr.	88.1 gr.	
Alliant RL-22	82.4 gr.	85.5 gr.	88.7 gr.	91.8 gr.
H1000	77.0 gr.	83.5 gr.	90.0 gr.	
Alliant RL-25	86.0 gr.	88.9 gr.	91.9 gr.	94.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



338 Lapua Magnum

Rifle:	TRG 42	**Bullet Diameter:**	0.338"
Barrel:	27.17", 1 in 10" Twist	**Maximum COL:**	.3.681"
Case:	Hornady	**Max. Case Length:**	.2.724"
Primer:	Federal 215	**Case Trim Length:**	.2.714"

First Edition Hornady Handbook coverage of 338 caliber cartridges was simple, succinct, and basic. At the end of the 1960s there were only two 338s to talk about, the 338 Winchester Magnum (introduced in 1958) and the 340 Weatherby Magnum (introduced in 1962). This new handbook features ten 338s. Clearly there is a trend here; 338 caliber is coming into its own as a preferred North American big game caliber.

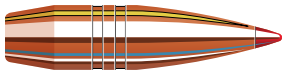
As the 338 LAPUA Magnum indicates, the trend has a European side, too. Developed in Finland at the Cartridge Factory LAPUA, Ltd., the new cartridge was introduced in 1987. While it was initially to have been based on a necked-down 416 Rigby case, it required a totally new case to accommodate the pressures first encountered.

The 338 LAPUA Magnum gained its first advocates among military and police SWAT units as a long range sniper cartridge. Effective at 1000 meters, it easily fulfilled original design intentions. Its flat trajectory, accuracy, and ability to deliver abundant energy over great ranges did not go unnoticed by Finnish and Swedish hunters, who favored powerful medium-bore cartridges on moose and bear.

Hornady has recently developed new 338 285 grain BTHP and ELD® Match bullets specifically for the 338 LAPUA Magnum. In our testing it worked best with H 1000 and Retumbo propellants. Additionally Hornady is manufacturing top quality cartridge brass and ammunition for the 338 LAPUA Magnum.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"



185 gr. GMX®
Item No. 33270
C.O.L.: 3.565"
G1 B.C.: 0.420

	VELOCITY (FPS – feet per second)						
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
IMR 4451	70.7 gr.	74.1 gr.	77.5 gr.	80.8 gr.	84.2 gr.	87.6 gr.	
H4350	71.4 gr.	74.7 gr.	77.9 gr.	81.2 gr.	84.5 gr.	87.8 gr.	
IMR 4831	76.8 gr.	79.5 gr.	82.2 gr.	84.9 gr.	87.5 gr.	90.2 gr.	
Alliant RL-22	80.1 gr.	82.9 gr.	85.8 gr.	88.6 gr.	91.4 gr.	94.2 gr.	97.1 gr.
Alliant RL-23	81.8 gr.	84.5 gr.	87.2 gr.	89.9 gr.	92.7 gr.	95.4 gr.	
Alliant RL-26	84.9 gr.	87.3 gr.	89.8 gr.	92.3 gr.	94.8 gr.	97.3 gr.	99.8 gr.
IMR 7828	84.5 gr.	87.1 gr.	89.7 gr.	92.3 gr.	95.0 gr.	97.6 gr.	
H4831	82.8 gr.	85.9 gr.	88.9 gr.	92.1 gr.	95.1 gr.		
IMR 7977	87.2 gr.	90.0 gr.	92.8 gr.	95.6 gr.	98.3 gr.		
H1000	88.1 gr.	91.2 gr.	94.3 gr.	97.4 gr.	100.5 gr.		

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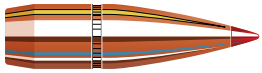
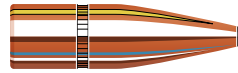
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.565"
G1 B.C.: 0.455



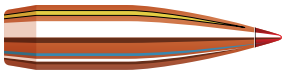
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.565"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)								
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**	**3250**	**3300**	**3350**
H4350	80.0 gr.	82.8 gr.	85.5 gr.	88.2 gr.	91.0 gr.				
IMR 4831	83.9 gr.	85.8 gr.	87.7 gr.	89.7 gr.	91.6 gr.				
VIHT N-160	77.9 gr.	81.5 gr.	85.2 gr.	88.8 gr.	92.5 gr.				
Alliant RL-26	84.3 gr.	86.7 gr.	89.1 gr.	91.5 gr.	93.9 gr.	96.4 gr.	97.6 gr.	98.8 gr.	100.0 gr.
Alliant RL-19	84.0 gr.	86.5 gr.	89.0 gr.	91.6 gr.	94.1 gr.	96.6 gr.			
Alliant RL-22	88.3 gr.	90.1 gr.	92.0 gr.	93.9 gr.	95.8 gr.	97.6 gr.	98.6 gr.		
VIHT N-165	87.0 gr.	89.5 gr.	92.0 gr.	94.5 gr.	96.9 gr.				
IMR 7977	86.3 gr.	89.0 gr.	91.6 gr.	94.3 gr.	97.0 gr.	99.6 gr.			
H4831	86.1 gr.	88.9 gr.	91.7 gr.	94.4 gr.	97.2 gr.				
IMR 7828	89.1 gr.	91.4 gr.	93.6 gr.	95.9 gr.	98.1 gr.				
H1000	91.2 gr.	93.9 gr.	96.5 gr.	99.2 gr.	101.9 gr.				

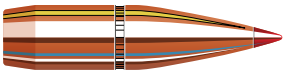
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

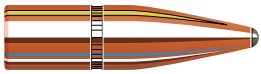
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.565"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.565"
G1 B.C.: 0.515



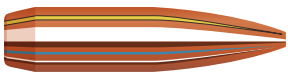
225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.565"
G1 B.C.: 0.397

	VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4831	74.8 gr.	77.6 gr.	80.4 gr.	83.2 gr.	86.1 gr.		
H4350	76.2 gr.	78.9 gr.	81.7 gr.	84.4 gr.	87.2 gr.		
VIHT N-160	75.5 gr.	78.5 gr.	81.5 gr.	84.5 gr.	87.5 gr.		
Alliant RL-19	78.0 gr.	80.7 gr.	83.5 gr.	86.3 gr.	89.0 gr.	91.8 gr.	
Alliant RL-26	80.0 gr.	82.6 gr.	85.2 gr.	87.8 gr.	90.3 gr.	92.9 gr.	95.5 gr.
Alliant RL-22	80.8 gr.	83.3 gr.	85.7 gr.	88.2 gr.	90.7 gr.	93.2 gr.	
H4831	81.9 gr.	84.5 gr.	87.2 gr.	89.9 gr.	92.5 gr.	95.2 gr.	
IMR 7828	82.6 gr.	85.1 gr.	87.6 gr.	90.1 gr.	92.6 gr.		
VIHT N-165	81.7 gr.	84.4 gr.	87.2 gr.	89.9 gr.	92.7 gr.		
IMR 7977	82.0 gr.	84.9 gr.	87.7 gr.	90.5 gr.	93.3 gr.	96.1 gr.	
H1000	86.4 gr.	88.9 gr.	91.5 gr.	94.0 gr.	96.6 gr.		

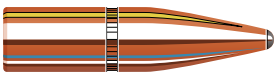
Create custom ballistic tables using our online calculators at hornady.com/ballistics

250 GRAIN BULLETS

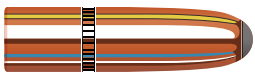
SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"



^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.625"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.565"
G1 B.C.: 0.431



250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.575"
G1 B.C.: 0.291

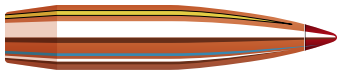
	VELOCITY (FPS – feet per second)							
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**
Alliant RL-19	72.1 gr.	75.3 gr.	78.4 gr.	81.5 gr.	84.6 gr.	87.8 gr.		
Alliant RL-26	74.4 gr.	77.4 gr.	80.4 gr.	83.3 gr.	86.3 gr.	89.3 gr.	92.3 gr.	93.8 gr.
Alliant RL-22	74.3 gr.	77.3 gr.	80.4 gr.	83.5 gr.	86.6 gr.	89.6 gr.		
H4831	75.7 gr.	78.7 gr.	81.8 gr.	84.8 gr.	87.9 gr.	90.9 gr.		
IMR 7977	75.9 gr.	79.4 gr.	82.8 gr.	86.2 gr.	89.6 gr.	93.0 gr.		
IMR 7828	78.9 gr.	81.6 gr.	84.3 gr.	87.0 gr.	89.7 gr.	92.4 gr.		
VIHT N-165	75.9 gr.	79.5 gr.	83.0 gr.	86.6 gr.	90.2 gr.	93.7 gr.		
H1000	77.9 gr.	81.6 gr.	85.2 gr.	88.9 gr.	92.6 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

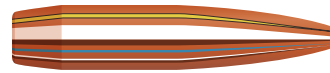
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

285 GRAIN BULLETS

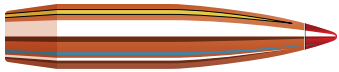
SECTIONAL DENSITY: 0.356
DIAMETER: 0.338"



***285 gr. ELD® Match**
Item No. 33381
C.O.L.: 3.665"
G1 B.C.: 0.789
G7 B.C.: 0.395



^285 gr. BTHP Match™
Item No. 3339
C.O.L.: 3.625"
G1 B.C.: 0.756
G7 B.C.: 0.356



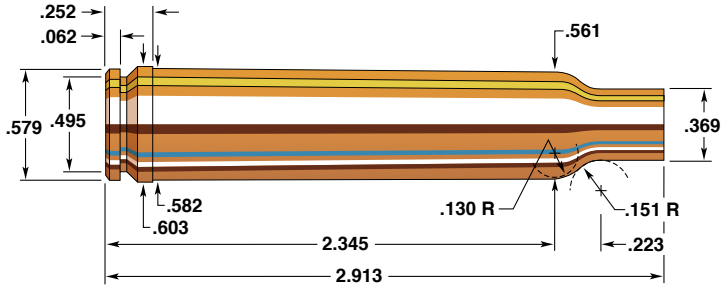
285 gr. A-MAX®
Item No. 3338
C.O.L.: 3.665"
G1 B.C.: 0.778

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**
Alliant RL-22	72.9 gr.	76.8 gr.	80.7 gr.	84.6 gr.	86.5 gr.
WIN Supreme 780	74.9 gr.	78.6 gr.	82.2 gr.	85.9 gr.	87.7 gr.
Alliant RL-25	77.2 gr.	80.8 gr.	84.3 gr.	87.8 gr.	89.6 gr.
H1000	77.2 gr.	80.8 gr.	84.3 gr.	87.8 gr.	89.6 gr.
Alliant RL-26	77.2 gr.	80.9 gr.	84.6 gr.	86.4 gr.	
IMR 7977	78.4 gr.	82.7 gr.	87.0 gr.		
RETUMBO	81.7 gr.	84.9 gr.	88.1 gr.	91.4 gr.	93.0 gr.
Alliant RL-33	88.0 gr.	91.3 gr.	94.6 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



338-378 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.338"
Barrel:	.28", 1 in 10" Twist	**Maximum COL:**	3.738"
Case:	.Weatherby	**Max. Case Length:**	.2.913"
Primer:	Federal 215	**Case Trim Length:**	2.903"

Mention the name 'Elmer Keith,' and the first association among old-timers, firearms buffs, and readers of Elmer's many articles and books are summed in two words: Big Bore. Many have observed that Keith never met a big bore rifle—or sidearm— that he didn't like. He never wanted to be "under gunned."

Keith and close associates experimented with 33 caliber cartridges in the 1940s, producing in the process the 333 OKH wildcat (333 caliber being considered Keith's minimum for elk). With the advent of Weatherby's 378 Magnum, Keith had a new platform for wildcat development. Necking this belted, double-radiused shoulder down to 338 caliber, known at first as the 338-378 KT (Keith- Thompson), the case held 30% more powder than that of the 340 Weatherby Magnum.

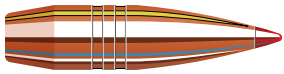
As this history indicates, the 338-378 KT was never an official entry in the proprietary Weatherby cartridge line, however closely the wildcat is related.

With the capacity to push efficient Hornady 338 caliber 250 grain bullets out the muzzle at 3000 fps, the 338-378 Weatherby can deliver well over 2000 ft. lbs. of remaining energy at 500 yards.

In our testing, H 1000, and VIHT N-170, powders were all excellent performers.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.231
DIAMETER: 0.338"

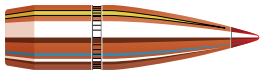


185 gr. GMX®
Item No. 33270
C.O.L.: 3.730"
G1 B.C.: 0.420

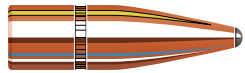
NOTE: USE 200 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.250
DIAMETER: 0.338"



200 gr. SST®
Item No. 33102
C.O.L.: 3.730"
G1 B.C.: 0.455



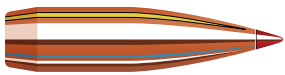
200 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3310
C.O.L.: 3.730"
G1 B.C.: 0.361

	VELOCITY (FPS – feet per second)				
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**
H4831	95.7 gr.	98.3 gr.	101.0 gr.	103.6 gr.	
IMR 7828	94.9 gr.	98.1 gr.	101.3 gr.	104.5 gr.	
VIHT N-165	94.7 gr.	98.0 gr.	101.3 gr.	104.6 gr.	107.9 gr.
H1000	101.3 gr.	104.3 gr.	107.4 gr.	110.4 gr.	113.5 gr.
Alliant RL-25	103.2 gr.	105.9 gr.	108.5 gr.	111.2 gr.	113.8 gr.

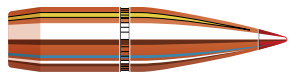
Create custom ballistic tables using our online calculators at hornady.com/ballistics

225 GRAIN BULLETS

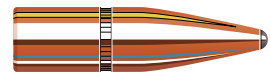
SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"



225 gr. InterBond®
Item No. 33209
C.O.L.: 3.730"
G1 B.C.: 0.515



225 gr. SST®
Item No. 33202
C.O.L.: 3.730"
G1 B.C.: 0.515



225 gr. InterLock® SP-RP
Item No. 3320
C.O.L.: 3.730"
G1 B.C.: 0.397

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
H4831	85.0 gr.	89.2 gr.	93.5 gr.	97.7 gr.		
IMR 7828	89.4 gr.	92.8 gr.	96.1 gr.	99.5 gr.	102.9 gr.	
VIHT N-165	90.7 gr.	94.0 gr.	97.3 gr.	100.6 gr.	103.9 gr.	
H1000	91.9 gr.	95.8 gr.	99.8 gr.	103.7 gr.	107.7 gr.	
Alliant RL-25	96.8 gr.	99.5 gr.	102.3 gr.	105.0 gr.	107.7 gr.	110.4 gr.

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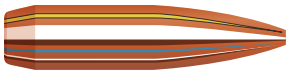
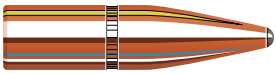
INDICATES MAXIMUM LOAD — USE WITH CAUTION

250 GRAIN BULLETS

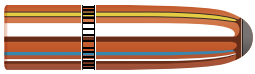
SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"



^250 gr. BTHP Match™
Item No. 33361
C.O.L.: 3.740"
G1 B.C.: 0.670



250 gr. InterLock® SP-RP
Item No. 3335
C.O.L.: 3.730"
G1 B.C.: 0.431

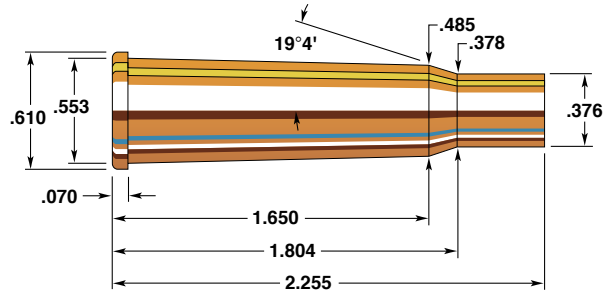


250 gr. InterLock® RN
Item No. 3330
C.O.L.: 3.740"
G1 B.C.: 0.291

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 7828	85.0 gr.	88.2 gr.	91.5 gr.	94.7 gr.	98.0 gr.	
H1000	85.8 gr.	90.2 gr.	94.6 gr.	99.0 gr.	103.4 gr.	107.8 gr.
Alliant RL-25	92.6 gr.	95.5 gr.	98.5 gr.	101.4 gr.	104.4 gr.	107.3 gr.
VIHT N-170	90.0 gr.	93.8 gr.	97.6 gr.	101.4 gr.	105.2 gr.	109.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



348 Winchester

Rifle:	Winchester Model 71	**Bullet Diameter:**	0.348"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	2.795"
Case:	Winchester	**Max. Case Length:**	2.255"
Primer:	Federal 210	**Case Trim Length:**	2.245"

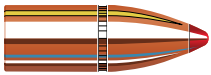
The only American rifle ever made for the 348 Winchester was that firm's Model 71, a modernized version of the old leveraction Model 1886. Announced in 1936, the Model 71 was discontinued in 1958 after new cartridge and rifle developments (the 358 Winchester and the Model 88 lever-action) made it obsolete. The big Model 71 was a well made firearm, but bulky and expensive to produce. Its top ejection necessitated side mounting of the telescopic sights more and more hunters prefer today. The Model 88 which superseded it (albeit in different calibers) was designed to handle higher pressure cartridges and to accommodate scopes more readily.

The 348 Winchester is among the most powerful of the rimmed smokeless powder cartridges so popular in lever-actions. Leveractions, tubular magazines, and more ballistically efficient pointed bullets are an impossible combination. The 348 Winchester remains, therefore, a good big game hunting cartridge for moderate ranges and brushy conditions, and one still quite popular in Alaska.

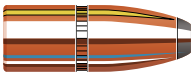
The 348 caliber 200 grain Hornady Flat Point can be loaded up to 2500 fps in the Model 71, and this bullet offers exceptionally dependable expansion for sure killing power with the 348 Winchester cartridge. Velocities in the 20" carbine are generally 100-150 fps less than the 24" barreled rifle. IMR 4320 and IMR 4350 are fine powder choices for loading the 348 case.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.236
DIAMETER: 0.348"



200 gr. FTX®
Item No. 3415
C.O.L.: 2.785"
G1 B.C.: 0.320



200 gr. InterLock® FP
Item No. 3410
C.O.L.: 2.785"
G1 B.C.: 0.246

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031		42.6 gr.	44.8 gr.	47.0 gr.	49.2 gr.
H4895		44.0 gr.	47.0 gr.	50.0 gr.	53.0 gr.
IMR 4064	41.8 gr.	44.9 gr.	48.0 gr.	51.1 gr.	
IMR 4320	44.1 gr.	46.6 gr.	49.1 gr.	51.6 gr.	54.1 gr.
WIN 760		51.9 gr.	54.3 gr.	56.7 gr.	59.1 gr.
IMR 4350	54.2 gr.	55.9 gr.	57.5 gr.	59.1 gr.	60.7 gr.
H4831	58.5 gr.	60.8 gr.	63.1 gr.	65.4 gr.	

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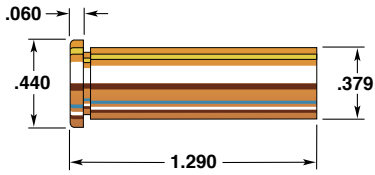


357 Magnum (Rifle)

Rifle:	Rossi Model 92	**Bullet Diameter:**	0.357"
Barrel:	16", 1 in 16" Twist	**Maximum COL:**	1.590"
Case:	Hornady/Frontier	**Max. Case Length:**	1.290"
Primer:	Winchester WSPM	**Case Trim Length:**	1.280"

There's a certain appeal to the idea of reloading one cartridge for both rifle and pistol. A good many shooters have purchased a pair of Ruger 44 Magnums, the Super Blackhawk pistol and the Ruger Carbine, to simplify their reloading. Marlin, Browning and several other manufacturers have met this demand for 357 Magnum rifles and are producing lever-actions, pumps, and single shots for this "pistol cartridge."

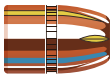
The logic that developed a following for the "dual chambering strategy" is disdained by many others. Why, some have wondered, buy two firearms of the same chambering and thereby compromise the true shooting requirements a reloader may have? Why not simply go for two different cartridges in two different firearms for two entirely different types of shooting? Why settle for being effective with one gun and only marginally effective with its counterpart? But wait; there are some real advantages of 357 Magnum chambered rifles.

With the development of FTX® bullets and LEVERevolution® ammunition the possibility to use more aerodynamic pointed bullets in tubular magazines now exists, and the potential of the 357 Magnum in carbines such as the Rossi Model 1892 is greatly increased. FTX® bullets also greatly improve terminal ballistics across a wide range of velocities. FTX® bullets redefine performance standards in lever guns.

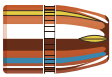
When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.357"



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.590"
G1 B.C.: 0.148



125 gr. XTP®
Item No. 35710
C.O.L.: 1.590"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)					
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**	**2000**
Alliant 2400	11.2 gr.	12.6 gr.	14.1 gr.	15.5 gr.		
H110	10.4 gr.	12.2 gr.	14.0 gr.	15.8 gr.	17.6 gr.	19.4 gr.
WIN 296	11.8 gr.	13.4 gr.	15.0 gr.	16.7 gr.	18.3 gr.	20.0 gr.

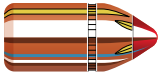
Create custom ballistic tables using our online calculators at hornady.com/ballistics

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"

CASE TRIM LENGTH: 1.240"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



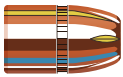
140 gr. FTX®
Item No. 35745
C.O.L.: 1.590"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)								
POWDER	**1250**	**1300**	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**	**1650**
VIHT N-105	9.0 gr.	9.2 gr.	9.4 gr.	9.6 gr.	9.9 gr.	10.1 gr.	10.3 gr.		
Accurate No. 7	9.7 gr.	10.0 gr.	10.2 gr.	10.5 gr.	10.7 gr.	11.0 gr.			
Accurate No. 9				11.4 gr.	11.8 gr.	12.2 gr.	12.7 gr.	13.1 gr.	13.5 gr.
ENFORCER	11.6 gr.	12.0 gr.	12.3 gr.	12.6 gr.	13.0 gr.	13.3 gr.	13.7 gr.	14.0 gr.	14.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"



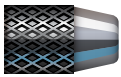
140 gr. XTP®
Item No. 35740
C.O.L.: 1.590"
G1 B.C.: 0.169

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**	**1900**
VIHT N-110	11.4 gr.	12.4 gr.	13.4 gr.	14.3 gr.		
Alliant 2400	10.8 gr.	12.1 gr.	13.4 gr.	14.7 gr.		
IMR 4227	12.5 gr.	13.2 gr.	14.0 gr.	14.8 gr.		
H110	11.5 gr.	12.9 gr.	14.2 gr.	15.6 gr.	17.0 gr.	18.3 gr.
WIN 296	11.1 gr.	12.7 gr.	14.4 gr.	16.0 gr.	17.6 gr.	19.2 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.358"



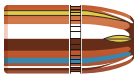
140 gr. COWBOY™
Item No. 10078
C.O.L.: 1.450"
G1 B.C.: 0.127

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	2.8 gr.	3.1 gr.	3.4 gr.	3.7 gr.	4.0 gr.	4.3 gr.
CLAYS	2.7 gr.	3.1 gr.	3.5 gr.	3.8 gr.	4.2 gr.	
AMERICAN SELECT	3.2 gr.	3.5 gr.	3.8 gr.	4.2 gr.	4.5 gr.	
UNIQUE	3.7 gr.	4.0 gr.	4.2 gr.	4.5 gr.	4.7 gr.	5.0 gr.

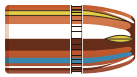
Create custom ballistic tables using our online calculators at hornady.com/ballistics

158-160 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.357"



158 gr. FP-XTP®
Item No. 35780
C.O.L.: 1.590"
G1 B.C.: 0.199



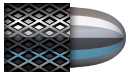
158 gr. XTP®
Item No. 35750
C.O.L.: 1.590"
G1 B.C.: 0.206

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**	**1650**
Alliant 2400	9.3 gr.	10.4 gr.	11.5 gr.	12.7 gr.	13.8 gr.	
Accurate No. 9	9.8 gr.	10.6 gr.	11.5 gr.			
H110	8.6 gr.	10.1 gr.	11.6 gr.	13.2 gr.	14.7 gr.	15.5 gr.
VIHT N-110	10.0 gr.	10.9 gr.	11.7 gr.	12.6 gr.	13.4 gr.	
WIN 296	10.2 gr.	11.4 gr.	12.7 gr.	13.9 gr.	15.1 gr.	15.7 gr.
IMR 4227	12.0 gr.	12.9 gr.	13.8 gr.	14.3 gr.		

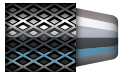
Create custom ballistic tables using our online calculators at hornady.com/ballistics

158 GRAIN BULLETS

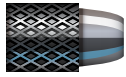
SECTIONAL DENSITY: 0.176
DIAMETER: 0.358"



158 gr. LRN
Item No. 10508
C.O.L.: 1.590"
G1 B.C.: 0.159



158 gr. SWC-HP
Item No. 10428
C.O.L.: 1.590"
G1 B.C.: 0.139



158 gr. SWC
Item No. 10408
C.O.L.: 1.590"
G1 B.C.: 0.135

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	3.1 gr.	3.3 gr.	3.6 gr.	3.9 gr.	4.2 gr.	
CLAYS	2.8 gr.	3.3 gr.	3.8 gr.	4.3 gr.		
AMERICAN SELECT	3.4 gr.	3.7 gr.	4.0 gr.	4.4 gr.		
UNIQUE	3.7 gr.	4.1 gr.	4.4 gr.	4.7 gr.	5.0 gr.	5.3 gr.

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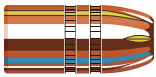
180 GRAIN BULLETS

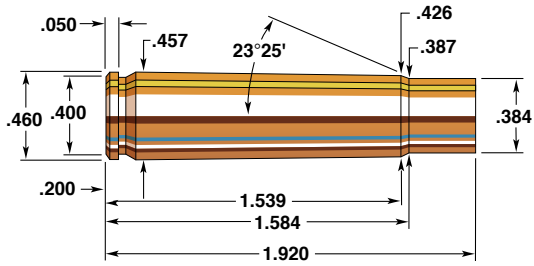
SECTIONAL DENSITY: 0.202
DIAMETER: 0.357"



180 gr. XTP®
Item No. 35771
C.O.L.: 1.590"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)					
POWDER	**1000**	**1100**	**1200**	**1300**	**1400**	**1450**
Alliant 2400	7.2 gr.	8.4 gr.	9.6 gr.	10.8 gr.	12.0 gr.	12.7 gr.
Accurate No. 9	8.4 gr.	9.3 gr.	10.2 gr.			
VIHT N-110	8.7 gr.	9.5 gr.	10.3 gr.	11.1 gr.	11.9 gr.	
H110	7.9 gr.	9.1 gr.	10.4 gr.	11.6 gr.	12.9 gr.	
WIN 296	8.6 gr.	9.8 gr.	11.1 gr.	12.3 gr.	13.5 gr.	
IMR 4227	10.2 gr.	11.2 gr.	12.3 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics



35 Remington

Rifle: . . . . . Marlin Model 336 SC
Barrel: . . . . . .20", 1 in 16" Twist
Case: . . . . . Remington
Primer: . . . . . Federal 210

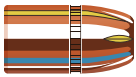
Bullet Diameter: . . . . . 0.357 – 0.358"
Maximum COL: . . . . . 2.525"
Max. Case Length: . . . . . .1.920"
Case Trim Length: . . . . . .1.910"

Remington introduced the 35 Remington in 1908 in their Model 8 semi-automatic rifle and later in their Model 14, 141, and 760 pump action rifles and the Model 81 semi-automatic rifle. The 35 Remington is a short range, woodlands hunting cartridge that is a favorite of deer hunters who hunt in crowded areas and need a short, fast-handling, and effective deer rifle. The 35 Remington is superior to the 30-30 Winchester in ballistics and closely approximates the new 375 Winchester. The lighter 158 grain bullets can give good accuracy even though .001" smaller than specified diameter. They are best used for practice or varmint hunting. The 200 grain bullets are designed for game animals such as deer and black bear.

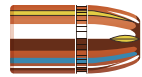
The following loading data will not give the same velocities in a 10" or 14" T/C barrel, but will supply a starting point and maximum loading data. Maximum loads should be approached with caution. The 200 grain Spire Point should not be used in guns with tubular magazines, as recoil could initiate the detonation of the remaining rounds in the magazine. Firearms, such as the Remington Model 8, 81 and the much newer Model 760 can safely use the Spire Point bullet.

158 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.357"



158 gr. FP-XTP®
Item No. 35780
C.O.L.: 2.215"
G1 B.C.: 0.199



158 gr. XTP®
Item No. 35750
C.O.L.: 2.235"
G1 B.C.: 0.206

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
IMR 4198	23.0 gr.	24.1 gr.	25.3 gr.	26.5 gr.		
H4198	23.6 gr.	24.7 gr.	25.9 gr.	27.0 gr.	28.2 gr.	
H322	24.3 gr.	26.6 gr.	29.0 gr.	31.3 gr.	33.6 gr.	36.0 gr.
Accurate 2015	26.9 gr.	28.5 gr.	30.1 gr.	31.7 gr.	33.3 gr.	
IMR 3031	27.8 gr.	29.8 gr.	31.7 gr.	33.7 gr.		

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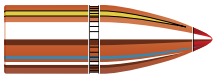
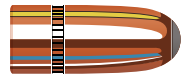
200 GRAIN BULLETS

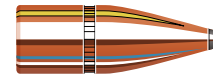
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.495"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.520"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 2.540"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)						
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2050**	**2100**
IMR 4198	22.8 gr.	24.2 gr.	25.7 gr.	27.1 gr.			
Alliant RL-10X	24.6 gr.	26.1 gr.	27.7 gr.	29.2 gr.			
H322	26.5 gr.	28.0 gr.	29.5 gr.	30.9 gr.			
Accurate 2015	25.6 gr.	27.8 gr.	30.0 gr.	32.2 gr.			
Benchmark	27.6 gr.	29.1 gr.	30.7 gr.	32.3 gr.			
X-TERMINATOR	25.8 gr.	28.3 gr.	30.7 gr.	33.2 gr.	35.6 gr.	36.9 gr.	
H4895	28.3 gr.	30.3 gr.	32.2 gr.	34.2 gr.	36.2 gr.		
IMR 8208 XBR	29.3 gr.	31.2 gr.	33.1 gr.	35.0 gr.			
VIHT N-135	30.2 gr.	31.9 gr.	33.6 gr.	35.2 gr.	36.9 gr.	37.7 gr.	
Accurate 2520	26.5 gr.	29.5 gr.	32.6 gr.	35.7 gr.	38.8 gr.		
LEVERevolution	26.6 gr.	29.8 gr.	33.0 gr.	36.3 gr.	39.5 gr.	41.1 gr.	42.7 gr.
IMR 4064	31.3 gr.	33.2 gr.	35.0 gr.	36.9 gr.			
WIN 748	32.1 gr.	34.4 gr.	36.8 gr.	39.1 gr.	41.5 gr.	42.7 gr.	

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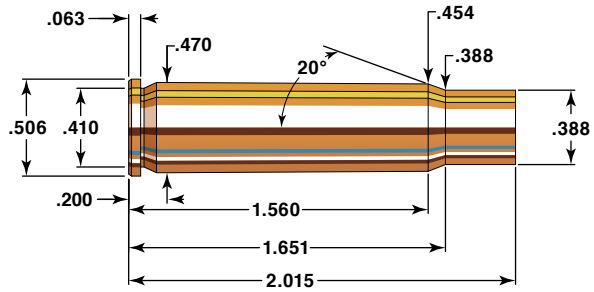
INDICATES MAXIMUM LOAD — USE WITH CAUTION



356 Winchester

Rifle:	Marlin 336 ER	**Bullet Diameter:**	0.358"
Barrel:	20¼", 1 in 12" Twist	**Maximum COL:**	2.560"
Case:	.WW	**Max. Case Length:**	.2.015"
Primer:	WLR	**Case Trim Length:**	2.005"

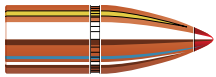
The 356 Winchester was developed in parallel with the 307 Winchester and like the 307 Winchester it is a cartridge that was ahead of its time. Similar to the 307 Winchester, the 356 Winchester is based on the 308 Winchester with the addition of a cartridge case rim. Available rifles for the 356 Winchester have been the Model 94 XTR, a beefed up version of the Model 94 Winchester as well as the Marlin 336ER. The introduction of Hornady 35 caliber 200 grain FTX® bullets give 356 Winchester owners a high-performance handloading option that will increase both the range and effectiveness of this great cartridge.

In our testing, we found that H 4895 delivers excellent velocities and great accuracy.

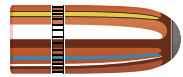
Loading FTX® bullets may require some specialized techniques. To achieve a high ballistic coefficient we had to lengthen the ogive, or nose of the bullet. Sometimes this requires that the cartridge case be trimmed shorter than the suggested .010" under SAAMI Max length that we recommend for conventional bullets. Follow prescribed trim lengths exactly as presented in the FTX® data for optimum results.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.600"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.560"
G1 B.C.: 0.195

	VELOCITY (FPS – feet per second)							
POWDER	**2100**	**2150**	**2200**	**2250**	**2300**	**2350**	**2400**	**2450**
Alliant RL-10X	35.6 gr.	36.5 gr.	37.4 gr.	38.4 gr.	39.3 gr.			
VIHT N-133	36.5 gr.	37.3 gr.	38.1 gr.	38.9 gr.	39.7 gr.	40.5 gr.	41.3 gr.	
H322	37.1 gr.	38.0 gr.	38.8 gr.	39.6 gr.	40.5 gr.	41.3 gr.		
Accurate 2230	36.4 gr.	37.4 gr.	38.5 gr.	39.5 gr.	40.6 gr.			
H335	38.4 gr.	39.3 gr.	40.2 gr.	41.1 gr.	42.0 gr.			
Accurate 2460	39.2 gr.	39.9 gr.	40.6 gr.	41.3 gr.	42.0 gr.	42.7 gr.	43.4 gr.	44.1 gr.
TAC	37.7 gr.	38.9 gr.	40.1 gr.	41.3 gr.	42.5 gr.	43.7 gr.		
H4895	39.9 gr.	40.7 gr.	41.4 gr.	42.2 gr.	43.0 gr.	43.7 gr.	44.5 gr.	
IMR 4895	39.2 gr.	40.3 gr.	41.4 gr.	42.4 gr.	43.5 gr.	44.5 gr.		

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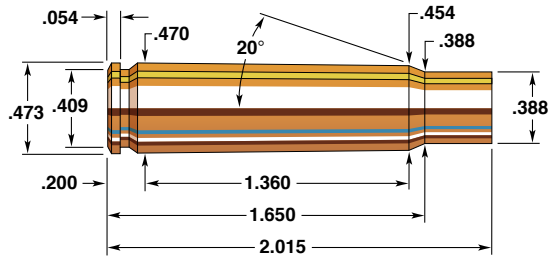
INDICATES MAXIMUM LOAD — USE WITH CAUTION



358 Winchester

Rifle:	T/C Encore	**Bullet Diameter:**	0.358"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	2.780"
Case:	Hornady	**Max. Case Length:**	2.015"
Primer:	Fed 210	**Case Trim Length:**	2.005"

Winchester's 358 and the 35 Whelen, which preceded it by 36 years, may be considered parallel developments. The 358 is a necked up 308 Winchester cartridge and the 35 Whelen is necked up 30-06. Winchester introduced its 358 in 1955 and chambered its Models 70 and 88 for the new cartridge.

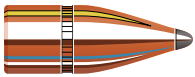
Ballistically superior to the older and larger 348 Winchester and far more powerful and versatile than the 35 Remington, the 358 nevertheless failed to succeed in the market and Winchester has discontinued chambering rifles for the cartridge. Only a few other manufacturers chambered rifles for this caliber, including Savage's M99, Mannlicher-Schoenauers, Ruger 77s and Browning BLRs.

While the newer 350 Remington Magnum will drive the 200 grain Hornady up to 200 fps faster than the 358 Winchester, with heavier 35 caliber bullets, the 358 nearly achieves the same top velocities with considerably less powder. Part of this may be attributed to the 5½" longer barrel of the T/C Encore we used in our testing versus the 18" barrel of the Model 600 used with the Remington magnum. In the field one probably could tell little effective difference between the two calibers.

The 200 grain FTX® is the newest 0.358" bullet in the Hornady line up and it is a great choice in the 358 Winchester. Its sleek profile delivers great down range performance and the flexible tip takes terminal ballistics to the next level.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.201
DIAMETER: 0.358"



180 gr. InterLock® SP-SSP *(Discontinued)*
Item No. 3505
C.O.L.: 2.600"
G1 B.C.: 0.248

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2750**
IMR 4198	33.6 gr.	36.0 gr.	38.4 gr.	40.8 gr.	43.2 gr.	44.4 gr.
H4198	33.2 gr.	35.9 gr.	38.5 gr.	41.2 gr.	43.9 gr.	
Alliant RL-7	36.6 gr.	38.7 gr.	40.8 gr.	42.9 gr.	45.1 gr.	46.1 gr.
H322	38.5 gr.	41.1 gr.	43.6 gr.	46.1 gr.	48.7 gr.	
X-TERMINATOR	37.5 gr.	40.5 gr.	43.6 gr.	46.6 gr.	49.7 gr.	51.2 gr.
TAC	40.8 gr.	43.3 gr.	45.9 gr.	48.5 gr.	51.0 gr.	52.3 gr.

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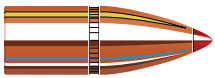
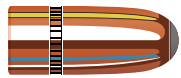
200 GRAIN BULLETS

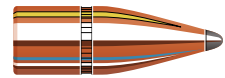
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.630"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.595"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 2.630"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4198	34.7 gr.	36.5 gr.	38.4 gr.	40.3 gr.		
H4198	32.8 gr.	35.4 gr.	38.0 gr.	40.7 gr.		
Alliant RL-7	35.3 gr.	37.3 gr.	39.3 gr.	41.2 gr.	43.2 gr.	
VIHT N-130	35.3 gr.	37.4 gr.	39.5 gr.	41.5 gr.		
H322	38.3 gr.	40.6 gr.	42.8 gr.	45.0 gr.	47.3 gr.	
X-TERMINATOR	40.1 gr.	42.4 gr.	44.7 gr.	46.9 gr.	49.2 gr.	51.4 gr.
TAC	40.7 gr.	43.0 gr.	45.4 gr.	47.7 gr.	50.1 gr.	52.4 gr.
H4895	40.9 gr.	43.1 gr.	45.4 gr.	47.7 gr.		
Accurate 2520	43.8 gr.	45.8 gr.	47.8 gr.	49.8 gr.	51.8 gr.	

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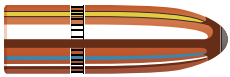
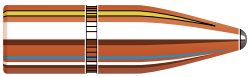
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.358"



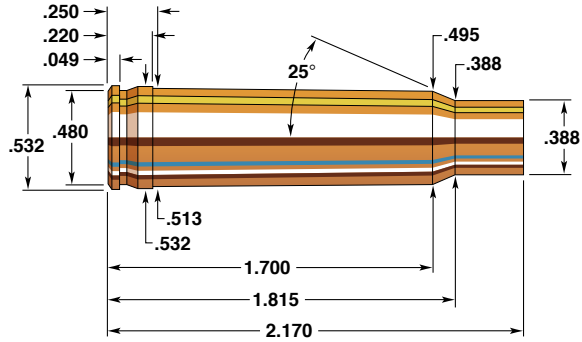
250 gr. InterLock® RN *(Discontinued)*
Item No. 3525
C.O.L.: 2.780"
G1 B.C.: 0.271



250 gr. InterLock® SP-RP
Item No. 3520
C.O.L.: 2.810"
G1 B.C.: 0.375

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4198	32.9 gr.	35.2 gr.	37.6 gr.		
H4198	32.0 gr.	34.9 gr.	37.9 gr.		
Alliant RL-7	34.0 gr.	36.5 gr.	39.1 gr.		
VIHT N-130	34.4 gr.	36.8 gr.	39.1 gr.		
X-TERMINATOR	37.1 gr.	39.6 gr.	42.2 gr.	44.7 gr.	
VIHT N-135	37.1 gr.	39.8 gr.	42.5 gr.	45.2 gr.	
TAC	37.4 gr.	40.1 gr.	42.8 gr.	45.5 gr.	48.2 gr.
H4895	38.9 gr.	41.3 gr.	43.7 gr.	46.1 gr.	
Accurate 2520	38.6 gr.	41.8 gr.	44.9 gr.	48.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



350 Remington Magnum

Rifle: . . . . . Remington 600 Carbine
Barrel: . . . . . 18½", 1 in 16" Twist
Case: . . . . . Remington
Primer: . . . . . Federal 210
Bullet Diameter: . . . . . 0.358"
Maximum COL: . . . . . 2.800"
Max. Case Length: . . . . . .2.170"
Case Trim Length: . . . . . .2.160"

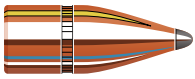
Winchester's latest entrant in the 35 caliber field—its 358—came out in 1955 and never truly established itself as a popular hunting cartridge. Nine years later, Remington introduced its contender, complete with belted head, short neck, and the magic "Magnum" in its name—the 350 Remington Magnum.

Remington's initial strategy was straightforward. Create a punchy new 35 caliber entrant for a short, quick handling rifle at its best on large American game over moderate ranges. The 350 Remington Magnum came on the market chambered in Remington's new Model 600 rifle, an 18" barreled carbine which produced some rather hefty recoil. Four years later Remington lengthened the Model 600 by 2", called it the Model 660. Remington's carbine has since been discontinued, as has its Model 700 BDL in 350 Remington Magnum. However, in 1987, Remington produced its limited edition 700 Classic in 350 Remington Magnum. Neither the 358 Winchester or the 350 Remington Magnum, whatever their merits, became common rifle calibers.

Thirty-five caliber is excellent for many types of North American big game hunting, from deer to moose, and the 350 Remington Magnum is suitable for nearly all—subject, of course, to some range limitations. Our 200 grain FTX® bullet is a great flat shooting, hard hitting option in the 350 Remington Magnum.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.201
DIAMETER: 0.358"



180 gr. InterLock® SP-SSP *(Discontinued)*
Item No. 3505
C.O.L.: 2.760"
G1 B.C.: 0.248

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031	48.3 gr.	50.6 gr.	52.8 gr.	55.1 gr.	57.4 gr.	
H4895	51.1 gr.	53.5 gr.	55.9 gr.	58.4 gr.	60.8 gr.	
VIHT N-140	54.4 gr.	56.8 gr.	59.1 gr.	61.4 gr.	63.7 gr.	66.0 gr.
Alliant RL-15	56.1 gr.	58.0 gr.	59.9 gr.	61.8 gr.	63.8 gr.	
WIN 748	57.3 gr.	59.3 gr.	61.3 gr.	63.3 gr.	65.3 gr.	

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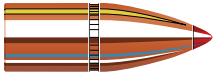
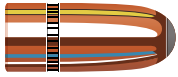
200 GRAIN BULLETS

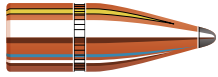
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.800"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.710"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 2.800"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
H4198	40.6 gr.	42.5 gr.	44.5 gr.	46.6 gr.		
IMR 3031	46.3 gr.	48.1 gr.	50.0 gr.	51.8 gr.	53.6 gr.	
IMR 4064	49.8 gr.	51.3 gr.	52.9 gr.	54.5 gr.	56.0 gr.	
Accurate 2520	47.0 gr.	49.6 gr.	52.2 gr.	54.8 gr.	57.4 gr.	60.0 gr.
H4895	49.7 gr.	51.7 gr.	53.8 gr.	55.8 gr.	57.9 gr.	
IMR 4320	51.3 gr.	52.5 gr.	54.4 gr.	56.5 gr.	58.5 gr.	60.5 gr.
H380		53.3 gr.	55.0 gr.	56.6 gr.		
VIHT N-140	48.7 gr.	51.5 gr.	54.2 gr.	56.9 gr.	59.6 gr.	62.4 gr.
WIN 760	57.5 gr.	59.3 gr.	61.2 gr.	63.0 gr.	64.8 gr.	

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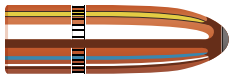
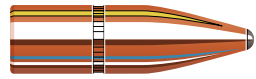
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.358"



250 gr. InterLock® RN *(Discontinued)*
Item No. 3525
C.O.L.: 2.930"
G1 B.C.: 0.271



250 gr. InterLock® SP-RP
Item No. 3520
C.O.L.: 2.955"
G1 B.C.: 0.375

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031	40.9 gr.	42.9 gr.	45.0 gr.	47.0 gr.	49.0 gr.	
H4895	43.7 gr.	45.5 gr.	47.3 gr.	49.1 gr.		
IMR 4064	43.6 gr.	45.6 gr.	47.5 gr.	49.5 gr.	51.4 gr.	
IMR 4320	45.0 gr.	47.0 gr.	49.0 gr.	50.9 gr.	53.9 gr.	54.9 gr.
VIHT N-140	45.9 gr.	48.1 gr.	50.3 gr.	52.5 gr.	54.7 gr.	
Alliant RL-15	46.1 gr.	48.4 gr.	50.6 gr.	52.8 gr.	55.1 gr.	57.3 gr.
WIN 760	51.6 gr.	53.2 gr.	55.0 gr.	56.6 gr.		

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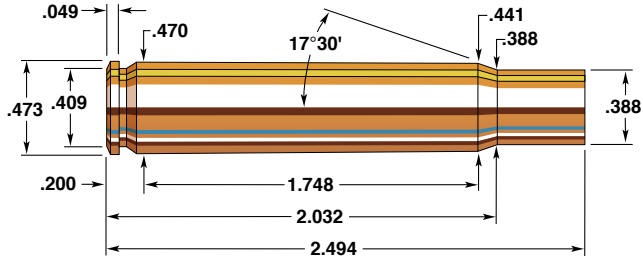


35 Whelen

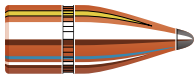
Rifle:	Remington 700	**Bullet Diameter:**	0.358"
Barrel:	22", 1 in 16" Twist	**Maximum COL:**	3.340"
Case:	Remington	**Max. Case Length:**	2.494"
Primer:	Federal 210	**Case Trim Length:**	2.484"

Attributed as a development by James Howe of Griffin & Howe, the 35 Whelen has been thought an honorific cartridge name celebrating the noted rifleman and outdoorsman, Col. Townsend Whelen. Apparently Col. Whelen made important contributions to this 1922 wildcat development. Whatever the full historical detail, the 35 Whelen enjoyed prompt acceptance. Sixty six years later, in 1988, Remington started production of firearms (Models 700 and 7600) and ammunition in this caliber.

The 35 Whelen is the 30-06 case necked up to 35 caliber, and is powerful and flexible enough for all North American game. At the time of its introduction, a magnum Mauser action alone cost about the price of two complete domestic sporting rifles, and hunters wanting a rifle which would approximate the power of the big 375 H&H had to dig deep in their pockets to achieve their goal. But the 35 Whelen gave hunters a fine low cost alternative; the cartridge was short enough to work through standard length (30-06) actions, conversion to the Whelen was simple, and cases could be made easily by running 30-06 brass over a 35 caliber expander plug. (A tapered expander greatly aids this necking up process). Though 35 Whelen performance falls several hundred feet per second short of 375 velocities with comparable bullets, the 35 Whelen is nevertheless a potent, accurate and dependable medium to big game cartridge.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.201
DIAMETER: 0.358"



180 gr. InterLock® SP-SSP *(Discontinued)*
Item No. 3505
C.O.L.: 3.050"
G1 B.C.: 0.248

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2750**
Accurate 2520	50.3 gr.	52.6 gr.	54.9 gr.	57.2 gr.	58.3 gr.
H4895	50.4 gr.	52.6 gr.	54.9 gr.	57.1 gr.	58.2 gr.
VIHT N-135	49.8 gr.	52.4 gr.	55.1 gr.	57.8 gr.	
IMR 4895	51.2 gr.	53.9 gr.	56.5 gr.	59.1 gr.	
IMR 4064	51.7 gr.	54.5 gr.	57.4 gr.		
Alliant RL-15	54.6 gr.	56.8 gr.	59.1 gr.		

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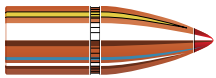
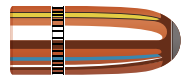
200 GRAIN BULLETS

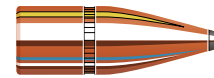
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 3.100"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 3.070"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 3.100"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2650**
Accurate 2520	46.8 gr.	49.8 gr.	52.8 gr.	55.8 gr.	57.3 gr.
H4895	48.2 gr.	50.5 gr.	52.9 gr.	55.2 gr.	56.4 gr.
IMR 4895	50.7 gr.	52.6 gr.	54.4 gr.	56.2 gr.	
VIHT N-140	49.9 gr.	52.5 gr.	55.1 gr.	57.6 gr.	58.9 gr.
IMR 4064	51.5 gr.	53.9 gr.	56.2 gr.	58.5 gr.	
Alliant RL-15	54.0 gr.	55.9 gr.	57.8 gr.		

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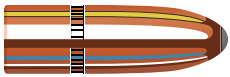
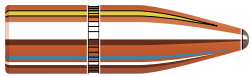
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.358"



250 gr. InterLock® RN *(Discontinued)*
Item No. 3525
C.O.L.: 3.290"
G1 B.C.: 0.271



250 gr. InterLock® SP-RP
Item No. 3520
C.O.L.: 3.232"
G1 B.C.: 0.375

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4895	46.5 gr.	48.5 gr.	50.5 gr.	52.5 gr.	
H4895	45.9 gr.	48.2 gr.	50.5 gr.	52.8 gr.	55.1 gr.
Accurate 2520	45.5 gr.	48.2 gr.	50.8 gr.	53.5 gr.	
IMR 4064	46.4 gr.	49.2 gr.	51.9 gr.	54.7 gr.	
VIHT N-140	46.3 gr.	49.2 gr.	52.2 gr.	55.1 gr.	
Alliant RL-15	49.4 gr.	51.3 gr.	53.2 gr.	55.1 gr.	

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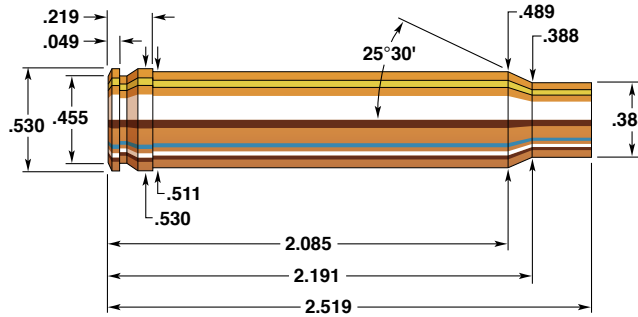


358 Norma Magnum

Rifle:	Remington Model 700	**Bullet Diameter:**	0.358"
Barrel:	25½", 1 in 14" Twist	**Maximum COL:**	3.345"
Case:	Norma	**Max. Case Length:**	2.519"
Primer:	RWS	**Case Trim Length:**	2.509"

Norma of Sweden has paid particular attention to the U.S. reloading market and to the American handloader as a trend maker. By providing cases for foreign military surplus rifles, the firm has helped popularize them and make them useful as sporting arms. But Norma has also taken its own initiatives in the American ammunition market by introducing entirely new cartridges such as the 358 Norma Magnum.

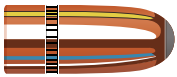
Norma announced this new and powerful cartridge in 1959 and immediately made cases and chambering specifications available. U.S. gunsmiths and reloaders accepted them and got the 358 Norma Magnum started on its way. Factory chambered European rifles entered the U.S. market in 1960, along with Norma ammunition.

The 358 Norma Magnum will work through standard length bolt actions such as the Model 70, the Mauser Model '98, and Springfield. Actions with locking lugs in the rear, however, are a poor choice for use with such a powerful cartridge.

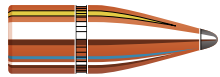
The 358 Norma Magnum comes very close to the potency of the 375 H&H Magnum and stands at the head of its 358 caliber class. Two hundred-fifty grain Hornady Bullets are outstanding and popular for this magnum, making it useful for all North American game species and many African game animals.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 3.110"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 3.140"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 3031	53.2 gr.	55.7 gr.	58.2 gr.	60.7 gr.	
H4895		58.7 gr.	61.1 gr.	63.5 gr.	65.9 gr.
IMR 4064	57.4 gr.	59.7 gr.	62.0 gr.	64.3 gr.	66.5 gr.
IMR 4320		60.6 gr.	63.2 gr.	65.7 gr.	68.3 gr.
H380	59.7 gr.	62.4 gr.	65.1 gr.	67.8 gr.	
IMR 4350	66.9 gr.	68.7 gr.	70.6 gr.	72.5 gr.	74.4 gr.

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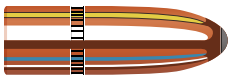
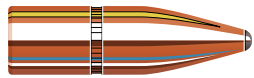
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.358"



250 gr. InterLock® RN *(Discontinued)*
Item No. 3525
C.O.L.: 3.280"
G1 B.C.: 0.271



250 gr. InterLock® SP-RP
Item No. 3520
C.O.L.: 3.300"
G1 B.C.: 0.375

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 3031	54.0 gr.	56.7 gr.	59.5 gr.	62.2 gr.	
H4895	55.7 gr.	58.4 gr.	61.0 gr.	63.7 gr.	66.4 gr.
IMR 4064	57.2 gr.	59.7 gr.	62.2 gr.	64.7 gr.	
IMR 4320	58.4 gr.	60.9 gr.	63.3 gr.	65.8 gr.	68.3 gr.
IMR 4350	64.3 gr.	66.7 gr.	69.1 gr.	71.5 gr.	74.0 gr.

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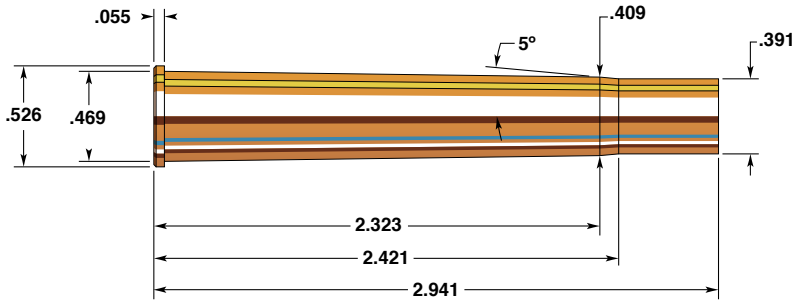


9.3 X 74R

Rifle: . . . . . .Merkel Model 141
Barrel: . . . . . .23.6", 1 in 14" Twist
Case: . . . . . .Hornady
Primer: . . . . . WLRM
Bullet Diameter: . . . . . 0.366"
Maximum COL: . . . . . .3.675"
Max. Case Length: . . . . . .2.941"
Case Trim Length: . . . . . .2.931"

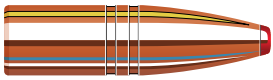
When European hunters think of large caliber big game cartridges and classic break action rifles, the 9.3x7 R is never far out of mind. Since inception in the early years of the last century, this cartridge has provided a moderate pressure, large payload option for break action rifles of nearly every configuration. European hunters have used it on nearly every big game animal on their continent, but it probably found its greatest use with German colonists in Africa back in the opening years of the 20th century.

Key to the success of this cartridge has always been its big game stopping power with heavy bullets at medium speed and sufficient accuracy for the style of hunting most popular in Europe and Africa. Hornady offers three bullets that are ideally suited for the 9.3x74R, the 250 grain GMX®, 286 grain Interlock® SP –RP and the 300 grain DGS®. The 286 grain SP-RP is designed to expand and penetrate well at the speeds generated by this cartridge, this bullet's modern design provides a flatter trajectory and more retained energy than the traditional semi-spitzer and flat point designs often favored in this cartridge.

In testing, propellants with medium burn rates provided the best blend of velocity and accuracy. Take care to seat bullets properly and with adequate neck tension to ensure proper ignition for this long powder column.

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.267
DIAMETER: 0.366"



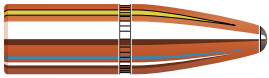
250 gr. GMX®
Item No. 3562
C.O.L.: 3.630"
G1 B.C.: 0.360

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2250**	**2300**	**2350**	**2400**
VARGET	47.9 gr.	52.3 gr.	54.6 gr.	56.8 gr.		
Alliant RL-15	51.4 gr.	54.3 gr.	55.8 gr.			
IMR 4064	52.2 gr.	55.1 gr.	56.6 gr.	58.1 gr.	59.5 gr.	
NORMA 203 B	52.3 gr.	55.3 gr.				
LEVERevolution	55.5 gr.	58.1 gr.	59.5 gr.	60.8 gr.	62.1 gr.	
CFE 223	56.6 gr.	59.1 gr.	60.4 gr.	61.7 gr.	62.9 gr.	64.2 gr.
WIN 748	56.2 gr.	59.4 gr.	61.0 gr.			
BIG GAME	56.5 gr.	60.3 gr.	62.2 gr.			
BL-C(2)	57.6 gr.	61.0 gr.	62.7 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

286 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.366"



286 gr. InterLock® SP-RP
Item No. 3560
C.O.L.: 3.630"
G1 B.C.: 0.400

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2150**	**2200**	**2250**	**2300**
VARGET	44.8 gr.	47.4 gr.	48.7 gr.			
NORMA 203 B	47.2 gr.	49.7 gr.	51.0 gr.	52.2 gr.	53.5 gr.	
Alliant RL-15	48.7 gr.	51.1 gr.	52.9 gr.	54.3 gr.	55.7 gr.	
H4350	51.0 gr.	54.3 gr.	56.0 gr.	57.6 gr.	59.3 gr.	60.9 gr.
H380	52.1 gr.	54.9 gr.	56.3 gr.	57.6 gr.	59.0 gr.	60.4 gr.
BIG GAME	52.7 gr.	55.2 gr.	56.4 gr.	57.6 gr.	58.9 gr.	60.1 gr.
IMR 4007 SSC	53.0 gr.	55.5 gr.	56.7 gr.	58.0 gr.	59.2 gr.	60.5 gr.
WIN 760	54.6 gr.	57.2 gr.	58.6 gr.	59.9 gr.	61.2 gr.	62.5 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.320
DIAMETER: 0.366"

300 gr. DGS®
Item No. 3565
C.O.L.: 3.630"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)				
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**
VARGET	43.3 gr.	45.5 gr.	47.8 gr.		
NORMA 203 B	42.5 gr.	46.0 gr.	49.5 gr.	53.0 gr.	
VIHT N-150	44.8 gr.	47.7 gr.	50.7 gr.	53.7 gr.	
Alliant RL-15	47.2 gr.	49.8 gr.	52.4 gr.	55.0 gr.	57.6 gr.
BIG GAME	47.0 gr.	50.1 gr.	53.1 gr.	56.2 gr.	59.2 gr.
Power Pro 2000 MR	47.3 gr.	50.3 gr.	53.3 gr.	56.3 gr.	
H4350	48.7 gr.	51.8 gr.	54.9 gr.	58.0 gr.	
IMR 4007 SSC	50.0 gr.	52.5 gr.	54.9 gr.	57.4 gr.	
WIN 760	51.7 gr.	54.5 gr.	57.3 gr.	60.1 gr.	

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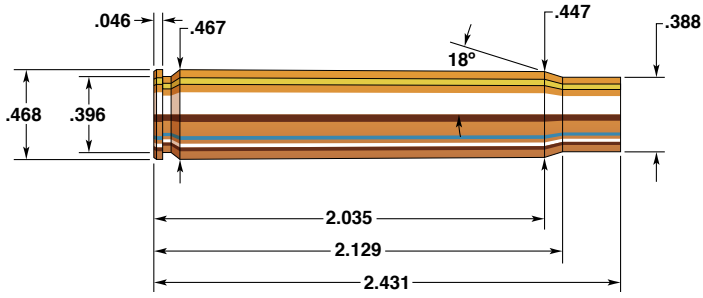


9.3 X 62

Rifle:	CZ550	**Bullet Diameter:**	0.366"
Barrel:	23.6", 1 in 10" Twist	**Maximum COL:**	3.290"
Case:	Hornady	**Max. Case Length:**	2.441"
Primer:	WLR	**Case Trim Length:**	2.431"

To most Americans, the 9.3x62mm is a novelty. Until recently, very few hunters had even heard of this fine round, but this has been steadily changing with the recent introduction of rifles chambered in this caliber from CZ-USA and many smaller custom manufacturers.

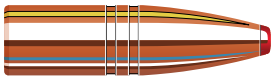
With the Hornady 250 grain GMX® or 286 grain Interlock® spitzer, this round has everything needed to make an excellent intermediate round for African game, nipping closely on the heels of the .375 H&H. The same bullets, by virtue of deep penetration and controlled expansion, will easily dispatch most North American game. In our opinion, the 9.3x62mm is an underutilized elk, bear, and moose round that will provide exceptional service in most hunting conditions. Hornady also offers a 300 grain DGS (Dangerous Game Solid) bullet for maximum penetration.

Not only does the 9.3x62mm deliver exceptional power, it also delivers terrific accuracy and frequently shoots sub MOA groups with a variety of propellants. This accuracy provides confidence and allows for the precise shot placement necessary to cleanly dispatch great beasts with clinical precision.

In our rifle, propellants such as 8208 XBR, VARGET and 2000 MR provided exceptional velocity combined with peak accuracy.

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.267
DIAMETER: 0.366"



250 gr. GMX®
Item No. 3562
C.O.L.: 3.135"
G1 B.C.: 0.360

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2450**
IMR 8208 XBR	46.3 gr.	48.8 gr.	51.2 gr.	53.7 gr.	
TAC	46.2 gr.	48.7 gr.	51.3 gr.	53.9 gr.	55.2 gr.
H4895	47.2 gr.	49.5 gr.	51.8 gr.	54.1 gr.	
VARGET	49.0 gr.	51.4 gr.	53.7 gr.	56.1 gr.	57.3 gr.
Accurate 2520	46.9 gr.	50.3 gr.	53.7 gr.	57.1 gr.	
Alliant RL-15	49.8 gr.	52.3 gr.	54.7 gr.	57.1 gr.	58.3 gr.
IMR 4064	50.7 gr.	52.9 gr.	55.2 gr.	57.4 gr.	
Power Pro Varmint	51.1 gr.	53.4 gr.	55.8 gr.	58.1 gr.	
WIN 748	51.4 gr.	53.9 gr.	56.3 gr.	58.8 gr.	60.0 gr.

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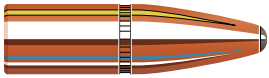
286 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.366"



286 gr. InterLock® SP-RP
Item No. 3560
C.O.L.: 3.125"
G1 B.C.: 0.400

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 8208 XBR	48.5 gr.	50.4 gr.	52.3 gr.	54.2 gr.	
TAC	46.8 gr.	49.5 gr.	52.2 gr.	55.0 gr.	
Accurate 2520	49.4 gr.	51.5 gr.	53.7 gr.	55.9 gr.	
NORMA 202	49.5 gr.	51.8 gr.	54.1 gr.	56.4 gr.	
VARGET	50.1 gr.	52.5 gr.	55.0 gr.	57.5 gr.	
WIN 748	51.0 gr.	53.4 gr.	55.7 gr.	58.1 gr.	60.4 gr.
Alliant RL-15	52.1 gr.	54.1 gr.	56.1 gr.	58.1 gr.	
VIHT N-150	50.9 gr.	53.4 gr.	55.9 gr.	58.4 gr.	
Power Pro 2000 MR	51.7 gr.	54.4 gr.	57.0 gr.	59.7 gr.	62.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.320
DIAMETER: 0.366"

300 gr. DGS®
Item No. 3565
C.O.L.: 3.115"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2150**	**2200**	**2250**
Accurate 2520	43.4 gr.	46.8 gr.	50.1 gr.			
IMR 8208 XBR	43.5 gr.	46.8 gr.	50.2 gr.			
TAC	45.5 gr.	47.9 gr.	50.3 gr.			
VARGET	47.2 gr.	49.5 gr.	51.7 gr.	52.9 gr.		
NORMA 202	47.7 gr.	49.8 gr.	51.9 gr.			
VIHT N-150	45.9 gr.	50.1 gr.	54.3 gr.			
WIN 748	49.5 gr.	52.1 gr.	54.7 gr.	56.0 gr.		
Alliant RL-15	51.2 gr.	53.5 gr.	55.8 gr.	56.9 gr.		
Power Pro 2000 MR	52.1 gr.	54.4 gr.	56.8 gr.	57.9 gr.	59.1 gr.	60.2 gr.

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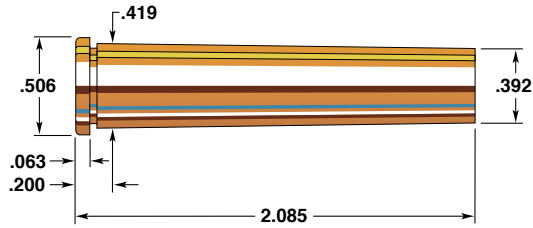


38-55 Winchester

Rifle:	Winchester M94	**Bullet Diameter:**	0.375"
Barrel:	16", 1 in 18" Twist	**Maximum COL:**	2.510"
Case:	Winchester	**Max. Case Length:**	2.085"
Primer:	Winchester WLR	**Case Trim Length:**	2.065"

Introduced in 1884 by Marlin for their Ballard rifle, this cartridge has had a long and interesting life. Originally a black powder round, it successfully made the transition to smokeless propellants. Many fine target rifles were made for these cartridges, as were fine hunting arms. Due to its age and the large variety of firearms chambered for this cartridge, however, modern loads should not be fired in older, weaker designs. This data is only to be used in Winchester Model 94s.

Initially loaded with a 255 grain bullet at 1320 fps, ammunition manufacturers offered a high velocity load at 1590 fps, later followed by a high power load at 1700 fps with 1630 foot pounds of energy. Such loads should only be fired in newer, strong firearms.

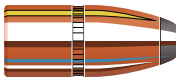
The 38-55 is an effective deer and black bear cartridge. It compares very favorably to other cartridges for classic lever-actions, such as the 30-30 Winchester, the 32 Winchester Special, and the 35 Remington.

Accuracy with our rifle was fine for its purpose. Some 38-55s with slightly oversize bores may not be as accurate.

The 220 grain Hornady Flat Point bullet is ideal for this cartridge. Expansion is good and the InterLock construction assures good penetration. Velocity in longer barrelled guns will be higher, about 80—100 fps at 20". Little advantage can be gained beyond that.

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.375"



220 gr. InterLock®
FP *(Discontinued)*
Item No. 3705
C.O.L.: 2.510"
G1 B.C.: 0.217

	VELOCITY (FPS – feet per second)					
POWDER	**1450**	**1500**	**1550**	**1600**	**1650**	**1700**
H4198	22.7 gr.	23.6 gr.	24.6 gr.	25.5 gr.	26.4 gr.	27.3 gr.
VIHT N-130	24.1 gr.	24.8 gr.	25.4 gr.	26.1 gr.	26.7 gr.	27.4 gr.
IMR 4198	24.6 gr.	25.2 gr.	25.8 gr.	26.4 gr.		
Alliant RL-7	29.6 gr.	30.1 gr.	30.5 gr.	31.0 gr.	31.5 gr.	31.9 gr.
IMR 3031	29.9 gr.	30.9 gr.	31.8 gr.	32.8 gr.	33.7 gr.	34.7 gr.

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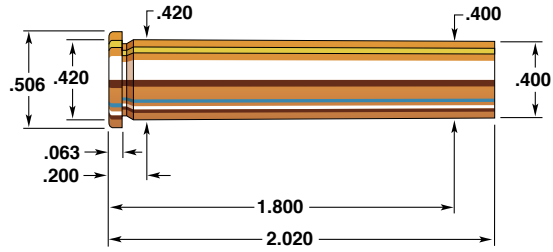


375 Winchester

Rifle: . . . . . Winchester "Big Bore 94"
Barrel: . . . . . .20", 1 in 12" Twist
Case: . . . . . Winchester
Primer: . . . . . Winchester WLR
Bullet Diameter: . . . . . 0.375"
Maximum COL: . . . . . 2.560"
Max. Case Length: . . . . . 2.020"
Case Trim Length: . . . . . .2.010"

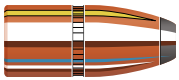
The 375 Winchester, new in 1978, was introduced by Winchester in a heavy duty version of their Model 94 lever-action rifle. A beefed-up Model 94 would surely catch the eye of enough leveraction fans to insure a following, especially the new cartridge designed for it. This Winchester round yields ballistics comparable to the 35 Remington.

The 375 is a fine choice for deer and black bear at short range and in heavy cover. The 375 Winchester case is only slightly shorter than the old 38-55 Winchester round but under no circumstances should 375 Winchester cartridges be fired in the 38-55. Working pressures for the 375 Winchester greatly exceed those of the 38-55.

When the 375 Winchester was introduced, factory ammunition was loaded with 200 and 250 grain bullets. Hornady designed a 220 grain Flat Point bullet expressly for the 375 Winchester, filling the gap. It sacrifices little velocity over the 200 grain load and is substantially faster than the 250 grain load with flatter trajectory. The InterLock design insures expansion and deep penetration. During testing, 100 yard groups of 2½" were the best obtainable. This kind of accuracy is all that is really necessary for the short range at which this cartridge should be used. RL-7 produced the best accuracy and uniformity in our firearm.

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.375"



220 gr. InterLock®
FP *(Discontinued)*
Item No. 3705
C.O.L.: 2.450"
G1 B.C.: 0.217

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
IMR 4198	28.0 gr.	30.1 gr.	32.2 gr.			
H4198	29.3 gr.	30.8 gr.	32.2 gr.	33.7 gr.	35.1 gr.	
Accurate 1680	28.0 gr.	30.6 gr.	33.3 gr.	35.9 gr.	38.6 gr.	41.2 gr.
VIHT N-130	27.0 gr.	30.2 gr.	33.4 gr.	36.6 gr.		
Alliant RL-7	31.1 gr.	32.8 gr.	34.5 gr.	36.2 gr.	38.0 gr.	
H322	34.8 gr.	36.7 gr.	38.6 gr.			

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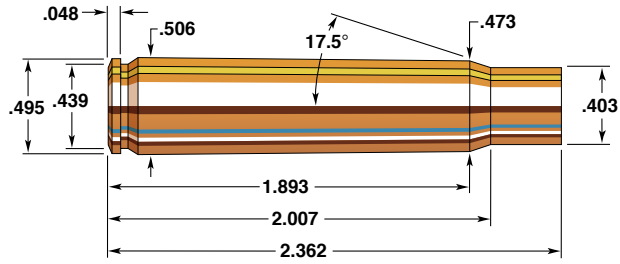


376 Steyr

Rifle:	Steyr Test Barrel	**Bullet Diameter:**	0.375"
Barrel:	25½", 1 in 12" Twist	**Maximum COL:**	3.110"
Case:	Hornady/Frontier	**Max. Case Length:**	2.362"
Primer:	Winchester WLR	**Case Trim Length:**	2.352"

Often through the Hornady Handbook you will find joint ventures between two established manufacturers to produce new cartridge/firearm combinations. Remington and Ruger, Winchester and Smith & Wesson, Colt and several cartridge manufactures, all these combinations come to mind.

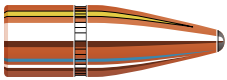
The new 376 Steyr is the outcome of collaboration between the famous Austrian firearms manufacturer, Steyr—and Hornady Manufacturing Company. Steyr has designed the cartridge and produced rifles for it. Factory ammunition is made by Hornady—along with cases, bullets and reloading dies.

The 376 Steyr falls just short of the power of the 375 H&H—and it does so with a cartridge far shorter than the H&H. It has been designed for and introduced in the Steyr Scout Rifle, introduced in 1998 chambered for the 308 Winchester. This firearm, intended for short range hunting, comes with a grey Zytel stock, fluted 19" barrel, and a Leupold M8 2.5 x 28mm IER scope mounted on a Picatinny optical rail.

The 376 Steyr is a powerhouse in a short, light rifle. For those who find weight taxing in pursuing elusive game in the mountains or elsewhere, the 376 Steyr is a splendid combination of light weight and flat-shooting power.

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.229
DIAMETER: 0.375"



225 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3706
C.O.L.: 3.065"
G1 B.C.: 0.320

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
Alliant RL-7	49.9 gr.	52.4 gr.	54.9 gr.	57.3 gr.	59.8 gr.	
H322	47.4 gr.	50.9 gr.	54.3 gr.	57.8 gr.	61.3 gr.	
Vectan 3000	49.8 gr.	52.7 gr.	55.6 gr.	58.5 gr.	61.4 gr.	
IMR 3031	50.9 gr.	53.5 gr.	56.2 gr.	58.9 gr.	61.6 gr.	
Accurate 2015	53.8 gr.	55.9 gr.	57.9 gr.	59.9 gr.	61.9 gr.	
H4895	54.3 gr.	56.8 gr.	59.4 gr.	61.9 gr.	64.5 gr.	
Accurate 2230	57.7 gr.	59.7 gr.	61.7 gr.	63.7 gr.	65.7 gr.	67.6 gr.

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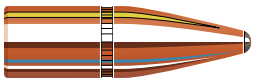
270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



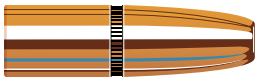
270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.080"
G1 B.C.: 0.380

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
IMR 3031	47.6 gr.	50.6 gr.	53.6 gr.	56.6 gr.		
Vectan 3000	47.9 gr.	50.8 gr.	53.7 gr.	56.6 gr.		
Accurate 2230	52.6 gr.	54.5 gr.	56.4 gr.	58.2 gr.	60.1 gr.	
VIHT N-135	49.8 gr.	53.0 gr.	56.1 gr.	59.3 gr.		
H4895	50.5 gr.	53.4 gr.	56.3 gr.	59.3 gr.	62.2 gr.	
Accurate 2460	55.0 gr.	56.7 gr.	58.5 gr.	60.2 gr.		
BL-C(2)	56.9 gr.	59.0 gr.	61.2 gr.	63.3 gr.	65.4 gr.	66.4 gr.

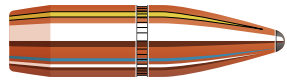
Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"

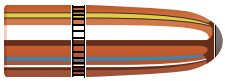


300 gr. DGS®
Item No. 3727
C.O.L.: 3.080"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.070"
G1 B.C.: 0.460

300 gr. DGX®
Item No. 3721
C.O.L.: 3.080"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.080"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2500**
VIHT N-135	46.8 gr.	49.4 gr.	52.1 gr.	54.7 gr.	57.3 gr.	
H4895	45.1 gr.	48.2 gr.	51.3 gr.	54.4 gr.	57.5 gr.	
Accurate 2520	44.5 gr.	47.9 gr.	51.2 gr.	54.6 gr.	57.9 gr.	
IMR 4895	46.2 gr.	49.2 gr.	52.3 gr.	55.4 gr.	58.5 gr.	61.5 gr.
Vectan 5000	46.8 gr.	49.8 gr.	52.7 gr.	55.6 gr.	58.6 gr.	
BL-C(2)	49.4 gr.	52.3 gr.	55.3 gr.	58.2 gr.	61.2 gr.	64.1 gr.

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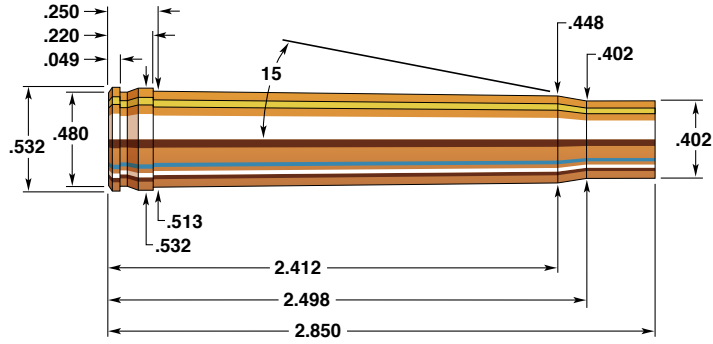


375 H & H Magnum

Rifle:	Remington 700	**Bullet Diameter:**	0.375"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	3.600"
Case:	Winchester	**Max. Case Length:**	2.850"
Primer:	Winchester WLRM	**Case Trim Length:**	2.840"

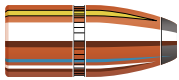
Introduced by the London firm of Holland & Holland in 1912, the 375 H&H Magnum actually started a number of events. First and foremost, it was a flexible, accurate, flat shooting cartridge suitable for medium to large game, with acceptable recoil. In short, a good all around African cartridge. It has found considerable use by Americans hunting elk, moose, and the large bears. Secondly, it was the second cartridge ever to feature a belt, designed for headspace control. In theory, it was to permit smooth feeding from the box magazine of a bolt action rifle, yet keep the positive headspacing of a rimmed cartridge. Thirdly, the 375 H&H Magnum case was the basis for a great number of today's magnum cartridges.

While many "short magnum" cartridges introduced in the 50's 60's and 70's may have hurt the popularity of the 375 H&H, it is still very much alive and not likely to be displaced any time soon on its merits.

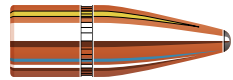
Shown are several loads for the Hornady 220 grain Flat Point, and 225 grain Spire Point Recoil Proof bullets which are both good choices for deer hunting. RL-15 worked very well with the 270 grain Spire Point, providing good velocity and trajectory. WIN 760 is an excellent choice with the 300 grain bullets. The 300 grain BTSP provides excellent accuracy, good trajectory and plenty of down range energy. Heavier bullets from the 375 H&H bring out its best qualities.

220-225 GRAIN BULLETS

SECTIONAL DENSITY: 0.223-0.229
DIAMETER: 0.375"



220 gr. InterLock®
FP *(Discontinued)*
Item No. 3705
C.O.L.: 3.340"
G1 B.C.: 0.217



225 gr. InterLock®
SP-RP *(Discontinued)*
Item No. 3706
C.O.L.: 3.555"
G1 B.C.: 0.320

	VELOCITY (FPS – feet per second)			
POWDER	**2500**	**2600**	**2700**	**2800**
IMR 4064	64.4 gr.	67.2 gr.	70.0 gr.	72.8 gr.
VIHT N-140	66.7 gr.	69.2 gr.	71.8 gr.	74.3 gr.
Alliant RL-15	67.6 gr.	69.9 gr.	72.2 gr.	74.5 gr.
H4895	64.3 gr.	67.8 gr.	71.3 gr.	74.8 gr.

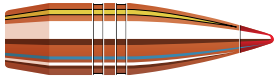
Create custom ballistic tables using our online calculators at hornady.com/ballistics

	REDUCED LOADS VELOCITY (FPS – feet per second)			
POWDER	**2000**	**2100**	**2200**	**2300**
IMR SR-4759	34.4 gr.	36.9 gr.	39.4 gr.	42.0 gr.
Accurate 5744	40.5 gr.	42.9 gr.	45.3 gr.	47.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.375"



250 gr. GMX®
Item No. 3708
C.O.L.: 3.595"
G1 B.C.: 0.430

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2650**	**2700**	**2750**
H4895	59.8 gr.	62.7 gr.	65.6 gr.	67.1 gr.	68.5 gr.	
TAC	60.7 gr.	63.3 gr.	65.9 gr.	67.2 gr.	68.5 gr.	69.8 gr.
IMR 8208 XBR	59.7 gr.	63.0 gr.	66.2 gr.	67.8 gr.	69.4 gr.	
NORMA 202	61.4 gr.	64.6 gr.	67.7 gr.	69.3 gr.	70.8 gr.	
VARGET	62.3 gr.	65.1 gr.	68.0 gr.	69.4 gr.	70.8 gr.	
Alliant RL-15	63.2 gr.	66.2 gr.	69.2 gr.	70.7 gr.		
VIHT N-140	63.8 gr.	66.8 gr.	69.7 gr.	71.2 gr.		
WIN 748	61.8 gr.	66.3 gr.	70.8 gr.	73.0 gr.	75.3 gr.	
Power Pro 2000 MR	67.3 gr.	70.3 gr.	73.3 gr.	74.8 gr.	76.3 gr.	77.8 gr.

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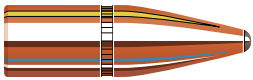
INDICATES MAXIMUM LOAD — USE WITH CAUTION

270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



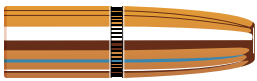
270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.570"
G1 B.C.: 0.380

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
H4895	58.6 gr.	61.8 gr.	64.9 gr.	68.1 gr.	
IMR 4064	61.2 gr.	64.3 gr.	67.3 gr.	70.3 gr.	73.4 gr.
Alliant RL-15	62.7 gr.	65.6 gr.	68.5 gr.	71.4 gr.	74.3 gr.
VARGET	61.1 gr.	64.6 gr.	68.1 gr.	71.6 gr.	75.1 gr.
VIHT N-140	61.9 gr.	65.2 gr.	68.4 gr.	71.7 gr.	
Accurate 2700	64.5 gr.	68.6 gr.	72.7 gr.	76.8 gr.	81.0 gr.
WIN 760	68.5 gr.	73.0 gr.	77.6 gr.	81.9 gr.	

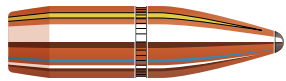
Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

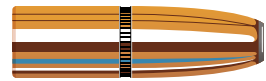
SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"



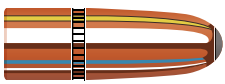
300 gr. DGS®
Item No. 3727
C.O.L.: 3.560"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.580"
G1 B.C.: 0.460



300 gr. DGX®
Item No. 3721
C.O.L.: 3.560"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.560"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
H4895	53.2 gr.	56.6 gr.	60.0 gr.	63.4 gr.	66.8 gr.
IMR 4064	52.3 gr.	56.4 gr.	60.5 gr.	64.6 gr.	68.7 gr.
VARGET	53.5 gr.	57.5 gr.	61.4 gr.	65.4 gr.	69.3 gr.
Alliant RL-15	56.8 gr.	60.1 gr.	63.5 gr.	66.8 gr.	70.1 gr.
VIHT N-140	57.7 gr.	60.9 gr.	64.0 gr.	67.1 gr.	70.3 gr.
Power Pro 2000 MR	61.2 gr.	64.3 gr.	67.4 gr.	70.5 gr.	73.6 gr.
Accurate 2700	57.8 gr.	62.3 gr.	66.8 gr.	71.3 gr.	75.8 gr.
IMR 4350	63.7 gr.	66.8 gr.	70.0 gr.	73.1 gr.	76.3 gr.
WIN 760	61.5 gr.	65.6 gr.	69.7 gr.	73.8 gr.	77.9 gr.

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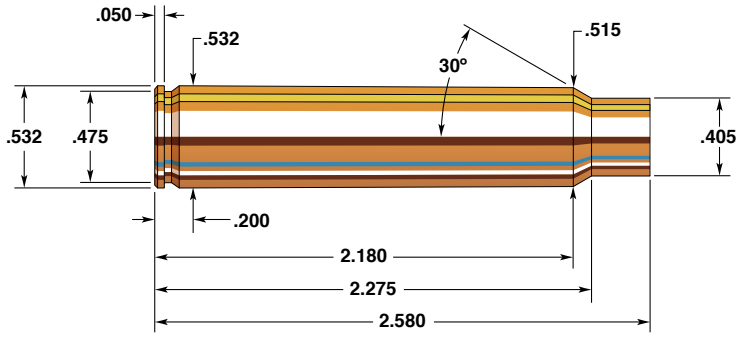


375 Ruger

Rifle:	Ruger Model 77 Hawkeye	**Bullet Diameter:**	0.375"
Barrel:	20", 1 in 12" Twist	**Maximum COL:**	3.340"
Case:	Hornady	**Max. Case Length:**	2.580"
Primer:	WLRM	**Case Trim Length:**	2.570"

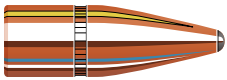
A collaborative design between Hornady and Ruger, the 375 Ruger is an efficient cartridge that delivers 375 H&H performance from a 20" barrel and a standard length action. The 375 Ruger is not based on the 404 Jeffery, as are many other "beltless" magnums and short magnums of the day. The 375 Ruger is a unique cartridge design. The case has a base diameter of 0.532" which is the same diameter as the belt on a belted magnum, but the 375 Ruger carries the 0.532" diameter forward increasing case capacity over that of a belted magnum.

Hornady offers many bullets that are suitable for loading in the 375 Ruger. The 250 grain GMX® and 270 grain SP-RP are excellent all around choices for all North American game and plains game in Africa. The 300 grain DGX® and DGS® bullets are designed specifically for dangerous game and deliver deep penetration, the DGX® combining deep penetration and controlled expansion.

Handloading the 375 Ruger is a straight forward task, using Hornady New Dimension dies and the data found on the following pages the handloader can build loads that match factory ballistics. Keep in mind that data was developed with a 20" barrel and factory ballistics are tested in a 24" SAAMI standard barrel. Hodgdon Varget, Winchester 760 and Viht N-160 all delivered noteworthy results in testing. Recoil is fairly heavy in the 375 Ruger, so it is important to crimp the case mouth on the cannelure of the bullet so Cartridge Overall Length is maintained.

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.229
DIAMETER: 0.375"



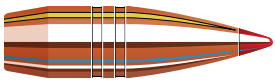
225 gr. InterLock®
SP-RP *(Discontinued)*
Item No. 3706
C.O.L.: 3.250"
G1 B.C.: 0.320

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	66.3 gr.	69.2 gr.	72.0 gr.	74.8 gr.	
Alliant RL-15	68.8 gr.	71.5 gr.	74.2 gr.	76.9 gr.	79.5 gr.
VARGET	66.4 gr.	70.0 gr.	73.7 gr.	77.3 gr.	
VIHT N-140	70.6 gr.	73.3 gr.	76.0 gr.	78.7 gr.	
WIN 760	76.0 gr.	79.0 gr.	82.0 gr.	85.0 gr.	87.9 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.375"



250 gr. GMX®
Item No. 3708
C.O.L.: 3.330"
G1 B.C.: 0.430

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2650**	**2700**
IMR 8208 XBR	60.8 gr.	63.5 gr.	66.2 gr.		
VARGET	62.3 gr.	66.0 gr.	69.7 gr.		
WIN 748	65.3 gr.	68.2 gr.	71.0 gr.	72.4 gr.	
VIHT N-150	65.6 gr.	68.5 gr.	71.4 gr.		
IMR 4007 SSC	70.8 gr.	73.6 gr.			
Alliant RL-17	70.7 gr.	73.8 gr.	76.9 gr.		
H414	71.0 gr.	74.0 gr.	77.0 gr.	78.5 gr.	
BIG GAME	71.8 gr.	74.6 gr.	77.3 gr.	78.7 gr.	80.1 gr.

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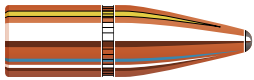
270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.250"
G1 B.C.: 0.380

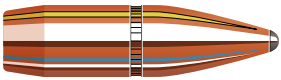
	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2650**	**2700**
IMR 4064	64.6 gr.	67.2 gr.	69.7 gr.		
VARGET	64.7 gr.	68.4 gr.	72.1 gr.	73.9 gr.	
Alliant RL-15	67.0 gr.	69.6 gr.	72.1 gr.	73.4 gr.	
VIHT N-140	67.6 gr.	70.1 gr.	72.6 gr.		
BIG GAME	70.4 gr.	73.0 gr.	75.7 gr.	77.0 gr.	
Power Pro 2000 MR	72.1 gr.	74.2 gr.	76.4 gr.		
Accurate 2700	70.7 gr.	73.7 gr.	76.7 gr.	78.2 gr.	
H414	71.6 gr.	74.3 gr.	77.0 gr.	78.4 gr.	79.7 gr.
WIN 760	72.2 gr.	75.0 gr.	77.8 gr.	79.2 gr.	80.5 gr.
IMR 4007 SSC	75.0 gr.	77.7 gr.	80.5 gr.		
Hybrid 100V	71.8 gr.	76.3 gr.	80.8 gr.		
Alliant RL-17	76.3 gr.	78.8 gr.	81.3 gr.		
H4350	74.8 gr.	78.1 gr.	81.4 gr.	83.0 gr.	
IMR 4350	75.8 gr.	78.9 gr.	82.0 gr.		
VIHT N-160	77.2 gr.	80.3 gr.	83.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

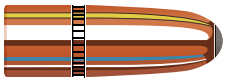
SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"

300 gr. DGS®
Item No. 3727
C.O.L.: 3.290"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.310"
G1 B.C.: 0.460

300 gr. DGX®
Item No. 3721
C.O.L.: 3.290"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.290"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2550**
Alliant RL-15	61.1 gr.	64.2 gr.	67.3 gr.		
VARGET	60.1 gr.	64.1 gr.	68.1 gr.		
BIG GAME	62.8 gr.	66.1 gr.	69.5 gr.		
WIN 760	63.3 gr.	67.1 gr.	70.9 gr.	74.7 gr.	
H414	63.6 gr.	67.4 gr.	71.1 gr.		
Power Pro 2000 MR	63.6 gr.	68.2 gr.	72.8 gr.		
Accurate 2700	65.9 gr.	69.7 gr.	73.4 gr.	77.1 gr.	
H4350	68.2 gr.	71.9 gr.	75.7 gr.	79.4 gr.	
IMR 4007 SSC	72.0 gr.	73.9 gr.	75.8 gr.	77.8 gr.	
Hybrid 100V	68.7 gr.	72.4 gr.	76.1 gr.		
Alliant RL-17	71.2 gr.	73.8 gr.	76.3 gr.	78.9 gr.	
IMR 4350	69.4 gr.	72.9 gr.	76.5 gr.	80.0 gr.	
VIHT N-160	69.9 gr.	73.6 gr.	77.3 gr.	81.1 gr.	82.9 gr.
SUPERFORMANCE	71.4 gr.	75.3 gr.	79.3 gr.	83.2 gr.	
Alliant RL-19	73.0 gr.	76.4 gr.	79.8 gr.	83.3 gr.	

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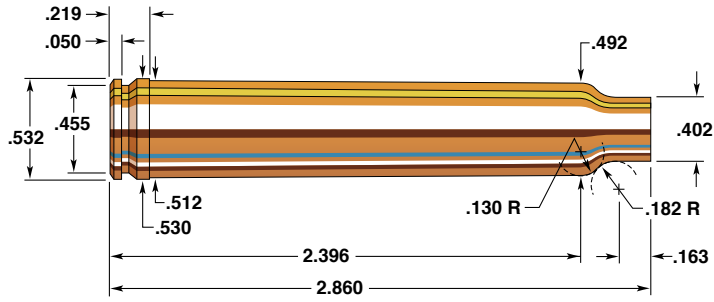


375 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.375"
Barrel:	24", 1 in 12" Twist	**Maximum COL:**	3.600"
Case:	Reformed Frontier 375 H&H	**Max. Case Length:**	2.860"
Primer:	Winchester WLRM	**Case Trim Length:**	2.850"

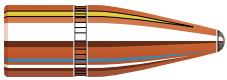
The 375 Weatherby Magnum is an improved 375 H&H Magnum with, of course, the double radius shoulder that Roy Weatherby made famous. It has been around since 1945 and is the ballistic peer of the 375 Ultra Mag. Weatherby tabled the cartridge when it was superceded by the 378 Weatherby in 1953, but have since brought it back.

Generally, when a standard case is improved, actual velocity gains with equal pressures will be in the neighborhood of 150 fps. The 375 Weatherby Magnum follows true to form. Another attractive feature of the 375 Weatherby Magnum is the fact that if a hunter is separated from his 375 Weatherby Magnum ammunition, 375 H&H ammunition may be fired in the chamber with only a slight loss in performance. The same cannot be said of its peers, the 375 Ultra Mag and most other cartridges.

Our test rifle seemed to prefer Varget with the 225 grain Spire Point and H 4350 worked very well with 270 and 300 grain bullets. Accuracy was average with most groups in the 1½" range. Any one with the necessity or desire to hunt with a powerful medium bore rifle will find a winner in the 375 Weatherby Mag.

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.229
DIAMETER: 0.375"



225 gr. InterLock® SP-RP *(Discontinued)*
Item No. 3706
C.O.L.: 3.590"
G1 B.C.: 0.320

	VELOCITY (FPS – feet per second)				
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4064	65.1 gr.	68.5 gr.	71.9 gr.	75.3 gr.	78.7 gr.
H4895	66.5 gr.	69.6 gr.	72.6 gr.	75.6 gr.	78.7 gr.
VARGET	68.3 gr.	71.4 gr.	74.6 gr.	77.8 gr.	81.0 gr.
Alliant RL-15	72.4 gr.	74.9 gr.	77.5 gr.	80.1 gr.	82.6 gr.
VIHT N-150	73.7 gr.	76.1 gr.	78.4 gr.	80.8 gr.	83.2 gr.
Accurate 2700	64.9 gr.	70.1 gr.	75.3 gr.	80.5 gr.	85.7 gr.
WIN 748	77.4 gr.	79.8 gr.	82.2 gr.	84.5 gr.	86.9 gr.

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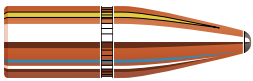
270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



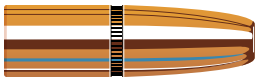
270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.585"
G1 B.C.: 0.380

	VELOCITY (FPS – feet per second)			
POWDER	**2500**	**2600**	**2700**	**2800**
H4895	67.6 gr.	70.4 gr.	73.3 gr.	76.1 gr.
IMR 4064	68.9 gr.	71.4 gr.	73.8 gr.	
VARGET	68.9 gr.	71.8 gr.	74.8 gr.	77.8 gr.
Alliant RL-15	70.7 gr.	73.0 gr.	75.2 gr.	77.4 gr.
VIHT N-150	71.7 gr.	74.2 gr.	76.7 gr.	79.1 gr.
Accurate 2700	68.8 gr.	72.8 gr.	76.8 gr.	80.8 gr.
WIN 748	75.5 gr.	77.7 gr.	79.9 gr.	82.1 gr.
H4350	76.4 gr.	79.9 gr.	83.4 gr.	86.9 gr.
IMR 4350	79.0 gr.	81.9 gr.	84.8 gr.	

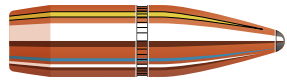
Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"

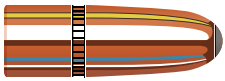


300 gr. DGS®
Item No. 3727
C.O.L.: 3.585"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.585"
G1 B.C.: 0.460

300 gr. DGX®
Item No. 3721
C.O.L.: 3.585"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.585"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
H4895	61.2 gr.	64.9 gr.	68.6 gr.	72.3 gr.	
VARGET	65.6 gr.	68.8 gr.	71.9 gr.	75.0 gr.	
Alliant RL-15	67.5 gr.	70.0 gr.	72.5 gr.	75.0 gr.	
VIHT N-150	69.0 gr.	71.5 gr.	74.0 gr.	76.6 gr.	
Accurate 2700	69.1 gr.	71.6 gr.	74.1 gr.	76.6 gr.	
WIN 748	70.0 gr.	73.0 gr.	76.1 gr.	79.1 gr.	
Accurate 4350	73.4 gr.	76.6 gr.	79.8 gr.	82.9 gr.	86.1 gr.
H4350	72.6 gr.	76.2 gr.	79.8 gr.	83.5 gr.	87.1 gr.
WIN 760	67.6 gr.	73.0 gr.	78.4 gr.	83.9 gr.	
IMR 4350	74.8 gr.	78.0 gr.	81.2 gr.	84.5 gr.	87.7 gr.

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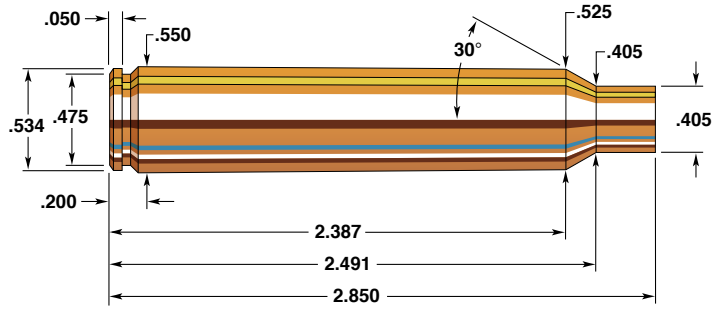
INDICATES MAXIMUM LOAD — USE WITH CAUTION



375 Remington Ultra Magnum

Rifle:	Remington Model 700	**Bullet Diameter:**	0.375"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	3.600"
Case:	Remington	**Max. Case Length:**	2.850"
Primer:	Remington 9½M	**Case Trim Length:**	2.840"

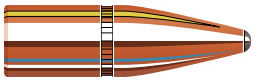
Remington's 1999 introduction of the 300 Ultra Mag and Ultra Mag Series is likely to cement the 404 Jeffery as the next great parent cartridge. Moving the 404 into a class with the 30-06 Springfield, 375 H & H Magnum and the 8mm Mauser, not bad company, especially for a cartridge that lay dormant for 6 or 7 decades.

The 375 Ultra Mag is capable of pushing our 270 grain bullet an impressive 2900 fps and the 300 grain bullets 2700 fps which is certainly impressive. That's a 200 fps increase over the tried and true 375 H&H. Not everyone, however, will agree that the increase in recoil and muzzle blast is worth the extra speed.

As with all Remington Ultra Mag cartridges the 375 prefers slower burning powders. Our gun performed best with H 4831 and VIHT N-165. The 270 grain Spire Point would be the first choice for hunting in North America and for African plains game. The 300 grain DGX® and DGS® would be excellent choices when deep penetration is necessary. Do not use charges that are lighter than what is listed in the data. Hang-fires can occur if the cartridge is under charged with a slow burning powder.

270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.585"
G1 B.C.: 0.380

	VELOCITY (FPS – feet per second)				
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**
H4350	82.4 gr.	84.1 gr.	85.8 gr.	87.5 gr.	
IMR 4350	81.1 gr.	83.6 gr.	86.2 gr.	88.7 gr.	
Accurate 4350	83.0 gr.	84.7 gr.	86.4 gr.		
Alliant RL-19	83.6 gr.	86.7 gr.	89.7 gr.	92.8 gr.	
H4831	87.2 gr.	90.4 gr.	93.5 gr.	96.7 gr.	
IMR 7828	88.7 gr.	91.6 gr.	94.4 gr.	97.3 gr.	
Alliant RL-22	87.4 gr.	91.0 gr.	94.6 gr.	98.3 gr.	
VIHT N-165		93.7 gr.	97.0 gr.	100.3 gr.	103.6 gr.

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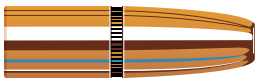
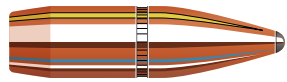
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"

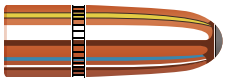


300 gr. DGS®
Item No. 3727
C.O.L.: 3.590"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.560"
G1 B.C.: 0.460

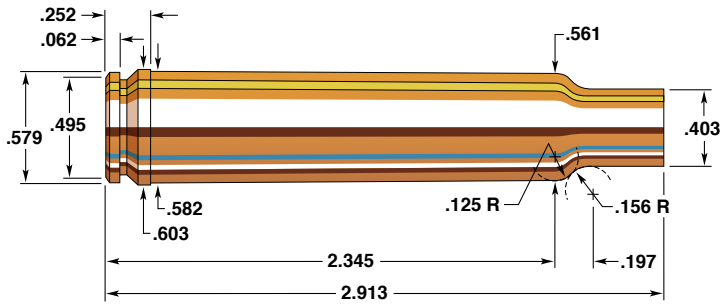
300 gr. DGX®
Item No. 3721
C.O.L.: 3.590"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.590"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4350	72.1 gr.	76.4 gr.	80.7 gr.	85.0 gr.	
H4350	73.0 gr.	77.0 gr.	80.9 gr.	84.8 gr.	
Accurate 4350	75.3 gr.	78.5 gr.	81.8 gr.		
Alliant RL-19	75.8 gr.	79.7 gr.	83.7 gr.	87.6 gr.	
VIHT N-165	78.1 gr.	82.5 gr.	86.9 gr.	91.3 gr.	
IMR 7828	81.7 gr.	84.6 gr.	87.5 gr.	90.3 gr.	
H4831	80.7 gr.	84.2 gr.	87.7 gr.	91.3 gr.	94.8 gr.
Alliant RL-22	81.0 gr.	84.6 gr.	88.2 gr.	91.8 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



378 Weatherby Magnum

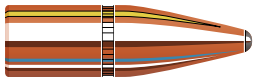
Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.375"
Barrel:	26", 1 in 12" Twist	**Maximum COL:**	3.655"
Case:	Weatherby	**Max. Case Length:**	2.913"
Primer:	Federal 215	**Case Trim Length:**	2.903"

The huge 378 Weatherby Magnum holds well over 100 grains of powder and can propel a 270 grain 375 caliber SP-RP at 3100 fps and a 300 grain DGX® or DGS® at 2900 fps producing muzzle energies of 5763 ft.-lbs. and 5604 ft.-lbs. respectively. That's ample power for the hunter to take on the very largest, toughest, and most dangerous game of the world. Because of its high velocity and flat trajectory, the 378 Weatherby Magnum is a far better long range performer than powerful big bores up to the 460 Weatherby. Flat shooting and hard hitting, it can be used effectively for hunting where local game laws permit the use of sub-40 caliber rifles on the largest species. However, this ballistic performance results in substantial recoil. It can be challenging when shot from a bench while sighting in.

The 378 has considerably more capacity and velocity potential than the earlier 375 Weatherby Magnum, a cartridge developed by blowing out and improving the 375 H&H Magnum case. The 378 Weatherby Magnum is a Weatherby original, and is based on the same case as their enormous, powerful 460 cartridge.

270 GRAIN BULLETS

SECTIONAL DENSITY: 0.274
DIAMETER: 0.375"



270 gr. InterLock® SP-RP
Item No. 3711
C.O.L.: 3.625"
G1 B.C.: 0.380

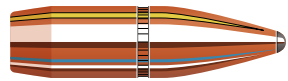
	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4350	89.9 gr.	93.2 gr.	96.5 gr.	99.7 gr.	
Accurate 4350	89.9 gr.	93.2 gr.	96.5 gr.	99.8 gr.	103.1 gr.
H4350	91.3 gr.	94.9 gr.	98.4 gr.	102.0 gr.	
IMR 4831	95.0 gr.	97.8 gr.	100.6 gr.	103.5 gr.	
VIHT N-160	94.3 gr.	98.0 gr.	101.8 gr.	105.5 gr.	
Alliant RL-19		102.2 gr.	105.7 gr.	109.2 gr.	112.7 gr.
VIHT N-165		101.6 gr.	106.7 gr.	111.7 gr.	116.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

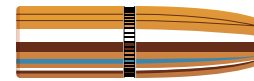
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.305
DIAMETER: 0.375"

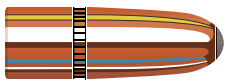
300 gr. DGS®
Item No. 3727
C.O.L.: 3.650"
G1 B.C.: 0.275



300 gr. InterLock® BTSP *(Discontinued)*
Item No. 3725
C.O.L.: 3.650"
G1 B.C.: 0.460



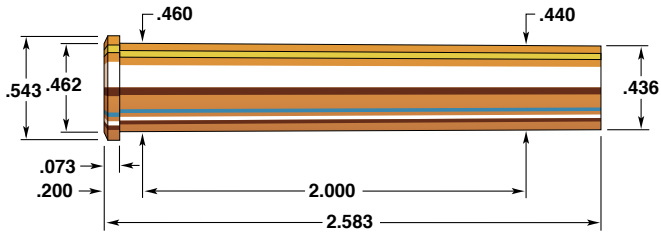
300 gr. DGX®
Item No. 3721
C.O.L.: 3.650"
G1 B.C.: 0.275



300 gr. InterLock® RN *(Discontinued)*
Item No. 3720
C.O.L.: 3.650"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)			
POWDER	**2600**	**2700**	**2800**	**2900**
H4350	86.4 gr.	91.6 gr.	96.8 gr.	
IMR 4831	93.6 gr.	96.8 gr.	100.0 gr.	103.2 gr.
H4831	97.1 gr.	100.7 gr.	104.3 gr.	107.9 gr.
Alliant RL-22	99.0 gr.	102.8 gr.	106.6 gr.	110.4 gr.
IMR 7828	101.4 gr.	104.9 gr.	108.5 gr.	112.0 gr.
VIHT N-165	103.6 gr.	106.7 gr.	109.9 gr.	113.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



405 Winchester

Rifle: . . . . . Winchester Model 1895
Barrel: . . . . . 24", 1 in 14" Twist
Case: . . . . . Hornady
Primer: . . . . . Winchester WLR

Bullet Diameter: . . . . . 0.411"
Maximum COL: . . . . . 3.175"
Max. Case Length: . . . . . 2.583"
Case Trim Length: . . . . . 2.573"

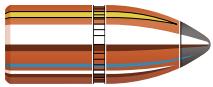
Nearly all modern cartridges have roots that can be traced to a 25-year period whose nominal date was 100 years ago. One cartridge that was developed in that design heyday was the 405 Winchester. The 405 Winchester is often found in the same sentence with American President, Theodore Roosevelt. President Roosevelt was an avid hunter and sportsman who was also the 405 Winchester's foremost proponent. This gives some interesting perspective into hunting's role in politics during the early part of the 20th Century.

The 405 Winchester puts up some respectable ballistic numbers, especially for a cartridge of its age. It was and is the most powerful rimmed cartridge ever that was specifically developed for a lever action rifle, having as much energy remaining at 100 yards as the 450 Marlin. In fact, the 405 was held in high regard by Teddy Roosevelt as a lion cartridge. It leaves one wondering what lions have done to get tougher over the past century, as the 375 H&H is considered anemic by some hunting regulations today.

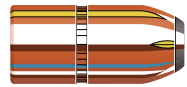
Our rifle preferred H 4895 with our 300 grain FP bullet and has no trouble reaching the original advertised velocity of 2200 fps, which equates to 3224 ft/lbs of energy at the muzzle. Groups averaged 1½" to 2" at one hundred yards fired from our Model 1895.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.254
DIAMETER: 0.411"



300 gr. InterLock® SP
Item No. 41051
C.O.L.: 3.085"
G1 B.C.: 0.250



300 gr. InterLock® FP *(Discontinued)*
Item No. 41050
C.O.L.: 3.085"
G1 B.C.: 0.215

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2250**
Alliant RL-7	36.4 gr.	39.4 gr.	42.5 gr.	45.5 gr.		
H322	41.1 gr.	43.0 gr.	44.9 gr.			
Accurate 2015	39.8 gr.	42.7 gr.	45.6 gr.	48.4 gr.	51.3 gr.	
IMR 3031	41.2 gr.	44.3 gr.	47.4 gr.	50.6 gr.		
VIHT N-133	43.0 gr.	45.4 gr.	47.8 gr.	50.2 gr.	52.6 gr.	
H4895	44.9 gr.	47.3 gr.	49.7 gr.	52.2 gr.	54.6 gr.	55.8 gr.

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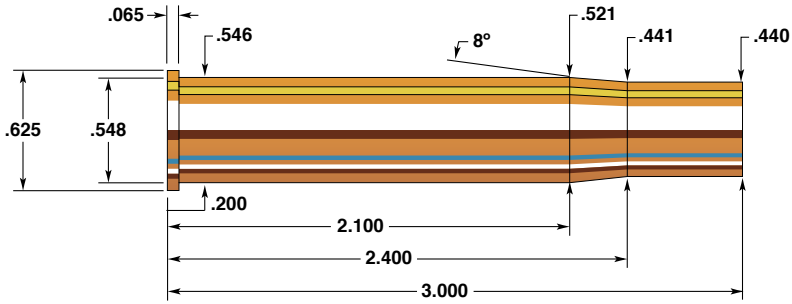


450/400 Nitro Express 3"

Rifle:	Ruger #1	**Bullet Diameter:**	.0.410"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	.3.735"
Case:	Hornady	**Max. Case Length:**	2.990"
Primer:	Federal 215	**Case Trim Length:**	2.980"

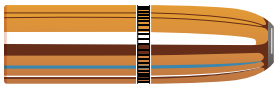
One of the easiest to shoot, most well balanced dangerous game cartridges ever devised, the 450/400 3" is legendary. John "Pondoro" Taylor, a foremost proponent of the 450/400, considered it enough cartridge for any African game in the hands of an experienced hunter. Capable of pushing a 400 grain DGX® or DGS® bullet to 2150 fps, the 450/400 Nitro Express is quite capable.

This cartridge has enjoyed a resurgence in the past decade, largely in part to being chambered in Ruger #1 rifles. Hornady offers factory loads with both the DGX® and DGS® bullets as well as cartridge cases and dies. DGX® and DGS® bullets are specifically designed with dangerous game hunting in mind, their copper clad steel jackets and high antimony lead cores make them some of the toughest bullets on the market today.

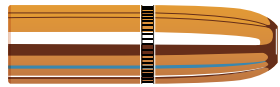
Handloading the 450/400 3" is not difficult, although originally intended to be loaded with cordite, there are a variety of modern propellants from RL-15 to H1000 that will deliver great results from this cartridge. In our testing, Viht N-165 produced the highest velocity and more than satisfactory accuracy. When loading the 450/400 3" it's important to crimp the case mouth tightly on the cannelure as this will aid in ignition and help provide consistent performance.

400 GRAIN BULLETS

SECTIONAL DENSITY: 0.340
DIAMETER: 0.410"



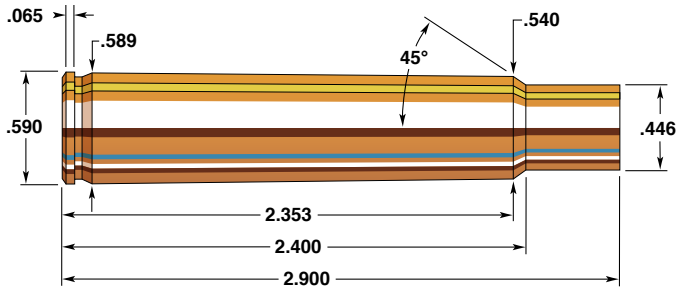
400 gr. DGX®
Item No. 4104
C.O.L.: 3.685"
G1 B.C.: 0.325



400 gr. DGS®
Item No. 4103
C.O.L.: 3.685"
G1 B.C.: 0.325

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2050**	**2100**	**2150**
Alliant RL-15	53.7 gr.	57.8 gr.	61.9 gr.	64.0 gr.		
H4350	62.2 gr.	65.9 gr.	69.2 gr.	70.9 gr.		
IMR 4831	67.7 gr.	71.9 gr.	76.2 gr.	78.3 gr.		
Alliant RL-19	73.5 gr.	76.8 gr.	80.1 gr.	81.8 gr.	83.4 gr.	
NORMA MRP	71.9 gr.	76.0 gr.	80.0 gr.	82.0 gr.	84.0 gr.	
H4831	69.3 gr.	74.5 gr.	79.7 gr.	82.3 gr.		
IMR 7828	73.9 gr.	77.4 gr.	80.9 gr.	82.6 gr.		
VIHT N-165	75.2 gr.	79.1 gr.	83.0 gr.	85.0 gr.	87.0 gr.	88.9 gr.
H1000	78.2 gr.	82.0 gr.	85.9 gr.	87.8 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



416 Rigby

Rifle:	Ruger 77	**Bullet Diameter:**	.0.416"
Barrel:	.24", 1 in 14" Twist	**Maximum COL:**	3.750"
Case:	.Federal	**Max. Case Length:**	2.900"
Primer:	Federal 215	**Case Trim Length:**	2.890"

Fundamentally an updated version of the 404 Jeffery cartridge, the 416 Rigby was introduced by John Rigby's rifle company in 1911. The 416 Rigby is a successful and well known big game cartridge, long chambered in double rifles. Perhaps its best known advocate was John Taylor who used it for many years in the golden era of African elephant hunting. Classified by the British as a medium bore, to quote Taylor, “it’s an essentially African weapon. Firing its plain soft-nose slug it crumples a charging lion as few other weapons are capable of doing.”

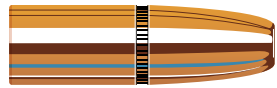
Until late in the 20th century the 416 has not been of much interest to U. S. hunters, but that has changed. Federal’s announcement of factory ammunition for the 416 Rigby and Ruger’s chambering it in their Model 77 spurred interest. Though it had always been available in custom rifles, availability of factory ammunition was a major boost to potential popularity. The 416 Rigby has had far more influence on North American shooting as the basis for other cartridges, the 378, 416, 460 Weatherbys among them.

Those who hunt the large, dangerous bears of Alaska and Canada might find it a confidence-inspiring and deadly cartridge. Original ballistic performance from factory ammunition propelled a 410 grain bullet (soft or full metal jacket) at a muzzle velocity of 2,350 fps and muzzle energy of 5,000 foot pounds.

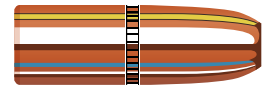
400 GRAIN BULLETS

SECTIONAL DENSITY: 0.330
DIAMETER: 0.416"

400 gr. DGX®
Item No. 4169
C.O.L.: 3.580"
G1 B.C.: 0.319



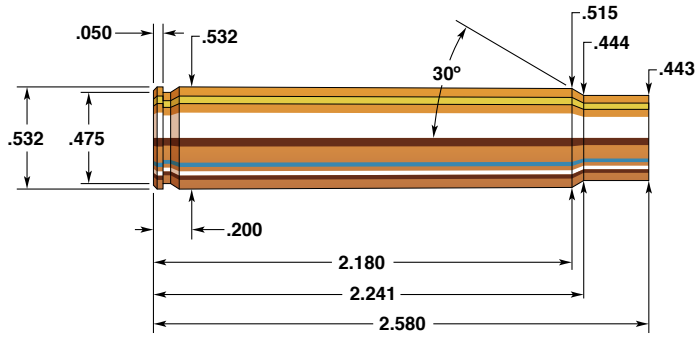
400 gr. DGS®
Item No. 4167
C.O.L.: 3.580"
G1 B.C.: 0.319



400 gr. InterLock® RN *(Discontinued)*
Item No. 4165
C.O.L.: 3.580"
G1 B.C.: 0.311

	VELOCITY (FPS – feet per second)			
POWDER	**2100**	**2200**	**2300**	**2400**
H4350	74.6 gr.	79.9 gr.	85.2 gr.	90.5 gr.
IMR 4350	81.0 gr.	84.7 gr.	88.5 gr.	
Alliant RL-19	84.2 gr.	87.5 gr.	90.8 gr.	94.1 gr.
IMR 4831	83.3 gr.	87.3 gr.	91.2 gr.	
H4831	84.8 gr.	89.4 gr.	94.0 gr.	98.6 gr.
VIHT N-165	86.9 gr.	91.8 gr.	96.6 gr.	
Alliant RL-25	91.0 gr.	95.1 gr.	99.2 gr.	103.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



416 Ruger

Rifle:	Ruger 77 Hawkeye	**Bullet Diameter:**	.0.416"
Barrel:	.20", 1 in 14" Twist	**Maximum COL:**	3.340"
Case:	Hornady	**Max. Case Length:**	2.580"
Primer:	Federal 215	**Case Trim Length:**	2.570"

When the 375 Ruger was first announced, one of the first questions that was followed from numerous hunters at the SCI convention in Reno Nevada was, "when is the 416 Ruger coming out?" Two years later it was reality. The 416 Ruger shares many of the traits of the 375 Ruger; performance levels that are equivalent of conventional magnum length cartridges but in a standard length action and a 20" barrel. The 416 Ruger in factory form pushes either the 400 grain DGX® or DGS® 2400 fps, making it the equal of the most powerful 416 cartridges on the market.

The 416 Ruger is simply the 375 Ruger necked up to handle a 0.416" diameter bullet. It shares the same beltless body design with a base diameter of 0.532" and uses a standard Hornady #5 shell holder. Reloading the 416 Ruger is simple, as Hornady offers New Dimension dies, cartridge cases and both the DGS® and DGX® component bullets. Those items combined with the data that follows makes it easy for the handloader to build quality ammunition.

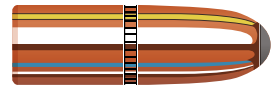
In our testing, the 416 Ruger really shined when stoked with RL-15. It delivered excellent accuracy and very consistent velocities. The 416 Ruger is a great choice if dangerous game is the prey and is an excellent combination of stopping power in a very easy to handle package.

400 GRAIN BULLETS

SECTIONAL DENSITY: 0.330
DIAMETER: 0.416"

400 gr. DGX®
Item No. 4169
C.O.L.: 3.235"
G1 B.C.: 0.319

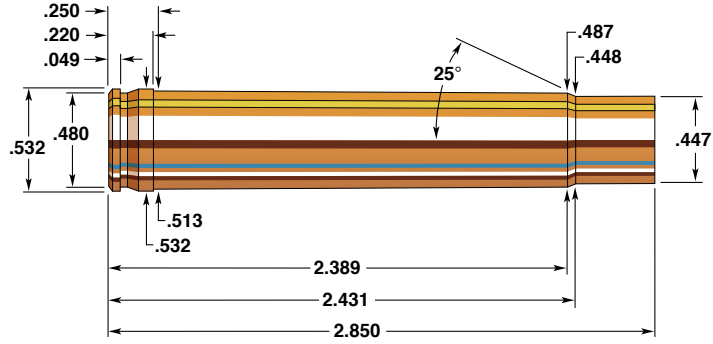
400 gr. DGS®
Item No. 4167
C.O.L.: 3.235"
G1 B.C.: 0.319



400 gr. InterLock® RN *(Discontinued)*
Item No. 4165
C.O.L.: 3.235"
G1 B.C.: 0.311

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2150**	**2200**	**2250**	**2300**
H335	61.6 gr.	65.5 gr.	67.5 gr.	69.5 gr.		
VARGET	60.8 gr.	65.6 gr.	68.1 gr.			
IMR 4320	62.5 gr.	66.8 gr.	69.0 gr.			
VIHT N-140	66.3 gr.	69.6 gr.	71.3 gr.			
WIN 748	66.5 gr.	70.0 gr.	71.8 gr.	73.5 gr.	75.3 gr.	
Alliant RL-15	66.9 gr.	70.4 gr.	72.1 gr.	73.8 gr.	75.5 gr.	
BIG GAME	69.2 gr.	72.7 gr.	74.4 gr.	76.2 gr.		
Power Pro 2000 MR	69.3 gr.	72.9 gr.	74.6 gr.	76.4 gr.	78.2 gr.	80.0 gr.
WIN 760	76.2 gr.	75.9 gr.	77.5 gr.	79.1 gr.	80.8 gr.	
IMR 4007 SSC	72.6 gr.	76.2 gr.	78.0 gr.	79.8 gr.		
Accurate 2700	71.1 gr.	76.5 gr.	79.2 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics



416 Remington Magnum

Rifle:	Remington 700	**Bullet Diameter:**	.0.416"
Barrel:	.24", 1 in 14" Twist	**Maximum COL:**	3.600"
Case:	Remington	**Max. Case Length:**	2.850"
Primer:	Remington 9½M	**Case Trim Length:**	2.840"

John Rigby's firm introduced 416 caliber to the hunting world in 1911, chambering his magnum Mauser action rifles for the proprietary beltless 416 Rigby cartridge. This bullet diameter, considered a "medium bore" by the British, nicely fills the gap between the 375 and the 45 calibers. The 416 Rigby cartridge performed well in Africa and attracted many hunters. Wildcat 416s such as the 416 Taylor and 416 Hoffman later followed. Remington entered the 416 race in 1988 with the 416 Remington Magnum, a cartridge very similar to the Hoffman wildcat. However similar, these cartridges should not be interchanged.

The belted 416 Remington case is based on their 8mm Magnum case, essentially an improved 375 H&H case. This provides ample powder capacity to propel the 400 grain bullet to 2400 fps in our test rifle, a Remington Model 700 Safari grade, equipped with a 24" barrel.

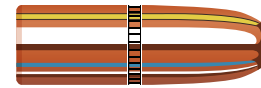
While appearing to be strictly an African caliber, it will find considerable use in hunting the large bears, moose and even elk in North America. Accuracy is good and recoil is manageable, being less than the 458 Winchester Magnum.

400 GRAIN BULLETS

SECTIONAL DENSITY: 0.330
DIAMETER: 0.416"

400 gr. DGX®
Item No. 4169
C.O.L.: 3.520"
G1 B.C.: 0.319

400 gr. DGS®
Item No. 4167
C.O.L.: 3.520"
G1 B.C.: 0.319



400 gr. InterLock® RN *(Discontinued)*
Item No. 4165
C.O.L.: 3.520"
G1 B.C.: 0.311

	VELOCITY (FPS – feet per second)				
POWDER	**2250**	**2300**	**2350**	**2400**	**2450**
IMR 4895	72.8 gr.	74.7 gr.	76.6 gr.		
IMR 4064	72.6 gr.	75.2 gr.	77.7 gr.	80.3 gr.	
WIN 748	73.1 gr.	75.2 gr.	77.4 gr.	79.5 gr.	
VARGET	73.5 gr.	75.7 gr.	78.0 gr.		
VIHT N-140	74.8 gr.	76.8 gr.			
Alliant RL-15	76.5 gr.	78.1 gr.	79.7 gr.	81.4 gr.	
Accurate 2495	77.3 gr.	79.4 gr.	81.4 gr.		
VIHT N-150	77.7 gr.	79.7 gr.	81.7 gr.		
H380	78.0 gr.	80.9 gr.	83.8 gr.	86.8 gr.	89.7 gr.
WIN 760	86.9 gr.	88.6 gr.	90.4 gr.	92.2 gr.	

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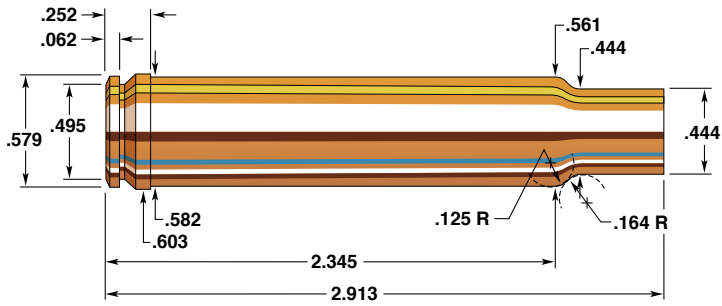


416 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	.0.416"
Barrel:	.26", 1 in 14" Twist	**Maximum COL:**	3.750"
Case:	.Weatherby	**Max. Case Length:**	.2.913"
Primer:	Federal 215	**Case Trim Length:**	2.903"

Weatherby's impressive 416 Magnum is the most powerful of the entrants in the 416 caliber hunting cartridge arena. Weatherby's long term strategy has always been to introduce the largest, fastest, biggest, and best in every popular caliber. Developments in the past few decades have displaced the company from its velocity and power leadership in some calibers, but that was not to be the case in 416 caliber.

The 416 Weatherby was developed from the same case used for their 378 and 460 cartridges. Factory ammunition uses a 400 grain bullet, propelled a bit over 2700 fps, producing over 6,600 foot pounds of energy. This is clearly more than sufficient for anything in North America, and easily enough for any African species. Recoil requires getting used to. Some shooters may choose to purchase the rifle with the optional muzzle brake which does reduce recoil.

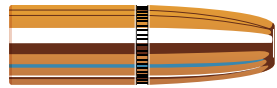
Powerful as Weatherby's rifles in 338 and 375 caliber are, there are nations where sub-40 caliber rifles are not deemed suitable for hunting large species. Introduction of the 416 Weatherby takes away any bureaucratic doubt of the cartridge's acceptability.

Good results were obtained with RL-19 and IMR 4831 powders.

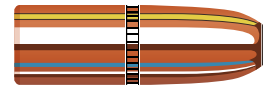
400 GRAIN BULLETS

SECTIONAL DENSITY: 0.330
DIAMETER: 0.416"

400 gr. DGX®
Item No. 4169
C.O.L.: 3.735"
G1 B.C.: 0.319



400 gr. DGS®
Item No. 4167
C.O.L.: 3.735"
G1 B.C.: 0.319



400 gr. InterLock® RN *(Discontinued)*
Item No. 4165
C.O.L.: 3.858"
G1 B.C.: 0.311

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
H4350	89.6 gr.	94.2 gr.	98.9 gr.	103.5 gr.	
IMR 4831	92.0 gr.	96.3 gr.	100.6 gr.	104.9 gr.	109.2 gr.
VIHT N-160	93.8 gr.	98.2 gr.	102.5 gr.	106.9 gr.	
H4831	94.2 gr.	99.4 gr.	104.6 gr.	109.8 gr.	115.0 gr.
Alliant RL-19	98.8 gr.	102.9 gr.	107.0 gr.	111.1 gr.	115.1 gr.
VIHT N-165	98.8 gr.	104.0 gr.	109.1 gr.	114.3 gr.	119.5 gr.
IMR 7828	101.0 gr.	105.5 gr.	110.0 gr.	114.5 gr.	118.9 gr.

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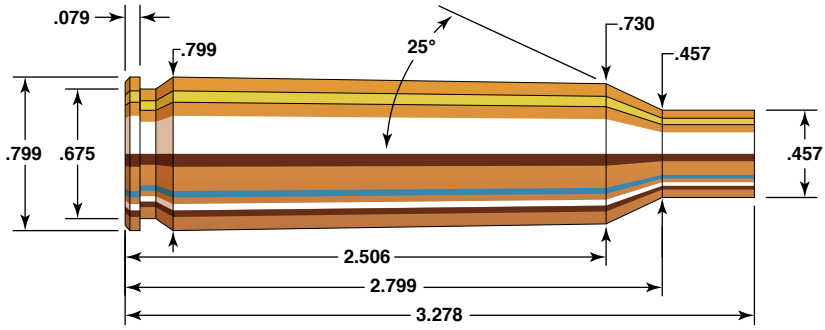


416 Barrett

Rifle:	Barrett Model 99	**Bullet Diameter:**	.0.416"
Barrel:	.32", 1 in 12" Twist	**Maximum COL:**	4.540"
Case:	Barrett	**Max. Case Length:**	3.273"
Primer:	CCI No. 35	**Case Trim Length:**	3.263"

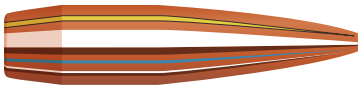
Designed in 2005 by necking down and shortening a 50 BMG, the 416 Barrett was first chambered in the Barrett Model 99. Since then, other rifles have been designed or converted to the cartridge. Rifles made for the 50 BMG parent case can be simply rebarreled to accommodate it.

Long range match shooters are sure to benefit from the speed, efficiency and accuracy of the 416 Barrett. Loaded with a Hornady 450 grain BTHP match bullet with a ballistic coefficient of 0.720 at a muzzle velocity of 3,050 fps and you have an accurate long range combination that remains supersonic past 2,000 yards. For military application, the accuracy is combined with tremendous energy. With over 9,000 foot pounds of energy at the muzzle, the 416 Barrett is a force to be reckoned with. Even at 1,200 yards, the 416 Barrett has more energy than a standard 308 Winchester does at the muzzle.

Much like the 50 BMG, the 416 Barrett has tremendous muzzle blast and requires an adequate brake. Hornady engineers first tested the new 450 grain BTHP bullets at 1,000 yards in a cattle pasture and quickly learned that the shooter and nearby spectators need to keep their mouths closed when shooting prone off a bipod because everything, and we mean everything, that happens to be near the muzzle will end up flying through the air!

450 GRAIN BULLETS

SECTIONAL DENSITY: 0.371
DIAMETER: 0.416"



450 gr. BTHP Match™
(Discontinued)
Item No. 41691
C.O.L.: 4.540"
G1 B.C.: 0.720

	VELOCITY (FPS – feet per second)							
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**2950**	**3000**	**3050**
Alliant RL-25	125.6 gr.	132.9 gr.	140.2 gr.	147.5 gr.	154.8 gr.	158.5 gr.		
RETUMBO	125.7 gr.	134.1 gr.	142.5 gr.	150.9 gr.	159.3 gr.	163.5 gr.		
H50BMG	144.6 gr.	151.6 gr.	158.6 gr.	165.6 gr.	172.6 gr.	176.1 gr.		
US 869	147.1 gr.	153.9 gr.	160.6 gr.	167.3 gr.	174.1 gr.	177.5 gr.	180.8 gr.	184.2 gr.
VIHT 20N29	148.3 gr.	156.2 gr.	164.0 gr.	171.9 gr.	179.8 gr.	187.7 gr.		
Alliant RL-50	156.0 gr.	162.1 gr.	168.1 gr.	174.2 gr.	180.2 gr.			

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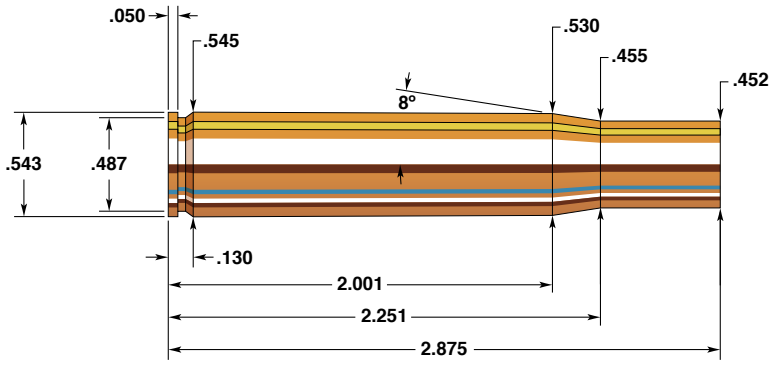


404 Jeffery

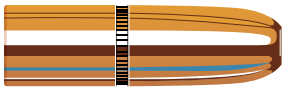
Rifle:	CZ 550 Magnum	**Bullet Diameter:**	0.423"
Barrel:	24", 1 in 11" Twist	**Maximum COL:**	3.530"
Case:	Hornady	**Max. Case Length:**	2.875"
Primer:	Federal 215	**Case Trim Length:**	2.865"

The 404 Jeffery is a classic cartridge design and is the parent cartridge of many of the beltless magnum cartridges on the market today. The 404 Jeffery was developed over 100 years ago for hunting large and dangerous game in Africa and designed to deliver similar ballistics to the 450/400 Nitro Express but from a rimless, beltless cartridge case that is designed to function in bolt action rifles. It is also interesting to note that the 404 Jeffery uses a 0.423" bullet which makes it unique from both the 450/400 and the 416's. The 404 Jeffery was a very popular cartridge in its day, but as the British Empire in Africa shrunk, so did the popularity of the cartridge.

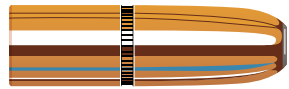
Over the past decade there has been increased interest in the 404 Jeffery, mostly as a foundation for series of beltless magnums and short magnums that have seen their fair share of both popularity and controversy. Additionally, a number of manufacturers including CZ have begun to chamber this classic cartridge. The 404 Jeffery measures 0.545" diameter at the base, about .01" larger than the 375 Ruger, and is 3.500" long which requires a magnum length action. Reloading the 404 Jeffery is very straight forward, using Hornady New Dimension dies, bullets and the data that follows, it is easy to load quality 404 Jeffery ammunition. In our testing we found RL 17 to work exceptionally well, delivering excellent velocity and accuracy.

400 GRAIN BULLETS

SECTIONAL DENSITY: 0.319
DIAMETER: 0.423"



400 gr. DGS®
Item No. 4241
C.O.L.: 3.500"
G1 B.C.: 0.315



400 gr. DGX®
Item No. 4240
C.O.L.: 3.500"
G1 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2250**	**2300**	**2350**
Alliant RL-15	66.9 gr.	70.5 gr.	74.1 gr.			
H414	69.8 gr.	73.9 gr.	78.0 gr.	80.0 gr.	82.1 gr.	84.1 gr.
Alliant RL-17	71.7 gr.	75.2 gr.	78.8 gr.	80.6 gr.	82.3 gr.	84.0 gr.
H4350	72.1 gr.	75.5 gr.	78.9 gr.			
NORMA URP	73.3 gr.	76.2 gr.	79.1 gr.	80.6 gr.	82.0 gr.	
Accurate 4350	73.3 gr.	76.4 gr.	79.4 gr.	80.9 gr.		
WIN 760	72.0 gr.	76.2 gr.	80.3 gr.	82.4 gr.	84.5 gr.	86.5 gr.
Hunter	68.9 gr.	75.1 gr.	81.4 gr.	84.5 gr.	87.6 gr.	90.7 gr.
IMR 4350	76.3 gr.	79.2 gr.	82.2 gr.	83.6 gr.		
VIHT N-160	76.8 gr.	80.5 gr.	84.1 gr.	85.9 gr.	87.8 gr.	

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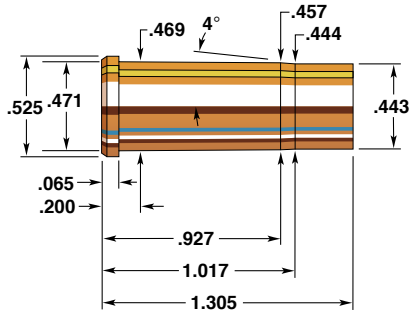


44-40 Winchester (Rifle)

Rifle:	Rossi 92 SRC	**Bullet Diameter:**	0.427"
Barrel:	20", 1 in 16" Twist	**Maximum COL:**	1.592"
Case:	Hornady/Frontier	**Max. Case Length:**	1.305"
Primer:	Federal 150	**Case Trim Length:**	1.295"

Frank C. Barnes, late author of the encyclopedic Cartridges of the World, confers an interesting accolade on the 44-40 Winchester, in his view one of the greatest of American cartridges. "It is said that it has killed more game, large and small, and more people, good and bad, than any other commercial cartridge ever developed."

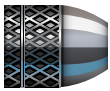
The 44-40 was one of the early cartridges to be chambered in two different types of firearms. Winchester introduced it in its Model 1873 lever-action, and Colt soon followed with revolvers for the 44-40. A widely popular cartridge, it was manufactured by most American gun makers in a variety of different rifles and handguns. Foreign manufacturers offer it today in Winchester and Henry replicas.

The 44-40 Winchester began its career as a blackpowder cartridge but performs at its best with smokeless powder loads in strong, modern actions. As a cartridge which can take deer at short ranges, it is as effective today as it was a century and a quarter ago.

Time takes its toll, however. The popularity of the 44-40 Winchester in rifle chamberings was jeopardized by the development of the 30-30 Winchester. Its role as an effective, potent round for revolvers was diminished with the appearance of the 357 and 44 magnums seven plus decades later. It remains an excellent cartridge, one which only handloaders can load to its full potential.

205 GRAIN BULLETS

SECTIONAL DENSITY: 0.161
DIAMETER: 0.427"



205 gr. COWBOY™
(Discontinued)
Item No. 11208
C.O.L.: 1.570"
G1 B.C.: 0.123

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	3.6 gr.	4.0 gr.	4.4 gr.	4.8 gr.	5.2 gr.	
AMERICAN SELECT	4.2 gr.	4.7 gr.	5.1 gr.	5.6 gr.		
GREEN DOT	4.4 gr.	4.9 gr.	5.4 gr.	5.9 gr.	6.3 gr.	
Trail Boss	4.5 gr.	5.0 gr.				
WIN 231	4.7 gr.	5.1 gr.	5.6 gr.	6.0 gr.	6.4 gr.	
HP-38	4.9 gr.	5.2 gr.	5.6 gr.	5.9 gr.	6.3 gr.	
UNIQUE	5.1 gr.	5.5 gr.	5.9 gr.	6.2 gr.	6.6 gr.	7.0 gr.
UNIVERSAL	5.8 gr.	6.1 gr.	6.4 gr.	6.6 gr.	6.9 gr.	7.2 gr.
IMR 800 X	5.9 gr.	6.3 gr.	6.7 gr.	7.1 gr.	7.5 gr.	7.9 gr.
VIHT N-340	6.4 gr.	6.7 gr.	7.0 gr.	7.2 gr.	7.5 gr.	

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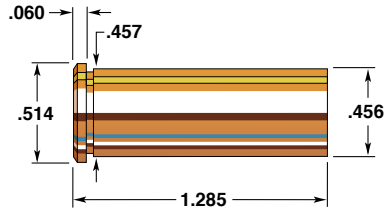


44 Remington Magnum (Rifle)

Rifle: . . . . . .Ruger Carbine
Barrel: . . . . . .18", 1 in 38" Twist
Case: . . . . . .Hornady/Frontier
Primer: . . . . . Winchester WLP

Bullet Diameter: . . . . . 0.430"
Maximum COL: . . . . . .1.610"
Max. Case Length: . . . . . .1.285"
Case Trim Length: . . . . . .1.275"

The 44 Remington Magnum dates back to 1955 when it was introduced as a handgun cartridge. The cartridge was originally chambered in the heavy frame Smith & Wesson Model 29 followed a short time later by Ruger in their Super Blackhawk. Because of the popularity of having a sidearm and a rifle of the same caliber, Ruger later introduced the 44 Magnum auto-loading carbine, while Winchester, Browning, and Marlin have produced lever-action rifles.

The light, fast handling Ruger Carbine and the various leveractions in 44 Magnum make handy guns for hunting wooded areas. The following loads listed should not be reduced. It is imperative that loads for all rifles be kept at near maximum charges to insure uniform results from the slower burning powders listed.

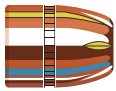
All the powders gave commendable results in our carbine, with IMR 4227 being the most uniform. The Hornady 265 grain Flat Point or the 300 grain HP-XTP® are the best choices for deer or black bear at short ranges, while the 200 grain Jacketed hollow Point and 240 grain Jacketed Hollow Point are better suited for smaller game.

We have also included data for the 225 grain FTX® bullet. Please note that when loading the 44 caliber 225 grain FTX® bullet the case must be trimmed extra short to allow room for the longer ogive of the FTX® bullet. This also reduces case capacity to a degree which effects charge weights. The data listed for the 225 grain FTX® bullet is specifically for that bullet. Do not deviate.

When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



180 gr. XTP®
Item No. 44050
C.O.L.: 1.600"
G1 B.C.: 0.138

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
BLUE DOT	15.0 gr.	16.2 gr.	17.4 gr.	18.6 gr.		
IMR 800 X	14.4 gr.	15.9 gr.	17.3 gr.	18.8 gr.		
VIHT N-105	16.1 gr.	17.6 gr.	19.0 gr.	20.4 gr.		
Accurate No. 7	17.1 gr.	18.5 gr.	19.8 gr.	21.2 gr.		
VIHT N-110	20.3 gr.	21.8 gr.	23.4 gr.	24.9 gr.	26.4 gr.	28.0 gr.
Alliant 2400	21.6 gr.	23.1 gr.	24.6 gr.	26.0 gr.	27.5 gr.	

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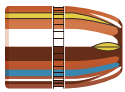
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.600"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
IMR 800 X	12.7 gr.	14.2 gr.	15.7 gr.	17.1 gr.		
VIHT N-105	15.0 gr.	16.5 gr.	18.1 gr.	19.7 gr.		
Accurate No. 7	16.8 gr.	18.1 gr.	19.3 gr.			
VIHT N-110	19.9 gr.	21.1 gr.	22.2 gr.	23.4 gr.	24.6 gr.	
Accurate No. 9	19.7 gr.	21.1 gr.	22.5 gr.	23.9 gr.		
Alliant 2400	20.5 gr.	21.8 gr.	23.1 gr.	24.5 gr.	25.8 gr.	
H110	22.6 gr.	24.0 gr.	25.3 gr.	26.6 gr.	27.9 gr.	29.3 gr.
IMR 4227	23.7 gr.	25.0 gr.	26.3 gr.	27.6 gr.		

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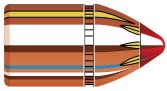
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.174
DIAMETER: 0.430"

CASE TRIM LENGTH: 1.255"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



225 gr. FTX®
Item No. 44105
C.O.L.: 1.645"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)						
POWDER	**1300**	**1400**	**1500**	**1600**	**1650**	**1700**	**1750**
Accurate No. 9	13.6 gr.	14.7 gr.					
Alliant 2400	13.4 gr.	14.8 gr.					
ENFORCER	14.0 gr.	15.3 gr.	16.7 gr.	18.0 gr.	18.6 gr.		
LIL' GUN	13.9 gr.	15.4 gr.	17.0 gr.	18.5 gr.	19.3 gr.	20.1 gr.	20.9 gr.
WIN 296	14.8 gr.	16.4 gr.	18.0 gr.	19.6 gr.	20.4 gr.	21.3 gr.	
H110	14.9 gr.	16.6 gr.	18.2 gr.	19.8 gr.	20.6 gr.		

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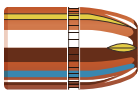
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 1.600"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**
VIHT N-105	13.8 gr.	14.8 gr.	15.8 gr.	16.7 gr.	
VIHT N-110	17.2 gr.	18.4 gr.	19.6 gr.	20.8 gr.	
Accurate No. 9	17.2 gr.	18.6 gr.	20.0 gr.	21.5 gr.	
Alliant 2400	17.3 gr.	18.7 gr.	20.1 gr.	21.5 gr.	
H110	19.4 gr.	20.8 gr.	22.1 gr.	23.5 gr.	24.8 gr.
WIN 296	19.8 gr.	21.1 gr.	22.4 gr.	23.7 gr.	25.0 gr.
IMR 4227	20.4 gr.	21.7 gr.	23.0 gr.	24.2 gr.	

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265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"

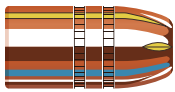
265 gr. InterLock® FP
Item No. 4300
C.O.L.: 1.610"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**	**1700**
VIHT N-105	11.2 gr.	12.6 gr.	14.1 gr.	15.5 gr.		
VIHT N-110	14.9 gr.	16.1 gr.	17.3 gr.	18.5 gr.	19.6 gr.	
Accurate No. 9	14.8 gr.	16.3 gr.	17.7 gr.	19.2 gr.		
H110	16.6 gr.	17.9 gr.	19.2 gr.	20.5 gr.	21.9 gr.	23.2 gr.
WIN 296	16.1 gr.	17.6 gr.	19.2 gr.	20.7 gr.	22.2 gr.	
IMR 4227	17.4 gr.	18.9 gr.	20.4 gr.	21.9 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 1.600"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)				
POWDER	**1000**	**1100**	**1200**	**1300**	**1400**
VIHT N-110	12.0 gr.	13.2 gr.	14.5 gr.	15.8 gr.	
Alliant 2400	12.2 gr.	13.5 gr.	14.8 gr.	16.1 gr.	
Accurate No. 9	12.3 gr.	13.6 gr.	15.0 gr.	16.3 gr.	
H110	11.4 gr.	13.1 gr.	14.9 gr.	16.6 gr.	18.4 gr.
WIN 296	13.4 gr.	14.9 gr.	16.3 gr.	17.8 gr.	
IMR 4227	15.2 gr.	16.4 gr.	17.6 gr.	18.8 gr.	

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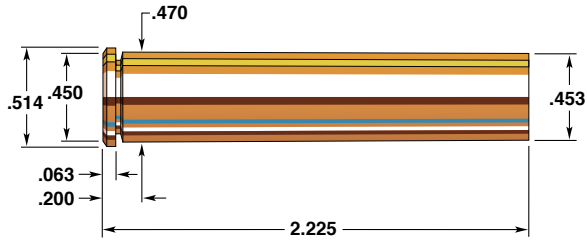


444 Marlin

Rifle:	Marlin 336	**Bullet Diameter:**	0.430"
Barrel:	24", 1 in 38" Twist	**Maximum COL:**	2.570"
Case:	Remington	**Max. Case Length:**	2.225"
Primer:	Remington 9½	**Case Trim Length:**	2.215"

The 444 Marlin is a big, cylindrical, semi-rimmed case which Remington loads with a 240 grain bullet to a velocity of 2350 fps. The 444 Marlin is a lot more cartridge than the 44 Remington Magnum, and historically is a short to moderate range round which is at its best hunting in brush. Its power makes it useful for most North American game hunted within its effective range.

The 444 Marlin cartridge first appeared in 1964 chambered in that firm's popular Model 336 lever-action. Marlin's new offering was at that time the largest caliber lever-action repeater available.

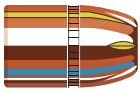
In 1967 Hornady introduced a bullet expressly for the 444 Marlin, a 44 caliber (.430") 265 grain Flat Point InterLock®. Accuracy in the lever-action is highly satisfactory, and the optimum expansion characteristics of the bullet have helped it earn a reputation as a deadly game-stopper.

In 2009 with the introduction of FTX® component bullets Hornady took the 444 Marlin to another level. FTX® bullets feature a long pointed ogive and a flexible elastomer tip that make them safe to use in tubular magazines. This longer ogive also requires that cartridge cases be trimmed shorter than normal to 2.065" to allow room for the longer ogive. This also reduces case capacity and effects charge weights. The data listed for the 265 grain FTX® bullet is specifically for that bullet. Do not deviate from data.

When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 2.535"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4198	32.9 gr.	36.0 gr.	39.1 gr.	42.1 gr.	45.2 gr.	48.3 gr.
H4198	35.5 gr.	38.3 gr.	41.0 gr.	43.8 gr.	46.5 gr.	
Alliant RL-7	37.7 gr.	40.4 gr.	43.2 gr.	46.0 gr.	48.8 gr.	
VIHT N-130	45.0 gr.	46.9 gr.	48.9 gr.	50.8 gr.	52.8 gr.	
H335	49.6 gr.	51.8 gr.	54.0 gr.	56.2 gr.	58.4 gr.	

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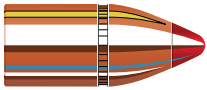
265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"

CASE TRIM LENGTH: 2.065"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



265 gr. FTX® (444 Marlin)
Item No. 4305
C.O.L.: 2.580"
G1 B.C.: 0.225

	VELOCITY (FPS – feet per second)							
POWDER	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**	**2250**	**2300**
IMR 4198	36.6 gr.	37.7 gr.	38.7 gr.	39.8 gr.	40.8 gr.	41.9 gr.		
VIHT N-120	36.9 gr.	37.9 gr.	38.9 gr.	39.9 gr.	40.9 gr.	41.9 gr.	42.8 gr.	
H4198	38.0 gr.	38.8 gr.	39.6 gr.	40.4 gr.	41.2 gr.	42.0 gr.	42.8 gr.	
Accurate 1680		34.2 gr.	36.4 gr.	38.6 gr.	40.8 gr.	43.1 gr.	45.3 gr.	47.5 gr.

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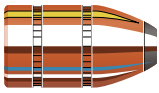
265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"



265 gr. InterLock® FP
Item No. 4300
C.O.L.: 2.560"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
H4198	32.6 gr.	35.2 gr.	37.7 gr.	40.3 gr.	42.8 gr.	45.4 gr.
IMR 4198	32.8 gr.	35.3 gr.	37.8 gr.	40.3 gr.	42.8 gr.	
Alliant RL-7	34.9 gr.	37.3 gr.	39.7 gr.	42.0 gr.	44.4 gr.	46.8 gr.
VIHT N-130	39.3 gr.	41.6 gr.	43.9 gr.	46.3 gr.	48.6 gr.	50.9 gr.
H335	43.8 gr.	46.5 gr.	49.3 gr.	52.0 gr.	54.8 gr.	57.5 gr.

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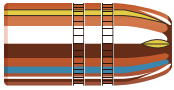
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 2.535"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**	**2000**
IMR 4198	30.4 gr.	32.7 gr.	35.0 gr.	37.4 gr.	39.7 gr.	
H4198	30.4 gr.	32.7 gr.	35.1 gr.	37.4 gr.	39.7 gr.	
Accurate 1680	28.5 gr.	31.5 gr.	34.6 gr.	37.6 gr.	40.6 gr.	
Alliant RL-7	32.2 gr.	34.5 gr.	36.7 gr.	39.0 gr.	41.3 gr.	
VIHT N-130	36.7 gr.	38.7 gr.	40.7 gr.	42.7 gr.	44.7 gr.	46.7 gr.
H335	35.6 gr.	38.7 gr.	41.9 gr.	45.0 gr.	48.1 gr.	51.3 gr.

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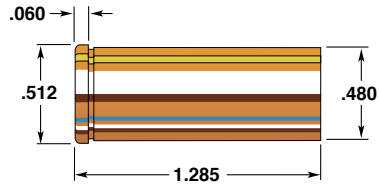


45 Colt (Rifle)

Rifle:	Rossi 92 SRC	**Bullet Diameter:**	0.454"
Barrel:	20", 1 in 16" Twist	**Maximum COL:**	1.600"
Case:	Hornady/Frontier	**Max. Case Length:**	1.285"
Primer:	Winchester WLP	**Case Trim Length:**	1.275"

Fame and longevity are conspicuous qualities of the 45 Colt, a cartridge that has been in active use since 1873. It was originally chambered in Colt's "Peacemaker," a cartridge of nearly mythic proportions for its role in "winning the West."

Metallurgy and powder chemistry being what they were in 1873, pressures obtainable with modern firearms and smokeless powders weren't possible. Pressures of loads in the following tables are safe to use in early Colts and many replicas of them. This data may be used in these firearms.

These loads can be safely used in the Marlin 1894S or the Winchester Model 94 rifles produced in 45 Colt. Both of these rifles have actions far stronger than the older firearms listed above.

If loads are desired for the 200 grain LSWC, the data for the standard 45 Colt should be used. Note: When loading for a tubular magazine, a heavy crimp is necessary to prevent bullets from pushing into the case during recoil.

The introduction of the 225 grain FTX® bullet in 2010 the venerable 45 Colt got a shot in the arm. The new FTX® bullet has a sleek, aerodynamic profile and a flexible elastomer tip that not only makes the bullets safe for use in firearms with tubular magazines, but it also accentuates the terminal performance of the bullet.

The FTX® data for the 45 Colt is specifically for that bullet. Do not deviate. Trim cases to 1.215" for FTX® bullets.

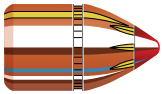
When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.452"

CASE TRIM LENGTH: 1.215"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



225 gr. FTX® (45 Colt)
Item No. 45218
C.O.L.: 1.645"
G1 B.C.: 0.140

	VELOCITY (FPS – feet per second)						
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**	**1150**
LONGSHOT	6.6 gr.	7.1 gr.	7.6 gr.	8.1 gr.	8.5 gr.	9.0 gr.	9.5 gr.
True Blue	7.6 gr.	8.0 gr.	8.5 gr.	8.9 gr.	9.3 gr.	9.7 gr.	10.2 gr.
Accurate No. 5	8.0 gr.	8.4 gr.	8.8 gr.	9.1 gr.	9.5 gr.	9.9 gr.	10.3 gr.
IMR SR-4756	8.4 gr.	8.8 gr.	9.2 gr.	9.5 gr.	9.9 gr.		
HS-6	8.5 gr.	9.0 gr.	9.4 gr.	9.9 gr.	10.3 gr.	10.8 gr.	
BLUE DOT	10.2 gr.	10.5 gr.	10.8 gr.	11.1 gr.	11.4 gr.	11.7 gr.	12.0 gr.
VIHT N-105	11.4 gr.	11.9 gr.	12.4 gr.	12.9 gr.	13.4 gr.		

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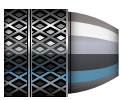
255 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.454"



255 gr. FP COWBOY™
Item No. 12458
C.O.L.: 1.575"
G1 B.C.: 0.117

	VELOCITY (FPS – feet per second)						
POWDER	**800**	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP		4.5 gr.	4.9 gr.	5.3 gr.	5.6 gr.		
IMR 700 X		4.8 gr.	5.2 gr.	5.6 gr.			
RED DOT		4.8 gr.	5.3 gr.	5.7 gr.	6.2 gr.		
AMERICAN SELECT		5.2 gr.	5.6 gr.	6.1 gr.			
VIHT N-320		5.5 gr.	5.9 gr.	6.3 gr.			
HP-38	5.1 gr.	5.5 gr.	5.9 gr.	6.4 gr.	6.9 gr.		
Trail Boss	5.1 gr.	5.6 gr.					
UNIQUE	5.4 gr.	5.8 gr.	6.2 gr.	6.7 gr.	7.1 gr.	7.5 gr.	
WIN 231	5.6 gr.	6.0 gr.	6.3 gr.	6.7 gr.	7.1 gr.	7.4 gr.	
IMR 800 X		6.2 gr.	6.7 gr.	7.3 gr.	7.8 gr.	8.3 gr.	8.9 gr.
UNIVERSAL	6.1 gr.	6.5 gr.	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.	
VIHT N-340		6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.	8.3 gr.	8.7 gr.

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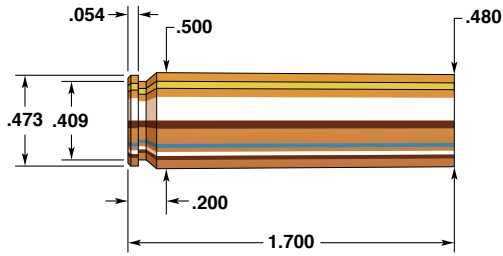


450 Bushmaster

Rifle:	Bushmaster XM15-E2.5	**Bullet Diameter:**	0.452"
Barrel:	16", 1 in 24" Twist	**Maximum COL:**	2.250"
Case:	Hornady	**Max. Case Length:**	1.700"
Primer:	WSR	**Case Trim Length:**	1.690"

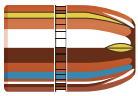
Modern Sporting Rifles (MSR's) have been quickly gaining popularity over the past decade and this popularity has spawned a number of new cartridges. The 450 Bushmaster is one of them. A joint development between Hornady and Bushmaster, it is designed to deliver hard hitting performance from the AR 15 platform.

Capable of taking any North American game at short to moderate ranges, the 450 Bushmaster delivers performance similar to the 444 Marlin which is exceptional performance from the light weight, quick handling AR platform and is quite possibly the brush gun of the 21st century. Jeff Cooper conceptualized the "Thumper" in his writing, a semi-automatic rifle larger than 44 Caliber capable of taking large game at ranges up to 250 yards. The 450 Bushmaster is a realization of this concept.

The 450 Bushmaster is based on the 45 Pro, a straight wall cartridge with a rebated rim that headspaces on the mouth of the cartridge. It is important NOT to use a heavy roll crimp when loading bullets with cannelures, like the 240 and 300 grain XTP®-MAG™. Using too much roll crimp can allow the cartridge to travel too far into the chamber and not fire, or worse yet fire with too much headspace which can create an unsafe situation. The 250 grain FTX® bullet was designed specifically for the 450 Bushmaster and does not have a cannelure, it is a heavily constructed bullet that delivers excellent accuracy and terminal performance and is an excellent all around choice in the 450 Bushmaster. In our testing Hodgdon Lil' Gun delivered excellent velocity and accuracy.

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.168
DIAMETER: 0.452"



240 gr. XTP® Mag
Item No. 45220
C.O.L.: 2.060"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)						
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
Accurate No. 9	26.7 gr.	28.2 gr.	29.6 gr.				
LIL' GUN	25.7 gr.	27.8 gr.	29.9 gr.	32.0 gr.	34.1 gr.	36.2 gr.	38.3 gr.
ENFORCER	28.5 gr.	30.6 gr.	32.6 gr.				
WIN 296	29.2 gr.	31.1 gr.	33.0 gr.	34.9 gr.	36.9 gr.	38.8 gr.	
H110	30.6 gr.	32.3 gr.	33.9 gr.	35.6 gr.	37.2 gr.	38.9 gr.	40.6 gr.
IMR 4227	34.0 gr.	35.8 gr.	37.6 gr.	39.4 gr.			

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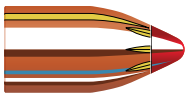
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.175
DIAMETER: 0.452"



250 gr. FTX®
(450 Bushmaster)
Item No. 45201
C.O.L.: 2.225"
G1 B.C.: 0.210

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
LIL' GUN	25.2 gr.	27.7 gr.	30.3 gr.	32.8 gr.	35.4 gr.	37.9 gr.
Accurate No. 9	27.1 gr.	29.2 gr.	31.4 gr.			
H110	28.1 gr.	30.8 gr.	33.6 gr.	36.4 gr.	39.2 gr.	
ENFORCER	29.3 gr.	31.5 gr.	33.8 gr.	36.0 gr.		
WIN 296	29.4 gr.	31.6 gr.	33.8 gr.	36.0 gr.	38.2 gr.	40.4 gr.
IMR 4227	33.5 gr.	35.0 gr.	36.6 gr.			

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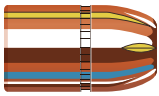
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.210
DIAMETER: 0.452"



300 gr. XTP® Mag
Item No. 45235
C.O.L.: 2.065"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**
Accurate No. 9	25.1 gr.	26.7 gr.	28.3 gr.		
LIL' GUN	25.5 gr.	27.2 gr.	28.8 gr.	30.5 gr.	32.2 gr.
H110	27.0 gr.	29.5 gr.	31.9 gr.	34.4 gr.	
WIN 296	28.7 gr.	30.6 gr.	32.6 gr.	34.5 gr.	
IMR 4227	30.5 gr.	32.2 gr.	33.9 gr.		
VIHT N-120	32.5 gr.	34.2 gr.	36.0 gr.	37.7 gr.	39.5 gr.
Accurate 1680	34.7 gr.	36.6 gr.	38.5 gr.	40.4 gr.	

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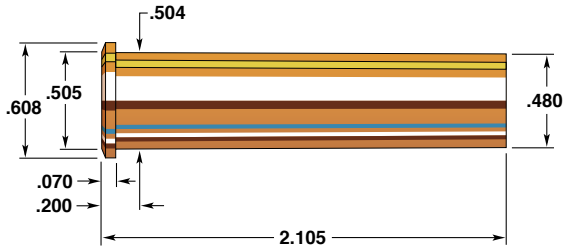


45-70 Government (Trap Door)

Rifle:	Springfield 1873	**Bullet Diameter:**	0.458"
Barrel:	29½", 1 in 23" Twist	**Maximum COL:**	2.550"
Case:	Winchester	**Max. Case Length:**	2.105"
Primer:	Federal 210	**Case Trim Length:**	2.095"

Renewed interest in older cartridges for contemporary use is a trend that cuts both ways. While it may encourage the development and use of new components and firearms for such cartridges, confusion about safety also can arise. This is especially true for a cartridge like the venerable 45-70 where old and new rifles both come into use. Remember that the 45-70 "Trap Door" is not the new rifle, but the old. It must be loaded for carefully.

The following data is to be used in such rifles as the 1873 Springfield "Trap Door" rifle, H&R "Shikari", 1886 Winchester, Rolling Block 45-70's and all other rifles of similar construction. The data represented here did not exceed 25,000 c.u.p. in our pressure barrel.

For the older rifles we have included our 300 grain Jacketed Hollow Point. This bullet is constructed to expand properly at the lower velocities. We recommend the use of slower burning powders to keep the case more nearly filled and pressures low. When using Pyrodex, its maker recommends that the case be full or slightly compressed for adequate ignition. For this reason only two increments are shown.

Also available is the 325 grain FTX® bullet. Introduced in 2009 the 325 grain FTX® bullet brought 45-70 performance to a new level. The FTX® bullet features a long streamlined ogive that requires cases to be trimmed shorter, to 2.040", than normally prescribed. This also reduces case capacity which effects charge weights. The data listed for the 325 grain FTX® bullet is specifically for that bullet. Do no deviate.

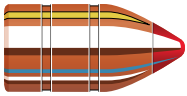
When loading FTX® and MonoFlex® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.170
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

The data below was developed with MonoFlex® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



250 gr. MonoFlex®
Item No. 45010
C.O.L.: 2.587"
G1 B.C.: 0.175

	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**
IMR SR-4759	24.9 gr.	26.1 gr.	27.4 gr.	28.5 gr.	
Alliant RL-7	25.9 gr.	29.6 gr.	33.3 gr.	37.0 gr.	40.7 gr.
Accurate 5744	29.9 gr.	31.9 gr.	33.8 gr.		

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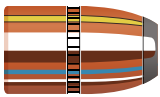
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.204
DIAMETER: 0.458"



300 gr. HP
Item No. 4500
C.O.L.: 2.550"
G1 B.C.: 0.197

	VELOCITY (FPS – feet per second)						
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**	**1800**	**1900**
IMR SR-4759	25.5 gr.	27.0 gr.	28.5 gr.	30.0 gr.	31.5 gr.	33.0 gr.	
IMR 4227	27.2 gr.	28.5 gr.	29.8 gr.	31.1 gr.	32.4 gr.	33.7 gr.	
VIHT N-120		26.9 gr.	29.3 gr.	31.7 gr.	34.0 gr.	36.4 gr.	
Accurate 5744		28.6 gr.	30.9 gr.	33.2 gr.	35.5 gr.	37.8 gr.	40.1 gr.
VIHT N-130		33.1 gr.	35.1 gr.	37.2 gr.	39.3 gr.	41.4 gr.	43.5 gr.
Alliant RL-7	31.6 gr.	33.9 gr.	36.3 gr.	38.6 gr.	41.0 gr.	43.3 gr.	45.7 gr.
H322			40.7 gr.	44.2 gr.	47.7 gr.	51.3 gr.	54.8 gr.
IMR 3031	40.9 gr.	43.1 gr.	45.3 gr.	47.6 gr.	49.8 gr.	52.0 gr.	

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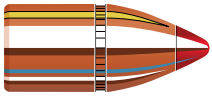
325 GRAIN BULLETS

SECTIONAL DENSITY: 0.221
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

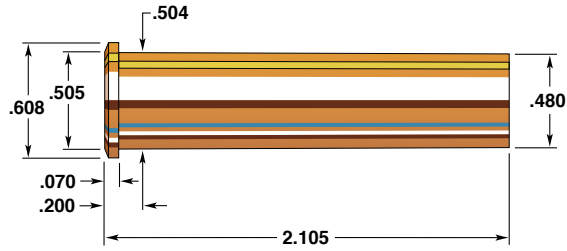
The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



325 gr. FTX®
Item No. 45015
C.O.L.: 2.590"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)					
POWDER	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**
IMR SR-4759		25.7 gr.	26.6 gr.	27.5 gr.	28.4 gr.	29.3 gr.
Accurate 5744	31.2 gr.	32.2 gr.	33.2 gr.	34.2 gr.	35.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



45-70 Government (1895 Marlin)

Rifle:	Marlin 1895	**Bullet Diameter:**	0.458"
Barrel:	.22", 1 in 20" Twist	**Maximum COL:**	2.550"
Case:	Winchester	**Max. Case Length:**	.2.105"
Primer:	Federal 210	**Case Trim Length:**	2.095"

We intend the following data only for use in the Marlin Model 1895. It should not be used in antique 45-70s or replicas of them. Pressures here are held to 40,000 c.u.p. maximum. This rifle is the same basic action as that of the 444 Marlin which operates at 40,000 c.u.p.

The 45-70 cartridge has enjoyed a renaissance in the past two decades. Although it never totally "went away" as an often used sporting cartridge, new rifles chambered for it have sparked a rebirth of interest. The Marlin 45-70 is one of these firearms. A reliable and functional big game rifle, the Marlin 45-70 has sufficient energy for any North American game if used at moderate range.

The 1895 is shown with the 250 grain MonoFlex®, 300 grain Hollow Point, 325 grain FTX® and 350 grain Round Nose, but not with the 500 grain Round Nose. The 500 grain Round Nose, when loaded to function through the magazine, has the bullet seated with the cannelure below the mouth of the case, which takes up too much case volume and allows no place for crimping. A good crimp is of utmost importance in a rifle with a tubular magazine and heavy recoil, such as the 45-70.

Excellent accuracy and good uniformity were obtained with our rifle using IMR 4198 and VIHT N-130. The 300 grain Hollow Point makes a good choice on deer while the 325 grain FTX® and 350 grain Round Nose are excellent choices for anything from black bear to moose.

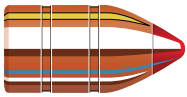
When loading FTX® and MonoFlex® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.170
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

The data below was developed with MonoFlex® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



250 gr. MonoFlex®
Item No. 45010
C.O.L.: 2.587"
G1 B.C.: 0.175

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
IMR 4198	41.5 gr.	43.4 gr.	45.3 gr.	47.3 gr.	49.2 gr.	
H4198	42.5 gr.	44.4 gr.	46.4 gr.	48.3 gr.	50.3 gr.	52.2 gr.
NORMA 200	44.8 gr.	47.1 gr.	49.3 gr.	51.5 gr.	53.8 gr.	
VIHT N-130	45.3 gr.	47.3 gr.	49.4 gr.	51.4 gr.	53.4 gr.	
Alliant RL-7	45.6 gr.	47.7 gr.	49.8 gr.	51.8 gr.	53.9 gr.	
Accurate 2015	49.6 gr.	51.5 gr.	53.4 gr.			

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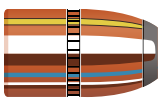
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.204
DIAMETER: 0.458"



300 gr. HP
Item No. 4500
C.O.L.: 2.550"
G1 B.C.: 0.197

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
VIHT N-120	32.2 gr.	35.1 gr.	38.0 gr.	40.9 gr.	43.8 gr.	
IMR 4198	35.8 gr.	38.4 gr.	41.0 gr.	43.6 gr.	46.2 gr.	48.7 gr.
VIHT N-130	38.5 gr.	41.3 gr.	44.1 gr.	46.9 gr.	49.7 gr.	52.4 gr.
H4198	42.3 gr.	44.6 gr.	46.8 gr.	49.0 gr.	51.2 gr.	
Alliant RL-7	44.7 gr.	46.6 gr.	48.5 gr.	50.4 gr.	52.3 gr.	
IMR 3031	50.2 gr.	52.4 gr.	54.7 gr.	56.9 gr.		

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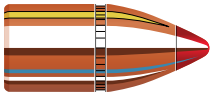
325 GRAIN BULLETS

SECTIONAL DENSITY: 0.221
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



325 gr. FTX®
Item No. 45015
C.O.L.: 2.590"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)							
POWDER	**1800**	**1850**	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**
IMR 4198	40.5 gr.	41.6 gr.	42.6 gr.	43.7 gr.	44.8 gr.	45.8 gr.	46.9 gr.	47.9 gr.
VIHT N-120	41.7 gr.	42.7 gr.	43.8 gr.	44.9 gr.	45.9 gr.	47.0 gr.	48.1 gr.	49.1 gr.
H4198	42.0 gr.	43.0 gr.	44.0 gr.	45.0 gr.	45.9 gr.	46.9 gr.	47.9 gr.	
Accurate 1680	42.2 gr.	43.5 gr.	44.8 gr.	46.1 gr.	47.4 gr.	48.7 gr.	50.1 gr.	51.4 gr.
Alliant RL-7	43.2 gr.	44.4 gr.	45.6 gr.	46.8 gr.	48.0 gr.	49.1 gr.	50.3 gr.	51.5 gr.
Accurate 2230	47.8 gr.	49.1 gr.	50.4 gr.	51.7 gr.	53.0 gr.			

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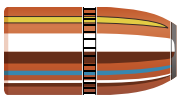
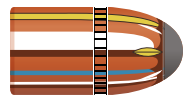
350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 2.545"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 2.550"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**	**1900**
VIHT N-120	29.6 gr.	32.3 gr.	35.0 gr.	37.8 gr.	40.5 gr.	
IMR 4198	32.0 gr.	34.7 gr.	37.3 gr.	40.0 gr.	42.7 gr.	45.3 gr.
VIHT N-130	33.6 gr.	36.4 gr.	39.1 gr.	41.9 gr.	44.6 gr.	47.4 gr.
H4198	37.1 gr.	39.4 gr.	41.6 gr.	43.9 gr.	46.2 gr.	48.4 gr.
Alliant RL-7	38.3 gr.	40.6 gr.	42.9 gr.	45.2 gr.	47.5 gr.	49.8 gr.
IMR 3031	45.2 gr.	47.4 gr.	49.6 gr.	51.7 gr.	53.9 gr.	56.1 gr.
IMR 4064	48.2 gr.	50.5 gr.	52.9 gr.	55.2 gr.	57.6 gr.	
H4895	50.2 gr.	52.2 gr.	54.2 gr.	56.2 gr.	58.3 gr.	

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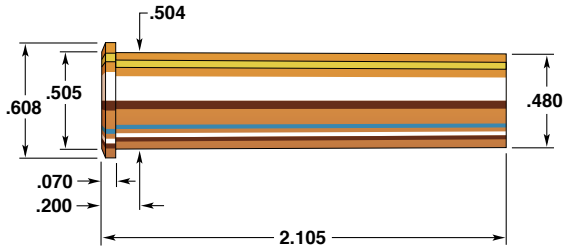


45-70 Government (Ruger #1)

Rifle:	Ruger #1	**Bullet Diameter:**	0.458"
Barrel:	.22", 1 in 20" Twist	**Maximum COL:**	.2.925"
Case:	Winchester	**Max. Case Length:**	.2.105"
Primer:	Federal 210	**Case Trim Length:**	2.095"

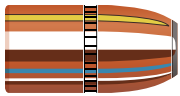
WARNING: The following data is to be used in such actions as the Ruger #1, Browning 78, Wickliffe, and 45-70's chambered in the Siamese Mauser bolt action. This data has maximum charges that develop 50,000 c.u.p. as tested in the Hornady Lab. Under no circumstances should these loads be used in any weaker action in the 40,000 c.u.p. class or less. Keep rounds developed with the following data clearly marked if there is even a remote chance they could be misappropriated to the wrong gun.

The 45-70 has been a popular sporting round since 1873, and with the advent of strong actions like the Ruger #1, its popularity has increased along with the usefulness of the cartridge. It is not possible for the ammunition manufacturers to produce rounds which utilize the full potential of these strong actions due to numerous antiques and antique replicas that remain in circulation. However, the handloader can produce every foot pound possible by using the correct powder-bullet combinations in his rifle, as listed here in the Hornady Handbook.

With the Hornady 500 grain DGX® or DGS® and IMR 3031, the Ruger #1 can produce velocities only 400 fps slower than the 458 Winchester. With such ballistic performance, the 45-70 Ruger can certainly take the largest game North America has to offer. Should any reloader desire to use the 250 grain MonoFlex®, 300 grain Hollow Point, or the 325 grain FTX® data for the Marlin 1895 45-70 may be used.

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 2.545"
G1 B.C.: 0.195

350 gr. InterLock® RN
Item No. 4502
C.O.L.: 2.550"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
IMR 4198	42.2 gr.	44.4 gr.	46.6 gr.	48.9 gr.	51.1 gr.	53.3 gr.
VIHT N-130	41.0 gr.	44.1 gr.	47.1 gr.	50.2 gr.	53.3 gr.	56.3 gr.
Alliant RL-7	44.8 gr.	47.5 gr.	50.2 gr.	52.8 gr.	55.5 gr.	
IMR 3031	49.0 gr.	51.2 gr.	53.3 gr.	55.4 gr.	57.5 gr.	59.6 gr.
Accurate 2015	50.9 gr.	53.7 gr.	56.5 gr.	59.4 gr.		
IMR 4895	51.2 gr.	54.2 gr.	57.2 gr.	60.1 gr.		
H322	52.9 gr.	55.4 gr.	57.9 gr.	60.4 gr.		

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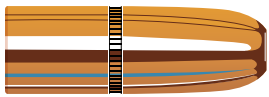
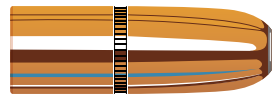
500 GRAIN BULLETS

SECTIONAL DENSITY: 0.341
DIAMETER: 0.458"



500 gr. DGS®
Item No. 4507
C.O.L.: 2.925"
G1 B.C.: 0.295



500 gr. DGX®
Item No. 4505
C.O.L.: 2.925"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**	**1800**
IMR 4198			39.1 gr.	41.9 gr.	44.8 gr.	47.6 gr.
Alliant RL-7		38.4 gr.	41.5 gr.	44.5 gr.		
IMR 3031			44.1 gr.	47.1 gr.	50.1 gr.	53.1 gr.
Accurate 2015	39.7 gr.	42.9 gr.	46.1 gr.	49.3 gr.		
IMR 4895	42.4 gr.	45.1 gr.	47.8 gr.	50.5 gr.	53.2 gr.	
H322	42.7 gr.	45.5 gr.	48.3 gr.	51.2 gr.		
IMR 4064	43.4 gr.	46.3 gr.	49.2 gr.	52.1 gr.	55.0 gr.	
VIHT N-135	44.2 gr.	46.8 gr.	49.4 gr.	52.1 gr.	54.8 gr.	

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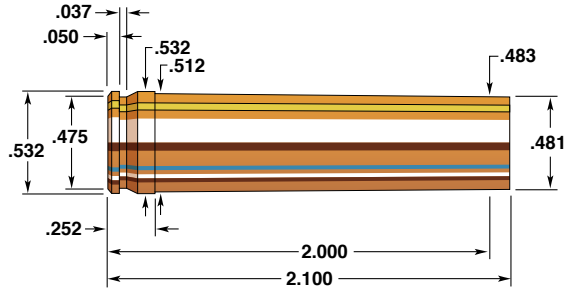


450 Marlin

Rifle:	Marlin Model 1895	**Bullet Diameter:**	0.458"
Barrel:	18½", 1 in 20" Twist	**Maximum COL:**	2.550"
Case:	Hornady	**Max. Case Length:**	2.100"
Primer:	Winchester WLR	**Case Trim Length:**	2.090"

In the year 2000, Hornady and Marlin set out to design a cartridge that would allow factory ammunition to take advantage of the potential of the 45-70 without loading it to pressures in excess of SAAMI maximums. Lengthening the 45-70 case was not an option as it would still fit in rifles chambered in 45-90 and 45- 110. "Improving" the cartridge case with a shoulder would be difficult to mass produce. The situation begged for a new cartridge case. We teamed up with Marlin and set out to design a cartridge that would meet performance requirements, and function reliably in Marlin's Model 1895.

The belt on the 450 Marlin is similar to, but longer than, the belt on standard belted magnums, thus it will not chamber in any other firearm with a standard magnum chamber or a standard 45-70 chamber. A similar wildcat cartridge, the 458 x 2" American employs a standard belt design and can be chambered in full length belted magnums such the 8mm Remington Magnum. If it were to be fired the results would be catastrophic.

H 4198 and VIHT N-130 gave best results in the 450 Marlin. Hornady makes five bullets that are suitable for use in the 450 Marlin. The 300 grain Hollow Point is best suited to hunting thin skinned game, and the 250 grain MonoFlex®, 325 grain FTX® and 350 grain Flat Point bullets are adequate for any game that the 450 is capable of taking.

When loading the 325 grain FTX® bullet in the 450 Marlin it is necessary to trim the cartridge cases shorter than normally prescribed to 2.040" so that the bullet can be seated to a C.O.L. that will function in the gun. This reduces case capacity and changes the load data. Do not deviate from data.

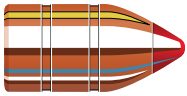
When loading FTX® and MonoFlex® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.170
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

The data below was developed with MonoFlex® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



250 gr. MonoFlex®
Item No. 45010
C.O.L.: 2.590"
G1 B.C.: 0.175

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2150**	**2200**	**2250**
IMR 4227	39.5 gr.	40.9 gr.	42.3 gr.	43.0 gr.		
Accurate 5744	41.7 gr.	44.3 gr.				
VIHT N-120	42.9 gr.	44.7 gr.	46.5 gr.	47.4 gr.	48.3 gr.	49.2 gr.

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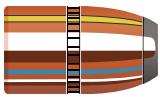
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.204
DIAMETER: 0.458"



300 gr. HP
Item No. 4500
C.O.L.: 2.525"
G1 B.C.: 0.197

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
Accurate 5744	35.9 gr.	38.4 gr.	40.8 gr.	43.3 gr.		
H4198	38.5 gr.	41.7 gr.	44.8 gr.	48.0 gr.	51.2 gr.	
IMR 4198	40.1 gr.	42.8 gr.	45.5 gr.	48.3 gr.	51.0 gr.	
VIHT N-120	42.4 gr.	44.8 gr.	47.3 gr.	49.7 gr.	52.2 gr.	
Alliant RL-7	44.2 gr.	46.8 gr.	49.4 gr.	51.9 gr.	54.5 gr.	57.1 gr.
VIHT N-130	46.3 gr.	48.7 gr.	51.1 gr.	53.5 gr.	56.0 gr.	58.4 gr.
Accurate 2015	49.5 gr.	51.9 gr.	54.3 gr.	56.7 gr.		

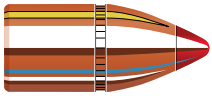
Create custom ballistic tables using our online calculators at hornady.com/ballistics

325 GRAIN BULLETS

SECTIONAL DENSITY: 0.221
DIAMETER: 0.458"

CASE TRIM LENGTH: 2.040"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



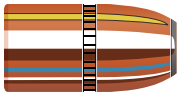
325 gr. FTX®
Item No. 45015
C.O.L.: 2.590"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)							
POWDER	**1750**	**1800**	**1850**	**1900**	**1950**	**2000**	**2050**	**2100**
VIHT N-120	39.4 gr.	40.5 gr.	41.6 gr.	42.7 gr.	43.8 gr.	44.9 gr.		
IMR 4198	40.1 gr.	41.1 gr.	42.1 gr.	43.0 gr.	44.0 gr.			
H4198	41.8 gr.	42.6 gr.	43.3 gr.	44.0 gr.	44.7 gr.	45.4 gr.		
Accurate 1680	41.1 gr.	42.0 gr.	43.0 gr.	43.9 gr.	44.8 gr.	45.8 gr.	46.7 gr.	47.7 gr.
Alliant RL-7	41.7 gr.	43.0 gr.	44.3 gr.	45.6 gr.	46.9 gr.	48.1 gr.		

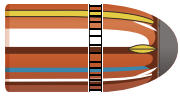
Create custom ballistic tables using our online calculators at hornady.com/ballistics

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 2.535"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 2.540"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**
IMR 4198	37.4 gr.	40.0 gr.	42.7 gr.	45.3 gr.	
H4198	39.9 gr.	41.9 gr.	43.9 gr.	45.9 gr.	47.9 gr.
VIHT N-120	39.4 gr.	42.0 gr.	44.6 gr.	47.1 gr.	
Alliant RL-7	39.9 gr.	42.8 gr.	45.7 gr.	48.6 gr.	51.5 gr.
VIHT N-130	43.5 gr.	46.0 gr.	48.5 gr.	51.0 gr.	53.5 gr.
Accurate 2015	45.6 gr.	48.0 gr.	50.5 gr.	52.9 gr.	55.3 gr.
IMR 3031	45.2 gr.	47.8 gr.	50.4 gr.	53.0 gr.	

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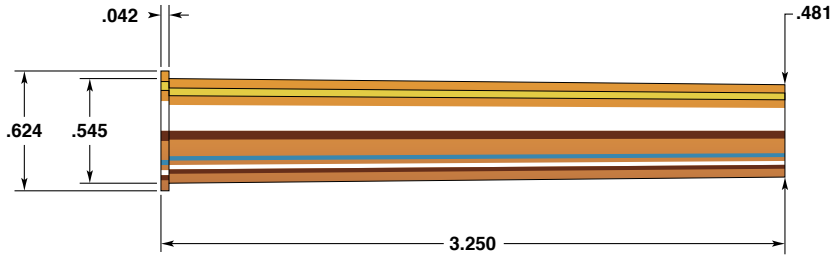


450 Nitro Express 3¼"

Rifle:	Custom	**Bullet Diameter:**	0.458"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	3.950"
Case:	Frontier	**Max. Case Length:**	3.250"
Primer:	Federal 215	**Case Trim Length:**	3.240"

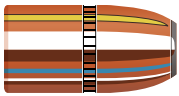
The 450 Nitro Express 3¼" has stood the test of time. Originally loaded with black powder, 450 Nitro Express 3¼" loads transitioned to cordite in the early 1900's and it has been a favorite cartridge among dangerous game hunters throughout the world since.

Hornady offers all the supplies needed to load the 450 Nitro Express 3¼" from New Dimension Dies, to Cartridge Cases to the excellent 480 grain DGX® and DGS® bullets that are featured in Dangerous Game Series ammunition. DGX® and DGS® bullets feature copper clad steel jackets and high antimony lead cores and are purpose built for the toughest of game. If plains game is on the list, we've also included data for our 350 grain RN and FP bullets. They are conventional gilding metal jackets with high antimony lead cores and will deliver controlled expansion, albeit more expansion than the DGX®. Double gun owners will be wise to spend extra time putting together a load that will regulate properly from their firearm, we found H 4350 to deliver excellent results in our testing.

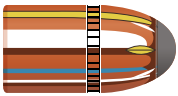
When testing the 480 grain DGX® and DGS® bullets, H 4831 is hard to beat. It provides good load density in this large cartridge case and is very insensitive to temperature fluctuation. It is also important to note the use of the Federal 215 primer; good ignition is absolutely critical when loading cartridges such as the 450 Nitro Express 3¼".

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 3.680"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 3.680"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)			
POWDER	**2200**	**2300**	**2400**	**2450**
H4350	81.1 gr.	85.4 gr.	89.9 gr.	92.0 gr.
Alliant RL-17	83.9 gr.	87.9 gr.	91.9 gr.	93.9 gr.
NORMA URP	84.6 gr.	89.2 gr.	93.9 gr.	
IMR 4831	91.5 gr.	95.1 gr.	98.8 gr.	
H4831	89.2 gr.	95.4 gr.	101.6 gr.	

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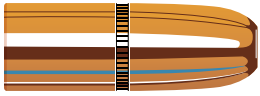
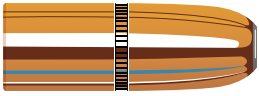
480 GRAIN BULLETS

SECTIONAL DENSITY: 0.327
DIAMETER: 0.458"



480 gr. DGS® (450 Nitro Express 3¼")
Item No. 45033
C.O.L.: 3.935"
G1 B.C.: 0.285



480 gr. DGX® (450 Nitro Express 3¼")
Item No. 45032
C.O.L.: 3.935"
G1 B.C.: 0.285

	VELOCITY (FPS – feet per second)			
POWDER	**1800**	**1900**	**2000**	**2100**
IMR 4831	75.0 gr.	79.5 gr.	84.0 gr.	88.5 gr.
Alliant RL-19	78.8 gr.	83.6 gr.	88.5 gr.	93.3 gr.
H4831	78.3 gr.	83.6 gr.	88.8 gr.	94.1 gr.
NORMA MRP	81.5 gr.	85.8 gr.	90.1 gr.	94.4 gr.

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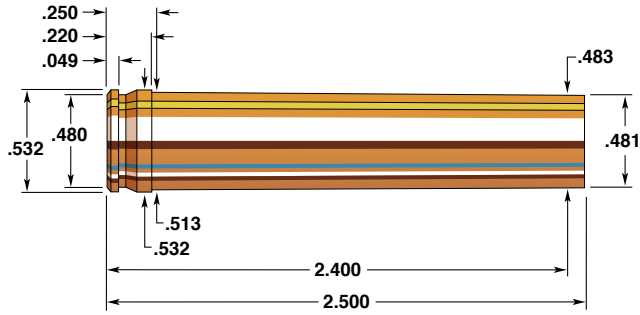


458 Winchester Magnum

Rifle:	Ruger 77	**Bullet Diameter:**	0.458"
Barrel:	24", 1 in 14" Twist	**Maximum COL:**	3.340"
Case:	Winchester	**Max. Case Length:**	2.500"
Primer:	Winchester WLRM	**Case Trim Length:**	2.490"

Nineteen fifty-six was Winchester's introduction year for its new 458 Winchester Magnum. This 458 became the basis for 1958 introductions of the 264 Winchester Magnum and the 338 Winchester Magnum. These new cartridges comprise a very potent family.

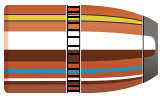
Winchester brought out their 458 in the Model 70 "African," a heavier and more stoutly constructed version of the Model 70 which would withstand the tremendous recoil this cartridge produces. This round was intended for large and dangerous African game, but has also found favor in North America for the big bears and moose.

The Hornady 500 grain DGS® is ideal for game such as elephant or Cape Buffalo, since muzzle energies of 5000 ft. lbs. plus are obtainable. The thickly drawn Copper Clad Steel jacket of this bullet will provide needed penetration on heavy thick-skinned game. The 500 grain DGX® is designed for controlled expansion in thinner skinned African game, and the 350 grain Round Nose being adequate for any North American game. The 300 grain Hollow Point bullets are designed to expand at 45-70 velocities.

Our test rifle was exceptionally accurate. Most loads produced good groups, with H 335 performing exceptionally well. The reloader must be careful not to load charges that are less than those listed, as potentially hazardous situations can occur.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.204
DIAMETER: 0.458"



300 gr. HP
Item No. 4500
C.O.L.: 2.930"
G1 B.C.: 0.197

	VELOCITY (FPS – feet per second)					
POWDER	**1850**	**1900**	**1950**	**2000**	**2050**	**2100**
IMR 4198	37.2 gr.	38.9 gr.	40.7 gr.	42.4 gr.	44.2 gr.	45.9 gr.
Accurate 5744	40.6 gr.	41.7 gr.	42.9 gr.	44.1 gr.	45.2 gr.	46.4 gr.
VIHT N-120	40.5 gr.	42.3 gr.	44.0 gr.	45.8 gr.	47.5 gr.	49.3 gr.
H4198	44.5 gr.	45.6 gr.	46.8 gr.	48.0 gr.	49.1 gr.	50.3 gr.

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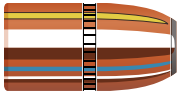
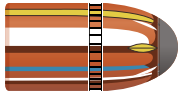
350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 2.940"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 2.950"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 4198	51.6 gr.	55.3 gr.	59.0 gr.	62.7 gr.	
VIHT N-120	54.5 gr.	57.9 gr.	61.2 gr.		
H4198	54.7 gr.	58.7 gr.	62.8 gr.	66.8 gr.	70.9 gr.
VIHT N-130	55.2 gr.	60.0 gr.	64.7 gr.	69.5 gr.	74.3 gr.
Alliant RL-7	63.1 gr.	66.3 gr.	69.5 gr.	72.7 gr.	75.9 gr.
H322	63.6 gr.	67.2 gr.	70.9 gr.	74.5 gr.	78.1 gr.
IMR 3031	64.3 gr.	68.1 gr.	71.8 gr.	75.5 gr.	
H335	68.1 gr.	72.3 gr.	76.6 gr.	80.8 gr.	

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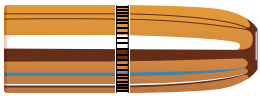
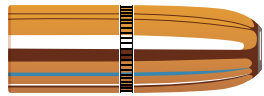
480 GRAIN BULLETS

SECTIONAL DENSITY: 0.327
DIAMETER: 0.458"



480 gr. DGS® (450 Nitro Express 3¼")
Item No. 45033
C.O.L.: 3.200"
G1 B.C.: 0.285



480 gr. DGX® (450 Nitro Express 3¼")
Item No. 45032
C.O.L.: 3.200"
G1 B.C.: 0.285

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2050**	**2100**	**2150**	**2200**
IMR 4198	53.3 gr.	56.7 gr.	58.4 gr.			
H4198	53.7 gr.	57.1 gr.	58.8 gr.	60.5 gr.		
Alliant RL-7	55.5 gr.	58.5 gr.	60.0 gr.	61.5 gr.		
NORMA 200	56.9 gr.	60.6 gr.	62.5 gr.	64.3 gr.	66.2 gr.	
H322	58.9 gr.	62.6 gr.	64.5 gr.	66.4 gr.	68.3 gr.	
Accurate 2230	58.7 gr.	62.8 gr.	64.9 gr.	66.9 gr.	69.0 gr.	71.1 gr.
X-TERMINATOR	62.8 gr.	66.6 gr.	68.6 gr.	70.5 gr.		

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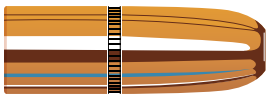
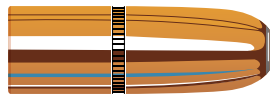
500 GRAIN BULLETS

SECTIONAL DENSITY: 0.341
DIAMETER: 0.458"



500 gr. DGS®
Item No. 4507
C.O.L.: 3.310"
G1 B.C.: 0.295



500 gr. DGX®
Item No. 4505
C.O.L.: 3.310"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**
Alliant RL-7	61.5 gr.	63.7 gr.	65.9 gr.			
IMR 3031	64.1 gr.	66.1 gr.	68.1 gr.	70.1 gr.		
Accurate 2015	63.5 gr.	65.9 gr.	68.2 gr.	70.6 gr.		
H4895	66.5 gr.	68.8 gr.	71.1 gr.	73.4 gr.	75.7 gr.	
IMR 4320	67.0 gr.	69.3 gr.	71.5 gr.	73.8 gr.		
IMR 4064	67.6 gr.	69.6 gr.	71.5 gr.	73.4 gr.	75.3 gr.	
VIHT N-135	67.1 gr.	69.3 gr.	71.6 gr.	73.8 gr.	76.0 gr.	
H335	67.5 gr.	69.7 gr.	71.9 gr.	74.1 gr.	76.3 gr.	
VIHT N-140	68.4 gr.	70.7 gr.	73.0 gr.	75.4 gr.	77.7 gr.	
Accurate 2230	71.5 gr.	72.8 gr.	74.2 gr.	75.6 gr.	76.9 gr.	78.3 gr.
WIN 748	74.0 gr.	75.8 gr.	77.7 gr.	79.6 gr.	81.4 gr.	

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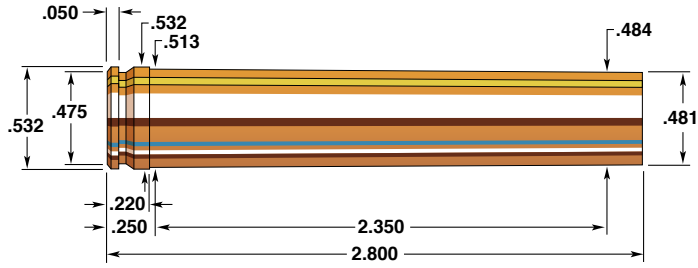
INDICATES MAXIMUM LOAD — USE WITH CAUTION



458 Lott

Rifle:	.Wiseman Custom	**Bullet Diameter:**	0.458"
Barrel:	.24", 1 in 10" Twist	**Maximum COL:**	3.600"
Case:	.Hornady	**Max. Case Length:**	2.800"
Primer:	Winchester WLRM	**Case Trim Length:**	2.790"

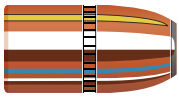
Jack Lott introduced the 458 Lott in 1971, it is based on a shortened, straight tapered version of the 375 Holland & Holland case that fires .458" projectiles. The 458 Lott is similar to the 458 Winchester Magnum except it is longer, and capable of firing bullets at higher velocities. Interestingly, 458 Winchester Magnum ammunition can be fired in guns chambered for the 458 Lott, which adds to its versatility.

Historically, custom gunsmiths such as D'Arcy Echols & Company were the only gun makers chambering rifles for 458 Lott. At the 2002 NRA show Ruger brought a #1 chambered in 458 Lott and announced that it would become a standard chambering in the near future. Winchester also builds rifles chambered for the 458 Lott. However, they are only available through their custom shop. Hornady introduced 458 Lott ammunition in 2002. We also added cartridge cases to our component line, which gives the 458 Lott owner a reliable source for top quality handloading components as well as ammunition which is loaded with our DGS® and DGX® bullets.

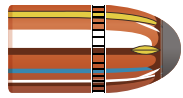
Powders with a medium burn rate gave the best results in our tests. Our choice of powder for this cartridge is Hodgdon 335. It gave good accuracy, consistent pressures, and good velocities while providing excellent resistance to extreme hot and cold conditions.

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 3.215"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 3.215"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4198	58.1 gr.	62.6 gr.	67.2 gr.		
Alliant RL-7	65.4 gr.	69.0 gr.	72.6 gr.	76.1 gr.	
H322	65.3 gr.	70.1 gr.	75.0 gr.	79.8 gr.	
Accurate 2015	69.8 gr.	73.2 gr.	76.6 gr.	79.9 gr.	
TAC	73.5 gr.	77.6 gr.	81.8 gr.	85.9 gr.	90.0 gr.

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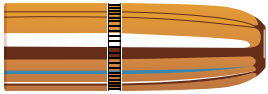
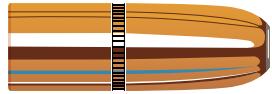
500 GRAIN BULLETS

SECTIONAL DENSITY: 0.341
DIAMETER: 0.458"



500 gr. DGS®
Item No. 4507
C.O.L.: 3.585"
G1 B.C.: 0.295



500 gr. DGX®
Item No. 4505
C.O.L.: 3.585"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2150**	**2200**	**2250**
H4895	64.4 gr.	68.3 gr.	72.2 gr.	74.2 gr.		
TAC	65.1 gr.	69.1 gr.	73.0 gr.	75.0 gr.	77.0 gr.	
IMR 4064	65.1 gr.	69.3 gr.	73.4 gr.	75.5 gr.		
IMR 4320	64.2 gr.	68.9 gr.	73.6 gr.			
Alliant RL-15	67.6 gr.	71.2 gr.	74.8 gr.	76.6 gr.		
H335	67.1 gr.	71.1 gr.	75.2 gr.	77.3 gr.	79.3 gr.	
Accurate 2700	69.7 gr.	74.5 gr.	79.2 gr.	81.5 gr.		
WIN 748	72.9 gr.	76.9 gr.	80.8 gr.	82.8 gr.	84.8 gr.	86.8 gr.

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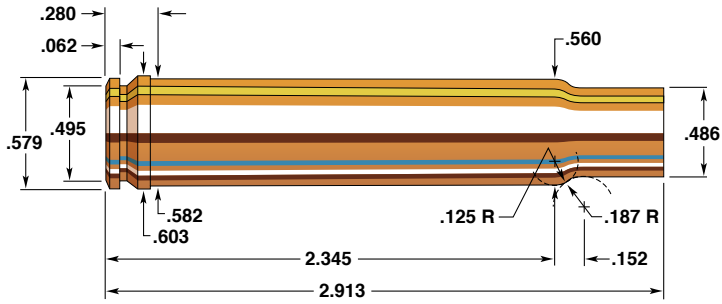


460 Weatherby Magnum

Rifle:	Weatherby Mark V	**Bullet Diameter:**	0.458"
Barrel:	26", 1 in 16" Twist	**Maximum COL:**	3.750"
Case:	.Weatherby	**Max. Case Length:**	.2.913"
Primer:	Federal 215	**Case Trim Length:**	2.898"

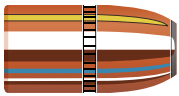
At its inception the 460 Weatherby Magnum earned the title of the world's most powerful commercial cartridge. Developing nearly 8000 foot pounds of muzzle energy with 500 grain bullets at 2600 fps, this ominous round was introduced by Roy Weatherby in 1958 and is based on the 378 Weatherby Magnum case necked up to 45 caliber. With its tremendous power the 460 is more than adequate for any game animal on the earth and, frankly, a tad more powerful than needed for trophies one might seek anywhere in North America.

Our test rifle was very accurate, with three shot groups of a minute of angle or less frequently obtained. In shooting this data, we found a twenty-five pound bag of lead shot between the shoulder and the buttstock was necessary to prevent badly bruised shoulders. Our test rifle also had a muzzle brake, which is intended to limit muzzle jump. However, with anything having as much recoil as the 460 Weatherby Magnum and considering the amount of shooting necessary, the shoulder protection was still necessary. This rifle showed a preference for VARGET with the light bullet and VIHT N-160 with the 500 grain DGX®.

Warning: The loads recommended in this section should not be reduced. Reducing loads in a large capacity cartridge can lead to dangerous hangfires. Hangfires with a cartridge of this magnitude can be quite unpleasant.

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



350 gr. InterLock® FP
Item No. 4503
C.O.L.: 3.345"
G1 B.C.: 0.195

350 gr. InterLock® RN
Item No. 4502
C.O.L.: 3.355"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**2700**	**2800**	**2900**	**2950**	**3000**
IMR 3031	93.6 gr.	99.0 gr.	104.4 gr.	107.1 gr.	
H4895	96.5 gr.	102.0 gr.	107.5 gr.	110.3 gr.	113.0 gr.
VARGET	98.1 gr.	104.6 gr.	111.2 gr.	114.5 gr.	117.8 gr.
IMR 4064	104.2 gr.	108.4 gr.	112.5 gr.	114.5 gr.	116.6 gr.
VIHT N-140	103.4 gr.	107.9 gr.	112.4 gr.	114.7 gr.	
Alliant RL-15	107.4 gr.	110.8 gr.	114.3 gr.	116.0 gr.	117.7 gr.
Accurate 4350	118.8 gr.	121.5 gr.	124.2 gr.	125.6 gr.	
WIN 760	121.2 gr.	126.2 gr.	131.2 gr.	133.8 gr.	136.3 gr.

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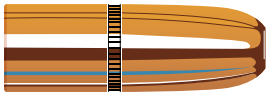
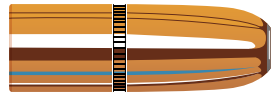
500 GRAIN BULLETS

SECTIONAL DENSITY: 0.341
DIAMETER: 0.458"



500 gr. DGS®
Item No. 4507
C.O.L.: 3.710"
G1 B.C.: 0.295



500 gr. DGX®
Item No. 4505
C.O.L.: 3.710"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)			
POWDER	**2300**	**2400**	**2500**	**2550**
H4895	89.8 gr.	94.6 gr.		
IMR 4064	92.2 gr.	96.7 gr.		
Accurate 4350	99.7 gr.	105.6 gr.	111.6 gr.	114.5 gr.
H4350	98.8 gr.	105.7 gr.	112.6 gr.	116.0 gr.
WIN 760	105.5 gr.	110.6 gr.	115.7 gr.	
IMR 4831	108.5 gr.	112.8 gr.	117.1 gr.	119.3 gr.
VIHT N-160	107.4 gr.	113.0 gr.	118.6 gr.	121.4 gr.
Alliant RL-19	113.5 gr.	118.0 gr.	122.5 gr.	124.7 gr.

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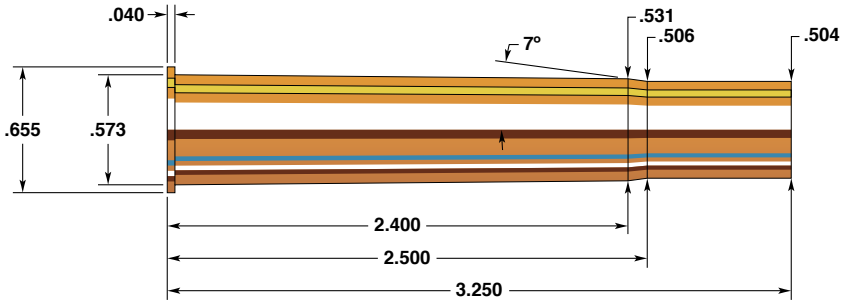


470 Nitro Express

Rifle: . . Gary Reeder Custom #1 Ruger
Barrel: . . . . . .24", 1 in 18" Twist
Case: . . . . . .Hornady
Primer: . . . . . Federal 215
Bullet Diameter: . . . . . .0.474"
Maximum COL: . . . . . 3.980"
Max. Case Length: . . . . . 3.250"
Case Trim Length: . . . . . 3.240"

It can easily be argued that of all the dangerous game cartridges currently in use, (particularly in Africa) the 470 NE offers the best combination of fight stopping energy and shootability. Many adherents of the various bolt action rifle calibers may argue, but while the recoil of many of those cartridges is savage, the 470 NE is more of a hard push.

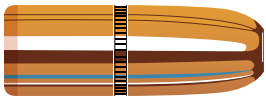
Hornady offers two excellent bullets for the 470 NE. The 500 grain DGS® (Dangerous Game Solid) is the ideal second round in a double rifle. Designed to deliver unmatched penetration at typical 470 NE impact velocities, this bullet will penetrate to vitals of most dangerous game from almost any angle, and is rapidly gaining favor as a stopper with PHs all over Africa.

The counterpart to the DGS® is the 500 grain Dangerous Game eXpanding (DGX®). Offering quick, yet controlled expansion, this is the ideal first barrel bullet to maximize shock and tissue damage, while still delivering enough penetration to smash its way to the vitals.

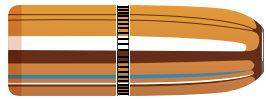
Combined with today's temperature insensitive propellants for extreme stability in a host of climates, Hornady's DGS® and DGX® bullets make today's 470 NE as handy and viable of a "stopper" as ever before. Offered in compact, fast pointing doubles, the 470 NE is still one of the best cartridges available when dangerous game is on the ticket—particularly in Africa—where its reputation was well earned.

500 GRAIN BULLETS

SECTIONAL DENSITY: 0.316
DIAMETER: 0.474"



500 gr. DGS®
Item No. 4748
C.O.L.: 3.965"
G1 B.C.: 0.290



500 gr. DGX®
Item No. 4747
C.O.L.: 3.965"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**
Alliant RL-15	84.5 gr.	86.8 gr.				
IMR 4831	92.5 gr.	95.1 gr.	97.7 gr.	100.4 gr.	103.0 gr.	105.6 gr.
H4831	95.6 gr.	99.0 gr.	102.4 gr.	105.9 gr.	109.3 gr.	112.7 gr.
Alliant RL-22	99.1 gr.	101.6 gr.	104.1 gr.	106.6 gr.	109.1 gr.	111.6 gr.
IMR 7828	99.8 gr.	102.7 gr.	105.5 gr.	108.4 gr.	111.2 gr.	
NORMA MRP	103.7 gr.	106.0 gr.	108.2 gr.	110.5 gr.		
H1000	107.8 gr.	110.4 gr.	112.9 gr.	115.5 gr.	118.1 gr.	

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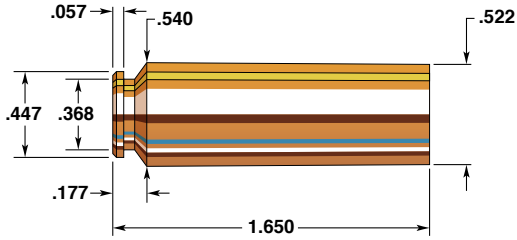


50 Beowulf

Rifle:	Alexander Arms	**Bullet Diameter:**	0.500"
Barrel:	16", 1 in 20" Twist	**Maximum COL:**	2.250"
Case:	Hornady	**Max. Case Length:**	1.650"
Primer:	WLP	**Case Trim Length:**	1.640"

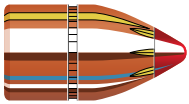
There is an old proverb/curse, "May you live in interesting times" AR-15 or MSR platform has most certainly lived a life in interesting times. From the "plastic" parts to "new" ball propellants of the early days to twist rate "growing pains" and a seemingly perpetual shortening over the years the AR platform has seen its fair share of diversity.

Although the original and official military chambering, 5.56 x 45mm NATO, has never changed the commercial market has chambered numerous cartridges from the 204 Ruger all the way up to the 50 Beowulf® and many in between. The 50 Beowulf® is a development of Bill Alexander of Alexander Arms and was designed to deliver maximum stopping power from the AR platform. The 50 Beowulf® has found favor with shooters in both the military and law enforcement world, especially in conjunction with vehicle check points for obvious reasons, as well as hunters; it would be hard to find a better cartridge for hunting hogs in thick cover.

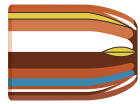
Hornady offers 3 bullets suitable for the 50 Beowulf®, the first being the 300 grain FTX® bullet, combines the highest velocity potential of all three bullets with flat trajectories and excellent terminal performance characteristics—the same bullet found in our 500 Smith & Wesson and 12 gauge SST® shotgun slug. The second is the 350 grain XTP® MAG™ bullet, also developed for our 500 Smith & Wesson factory ammo, the 350 grain XTP® MAG™ is a very tough bullet that will work for ANY game in North America. Finally, the 500 grain XTP® FP will deliver DEEP penetration with controlled expansion, the ideal bullet if the Beowulf is being used as a backup gun in big bear country.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.500"



300 gr. FTX®
Item No. 50102
C.O.L.: 2.250"
G1 B.C.: 0.200



300 gr. XTP® Mag
Item No. 50101
C.O.L.: 2.230"
G1 B.C.: 0.120

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**
LIL' GUN	30.5 gr.	32.6 gr.	34.7 gr.	36.8 gr.	38.8 gr.
WIN 296	33.3 gr.	35.3 gr.	37.3 gr.	39.3 gr.	41.3 gr.
H110	35.9 gr.	38.1 gr.	40.2 gr.	42.4 gr.	44.5 gr.
IMR 4227	39.2 gr.	41.0 gr.	42.8 gr.	44.6 gr.	

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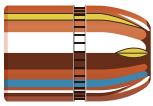
350 GRAIN BULLETS

SECTIONAL DENSITY: 0.200
DIAMETER: 0.500"



350 gr. XTP® Mag
Item No. 50100
C.O.L.: 2.100"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)			
POWDER	**1500**	**1600**	**1700**	**1800**
LIL' GUN	28.8 gr.	31.1 gr.	33.3 gr.	35.6 gr.
WIN 296	34.5 gr.	36.4 gr.	38.2 gr.	40.1 gr.
H110	33.0 gr.	35.7 gr.	38.4 gr.	41.0 gr.
IMR 4227	37.3 gr.	39.5 gr.	41.7 gr.	43.9 gr.

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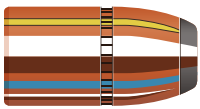
500 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.500"



500 gr. FP
Item No. 50105
C.O.L.: 2.240"
G1 B.C.: 0.185

	VELOCITY (FPS – feet per second)			
POWDER	**1100**	**1200**	**1300**	**1400**
LIL' GUN	21.8 gr.	23.8 gr.	26.0 gr.	28.1 gr.
WIN 296	26.0 gr.	28.1 gr.	30.2 gr.	32.4 gr.
H110	26.3 gr.	28.3 gr.	30.4 gr.	32.5 gr.
IMR 4227	28.4 gr.	30.5 gr.	32.6 gr.	34.7 gr.

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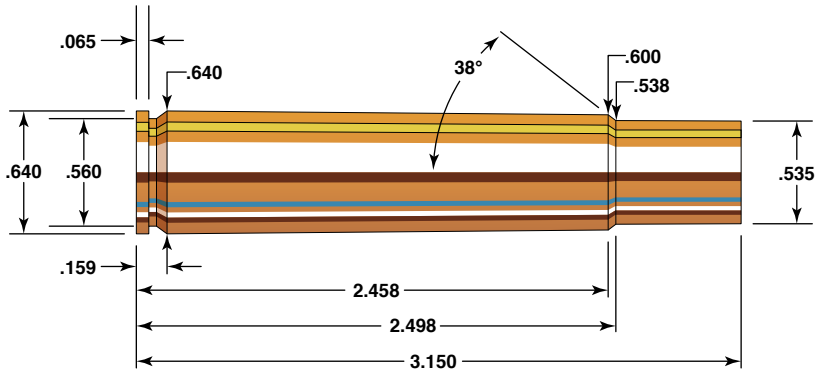
INDICATES MAXIMUM LOAD — USE WITH CAUTION



505 Gibbs

Rifle:	CZ 550 Magnum Express	**Bullet Diameter:**	0.505"
Barrel:	24", 1 in 16" Twist	**Maximum COL:**	3.850"
Case:	Bertram	**Max. Case Length:**	3.150"
Primer:	Federal 215	**Case Trim Length:**	3.140"

The 505 Gibbs, developed over 100 years ago by George Gibbs, is nothing short of impressive. Capable of firing a 525 grain bullet at 2,300 feet per second it generates over 6,100 foot pounds of energy. Recoil is significant, as expected. With an 11 pound rifle, the shooter can expect nearly 100 foot pounds of recoil energy.

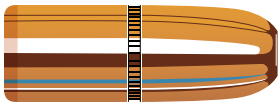
While most of the popular dangerous game calibers, such as the "Nitro Express" line from .450 up to .600 were developed for double rifles, the 505 Gibbs was designed for the Mauser bolt action. Original loads used cordite and a 525 grain bullet.

Hornady offers two .505 caliber bullets for handloaders, both weighing 525 grains; the Dangerous Game Solid (DGS) and the Dangerous Game eXpanding (DGX). Both feature copper-clad steel jackets and high antimony lead cores. The DGS is, of course, designed for maximum penetration to reach vitals from the various angles that present themselves on safari. The DGX is designed to allow extremely controlled expansion and is a favorable first-round load to be backed up by DGS rounds for follow-up shots.

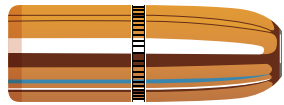
The 505 Gibbs gained notoriety by author Ernest Hemingway, outfitting his fictional character PH Robert Wilson with a rifle of that caliber in his short story "The Short Happy Life of Francis Macomber."

525 GRAIN BULLETS

SECTIONAL DENSITY: 0.294
DIAMETER: 0.505"



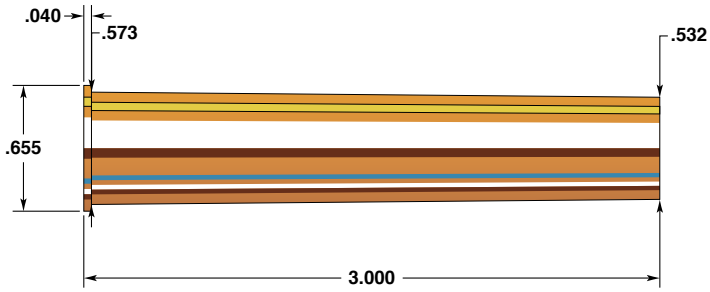
525 gr. DGS® (505 Gibbs)
Item No. 5051
C.O.L.: 3.835"
G1 B.C.: 0.270



525 gr. DGX® (505 Gibbs)
Item No. 5050
C.O.L.: 3.835"
G1 B.C.: 0.270

	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2150**	**2200**	**2250**	**2300**
H4831	127.3 gr.	131.7 gr.	133.9 gr.			
IMR 7828	131.6 gr.	135.0 gr.	136.7 gr.	138.4 gr.	140.1 gr.	
Alliant RL-25	132.9 gr.	138.2 gr.	140.9 gr.	143.6 gr.	146.3 gr.	148.9 gr.
H1000	138.0 gr.	142.2 gr.	144.3 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics



500 Nitro Express 3"

Rifle:	Bartlein Custom	**Bullet Diameter:**	.0.510"
Barrel:	24", 1 in 15" Twist	**Maximum COL:**	3.750"
Case:	Hornady	**Max. Case Length:**	3.000"
Primer:	Federal 215	**Case Trim Length:**	2.990"

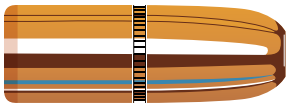
The 500 Nitro Express (NE) is one of the largest readily available dangerous game cartridges on the planet. The 500 NE is neither the fastest, nor the flattest shooting cartridge ever devised, but the reason it is still around after all these years boils down to the unmistakable advantage it offers over most other cartridges: POWER. This is one of those rounds that was devised when Africa was still an amalgamation of colonies, and smokeless propellants and big game bullets were in their infancies. It was devised from the outset to run at moderate pressures, but to deliver such a massive payload that nothing would be able to take two solid hits without serious damage.

Hornady has taken the payload portion of this venerable cartridge and brought it into the 21st century with the introduction of the 570 grain Dangerous Game Solid (DGS®) and Dangerous Game eXpanding (DGX®) bullets. While the solid provides the penetration to instill confidence on nearly any shot reaching the vitals, the DGX® offers a blend of expansion and penetration that will create massive wound channels and deliver exceptional shock and stopping power. In many cases, the DGX® is the ideal first barrel bullet, while the DGS® makes a second barrel bullet with no peer. Shock and awe at its finest.

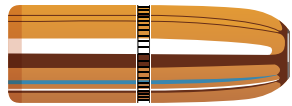
Today's modern propellants give the 500 NE another dimension — combined with Hornady bullets they allow for consistent velocities and pressures across a broad range of temperatures, and allow hunters to go afield with confidence that their loads will perform the same wherever they hunt. If the biggest, baddest animals on the planet are on the menu, and you'd rather pay a taxidermist than a mortician, consider the 500 NE as the last word in life insurance.

570 GRAIN BULLETS

SECTIONAL DENSITY: 0.313
DIAMETER: 0.510"



570 gr. DGS®
Item No. 5155
C.O.L.: 3.730"
G1 B.C.: 0.295



570 gr. DGX®
Item No. 5150
C.O.L.: 3.730"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**
H4831	100.7 gr.	104.1 gr.	107.4 gr.		
NORMA URP	91.2 gr.	93.9 gr.	96.5 gr.	99.1 gr.	101.8 gr.
H4350	90.1 gr.	93.2 gr.	96.2 gr.	99.2 gr.	102.3 gr.
IMR 4007 SSC	92.9 gr.	95.3 gr.	97.7 gr.	100.0 gr.	102.4 gr.
Alliant RL-17	94.1 gr.	96.2 gr.	98.4 gr.	100.6 gr.	102.7 gr.
IMR 4350	95.7 gr.	98.0 gr.	100.3 gr.	102.6 gr.	104.9 gr.

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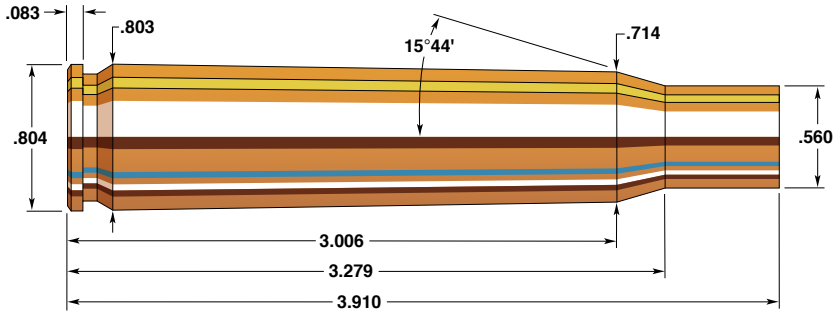


50 BMG

Rifle:	McMillian	**Bullet Diameter:**	.0.510"
Barrel:	36", 1 in 15" Twist	**Maximum COL:**	5.450"
Case:	IMI	**Max. Case Length:**	.3.910"
Primer:	CCI 35	**Case Trim Length:**	3.900"

John M. Browning's contributions to sporting and military firearms development in the 20th century are both legendary and unsurpassed. His standing in the pantheon of arms designers will not be challenged any time soon in the new millennium. The 50 BMG—Browning Machine Gun—is an achievement from the teens of the 20th century that found an unexpected new role in the 1990s.

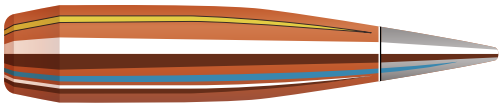
The 50 BMG entered U. S. Military service in 1918 and retains its role to the present, despite efforts to drop it in favor of larger caliber cartridges. It has demonstrated flexibility in military applications based on saboted loadings with enhanced armor piercing capabilities. Its exemplary performance in the Gulf Wars should assure its future.

Its use as a sporting, or semi-sporting, cartridge can be understood very quickly with simple arithmetic. The 50 BMG can be effective in one mile target competitions, can perform superbly in long-range accuracy shooting, and can fire sub-MOA (Minute of Angle) groups even at 1000 yards. In the heavy, bolt action, bench rest, muzzle-braked rifles created for it, the 50 BMG is an awesome target rifle.

As of this writing, over 2000 shooters are registered participants in 50 BMG competitions—and the number is growing. Brass is available from reclaimed military ammo, and there is no better match bullet for reloading it than the Hornady 50 caliber 750 grain A-MAX®.

750 GRAIN BULLETS

SECTIONAL DENSITY: 0.412
DIAMETER: 0.510"



^750 gr. A-MAX®
Item No. 5165
C.O.L.: 5.730"
G1 B.C.: 1.050
G7 B.C.: 0.451

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
H50BMG	185.5 gr.	195.3 gr.	205.1 gr.	214.9 gr.	
VIHT 24N41	194.9 gr.	202.2 gr.	209.5 gr.	216.8 gr.	
VIHT 20N29	211.9 gr.	218.6 gr.	225.3 gr.	232.0 gr.	238.7 gr.
US 869	204.8 gr.	214.1 gr.	223.4 gr.	232.6 gr.	241.0 gr.
Alliant RL-50	206.0 gr.	215.7 gr.	225.5 gr.	235.2 gr.	

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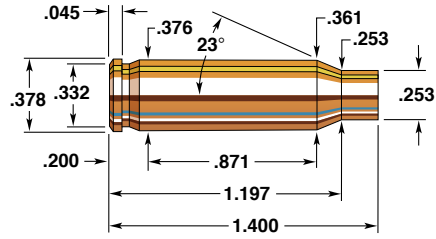
*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

HANDGUN RELOADING DATA

EDITION 10



221 Remington Fireball

Handgun:	Remington XP-100	**Bullet Diameter:**	0.224"
Barrel:	10¾", 1 in 12" Twist	**Maximum COL:**	1.830"
Case:	Remington	**Max. Case Length:**	1.400"
Primer:	Remington 7½	**Case Trim Length:**	1.390"

The Fireball cartridge is a shortened version of the 222 Remington introduced in the short barreled XP-100 action in 1963. The XP-100 action is a shortened and modified version of the Model 600 action, although it was introduced before the Model 600. This cartridge had the distinction of being the "hottest", flattest shooting pistol cartridge manufactured that also had commercially available ammunition. However, several newer pistol cartridges surpass the 221 Fireball. As a varminter, the 221 is superb, with accuracy capabilities of minute-of-angle or less. Topped with a scope and loaded with Hornady SX or V-MAX® bullets the 221 is adequate for taking varmints in excess of 150 yards. The XP-100 Pistol has been reintroduced by Remington after a several year halt in production.

In our test weapon, IMR 4198 gave the best overall results. Performance in the 221 Fireball is outstanding.

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 1.830"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)				
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**
Alliant 2400	12.8 gr.	13.3 gr.	13.9 gr.		
IMR 4227	14.5 gr.	15.1 gr.	15.7 gr.	16.3 gr.	
IMR 4198	16.8 gr.	17.4 gr.	18.0 gr.	18.6 gr.	
Alliant RL-7	17.0 gr.	17.5 gr.	18.0 gr.	18.6 gr.	19.1 gr.

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 1.830"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 1.830"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 1.830"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4227		14.5 gr.	15.2 gr.	15.9 gr.	16.6 gr.
IMR 4198	16.3 gr.	16.8 gr.	17.3 gr.	17.8 gr.	18.3 gr.
Alliant RL-7	16.5 gr.	17.1 gr.	17.7 gr.	18.2 gr.	18.8 gr.
BL-C(2)	21.1 gr.	21.7 gr.	22.4 gr.	23.0 gr.	

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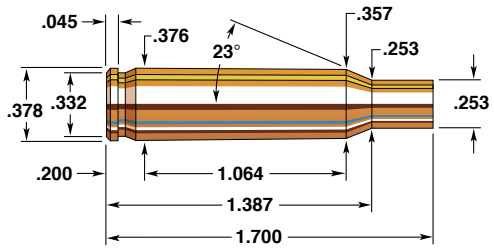


222 Remington

Handgun:	T/C Contender	**Bullet Diameter:**	0.224"
Barrel:	10", 1 in 14" Twist	**Maximum COL:**	2.130"
Case:	Hornady/Frontier	**Max. Case Length:**	1.700"
Primer:	Winchester WSR	**Case Trim Length:**	1.690"

Just because someone can think up a new combination of cartridge capacity, bore diameter, barrel length, rate of twist, etc. doesn't mean the new idea is an especially good one. Our case in point: the 222 Remington chambered in a 10" handgun barrel.

The 222 is an excellent round in a rifle, but loses ground when used in a 10" barrel pistol. Powder capacity of the 222 is too large for efficient performance in only 10 inches of barrel. Only the faster powders as listed perform well enough to produce uniform accuracy. The 223 Remington chambered barrels, especially in the 14 inch length, have greatly surpassed the popularity of the 222 barrels.

VIHT N-130 and IMR 4198 performed best of all powders listed throughout the range of bullets tested. Hornady's 50 grain SX bullet proved to be perfect for 222 velocities when tested on prairie dogs. At 222 pistol velocities, only SX or the V-MAX® bullets and the 45 grain Hornet bullet should be used on varmints, and for small edible game, the 55 FMJ is a good performer.

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.130"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**2550**	**2600**	**2650**	**2700**	**2750**	**2800**
VIHT N-120	17.0 gr.	17.4 gr.	17.8 gr.	18.2 gr.	18.6 gr.	19.0 gr.
IMR 4198	18.9 gr.	19.2 gr.	19.5 gr.	19.8 gr.	20.0 gr.	20.3 gr.
Alliant RL-7	20.2 gr.	20.4 gr.	20.6 gr.	20.8 gr.	21.0 gr.	
VIHT N-130	21.1 gr.	21.3 gr.	21.6 gr.	21.9 gr.	22.1 gr.	
Accurate 2015	22.3 gr.	22.6 gr.	22.8 gr.	23.1 gr.	23.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.130"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)					
POWDER	**2450**	**2500**	**2550**	**2600**	**2650**	**2700**
VIHT N-120	17.5 gr.	17.9 gr.				
IMR 4198	19.5 gr.	19.9 gr.	20.3 gr.	20.7 gr.		
Alliant RL-7	20.2 gr.	20.4 gr.	20.6 gr.	20.8 gr.	21.0 gr.	21.2 gr.
VIHT N-130	20.4 gr.	20.6 gr.	20.9 gr.	21.1 gr.		
Accurate 2015	21.8 gr.	22.1 gr.	22.3 gr.	22.5 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.130"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.130"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.130"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**2350**	**2400**	**2450**	**2500**	**2550**	**2600**
IMR 4198	18.2 gr.	18.4 gr.	18.6 gr.	18.8 gr.	19.0 gr.	19.2 gr.
VIHT N-130	19.3 gr.	19.5 gr.	19.8 gr.	20.0 gr.	20.2 gr.	20.5 gr.
Accurate 2015	21.0 gr.	21.2 gr.	21.4 gr.	21.7 gr.		
H322	20.6 gr.	21.0 gr.	21.4 gr.	21.8 gr.	22.2 gr.	22.7 gr.

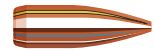
Create custom ballistic tables using our online calculators at hornady.com/ballistics

52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.130"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.130"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.130"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.130"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.130"
G1 B.C.: 0.218

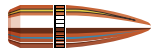
	VELOCITY (FPS – feet per second)					
POWDER	**2250**	**2300**	**2350**	**2400**	**2450**	**2500**
IMR 4198	18.0 gr.	18.3 gr.	18.6 gr.	19.0 gr.		
VIHT N-130	19.0 gr.	19.4 gr.	19.8 gr.	20.2 gr.	20.6 gr.	21.1 gr.
H322	20.2 gr.	20.6 gr.	21.0 gr.	21.4 gr.	21.9 gr.	22.3 gr.
IMR 3031	20.7 gr.	21.0 gr.	21.2 gr.	21.5 gr.	21.8 gr.	22.0 gr.
Accurate 2015	20.7 gr.	21.0 gr.	21.4 gr.	21.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

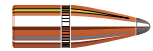
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.130"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.130"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.130"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.130"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.130"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**2150**	**2200**	**2250**	**2300**	**2350**	**2400**
IMR 4198	17.3 gr.	17.6 gr.	17.9 gr.	18.1 gr.	18.4 gr.	18.7 gr.
VIHT N-130	18.2 gr.	18.6 gr.	18.9 gr.	19.2 gr.	19.6 gr.	19.9 gr.
H322	19.3 gr.	19.7 gr.	20.1 gr.	20.5 gr.	20.9 gr.	21.3 gr.
Accurate 2015	19.7 gr.	19.9 gr.	20.2 gr.	20.5 gr.		
IMR 3031	19.8 gr.	20.1 gr.	20.4 gr.	20.7 gr.	20.9 gr.	21.2 gr.

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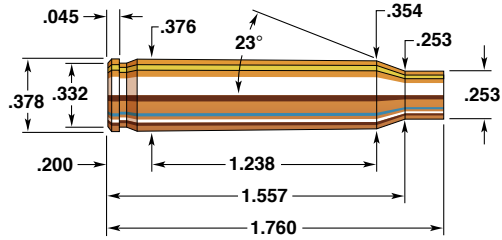

223 Remington

Handgun:	T/C Contender	**Bullet Diameter:**	0.224"
Barrel:	14", 1 in 14" Twist	**Maximum COL:**	2.260"
Case:	Hornady/Frontier	**Max. Case Length:**	1.760"
Primer:	Remington 7½	**Case Trim Length:**	1.750"

The 223 Remington began as the 5.56mm military cartridge in 1957. Several years later, it was introduced to the public as a commercial rifle cartridge and is currently loaded by all major manufacturers. It is extremely popular and is used mainly for varmint hunting. It has been offered in bolt action, pump, semiautomatic, lever-action, single shot rifles and, course, the Thompson/ Center Contender pistol.

And what a difference just a few inches of barrel length can make! Compare the performance of the 222 Remington shot from a 10" barrel, listed in the preceding section. The 223 Remington cartridge does quite well in the 14" barreled gun, pushing, the 50 grain Hornady SX bullet to the magical 3000 fps barrier. Accuracy with a scoped pistol can be remarkable, with 1 minute of angle groups not uncommon.

The SX (super explosive) bullets work especially well in this cartridge and this firearm. They are accurate and expand easily and reliably for quick, sure performance on varmints. Other outstanding choices can be found in the extensive line of Hornady V-MAX® bullets.

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.200"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
VIHT N-120	16.8 gr.	17.7 gr.	18.5 gr.	19.3 gr.	20.1 gr.	20.9 gr.
IMR 4198	18.6 gr.	19.4 gr.	20.3 gr.	21.1 gr.	22.0 gr.	
VIHT N-130	20.7 gr.	21.4 gr.	22.0 gr.	22.7 gr.	23.4 gr.	24.1 gr.
H335	24.2 gr.	25.0 gr.	25.9 gr.	26.7 gr.	27.6 gr.	
Accurate 2460	24.7 gr.	25.4 gr.	26.2 gr.	26.9 gr.	27.7 gr.	

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45 GRAIN BULLETS

SECTIONAL DENSITY: 0.128
DIAMETER: 0.224"

45 gr. HORNET
Item No. 2230
C.O.L.: 2.200"
G1 B.C.: 0.202

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
VIHT N-130	20.2 gr.	20.9 gr.	21.6 gr.	22.4 gr.	23.1 gr.	
H322	19.6 gr.	20.8 gr.	22.1 gr.	23.3 gr.	24.5 gr.	
VIHT N-133	21.6 gr.	22.3 gr.	23.0 gr.	23.8 gr.	24.5 gr.	
IMR 3031	22.4 gr.	23.0 gr.	23.5 gr.	24.1 gr.	24.7 gr.	25.3 gr.
VIHT N-135	22.9 gr.	23.6 gr.	24.3 gr.	25.0 gr.	25.8 gr.	
Accurate 2460	23.8 gr.	24.5 gr.	25.2 gr.	25.9 gr.	26.6 gr.	
H335	23.5 gr.	24.5 gr.	25.6 gr.	26.6 gr.		
WIN 748	25.3 gr.	25.9 gr.	26.5 gr.	27.2 gr.	27.8 gr.	
BL-C(2)	25.7 gr.	26.5 gr.	27.4 gr.			

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.200"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.200"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.200"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4198	18.7 gr.	19.5 gr.	20.3 gr.	21.0 gr.	21.8 gr.	
VIHT N-130	20.2 gr.	21.1 gr.	22.0 gr.	22.8 gr.		
H322	20.6 gr.	21.7 gr.	22.8 gr.	23.9 gr.	25.1 gr.	
VIHT N-133	21.7 gr.	22.5 gr.	23.2 gr.	23.9 gr.		
IMR 3031	22.3 gr.	22.9 gr.	23.5 gr.	24.0 gr.	24.6 gr.	25.2 gr.
Accurate 2460	23.6 gr.	24.3 gr.	24.9 gr.	25.5 gr.	26.1 gr.	26.8 gr.
H335	23.3 gr.	24.2 gr.	25.0 gr.			
IMR 4895	24.0 gr.	24.7 gr.	25.5 gr.	26.2 gr.		
WIN 748	24.4 gr.	25.2 gr.	26.0 gr.	26.7 gr.	27.5 gr.	28.3 gr.
IMR 4320	24.6 gr.	25.3 gr.	26.1 gr.	26.8 gr.	27.5 gr.	

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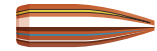
52-53 GRAIN BULLETS

SECTIONAL DENSITY: 0.148-0.151
DIAMETER: 0.224"

52 gr. A-MAX® *(Discontinued)*
Item No. 22492
C.O.L.: 2.230"
G1 B.C.: 0.247

52 gr. ELD® Match
Item No. 22491
C.O.L.: 2.230"
G1 B.C.: 0.247



52 gr. BTHP Match™
Item No. 2249
C.O.L.: 2.230"
G1 B.C.: 0.229

53 gr. V-MAX®
Item No. 22265
C.O.L.: 2.240"
G1 B.C.: 0.290

53 gr. HP Match™
Item No. 2250
C.O.L.: 2.230"
G1 B.C.: 0.218

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
IMR 4198	19.2 gr.	20.0 gr.	20.9 gr.	21.7 gr.		
VIHT N-130	20.2 gr.	21.0 gr.	21.8 gr.			
H322	20.9 gr.	22.1 gr.	23.2 gr.	24.3 gr.		
VIHT N-133	21.9 gr.	22.6 gr.	23.3 gr.			
VIHT N-135	22.7 gr.	23.4 gr.	24.2 gr.			
Accurate 2460	23.3 gr.	24.0 gr.	24.8 gr.	25.5 gr.	26.3 gr.	27.0 gr.
IMR 4895	24.1 gr.	24.8 gr.	25.6 gr.	26.3 gr.		
WIN 748	24.7 gr.	25.5 gr.	26.2 gr.	27.0 gr.	27.7 gr.	28.5 gr.
VARGET	24.6 gr.	25.5 gr.	26.5 gr.			
BL-C(2)	25.7 gr.	26.6 gr.	27.5 gr.			

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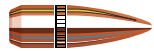
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.230"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.230"
G1 B.C.: 0.243

55 gr. SP W/C
Item No. 2266
C.O.L.: 2.230"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.230"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.230"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
H322	19.1 gr.	20.2 gr.	21.3 gr.	22.5 gr.		
IMR 3031	20.9 gr.	21.5 gr.	22.1 gr.	22.8 gr.	23.4 gr.	
VIHT N-135	21.3 gr.	22.0 gr.	22.8 gr.	23.5 gr.		
Accurate 2460	21.3 gr.	22.2 gr.	23.0 gr.	23.9 gr.		
H335	21.6 gr.	22.5 gr.	23.5 gr.			
IMR 4198	19.3 gr.	21.7 gr.	24.0 gr.			
IMR 4895	22.3 gr.	23.2 gr.	24.1 gr.	24.9 gr.		
VIHT N-140	22.6 gr.	23.4 gr.	24.2 gr.	24.9 gr.	25.7 gr.	
WIN 748	22.9 gr.	23.7 gr.	24.5 gr.	25.3 gr.	26.1 gr.	
BL-C(2)	24.0 gr.	24.7 gr.	25.4 gr.	26.1 gr.	26.8 gr.	27.5 gr.

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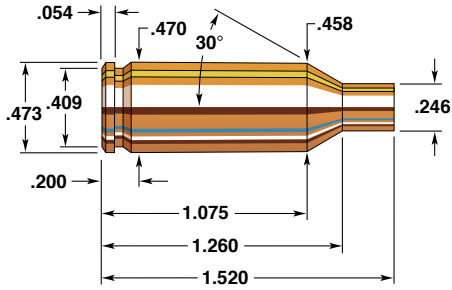

22 Bench Rest Remington

Handgun:	Remington XP-100	**Bullet Diameter:**	0.224"
Barrel:	14½ ", 1 in 10" Twist	**Maximum COL:**	2.020"
Case:	Remington	**Max. Case Length:**	1.520"
Primer:	Remington 7½	**Case Trim Length:**	1.510"

In 1961, Frank C. Barnes developed a 308 Winchester case shortened to 1.5 inches. This wildcat was further modified by other shooters, including being necked down to 22 caliber. Remington standardized this caliber in 1978, naming it the 22 Bench Rest Remington. They also produced two other BR calibers, the 6mm BR and the 7mm BR, all based on the same case. The BR cases differ from the parent 308 Winchester by having a small primer pocket, which some feel aids in accuracy. This claim may be validated by the many benchrest events the 22 BR has won.

The Remington XP-100 pistol, based on a shortened and modified version of the company's Model 600 rifle action, was introduced in 1963 as the handgun of choice for its new 221 Remington Fireball. While the Fireball has seen more popular days, the XP-100 has enjoyed popularity as the firearm for a number of handgun cartridges, old and new.

When loaded in the XP-100 pistol, the 22 Bench Rest is primarily a varmint cartridge. It offers superb accuracy and performance rivaling the .223 Remington in a rifle. Accurate 2460 produced top velocity. The SX bullets gave excellent accuracy with devastating expansion. And for the avid varmint hunter, reloading with the premium polymer tipped Hornady V-MAX® bullets can produce some not-to-be-missed shooting!

40 GRAIN BULLETS

SECTIONAL DENSITY: 0.114
DIAMETER: 0.224"

40 gr. V-MAX®
Item No. 22241
C.O.L.: 2.000"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**2900**	**3000**	**3100**	**3200**	**3300**	**3400**
Vectan 2000	21.3 gr.	22.2 gr.	23.0 gr.	23.9 gr.	24.7 gr.	
IMR 4198	22.3 gr.	23.2 gr.	24.1 gr.	25.0 gr.	25.8 gr.	
H322	26.0 gr.	27.1 gr.	28.1 gr.	29.1 gr.		
VIHT N-135	27.7 gr.	28.5 gr.	29.3 gr.	30.1 gr.	31.0 gr.	31.8 gr.
Vectan SP 10	29.2 gr.	30.1 gr.	31.0 gr.	31.8 gr.	32.7 gr.	33.6 gr.
Accurate 2460	29.3 gr.	30.2 gr.	31.0 gr.	31.8 gr.	32.6 gr.	

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50 GRAIN BULLETS

SECTIONAL DENSITY: 0.142
DIAMETER: 0.224"

50 gr. V-MAX®
Item No. 22261
C.O.L.: 2.010"
G1 B.C.: 0.242

50 gr. SP
Item No. 2245
C.O.L.: 2.010"
G1 B.C.: 0.214

50 gr. SP SX™
Item No. 2240
C.O.L.: 2.010"
G1 B.C.: 0.214

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3050**	**3100**
H322	24.1 gr.	25.4 gr.	26.7 gr.	28.0 gr.	28.7 gr.	
Accurate 2460	25.8 gr.	26.6 gr.	27.7 gr.	28.7 gr.	29.2 gr.	29.8 gr.
Accurate 2230	26.0 gr.	26.9 gr.	27.8 gr.	28.7 gr.	29.1 gr.	29.5 gr.
VIHT N-135	26.5 gr.	27.4 gr.	28.3 gr.	29.3 gr.		
Vectan SP 10	26.2 gr.	27.6 gr.	29.1 gr.			
IMR 4895	27.8 gr.	28.7 gr.	29.7 gr.	30.6 gr.	31.5 gr.	
BL-C(2)	28.5 gr.	29.3 gr.	30.2 gr.	31.0 gr.	31.4 gr.	31.9 gr.
WIN 748	28.2 gr.	29.3 gr.	30.3 gr.	31.4 gr.	31.9 gr.	

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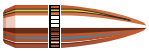
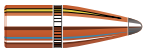
55 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.224"

55 gr. V-MAX®
Item No. 22271
C.O.L.: 2.045"
G1 B.C.: 0.255



55 gr. FMJ-BT W/C
Item No. 2267
C.O.L.: 2.010"
G1 B.C.: 0.243



55 gr. SP W/C
Item No. 2266
C.O.L.: 2.010"
G1 B.C.: 0.235

55 gr. SP
Item No. 2265
C.O.L.: 2.010"
G1 B.C.: 0.235

55 gr. SP SX™
Item No. 2260
C.O.L.: 2.010"
G1 B.C.: 0.235

	VELOCITY (FPS – feet per second)						
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3050**	**3100**
H322		24.4 gr.	25.5 gr.	26.5 gr.	27.6 gr.	28.1 gr.	
Vectan SP 10	24.3 gr.	25.5 gr.	26.7 gr.				
VIHT N-135	24.9 gr.	25.8 gr.	26.7 gr.				
Accurate 2460		25.8 gr.	26.9 gr.	28.0 gr.	29.0 gr.	29.6 gr.	30.1 gr.
Accurate 2230		26.3 gr.	27.1 gr.	27.8 gr.	28.6 gr.	29.0 gr.	
BL-C(2)		27.9 gr.	28.9 gr.	30.0 gr.	31.0 gr.	31.5 gr.	
WIN 748		28.3 gr.	29.4 gr.	30.5 gr.	31.6 gr.		

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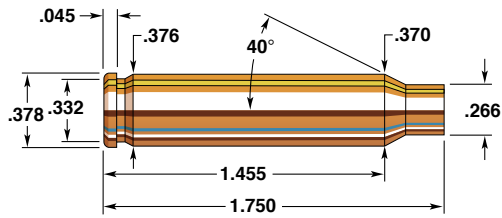


6mm TCU

Handgun:	T/C Contender	**Bullet Diameter:**	0.243"
Barrel:	14", 1 in 10" Twist	**Maximum COL:**	2.500"
Case:	Hornady/Frontier	**Max. Case Length:**	1.750"
Primer:	Federal 205	**Case Trim Length:**	1.740"

Wes Ugalde designed a series of cartridges, based on the 223 Remington case, for chambering in the Thompson/Center Contender Single Shot Pistol series. These cartridges are formed by expanding the case neck and then fire forming the case. A tapered neck expander is usually required. Starting loads expand the case to its reduced taper and sharper shoulder than its parent case. Commercial cases work best for reforming. In fact, T/C cautions against using military cases for this task.

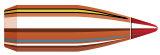
The 6mm TCU (6mm Thompson/Center Ugalde) was developed at the behest of the company as one chambering for metallic silhouette shooting. While similar to the 6mm-223, the 6mm TCU is not interchangeable with it.

As with many single shot pistol cartridges, in the Thompson/ Center it is important not to set the shoulder back during resizing. If the shoulder is set back, the result is poor accuracy and short case life.

Silhouette shooters have found the 6mm TCU to be borderline on heavier distant targets. Although hit, they may fail to tumble. It has been, however, very successfully used on varmints, especially with Hornady 65 grain V-MAX®.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.300"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
H4198	20.1 gr.	20.9 gr.	21.7 gr.	22.4 gr.	23.2 gr.	
IMR 4198	20.3 gr.	21.0 gr.	21.8 gr.	22.6 gr.	23.4 gr.	
Alliant RL-7	21.0 gr.	21.8 gr.	22.6 gr.	23.3 gr.	24.1 gr.	
VIHT N-130	22.1 gr.	22.8 gr.	23.5 gr.	24.2 gr.	24.8 gr.	
Accurate 2015	22.6 gr.	23.3 gr.	24.0 gr.	24.7 gr.	25.4 gr.	26.0 gr.
H322	23.3 gr.	24.2 gr.	25.1 gr.	25.9 gr.	26.8 gr.	

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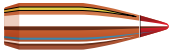
65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"



65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.300"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
IMR 4198	19.5 gr.	20.3 gr.	21.1 gr.	21.9 gr.		
Alliant RL-7	20.3 gr.	21.1 gr.	22.0 gr.	22.8 gr.		
VIHT N-130	21.5 gr.	22.3 gr.	23.0 gr.	23.8 gr.		
Accurate 2015	21.9 gr.	22.6 gr.	23.3 gr.	24.1 gr.	24.8 gr.	
H322	22.0 gr.	23.2 gr.	24.4 gr.	25.6 gr.		
H335	24.1 gr.	24.9 gr.	25.8 gr.	26.7 gr.	27.6 gr.	
Accurate 2460	25.5 gr.	26.2 gr.	26.8 gr.	27.4 gr.	28.0 gr.	28.6 gr.

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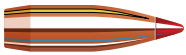
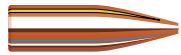
75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.345"
G1 B.C.: 0.330



75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.345"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2650**
Alliant RL-7	19.8 gr.	20.8 gr.	21.7 gr.	22.6 gr.		
VIHT N-130	21.2 gr.	22.1 gr.	23.0 gr.	23.9 gr.		
Accurate 2015	21.8 gr.	22.6 gr.	23.4 gr.	24.3 gr.		
H322	22.4 gr.	23.3 gr.	24.1 gr.	25.0 gr.		
Accurate 2460		24.0 gr.	25.2 gr.	26.4 gr.	27.6 gr.	
H335	23.9 gr.	24.9 gr.	25.9 gr.	26.8 gr.	27.8 gr.	28.3 gr.
IMR 4895	24.0 gr.	24.9 gr.	25.9 gr.	26.8 gr.	27.8 gr.	
WIN 748	25.5 gr.	26.4 gr.	27.3 gr.	28.2 gr.	29.1 gr.	

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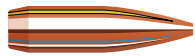
87 GRAIN BULLETS

SECTIONAL DENSITY: 0.210
DIAMETER: 0.243"

87 gr. V-MAX®
Item No. 22440
C.O.L.: 2.425"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 2.425"
G1 B.C.: 0.376

87 gr. SP
Item No. 2440
C.O.L.: 2.425"
G1 B.C.: 0.327

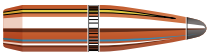
	VELOCITY (FPS – feet per second)					
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**	**2450**
Alliant RL-7	18.5 gr.	19.5 gr.	20.5 gr.	21.5 gr.		
H322	20.9 gr.	21.9 gr.	22.9 gr.	23.9 gr.		
Accurate 2460	21.6 gr.	22.7 gr.	23.8 gr.	24.8 gr.	25.9 gr.	26.5 gr.
H335		22.9 gr.	23.9 gr.	24.9 gr.	26.0 gr.	26.5 gr.
VIHT N-135	21.8 gr.	22.9 gr.	23.9 gr.	24.9 gr.	26.0 gr.	
IMR 4895		23.1 gr.	24.2 gr.	25.2 gr.	26.3 gr.	26.8 gr.
WIN 748	23.6 gr.	24.6 gr.	25.6 gr.	26.5 gr.	27.5 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

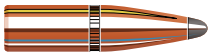
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 2.330"
G1 B.C.: 0.355



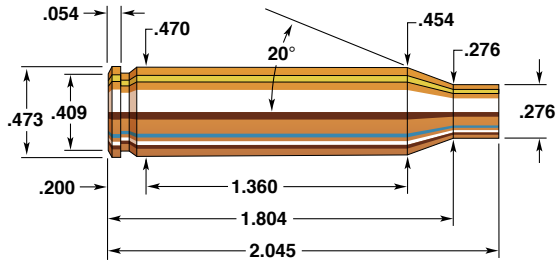
100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 2.330"
G1 B.C.: 0.405



100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 2.330"
G1 B.C.: 0.381

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2250**	**2300**
Alliant RL-7	18.4 gr.	19.6 gr.	20.7 gr.			
H322	20.3 gr.	21.4 gr.	22.4 gr.	23.5 gr.		
Accurate 2460	19.9 gr.	21.4 gr.	22.9 gr.	24.5 gr.		
H335	20.7 gr.	21.9 gr.	23.2 gr.	24.5 gr.		
IMR 4895		22.6 gr.	23.7 gr.	24.9 gr.	25.5 gr.	26.0 gr.
WIN 748	22.5 gr.	23.8 gr.	25.1 gr.	26.4 gr.		
VIHT N-140	22.8 gr.	24.0 gr.	25.2 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics



243 Winchester (Encore)

Handgun:	T/C Encore	**Bullet Diameter:**	0.243"
Barrel:	15", 1 in 10" Twist	**Maximum COL:**	2.710"
Case:	Hornady/Frontier	**Max. Case Length:**	2.045"
Primer:	Remington 9½	**Case Trim Length:**	2.035"

Encore Pistols are a Thompson/Center line of single shot, break-open action, interchangeable barrel handguns introduced to meet the growing demand for hard-hitting, long range scoped pistols. Thompson/Center has built its name and reputation on responding to—and even anticipating—the demands a new generation of handgunners has generated. Think big, think powerful, think accurate, think flexible—and you have characterized the T/C Encore Pistol lineup.

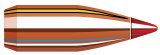
T/C offers the Encore Pistol in a variety of different cartridge chamberings, from the 17 HMR through the 45-70, including along the way the 30-06 Springfield and, as here, the 243 Winchester. Whether a handgunner prefers silhouette targets or the actual game itself, Encore shooters can come equipped.

Most T/C Encore offerings, as with the 243 Winchester, are pistol adaptations of rifle cartridges. As such, reloading for them (essential to get them to their full potential) requires special attention. Fifteen inch barrels for cartridges originally used in 18", 24", or even 26" barrels won't produce original factory load ballistics. You can do well, though, if you are careful in both powder selection and reloading. Don't exceed the maximums shown. T/C barrels, like all others, are subject to wear over time. So are we. But, who wants to rush the process?

You'll find the data for our two newest 6mm bullets, the 80 grain GMX® and the 85 grain InterBond® both bullets use our existing 87 grain data due in part to the GMX® having a longer bearing surface and no boat tail. We've tested the combinations thoroughly and found that the data to be a precise fit for these bullets.

58 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.243"



58 gr. V-MAX®
Item No. 22411
C.O.L.: 2.600"
G1 B.C.: 0.250

	VELOCITY (FPS – feet per second)					
POWDER	**2800**	**2900**	**3000**	**3100**	**3200**	**3300**
Accurate 2520	34.1 gr.	35.7 gr.	37.2 gr.	38.7 gr.	40.2 gr.	
H4895	34.2 gr.	35.7 gr.	37.3 gr.	38.8 gr.	40.3 gr.	
IMR 4064	36.9 gr.	38.0 gr.	39.2 gr.	40.4 gr.	41.6 gr.	42.8 gr.
VARGET	35.6 gr.	37.2 gr.	38.8 gr.	40.3 gr.	41.9 gr.	43.4 gr.
Alliant RL-15	37.9 gr.	38.9 gr.	40.0 gr.	41.0 gr.	42.0 gr.	43.0 gr.
VIHT N-140	37.0 gr.	38.4 gr.	39.8 gr.	41.2 gr.	42.5 gr.	43.9 gr.

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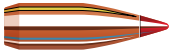
65 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.243"



65 gr. V-MAX®
Item No. 22415
C.O.L.: 2.620"
G1 B.C.: 0.280

	VELOCITY (FPS – feet per second)					
POWDER	**2700**	**2800**	**2900**	**3000**	**3100**	**3200**
H4895	30.6 gr.	32.3 gr.	34.0 gr.	35.7 gr.	37.3 gr.	39.0 gr.
Accurate 2520	30.6 gr.	32.5 gr.	34.5 gr.	36.4 gr.	38.4 gr.	
VARGET	33.7 gr.	35.2 gr.	36.6 gr.	38.1 gr.	39.5 gr.	41.0 gr.
IMR 4064	33.7 gr.	35.3 gr.	36.9 gr.	38.4 gr.	40.0 gr.	41.6 gr.
VIHT N-140	33.8 gr.	35.3 gr.	36.9 gr.	38.4 gr.	40.0 gr.	41.5 gr.
Alliant RL-15	35.1 gr.	36.4 gr.	37.8 gr.	39.1 gr.	40.4 gr.	41.8 gr.

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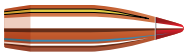
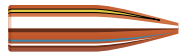
75 GRAIN BULLETS

SECTIONAL DENSITY: 0.181
DIAMETER: 0.243"



75 gr. V-MAX®
Item No. 22420
C.O.L.: 2.625"
G1 B.C.: 0.330



75 gr. HP *(Discontinued)*
Item No. 2420
C.O.L.: 2.600"
G1 B.C.: 0.294

	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
H4895	30.9 gr.	32.4 gr.	33.8 gr.	35.3 gr.	36.8 gr.	
IMR 4064	32.7 gr.	34.3 gr.	35.8 gr.	37.4 gr.	38.9 gr.	
Alliant RL-15	33.5 gr.	34.9 gr.	36.3 gr.	37.7 gr.	39.1 gr.	
VIHT N-140	33.0 gr.	34.6 gr.	36.2 gr.	37.9 gr.	39.5 gr.	
H4350	37.7 gr.	39.2 gr.	40.6 gr.	42.1 gr.	43.6 gr.	45.1 gr.
WIN 760	36.2 gr.	38.1 gr.	40.1 gr.	42.0 gr.	43.9 gr.	45.9 gr.

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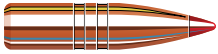
80 GRAIN BULLETS

SECTIONAL DENSITY: 0.194
DIAMETER: 0.243"

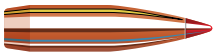


80 gr. GMX®
Item No. 24370
C.O.L.: 2.600"
G1 B.C.: 0.300

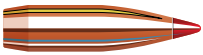
NOTE: USE 85-87 GRAIN POWDER DATA FOR LOADING THESE BULLETS
Create custom ballistic tables using our online calculators at hornady.com/ballistics

85-87 GRAIN BULLETS

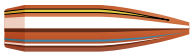
SECTIONAL DENSITY: 0.206-0.210
DIAMETER: 0.243"



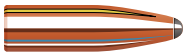
85 gr. InterBond®
Item No. 24539
C.O.L.: 2.600"
G1 B.C.: 0.395



87 gr. V-MAX®
Item No. 22440
C.O.L.: 2.625"
G1 B.C.: 0.400



87 gr. BTHP
Item No. 2442
C.O.L.: 2.600"
G1 B.C.: 0.376



87 gr. SP
Item No. 2440
C.O.L.: 2.600"
G1 B.C.: 0.327

	VELOCITY (FPS – feet per second)					
POWDER	**2400**	**2500**	**2600**	**2700**	**2800**	**2900**
IMR 4064	30.4 gr.	32.1 gr.	33.9 gr.	35.7 gr.	37.4 gr.	
Alliant RL-15	31.8 gr.	33.4 gr.	34.9 gr.	36.5 gr.	38.1 gr.	
VIHT N-140	31.3 gr.	33.1 gr.	34.9 gr.	36.7 gr.		
H4350	35.4 gr.	37.0 gr.	38.5 gr.	40.1 gr.	41.7 gr.	43.3 gr.
WIN 760	36.3 gr.	37.9 gr.	39.5 gr.	41.2 gr.	42.8 gr.	
IMR 4831	38.2 gr.	39.7 gr.	41.3 gr.	42.8 gr.		

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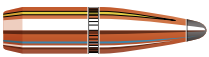
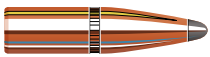
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.230-0.242
DIAMETER: 0.243"

95 gr. SST®
Item No. 24532
C.O.L.: 2.620"
G1 B.C.: 0.355



100 gr. InterLock® BTSP
Item No. 2453
C.O.L.: 2.620"
G1 B.C.: 0.405



100 gr. InterLock® SP *(Discontinued)*
Item No. 2450
C.O.L.: 2.620"
G1 B.C.: 0.381

	VELOCITY (FPS – feet per second)				
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 4064	29.3 gr.	30.8 gr.	32.4 gr.	33.9 gr.	35.4 gr.
H4350	32.4 gr.	34.3 gr.	36.3 gr.	38.2 gr.	40.2 gr.
Accurate 4350	34.0 gr.	35.7 gr.	37.4 gr.	39.2 gr.	
WIN 760	35.7 gr.	37.1 gr.	38.6 gr.	40.1 gr.	41.5 gr.
IMR 4831	36.3 gr.	37.9 gr.	39.5 gr.	41.1 gr.	42.7 gr.
Alliant RL-19	38.6 gr.	40.1 gr.	41.6 gr.	43.2 gr.	

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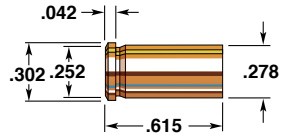

25 Automatic

Handgun:	Beretta 950 BS	**Bullet Diameter:**	.0.251"
Barrel:	.2⅜", 1 in 10" Twist	**Maximum COL:**	.0.910"
Case:	.Hornady/Frontier	**Max. Case Length:**	.0.615"
Primer:	Federal 100	**Case Trim Length:**	0.605"

Belgium was the place this cartridge first appeared in 1902 in the FN Baby Browning. This diminutive 25 caliber cartridge was then introduced in the U.S. in 1908 in a Browning-designed Colt. The 25 Automatic is popular as a self-defense weapon because of its small size. Its power, though, is similar to but slightly less than that of the 22 rimfire. Its ability to protect either ladies or gentlemen from "unpleasant elements" isn't guaranteed, however popular it still is.

For many decades, Hornady made the only 25 caliber, .251" diameter bullets available to the reloader. Hornady 25 Automatic ammunition uses our 35 grain Hollow Point, Extreme Terminal Performance. Even at 25 Automatic velocities, this HP/XTP® will enhance performance over other factory loadings.

Handloading the 25 Automatic is not particularly rewarding. The cases and bullets are small and powder charges are minuscule. Use caution since a double charge may not be noticeable until fired! Charges listed in the tables are rounded to the nearest tenth of a grain. Because of the exceptionally light loads used in this cartridge, and the rounding of data, two velocities may show the same charge. During our testing, Alliant Red Dot provided the best uniformity and accuracy.

35 GRAIN BULLETS

SECTIONAL DENSITY: 0.079
DIAMETER: 0.251"

35 gr. XTP® *(Discontinued)*
Item No. 35450
C.O.L.: 0.860"
G1 B.C.: 0.072

	VELOCITY (FPS – feet per second)					
POWDER	**750**	**800**	**850**	**900**	**950**	**1000**
SOLO 1000	0.9 gr.	1.0 gr.	1.1 gr.	1.1 gr.	1.2 gr.	
IMR 700 X	1.0 gr.	1.1 gr.	1.2 gr.	1.3 gr.	1.4 gr.	1.5 gr.
RED DOT	1.1 gr.	1.2 gr.	1.2 gr.	1.3 gr.	1.4 gr.	1.4 gr.
BULLSEYE	1.2 gr.	1.3 gr.	1.4 gr.	1.4 gr.	1.5 gr.	
Accurate No. 2	1.3 gr.	1.3 gr.	1.4 gr.	1.5 gr.	1.5 gr.	
WIN 231	1.3 gr.	1.4 gr.	1.5 gr.	1.5 gr.	1.6 gr.	
HP-38	1.3 gr.	1.4 gr.	1.5 gr.	1.6 gr.	1.7 gr.	

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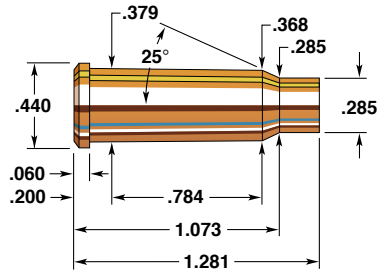

256 Winchester Magnum

Handgun: . . . . . Ruger Hawkeye
Barrel:. . . . . .8½", 1 in 14" Twist
Case:. . . . . Winchester
Primer: . . . . . Winchester WSR
Bullet Diameter:. . . . . 0.257"
Maximum COL: . . . . . 1.590"
Max. Case Length:. . . . . .1.281"
Case Trim Length: . . . . . .1.271"

Arms makers are fully aware of the burgeoning "Collector's Market" for new firearms of all types: replicas, commemoratives, and special editions. So many such offerings suggests making firearms to look at instead of shoot must be a profitable business. Then, of course, there's the phenomenon of the "instant collector's item"—manufacturing a firearm which simply doesn't sell and is promptly, quietly discontinued. Sturm, Ruger & Company didn't intend to do this with its Hawkeye pistol, but that's what happened.

Introduced in 1961 to satisfy demand for an improved long-range cartridge/pistol combination, the 256 Winchester Magnum is based on a necked down 357 Magnum revolver case. Ruger introduced this new cartridge in a unique new pistol, the 256 Hawkeye, a single shot handgun built on revolver frame, featuring a pivoting breech block to handle the pressures developed by the 256 cartridge. With the chamber integral with the barrel, the full velocity potential of the round was realized.

The Ruger system worked but didn't sell, and the Hawkeye was soon withdrawn. The 256 Winchester didn't fare much better when offered in factory rifles such as the Marlin Model 62, though it could develop almost 600 fps more velocity in the longer barrels. The 256 was available in the popular Thompson/Center Contender and the Merrill Single Shot, but is rarely encountered today.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.257"

60 gr. FP
Item No. 2510
C.O.L.: 1.560"
G1 B.C.: 0.101

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
UNIQUE	8.0 gr.	8.6 gr.	9.2 gr.	9.8 gr.		
HERCO	8.4 gr.	9.1 gr.	9.8 gr.	10.5 gr.		
Alliant 2400				13.8 gr.	14.6 gr.	15.4 gr.

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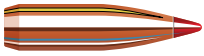
75 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.257"



75 gr. V-MAX®
Item No. 22520
C.O.L.: 1.740"
G1 B.C.: 0.290

75 gr. HP *(Discontinued)*
Item No. 2520
C.O.L.: 1.740"
G1 B.C.: 0.257

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
UNIQUE	6.7 gr.	7.3 gr.	7.9 gr.	8.6 gr.	9.2 gr.	
HERCO	7.0 gr.	7.6 gr.	8.2 gr.	8.8 gr.		
H110		9.5 gr.	10.3 gr.	11.1 gr.		
Alliant 2400				12.5 gr.	13.1 gr.	13.7 gr.

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87 GRAIN BULLETS

SECTIONAL DENSITY: 0.188
DIAMETER: 0.257"

87 gr. SP *(Discontinued)*
Item No. 2530
C.O.L.: 1.825"
G1 B.C.: 0.290

	VELOCITY (FPS – feet per second)					
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**	**1800**
UNIQUE	5.4 gr.	6.0 gr.	6.7 gr.	7.4 gr.	8.0 gr.	
HERCO	5.7 gr.	6.3 gr.	6.9 gr.	7.6 gr.	8.2 gr.	
H110		8.4 gr.	9.0 gr.	9.6 gr.	10.3 gr.	
Alliant 2400	8.0 gr.	8.7 gr.	9.4 gr.	10.1 gr.	10.8 gr.	11.5 gr.
H4198		12.0 gr.	12.9 gr.	13.8 gr.	14.6 gr.	

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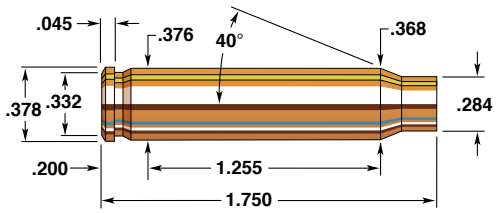


6.5mm TCU

Handgun: . . . . . .T/C Contender
Barrel:. . . . . .10", 1 in 10" Twist
Case:. . . . . .Hornady/Frontier
Primer: . . . . . Remington 7½
Bullet Diameter:. . . . . 0.264"
Maximum COL: . . . . . 2.700"
Max. Case Length:. . . . . .1.750"
Case Trim Length: . . . . . .1.740"

At the behest of Thompson/Center Arms, Wes Ugalde designed a cartridge series based on the 223 Remington case for silhouette shooting. Let no one suppose that TCU here stands for "Texas Christian University." A longer and more fully descriptive name for this cartridge would be the "6.5mm Thompson/ Center Ugalde." Caliber, Corporation, Designer.

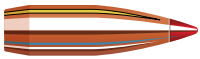
These cartridges are formed by expanding the case neck and then fire forming the case. A tapered neck expander is usually required. Starting loads expand the case to its reduced taper and sharper shoulder than its parent case. Commercial cases work best for reforming.

As with many single shot pistol cartridges, in the Thompson/ Center it is important not to set the shoulder back during resizing. If the shoulder is set back, the result is poor accuracy and short case life.

Shooters have found the 6.5mm TCU to be borderline on distant rams in silhouette shooting. Although hit, they may fail to tumble. It has been, however, successfully used on varmints with the 100 grain Spire Point and reportedly on deer sized game with the 129 grain Spire Point. Game hunting ranges with this cartridge should be short to moderate. It's one thing to hit and fail to drop a distant silhouette target. It's quite another to do so on game.

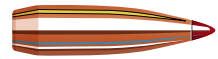
95-100 GRAIN BULLETS

SECTIONAL DENSITY: 0.195-0.205
DIAMETER: 0.264"

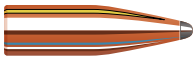


95 gr. V-MAX®
Item No. 22601
C.O.L.: 2.785"
G1 B.C.: 0.365

100 gr. A-MAX®
(Discontinued)
Item No. 26101
C.O.L.: 2.705"
G1 B.C.: 0.390



***100 gr. ELD® Match**
Item No. 26100
C.O.L.: 2.705"
G1 B.C.: 0.371
G7 B.C.: 0.189



100 gr. SP *(Discontinued)*
Item No. 2610
C.O.L.: 2.785"
G1 B.C.: 0.358

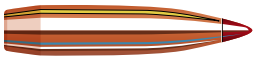
	VELOCITY (FPS – feet per second)				
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**
Alliant RL-7	20.6 gr.	21.6 gr.	22.6 gr.	23.6 gr.	24.6 gr.
H322	24.0 gr.	25.0 gr.	26.0 gr.	27.0 gr.	28.0 gr.
IMR 3031	24.4 gr.	25.2 gr.	26.0 gr.	26.9 gr.	
IMR 4895	24.8 gr.	25.9 gr.	27.1 gr.	28.2 gr.	
WIN 748	27.0 gr.	28.4 gr.	29.8 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

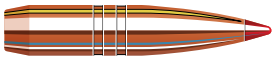
120-123 GRAIN BULLETS

SECTIONAL DENSITY: 0.246-0.252
DIAMETER: 0.264"



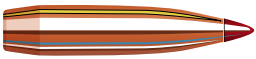
***120 gr. ELD® Match**
Item No. 26175
C.O.L.: 2.700"
G1 B.C.: 0.458
G7 B.C.: 0.233

120 gr. A-MAX®
(Discontinued)
Item No. 26172
C.O.L.: 2.700"
G1 B.C.: 0.465

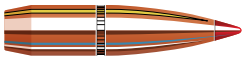


120 gr. GMX®
Item No. 26110
C.O.L.: 2.700"
G1 B.C.: 0.450

123 gr. A-MAX®
(Discontinued)
Item No. 26171
C.O.L.: 2.700"
G1 B.C.: 0.510



***123 gr. ELD® Match**
Item No. 26176
C.O.L.: 2.700"
G1 B.C.: 0.461
G7 B.C.: 0.233



123 gr. SST®
Item No. 26173
C.O.L.: 2.700"
G1 B.C.: 0.510

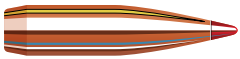
NOTE: USE 129-130 GRAIN POWDER DATA FOR LOADING THESE BULLETS

Create custom ballistic tables using our online calculators at hornady.com/ballistics

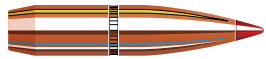
*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

129-130 GRAIN BULLETS

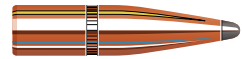
SECTIONAL DENSITY: 0.264-0.266
DIAMETER: 0.264"



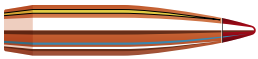
129 gr. InterBond®
Item No. 26209
C.O.L.: 2.700"
G1 B.C.: 0.485



129 gr. SST®
Item No. 26202
C.O.L.: 2.700"
G1 B.C.: 0.485



129 gr. InterLock® SP
Item No. 2620
C.O.L.: 2.700"
G1 B.C.: 0.445



***130 gr. ELD® Match**
Item No. 26177
C.O.L.: 2.700"
G1 B.C.: 0.549
G7 B.C.: 0.277

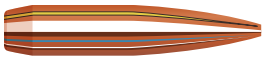
	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**1950**	**2000**	**2050**
Alliant RL-7	19.7 gr.	20.7 gr.	21.7 gr.	22.2 gr.		
H322	21.8 gr.	22.8 gr.	23.8 gr.	24.3 gr.	24.8 gr.	
IMR 3031	22.9 gr.	24.0 gr.	25.0 gr.	25.6 gr.	26.0 gr.	
IMR 4895	23.3 gr.	24.5 gr.	25.7 gr.	26.3 gr.	26.9 gr.	
WIN 748	24.6 gr.	26.0 gr.	27.4 gr.	28.1 gr.	28.8 gr.	29.5 gr.
BL-C(2)		25.9 gr.	27.5 gr.	28.3 gr.	29.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

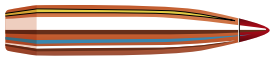
140-143 GRAIN BULLETS

SECTIONAL DENSITY: 0.287-0.293
DIAMETER: 0.264"

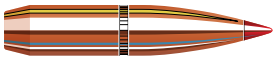


^140 gr. BTHP Match™
Item No. 26335
C.O.L.: 2.700"
G1 B.C.: 0.580

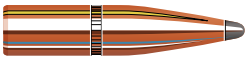
140 gr. A-MAX®
(Discontinued)
Item No. 26332
C.O.L.: 2.700"
G1 B.C.: 0.585



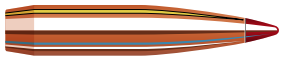
***140 gr. ELD® Match**
Item No. 26331
C.O.L.: 2.700"
G1 B.C.: 0.620
G7 B.C.: 0.312



140 gr. SST®
Item No. 26302
C.O.L.: 2.700"
G1 B.C.: 0.520



140 gr. InterLock® SP
Item No. 2630
C.O.L.: 2.700"
G1 B.C.: 0.465



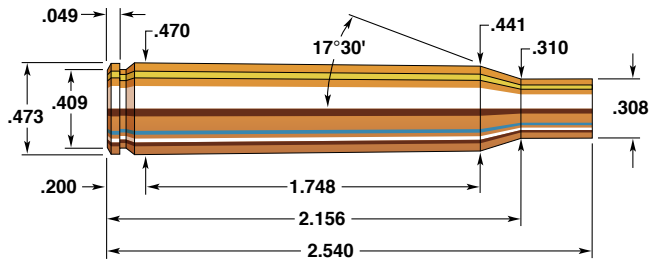
***143 gr. ELD-X®**
Item No. 2635
C.O.L.: 2.700"
G1 B.C.: 0.625
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**1700**	**1800**	**1850**	**1900**	**1950**
H322	21.4 gr.	22.4 gr.	23.0 gr.		
IMR 3031	22.0 gr.	23.2 gr.	23.8 gr.	24.5 gr.	25.1 gr.
IMR 4895	22.7 gr.	24.2 gr.	24.9 gr.	25.6 gr.	
BL-C(2)	24.4 gr.	25.7 gr.	26.4 gr.	27.0 gr.	
WIN 748	24.6 gr.	26.0 gr.	26.6 gr.	27.3 gr.	28.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



270 Winchester (Encore)

Handgun:	T/C Encore	**Bullet Diameter:**	0.277"
Barrel:	15", 1 in 10" Twist	**Maximum COL:**	3.340"
Case:	Frontier	**Max. Case Length:**	2.540"
Primer:	Winchester WLR	**Case Trim Length:**	2.530"

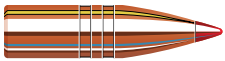
Encore pistols are a Thompson/Center line of single shot, breakaction, interchangeable barrel handguns introduced to meet the growing demand for hard-hitting, long range scoped pistols. Thompson/Center has built its name and reputation on responding to—and anticipating—the demands a new generation of handgunners has generated. Think big, think powerful, think accurate, think flexible—and you have characterized the T/C Encore Pistol lineup.

T/C offers the Encore Pistol in a wide variety of cartridge chamberings, from the 17 HMR through the 45-70, including along the way the 30-06 Springfield and, as here, the 270 Winchester. Whether a handgunner prefers silhouette targets or the actual game itself, Encore shooters can come equipped.

Most T/C Encore offerings, as with the 270 Winchester, are pistol adaptations of rifle cartridges. As such, reloading for them (essential to reach their full potential) requires special attention. Fifteen inch barrels for cartridges originally used in 24", or even 26" barrels won't produce original factory load ballistics. You can do well, though, if you are careful in both powder selection and reloading. Don't exceed the maximums shown. Well made as T/C pistols are, there's no reason to punish them—or yourself!

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.186
DIAMETER: 0.277"



100 gr. GMX®
Item No. 27190
C.O.L.: 3.100"
G1 B.C.: 0.274

100 gr. SP *(Discontinued)*
Item No. 2710
C.O.L.: 3.075"
G1 B.C.: 0.307

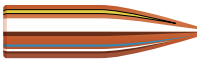
	VELOCITY (FPS – feet per second)					
POWDER	**2600**	**2700**	**2800**	**2900**	**3000**	**3100**
VARGET	41.8 gr.	44.1 gr.	46.4 gr.	48.8 gr.	51.1 gr.	53.4 gr.
Alliant RL-15	44.1 gr.	45.9 gr.	47.7 gr.	49.5 gr.	51.3 gr.	53.1 gr.
IMR 4064	45.2 gr.	47.1 gr.	48.9 gr.	50.7 gr.	52.6 gr.	
Accurate 4350	51.7 gr.	53.3 gr.	54.9 gr.	56.4 gr.	58.0 gr.	
IMR 4350	50.6 gr.	52.6 gr.	54.5 gr.	56.5 gr.	58.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.277"

110 gr. V-MAX® W/C
Item No. 22721
C.O.L.: 3.165"
G1 B.C.: 0.370



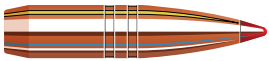
110 gr. HP *(Discontinued)*
Item No. 2720
C.O.L.: 3.165"
G1 B.C.: 0.352

	VELOCITY (FPS – feet per second)					
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
Alliant RL-15	42.8 gr.	44.4 gr.	46.0 gr.	47.6 gr.	49.2 gr.	50.8 gr.
VARGET	40.1 gr.	42.4 gr.	44.7 gr.	47.0 gr.	49.3 gr.	51.6 gr.
IMR 4064	44.1 gr.	45.8 gr.	47.5 gr.	49.2 gr.	50.9 gr.	
Accurate 4350	48.8 gr.	50.6 gr.	52.4 gr.	54.1 gr.	55.9 gr.	57.7 gr.
IMR 4350	49.2 gr.	51.0 gr.	52.8 gr.	54.6 gr.	56.4 gr.	58.2 gr.

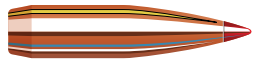
Create custom ballistic tables using our online calculators at hornady.com/ballistics

130 GRAIN BULLETS

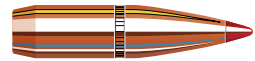
SECTIONAL DENSITY: 0.242
DIAMETER: 0.277"



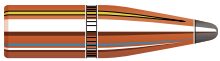
130 gr. GMX®
Item No. 27370
C.O.L.: 3.220"
G1 B.C.: 0.460



130 gr. InterBond®
Item No. 27309
C.O.L.: 3.220"
G1 B.C.: 0.460



130 gr. SST®
Item No. 27302
C.O.L.: 3.220"
G1 B.C.: 0.460



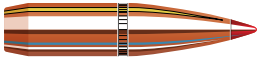
130 gr. InterLock® SP
Item No. 2730
C.O.L.: 3.180"
G1 B.C.: 0.409

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4064	41.7 gr.	43.5 gr.	45.4 gr.	47.3 gr.	
IMR 4350	45.5 gr.	47.7 gr.	50.0 gr.	52.2 gr.	54.4 gr.
Accurate 4350	46.5 gr.	48.6 gr.	50.6 gr.	52.7 gr.	54.7 gr.
IMR 4831	48.0 gr.	50.1 gr.	52.1 gr.	54.2 gr.	56.2 gr.
Alliant RL-19	50.9 gr.	52.9 gr.	54.8 gr.	56.8 gr.	58.8 gr.
H4831	52.7 gr.	54.6 gr.	56.5 gr.	58.4 gr.	60.4 gr.

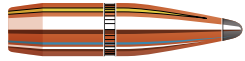
Create custom ballistic tables using our online calculators at hornady.com/ballistics

140-145 GRAIN BULLETS

SECTIONAL DENSITY: 0.261-0.284
DIAMETER: 0.277"



140 gr. SST®
Item No. 27352
C.O.L.: 3.200"
G1 B.C.: 0.495



140 gr. InterLock® BTSP
Item No. 2735
C.O.L.: 3.200"
G1 B.C.: 0.486

***145 gr. ELD-X®**
Item No. 27356
C.O.L.: 3.210"
G1 B.C.: 0.485
G7 B.C.: 0.244

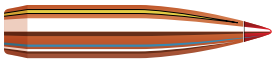
	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 4350	44.7 gr.	46.5 gr.	48.4 gr.	50.2 gr.	52.0 gr.	
Accurate 4350	44.6 gr.	46.5 gr.	48.3 gr.	50.2 gr.	52.1 gr.	
IMR 4831	46.2 gr.	48.2 gr.	50.2 gr.	52.2 gr.	54.3 gr.	
Alliant RL-19	47.6 gr.	49.7 gr.	51.8 gr.	54.0 gr.	56.1 gr.	
VIHT N-165	50.9 gr.	52.6 gr.	54.2 gr.	55.8 gr.	57.5 gr.	59.1 gr.
H4831	49.9 gr.	52.0 gr.	54.1 gr.	56.2 gr.	58.2 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

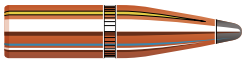
150 GRAIN BULLETS

SECTIONAL DENSITY: 0.279
DIAMETER: 0.277"



150 gr. InterBond®
Item No. 27409
C.O.L.: 3.200"
G1 B.C.: 0.525

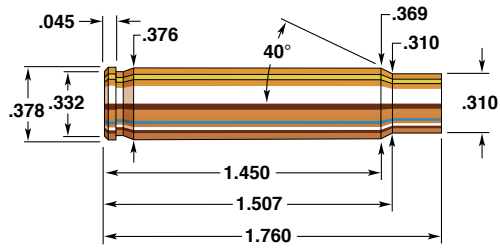
150 gr. SST®
Item No. 27402
C.O.L.: 3.200"
G1 B.C.: 0.525



150 gr. InterLock® SP
Item No. 2740
C.O.L.: 3.180"
G1 B.C.: 0.462

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 4350	42.0 gr.	43.9 gr.	45.9 gr.	47.9 gr.	49.8 gr.	51.8 gr.
Accurate 4350	41.9 gr.	44.0 gr.	46.1 gr.	48.2 gr.	50.3 gr.	
IMR 4831	44.5 gr.	46.4 gr.	48.4 gr.	50.3 gr.	52.3 gr.	
Alliant RL-19	46.0 gr.	48.0 gr.	49.9 gr.	51.9 gr.	53.8 gr.	
H4831	47.1 gr.	49.2 gr.	51.3 gr.	53.4 gr.	55.6 gr.	
VIHT N-165	48.1 gr.	50.3 gr.	52.5 gr.	54.7 gr.	56.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



7mm TCU

Handgun: . . . . . .T/C Contender
Barrel:. . . . . .10", 1 in 10" Twist
Case:. . . . . Frontier Reformed
Primer: . . . . . Remington 7½
Bullet Diameter:. . . . . 0.284"
Maximum COL: . . . . . .2.675"
Max. Case Length:. . . . . .1.760"
Case Trim Length: . . . . . .1.750"

Rising interest in new forms of handgun shooting and sporting competition set off a far-reaching set of developments from the 1970s forward. Single shot pistols began to find new and great favor; and metallic silhouette targets were adopted as a new arena for shooting competition. Wildcats proliferated immediately.

The 7mm TCU is one of the best and mildest-mannered wildcat cartridges for silhouette target shooting. Originating in the late seventies, Thompson/Center chose Wes Ugalde's (hence TCU) cartridge for its Contender handgun. The 7mm TCU is a superb choice. Accuracy is excellent and recoil is mild.

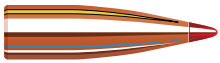
Cases are formed from the 223 Remington, using standard 7mm TCU dies and a tapered neck expander. After neck expanding, a starting load is used to fire form the new case. These starting loads are usually accurate and good practice loads. Commercial (as opposed to military 5.56mm) brass cases work best for reforming.

The 14" barrel from Thompson/Center will provide from 150 to 200 fps higher velocity than the 10" barrel originally used in our load development research.

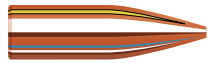
IMR 4895 produced high velocities in almost all bullet weights and was especially useful with the 154 grain bullet.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.550"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.550"
G1 B.C.: 0.334

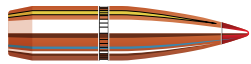
	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2050**
Alliant RL-7	19.8 gr.	20.7 gr.	21.6 gr.	22.6 gr.		
VIHT N-130	21.0 gr.	22.2 gr.	23.4 gr.	24.6 gr.	25.9 gr.	
H322	22.1 gr.	23.3 gr.	24.6 gr.	25.8 gr.	27.0 gr.	
IMR 3031	24.2 gr.	25.2 gr.	26.2 gr.	27.2 gr.	28.2 gr.	
IMR 4895		25.4 gr.	26.8 gr.	28.2 gr.	29.6 gr.	30.3 gr.
Accurate 2460	26.0 gr.	27.0 gr.	28.1 gr.	29.1 gr.	30.1 gr.	31.2 gr.
WIN 748		27.8 gr.	29.2 gr.	30.6 gr.		
BL-C(2)		29.7 gr.	30.8 gr.	32.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

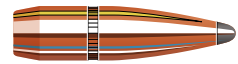
139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

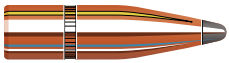
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.625"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.625"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.625"
G1 B.C.: 0.453



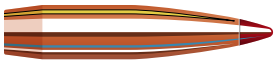
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.625"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**	**1950**
Alliant RL-7		19.9 gr.	21.0 gr.			
VIHT N-130	19.6 gr.	20.9 gr.	22.2 gr.	23.4 gr.	24.7 gr.	
H322			23.6 gr.	24.6 gr.	25.6 gr.	26.1 gr.
IMR 3031		24.3 gr.	25.4 gr.	26.4 gr.	27.5 gr.	
IMR 4895		25.3 gr.	26.4 gr.	27.5 gr.	28.7 gr.	29.2 gr.
Accurate 2460	24.6 gr.	25.6 gr.	26.7 gr.	27.7 gr.	28.7 gr.	29.7 gr.
WIN 748		27.3 gr.	28.5 gr.	29.6 gr.	30.7 gr.	
BL-C(2)		28.1 gr.	29.3 gr.	30.6 gr.	31.9 gr.	

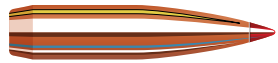
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

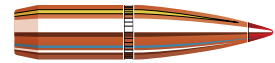
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



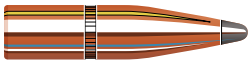
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.625"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.625"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.625"
G1 B.C.: 0.525

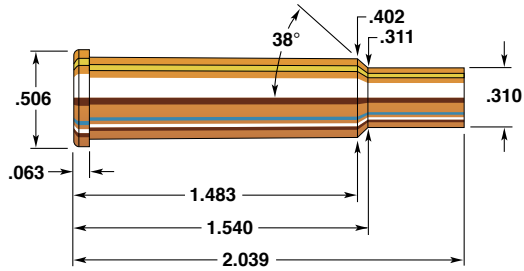


154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.625"
G1 B.C.: 0.433

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**
VIHT N-130	20.0 gr.	21.3 gr.	22.7 gr.	24.1 gr.	
H322	21.3 gr.	22.4 gr.	23.6 gr.	24.8 gr.	
IMR 3031	22.9 gr.	23.9 gr.	25.0 gr.	26.0 gr.	
Accurate 2460	22.1 gr.	23.6 gr.	25.0 gr.	26.5 gr.	28.0 gr.
IMR 4895	24.0 gr.	25.3 gr.	26.5 gr.	27.7 gr.	28.3 gr.
WIN 748	24.8 gr.	26.3 gr.	27.9 gr.	29.4 gr.	
BL-C(2)	26.0 gr.	27.4 gr.	28.9 gr.	30.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7mm International Rimmed

Handgun:	T/C Contender	**Bullet Diameter:**	0.284"
Barrel:	10", 1 in 10" Twist	**Maximum COL:**	2.835"
Case:	Hornady/Frontier	**Max. Case Length:**	2.039"
Primer:	Federal 210	**Case Trim Length:**	2.029"

Elgin Gates, the late and much respected promoter of competitive silhouette shooting, not only was a founder of the International Handgun Metallic Shooting Association (IHMSA), but an avid and inventive wildcatter. Like many of the earliest silhouette shooters, Gates long sought the "Holy Grail" of silhouette shooting cartridges: one that would combine power with accuracy and acceptable recoil.

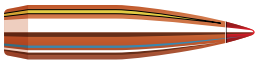
While the definition of perfect may differ from shooter to shooter, some shooters feel that Elgin Gates' intermediate cartridge, the 7mm International Rimmed may be close. It falls in between the 7mm TCU and the 7mm IHMSA.

The 7mm International Rimmed is formed from the 30-30 Winchester case. Reloaders can simply run a lubricated 30-30 case in a full length 7mm International Rimmed sizing die, fire using a starting load to fire form, and reload as normal. These fire forming loads can be used as practice loads. The introduction of the 7-30 Waters has affected the popularity of the 7mm International Rimmed. The 7-30 Waters, also based on the 30-30 Winchester, is ballistically very similar but offers factory ammunition and cases.

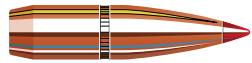
Barrels of 14" produce 100 to 150 fps increases in velocity. In our testing, WIN 748 and H 335 produced top velocities.

139 GRAIN BULLETS

SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"

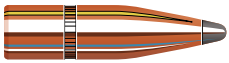


139 gr. InterBond®
Item No. 28209
C.O.L.: 2.800"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.800"
G1 B.C.: 0.486

139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.800"
G1 B.C.: 0.453



139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.800"
G1 B.C.: 0.392

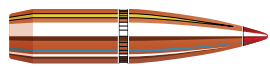
	VELOCITY (FPS – feet per second)				
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**
H322	23.4 gr.	25.2 gr.	27.1 gr.	28.9 gr.	
IMR 4895	25.4 gr.	26.7 gr.	27.9 gr.		
H335		26.5 gr.	28.2 gr.	30.0 gr.	31.7 gr.
WIN 748	29.7 gr.	31.1 gr.	32.5 gr.	33.9 gr.	35.3 gr.
BL-C(2)	30.2 gr.	31.7 gr.	33.3 gr.	34.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

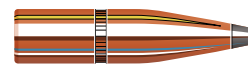
154 GRAIN BULLETS

SECTIONAL DENSITY: 0.273
DIAMETER: 0.284"

154 gr. InterBond®
Item No. 28309
C.O.L.: 2.835"
G1 B.C.: 0.525



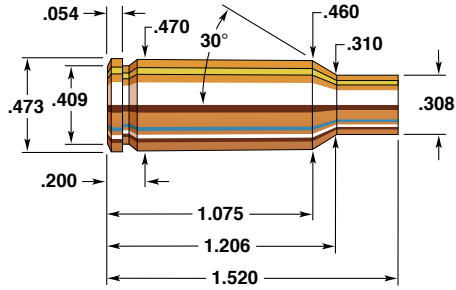
154 gr. SST®
Item No. 28302
C.O.L.: 2.835"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.835"
G1 B.C.: 0.433

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**
H322	22.2 gr.	23.9 gr.	25.6 gr.	27.3 gr.	
H335		24.2 gr.	27.9 gr.	28.8 gr.	30.5 gr.
IMR 3031	23.4 gr.	24.6 gr.	25.8 gr.		
IMR 4895	24.2 gr.	25.7 gr.	27.2 gr.		
IMR 4064	26.1 gr.	27.5 gr.			
WIN 748	27.6 gr.	29.2 gr.	30.8 gr.	32.4 gr.	
BL-C(2)	28.3 gr.	30.0 gr.	31.7 gr.	33.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



7mm Bench Rest Remington

Handgun: . . . . . T/C Encore
Barrel:. . . . . 15", 1 in 10" Twist
Case:. . . . . Remington
Primer: . . . . . Remington 7½
Bullet Diameter:. . . . . 0.284"
Maximum COL: . . . . . 2.375"
Max. Case Length:. . . . . .1.520"
Case Trim Length: . . . . . .1.510"

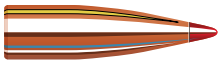
Metallic silhouette shooting popularity grew substantially in a short period of time. Remington realized the need for a commercial “unlimited" gun and in 1980 introduced the 7mm BR Remington in their XP-100. This cartridge case has been used by bench rest enthusiasts in both 22 caliber and 6mm chamberings. The cartridge is based on a necked down 308 Win. case with a small rifle primer pocket, shortened to a length of 1.520" with a shoulder angle of 30°. Cases earlier had to be trimmed and reformed to produce cartridges. Remington currently offers match quality cases that incorporate the small primer pocket.

In appearance, the 7mm Ingram should have less case capacity by a substantial margin, but in truth the usable difference is about three percent. Our 7mm BR could not reach the velocities of our 7mm Ingram and primary reasons relate to the throats of the two firearms. The 7mm Ingram had a significantly longer throat which allowed bullets to be seated farther out of the case. This practice lowers pressures and increases case capacity for greater velocity.

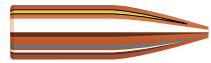
The 7mm BR is an excellent choice for the silhouette shooter. Efficient and effective use of small charges of powder produce enough velocity for the 200 meter rams. Best results were achieved with WIN 748 during our testing. Hunters also report good success with this cartridge up to deer sized game.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.300"
G1 B.C.: 0.365



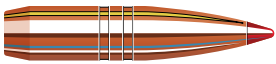
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.300"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
Accurate 2015	21.5 gr.	22.8 gr.	24.1 gr.	25.4 gr.	26.7 gr.	
H322	22.6 gr.	24.0 gr.	25.5 gr.	26.9 gr.	28.4 gr.	
IMR 3031	24.2 gr.	25.2 gr.	26.3 gr.	27.4 gr.	28.5 gr.	
VIHT N-135	24.5 gr.	25.7 gr.	27.0 gr.	28.2 gr.	29.4 gr.	30.7 gr.
Accurate 2495	24.7 gr.	26.0 gr.	27.4 gr.	28.7 gr.	30.1 gr.	31.4 gr.
IMR 4895	26.2 gr.	27.4 gr.	28.5 gr.	29.6 gr.	30.8 gr.	31.9 gr.
VARGET	26.3 gr.	27.5 gr.	28.7 gr.	29.9 gr.	31.1 gr.	
WIN 748	26.4 gr.	27.8 gr.	29.2 gr.	30.6 gr.	32.1 gr.	33.5 gr.

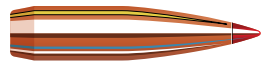
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

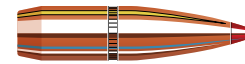
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



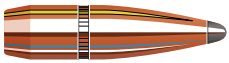
139 gr. GMX®
Item No. 28270
C.O.L.: 2.300"
G1 B.C.: 0.486



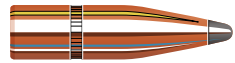
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.300"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.300"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.300"
G1 B.C.: 0.453



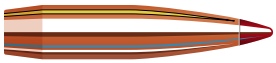
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.300"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**1800**	**1900**	**2000**	**2100**	**2200**	**2300**
Accurate 2015	22.7 gr.	24.0 gr.	25.4 gr.	26.7 gr.		
IMR 3031	24.2 gr.	25.5 gr.	26.8 gr.	28.1 gr.		
H322	23.5 gr.	25.1 gr.	26.7 gr.	28.4 gr.		
VIHT N-135	24.8 gr.	26.2 gr.	27.5 gr.	28.8 gr.		
Accurate 2495	24.5 gr.	26.2 gr.	27.9 gr.	29.6 gr.		
IMR 4895	26.1 gr.	27.4 gr.	28.8 gr.	30.1 gr.		
VARGET	26.5 gr.	27.7 gr.	29.0 gr.	30.3 gr.		
WIN 748	27.1 gr.	28.5 gr.	30.0 gr.	31.5 gr.	32.9 gr.	
BL-C(2)	27.4 gr.	29.1 gr.	30.8 gr.	32.6 gr.	34.3 gr.	36.0 gr.

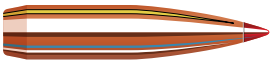
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

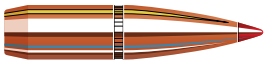
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



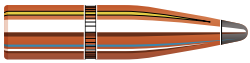
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.375"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.300"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.300"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.300"
G1 B.C.: 0.433

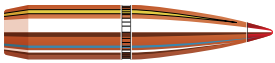
	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
H322	21.1 gr.	22.6 gr.	24.1 gr.	25.6 gr.	27.2 gr.	
VIHT N-135	22.9 gr.	24.1 gr.	25.4 gr.	26.6 gr.	27.9 gr.	
Accurate 2230	23.2 gr.	24.5 gr.	25.9 gr.	27.2 gr.	28.6 gr.	29.9 gr.
IMR 4895	24.3 gr.	25.6 gr.	26.8 gr.	28.0 gr.	29.2 gr.	
VARGET	23.9 gr.	25.2 gr.	26.6 gr.	27.9 gr.	29.3 gr.	
WIN 748	25.6 gr.	26.9 gr.	28.3 gr.	29.6 gr.	30.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

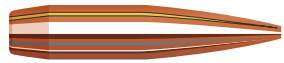
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

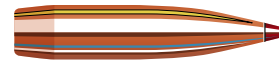
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



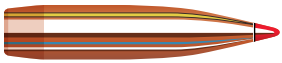
162 gr. SST®
Item No. 28452
C.O.L.: 2.310"
G1 B.C.: 0.550



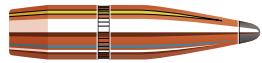
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.375"
G1 B.C.: 0.610



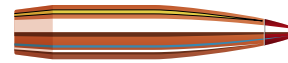
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.375"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.375"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.310"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.375"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
IMR 3031	22.2 gr.	23.5 gr.	24.7 gr.	26.0 gr.		
VIHT N-135	22.3 gr.	23.7 gr.	25.1 gr.	26.5 gr.	27.8 gr.	
Accurate 2230	23.2 gr.	24.5 gr.	25.9 gr.	27.2 gr.	28.5 gr.	29.8 gr.
IMR 4895	23.6 gr.	25.0 gr.	26.4 gr.	27.8 gr.	29.2 gr.	
VARGET	24.1 gr.	25.4 gr.	26.6 gr.	27.8 gr.		
WIN 748	24.6 gr.	26.0 gr.	27.4 gr.	28.9 gr.	30.3 gr.	
BL-C(2)	25.7 gr.	27.2 gr.	28.8 gr.	30.4 gr.	31.9 gr.	33.5 gr.

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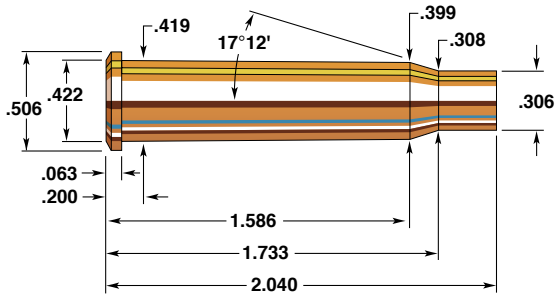
*****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^**NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



7-30 Waters

Handgun:	T/C Contender	**Bullet Diameter:**	0.284"
Barrel:	.14", 1 in 9½" Twist	**Maximum COL:**	2.830"
Case:	Hornady/Frontier	**Max. Case Length:**	2.040"
Primer:	Federal 210	**Case Trim Length:**	2.030"

Ken Waters, well known writer, firearms expert, cartridge authority par excellence, and wildcatter, felt the need for a new hunting cartridge with better ballistics than permitted by the 30-30 case and the tubular magazines and actions of the 30-30 Winchester.

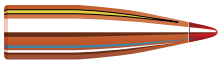
The final design of this new cartridge was the 30-30 case necked down to 7mm (.284") and "blown out," giving more powder capacity than the parent case. In 1984 the first rifles and cartridges were manufactured. The original firearm was the U.S. Repeating Arms, Model 94 Angle Eject with a 24" barrel.

That was far from the end of the story. Shortly after this development, Thompson/Center produced firearms for the 7-30 Waters including their Contender Pistol. This cartridge has become quite popular for silhouette shooters and hunters. It offers the 7mm bore size, and therefore a wide variety of excellent bullets, factory ammunition and cases.

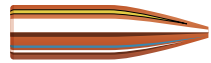
The 7-30 Waters' success has been confirmed by its continued inclusion as a chambering standard in Thompson/Center single shot pistols. It has apparently displaced much of the 30 Herrett's popularity, a cartridge also based on the 30-30.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.775"
G1 B.C.: 0.365



120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.775"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)						
POWDER	**2200**	**2250**	**2300**	**2350**	**2400**	**2450**	**2500**
H322	28.0 gr.	29.0 gr.	29.9 gr.	30.9 gr.	31.9 gr.		
VIHT N-135	30.0 gr.	30.7 gr.	31.4 gr.	32.1 gr.	32.9 gr.		
H4895	31.0 gr.	31.8 gr.	32.6 gr.	33.3 gr.			
Accurate 2460	30.7 gr.	31.6 gr.	32.5 gr.	33.4 gr.	34.2 gr.	35.1 gr.	36.0 gr.
H335	30.7 gr.	31.7 gr.	32.7 gr.	33.7 gr.	34.8 gr.		
Alliant RL-15	32.1 gr.	32.8 gr.	33.6 gr.	34.3 gr.	35.0 gr.	35.8 gr.	
VARGET	32.6 gr.	33.3 gr.	34.0 gr.	34.7 gr.	35.5 gr.		
IMR 4064	33.1 gr.	33.9 gr.	34.7 gr.	35.4 gr.	36.2 gr.	37.0 gr.	
WIN 748	33.9 gr.	34.7 gr.	35.5 gr.	36.2 gr.	37.0 gr.	37.8 gr.	38.5 gr.

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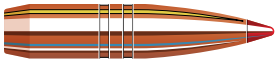
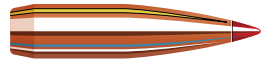
139 GRAIN BULLETS

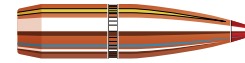
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



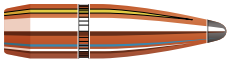
139 gr. GMX®
Item No. 28270
C.O.L.: 2.790"
G1 B.C.: 0.486



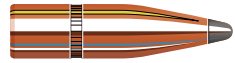
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.830"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.830"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.830"
G1 B.C.: 0.453



139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.830"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)						
POWDER	**2050**	**2100**	**2150**	**2200**	**2250**	**2300**	**2350**
H322	27.1 gr.	28.0 gr.	28.8 gr.	29.7 gr.	30.5 gr.		
Accurate 2460	28.8 gr.	29.7 gr.	30.7 gr.	31.6 gr.	32.5 gr.	33.5 gr.	
H4895	29.2 gr.	30.0 gr.	30.8 gr.	31.6 gr.			
H335	29.7 gr.	30.6 gr.	31.5 gr.	32.4 gr.	33.2 gr.		
VIHT N-140		30.9 gr.	31.7 gr.	32.5 gr.	33.3 gr.	34.1 gr.	35.0 gr.
Alliant RL-15		31.5 gr.	32.4 gr.	33.3 gr.			
VARGET		31.8 gr.	32.6 gr.	33.4 gr.			
IMR 4064	31.0 gr.	31.8 gr.	32.6 gr.	33.4 gr.	34.2 gr.	35.0 gr.	
WIN 748	31.4 gr.	32.1 gr.	32.9 gr.	33.7 gr.	34.4 gr.	35.2 gr.	

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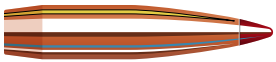
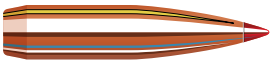
150-154 GRAIN BULLETS

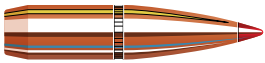
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



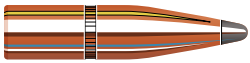
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.830"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.830"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.830"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.830"
G1 B.C.: 0.433

	VELOCITY (FPS – feet per second)						
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**
VARGET	30.3 gr.	31.2 gr.	32.0 gr.				
H322	25.6 gr.	26.4 gr.	27.3 gr.	28.1 gr.	28.9 gr.		
H4895	27.3 gr.	28.1 gr.	28.8 gr.	29.6 gr.	30.4 gr.		
Accurate 2460		28.1 gr.	29.0 gr.	29.9 gr.	30.8 gr.	31.7 gr.	32.6 gr.
H335	27.9 gr.	28.7 gr.	29.5 gr.	30.4 gr.	31.2 gr.		
IMR 4064	28.9 gr.	29.7 gr.	30.5 gr.	31.3 gr.	32.2 gr.	33.0 gr.	
WIN 748	29.8 gr.	30.5 gr.	31.1 gr.	31.7 gr.	32.4 gr.	33.0 gr.	33.7 gr.
VIHT N-140	28.9 gr.	30.1 gr.	31.0 gr.	32.0 gr.	32.9 gr.	33.8 gr.	
Alliant RL-15	29.4 gr.	30.3 gr.	31.2 gr.	32.1 gr.			

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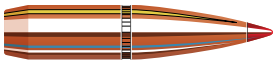
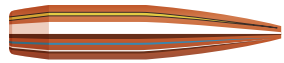
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

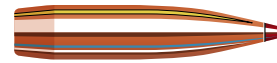
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



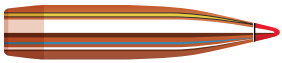
162 gr. SST®
Item No. 28452
C.O.L.: 2.830"
G1 B.C.: 0.550



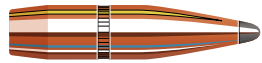
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.830"
G1 B.C.: 0.610



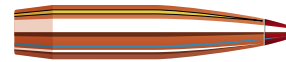
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.830"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.830"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.830"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.830"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)						
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**
H322	25.8 gr.	26.6 gr.	27.5 gr.				
Accurate 2460		28.5 gr.	29.4 gr.	30.3 gr.	31.1 gr.	32.0 gr.	
H4895	27.8 gr.	28.6 gr.	29.4 gr.	30.2 gr.			
H335	27.6 gr.	28.6 gr.	29.6 gr.	30.6 gr.			
VIHT N-140	28.2 gr.	29.0 gr.	29.7 gr.	30.5 gr.	31.3 gr.		
IMR 4064	28.9 gr.	29.6 gr.	30.2 gr.	30.9 gr.	31.5 gr.	32.2 gr.	
Alliant RL-15	28.7 gr.	29.6 gr.	30.5 gr.	31.4 gr.			
VARGET	29.0 gr.	29.8 gr.	30.6 gr.				
WIN 748	30.3 gr.	31.0 gr.	31.8 gr.	32.5 gr.	33.2 gr.	33.9 gr.	34.6 gr.

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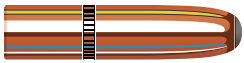
***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

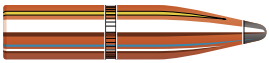
***^NOTE:** This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.805"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.815"
G1 B.C.: 0.462

	VELOCITY (FPS – feet per second)					
POWDER	**1750**	**1800**	**1850**	**1900**	**1950**	**2000**
H322	23.7 gr.	24.5 gr.	25.3 gr.	26.0 gr.		
VIHT N-140	25.9 gr.	26.2 gr.	26.5 gr.	26.8 gr.	27.1 gr.	27.4 gr.
Accurate 2460		26.0 gr.	27.1 gr.	28.1 gr.	29.2 gr.	30.2 gr.
H4895	25.4 gr.	26.4 gr.	27.3 gr.	28.3 gr.		
H335	25.5 gr.	26.5 gr.	27.6 gr.	28.6 gr.	29.5 gr.	
IMR 4064	26.5 gr.	27.4 gr.	28.2 gr.	29.0 gr.	29.8 gr.	30.6 gr.
Alliant RL-15	26.9 gr.	27.7 gr.	28.5 gr.	29.4 gr.		
VARGET	27.1 gr.	27.9 gr.	28.8 gr.	29.6 gr.		
WIN 748	28.1 gr.	28.9 gr.	29.7 gr.	30.4 gr.	31.2 gr.	32.0 gr.

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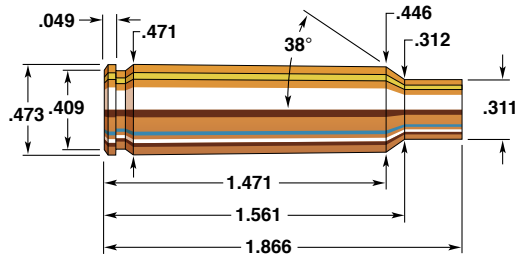


7mm IHMSA

Handgun:	.Wichita	**Bullet Diameter:**	0.284"
Barrel:	15", 1 in 10" Twist	**Maximum COL:**	2.670"
Case:	IHMSA	**Max. Case Length:**	1.866"
Primer:	Federal 210	**Case Trim Length:**	1.858"

Silhouette shooting is the mother of invention. If not all invention, then certainly the enormous amount of cartridge invention and development that has occurred over the last three decades. Some wildcats from the period have actually become factory standards.

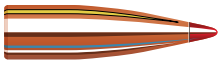
Among the foremost developers of new wildcats was Elgin Gates, the late president and one of the founders of IHMSA. One of his most popular cartridges is the 7mm IHMSA (International Handgun Metallic Silhouette Association), which is formed from 300 Savage cases. It is one of the most accurate and successful rounds in silhouette shooting, easily hitting and knocking over the distant rams.

For any reloader considering the 7mm IHMSA as a cartridge for silhouette shooting (and hunting as well), we suggest comparing the loading tables for this cartridge with those of the 300 Savage. The 15" barrel of our test handgun delivered velocities only about 400 fps less than those of our 24" test rifle. The 7mm IHMSA's popularity is well earned.

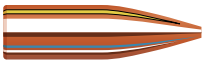
In our testing, H 322 and WIN 748 gave excellent accuracy with all bullets with WIN 748 giving slightly higher velocities.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.555"
G1 B.C.: 0.365



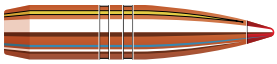
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.555"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)				
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**
IMR 3031	33.2 gr.	34.3 gr.	35.4 gr.	36.4 gr.	
H322	33.0 gr.	34.3 gr.	35.5 gr.	36.8 gr.	
IMR 4895	34.9 gr.	36.2 gr.	37.5 gr.	38.8 gr.	
IMR 4064	35.8 gr.	36.8 gr.	37.8 gr.	38.9 gr.	39.9 gr.
WIN 748	36.7 gr.	38.0 gr.	39.2 gr.	40.5 gr.	41.7 gr.

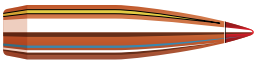
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

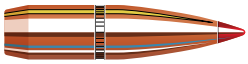
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



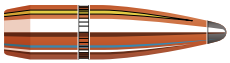
139 gr. GMX®
Item No. 28270
C.O.L.: 2.655"
G1 B.C.: 0.486



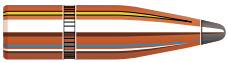
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.655"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.655"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.655"
G1 B.C.: 0.453



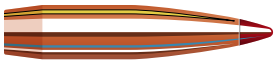
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.655"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)				
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**
IMR 3031	31.2 gr.	32.2 gr.	33.3 gr.	34.4 gr.	35.5 gr.
H322	30.7 gr.	32.1 gr.	33.6 gr.	35.0 gr.	
IMR 4895	32.7 gr.	34.0 gr.	35.3 gr.	36.6 gr.	37.9 gr.
IMR 4064	33.9 gr.	35.1 gr.	36.2 gr.	37.3 gr.	38.4 gr.
WIN 748		36.9 gr.	38.1 gr.	39.4 gr.	40.6 gr.

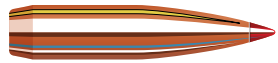
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

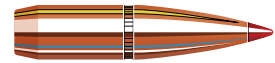
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



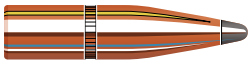
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.670"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.670"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.670"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.670"
G1 B.C.: 0.433

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	29.8 gr.	31.1 gr.	32.3 gr.	33.5 gr.	
H322	28.9 gr.	30.7 gr.	32.5 gr.	34.3 gr.	
IMR 4895	31.4 gr.	32.7 gr.	34.0 gr.	35.2 gr.	
IMR 4064	32.2 gr.	33.5 gr.	34.7 gr.	35.9 gr.	37.2 gr.
WIN 748	33.8 gr.	35.2 gr.	36.6 gr.	37.9 gr.	39.3 gr.

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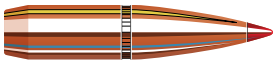
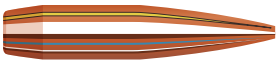
***NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

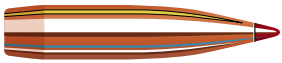
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



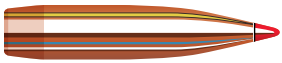
162 gr. SST®
Item No. 28452
C.O.L.: 2.670"
G1 B.C.: 0.550



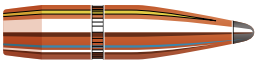
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.670"
G1 B.C.: 0.610



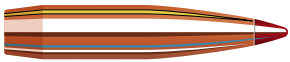
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.670"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.670"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.670"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.670"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)				
POWDER	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 3031	29.2 gr.	30.6 gr.	31.9 gr.	33.3 gr.	
H322	30.1 gr.	31.5 gr.	32.9 gr.		
IMR 4895	31.2 gr.	32.4 gr.	33.7 gr.	34.9 gr.	
IMR 4064	32.1 gr.	33.3 gr.	34.5 gr.	35.7 gr.	36.9 gr.
WIN 748	33.5 gr.	34.8 gr.	36.1 gr.	37.4 gr.	38.7 gr.
BL-C(2)	34.1 gr.	35.7 gr.	37.2 gr.	38.8 gr.	

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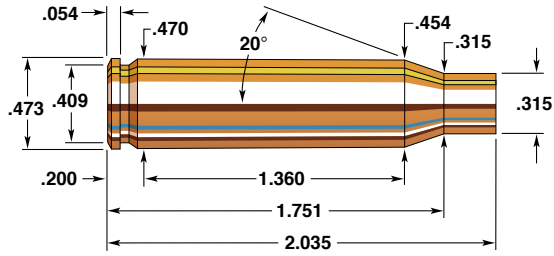
*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



7mm-08 Remington

Handgun: . . . . . T/C Encore
Barrel: . . . . . 15", 1 in 9" Twist
Case: . . . . . Hornady/Frontier
Primer: . . . . . Remington 9½
Bullet Diameter: . . . . . 0.284"
Maximum COL: . . . . . 2.800"
Max. Case Length: . . . . . 2.035"
Case Trim Length: . . . . . 2.025"

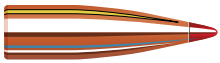
Encore Pistols are a Thompson/Center line of single shot, break-open action, interchangeable barrel handguns introduced to meet the growing demand for hard-hitting, long range scoped pistols. Thompson/Center has built its name and reputation on responding to—and even anticipating—the demands a new generation of handgunners has generated. Metallic silhouette shooting is one of those new demands, and T/C has been a leader in making firearms for that purpose.

T/C offers the Encore Pistol in a variety of cartridge chamberings, from the 17 HMR through the 45-70, including along the way the 30-06 Springfield and, as here, the 7mm-08 Remington. Whether a handgunner prefers silhouette targets or the actual game itself, Encore shooters can come equipped. The 7mm-08 is one chambering that has become increasingly important as a silhouette shooting competitor. It's effective both in rifle or pistol use.

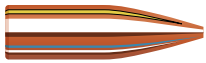
Most T/C Encore offerings, as with the 7mm-08, are pistol adaptations of rifle cartridges. As such, reloading for them requires special attention. Fifteen inch barrels for cartridges originally used in 18", 24", or even 26" barrels won't produce original factory load ballistics. You can do well, though, if you are careful in both powder selection and reloading. Don't exceed the maximums shown.

120 GRAIN BULLETS

SECTIONAL DENSITY: 0.213
DIAMETER: 0.284"



120 gr. V-MAX®
Item No. 22810
C.O.L.: 2.700"
G1 B.C.: 0.365



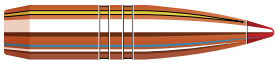
120 gr. HP *(Discontinued)*
Item No. 2815
C.O.L.: 2.700"
G1 B.C.: 0.334

	VELOCITY (FPS – feet per second)					
POWDER	**2200**	**2300**	**2400**	**2500**	**2600**	**2700**
Accurate 2495	32.3 gr.	34.3 gr.	36.2 gr.	38.1 gr.	40.1 gr.	42.0 gr.
IMR 4064	34.5 gr.	36.2 gr.	37.9 gr.	39.6 gr.	41.3 gr.	43.0 gr.
VIHT N-140	34.4 gr.	36.2 gr.	38.0 gr.	39.8 gr.	41.5 gr.	43.3 gr.
Alliant RL-15	35.7 gr.	37.3 gr.	38.8 gr.	40.3 gr.	41.9 gr.	43.4 gr.
VARGET	34.0 gr.	36.1 gr.	38.2 gr.	40.3 gr.	42.3 gr.	44.4 gr.

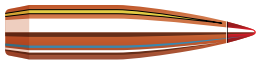
Create custom ballistic tables using our online calculators at hornady.com/ballistics

139 GRAIN BULLETS

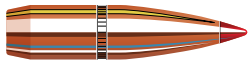
SECTIONAL DENSITY: 0.246
DIAMETER: 0.284"



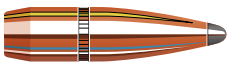
139 gr. GMX®
Item No. 28270
C.O.L.: 2.775"
G1 B.C.: 0.486



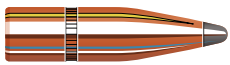
139 gr. InterBond®
Item No. 28209
C.O.L.: 2.775"
G1 B.C.: 0.486



139 gr. SST®
Item No. 28202
C.O.L.: 2.775"
G1 B.C.: 0.486



139 gr. InterLock® BTSP
Item No. 2825
C.O.L.: 2.775"
G1 B.C.: 0.453



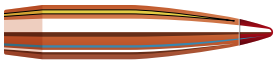
139 gr. InterLock® SP
Item No. 2820
C.O.L.: 2.775"
G1 B.C.: 0.392

	VELOCITY (FPS – feet per second)					
POWDER	**2100**	**2200**	**2300**	**2400**	**2500**	**2600**
IMR 4064	33.6 gr.	35.3 gr.	37.1 gr.	38.8 gr.	40.5 gr.	42.3 gr.
VIHT N-140	33.4 gr.	35.2 gr.	37.1 gr.	38.9 gr.	40.8 gr.	
Alliant RL-15	34.3 gr.	36.0 gr.	37.6 gr.	39.3 gr.	41.0 gr.	
VARGET	33.5 gr.	35.5 gr.	37.5 gr.	39.5 gr.	41.5 gr.	
IMR 4350	39.6 gr.	41.4 gr.	43.2 gr.	45.0 gr.		
Accurate 4350	41.5 gr.	42.9 gr.	44.2 gr.	45.6 gr.		

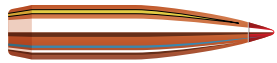
Create custom ballistic tables using our online calculators at hornady.com/ballistics

150-154 GRAIN BULLETS

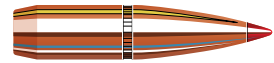
SECTIONAL DENSITY: 0.266-0.273
DIAMETER: 0.284"



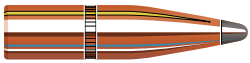
***150 gr. ELD-X®**
Item No. 2826
C.O.L.: 2.800"
G1 B.C.: 0.555
G7 B.C.: 0.280



154 gr. InterBond®
Item No. 28309
C.O.L.: 2.800"
G1 B.C.: 0.525



154 gr. SST®
Item No. 28302
C.O.L.: 2.800"
G1 B.C.: 0.525



154 gr. InterLock® SP
Item No. 2830
C.O.L.: 2.800"
G1 B.C.: 0.433

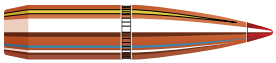
	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4064	30.5 gr.	32.3 gr.	34.1 gr.	35.9 gr.	37.7 gr.	39.5 gr.
VIHT N-140	30.0 gr.	31.9 gr.	33.9 gr.	35.8 gr.	37.8 gr.	39.7 gr.
Alliant RL-15	31.1 gr.	32.9 gr.	34.7 gr.	36.4 gr.	38.2 gr.	40.0 gr.
VARGET	30.5 gr.	32.5 gr.	34.4 gr.	36.4 gr.	38.3 gr.	40.3 gr.
IMR 4350	36.1 gr.	37.9 gr.	39.8 gr.	41.7 gr.	43.5 gr.	45.4 gr.
Accurate 4350	37.0 gr.	38.7 gr.	40.4 gr.	42.2 gr.	43.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

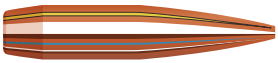
**__NOTE:__ Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

162 GRAIN BULLETS

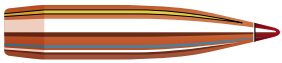
SECTIONAL DENSITY: 0.287
DIAMETER: 0.284"



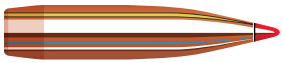
162 gr. SST®
Item No. 28452
C.O.L.: 2.800"
G1 B.C.: 0.550



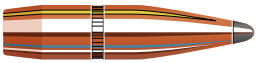
^162 gr. BTHP Match™
Item No. 28405
C.O.L.: 2.800"
G1 B.C.: 0.610



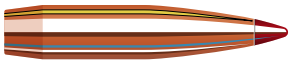
***162 gr. ELD® Match**
Item No. 28403
C.O.L.: 2.800"
G1 B.C.: 0.652
G7 B.C.: 0.329



162 gr. A-MAX®
(Discontinued)
Item No. 28402
C.O.L.: 2.800"
G1 B.C.: 0.625



162 gr. InterLock® BTSP
Item No. 2845
C.O.L.: 2.800"
G1 B.C.: 0.514



***162 gr. ELD-X®**
Item No. 2840
C.O.L.: 2.800"
G1 B.C.: 0.630
G7 B.C.: 0.315

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4064	30.1 gr.	32.0 gr.	33.9 gr.	35.8 gr.	37.7 gr.	39.5 gr.
VIHT N-140	30.3 gr.	32.4 gr.	34.4 gr.	36.4 gr.	38.4 gr.	
Alliant RL-15	30.7 gr.	32.6 gr.	34.6 gr.	36.5 gr.	38.4 gr.	
VARGET	30.2 gr.	32.3 gr.	34.4 gr.	36.4 gr.	38.5 gr.	
IMR 4350	35.4 gr.	37.5 gr.	39.6 gr.	41.7 gr.	43.8 gr.	
Accurate 4350	37.5 gr.	39.2 gr.	40.8 gr.	42.5 gr.	44.1 gr.	

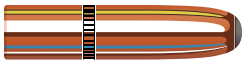
Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

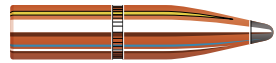
*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*

175 GRAIN BULLETS

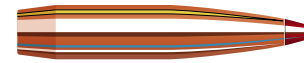
SECTIONAL DENSITY: 0.310
DIAMETER: 0.284"



175 gr. InterLock® RN *(Discontinued)*
Item No. 2855
C.O.L.: 2.800"
G1 B.C.: 0.285



175 gr. InterLock® SP
Item No. 2850
C.O.L.: 2.800"
G1 B.C.: 0.462



***175 gr. ELD-X®**
Item No. 2841
C.O.L.: 2.800"
G1 B.C.: 0.675
G7 B.C.: 0.340

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
VARGET	27.0 gr.	29.2 gr.	31.4 gr.	33.7 gr.	35.9 gr.	38.1 gr.
VIHT N-140	27.3 gr.	29.5 gr.	31.7 gr.	33.9 gr.	36.1 gr.	38.3 gr.
Alliant RL-15	27.7 gr.	29.9 gr.	32.1 gr.	34.2 gr.	36.4 gr.	38.6 gr.
IMR 4350	32.8 gr.	35.0 gr.	37.1 gr.	39.2 gr.	41.3 gr.	
Accurate 4350	35.1 gr.	36.9 gr.	38.6 gr.	40.4 gr.	42.1 gr.	

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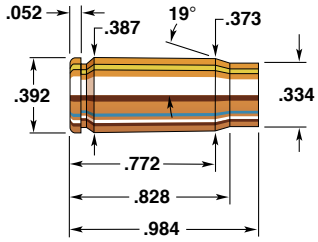
****NOTE:** Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*



7.62 X 25mm Tokarev

Handgun:	CZ 52	**Bullet Diameter:**	0.309"
Barrel:	4¾", 1 in 12.2" Twist	**Maximum COL:**	1.385"
Case:	Starline	**Max. Case Length:**	0.984"
Primer:	Federal 100	**Case Trim Length:**	0.974"

Soviet adoption of the 7.62mm Tokarev (or 7.62 x 25mm Russian Tokarev) as the official military pistol cartridge in 1930 began the seven decade history it has now experienced. What the Soviets started, the Peoples Republic of China (and Hungary under Communist rule) have continued. Vast numbers of TT-30 and TT-33 Model automatic pistols have been produced. Beginning in the 1980s many of them began arriving on American shores in quantity, along with reasonably priced foreign (primarily Chinese) ammunition.

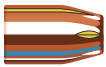
Automatic pistols for the 7.62mm Tokarev were essentially knockoffs of the Browning-designed 45 Automatic Colt Pistol, though both imitation and some original design contributed to the Soviet auto. Our CZ-52 test pistol, one of many recent imports, was both strong and well made.

Many of the handguns appearing on the American market are crudely finished, but functional nonetheless. Both Soviet and Chinese military ammunition use steel cases and corrosive Berdan primers. These are not reloadable.

Imports of Boxer-primed brass ammunition have become available for this cartridge, which strongly resembles both the 30 Luger and 30 Mauser in performance and utility. Starline manufactures Boxer-primed cases. With the Hornady 30 caliber 90 grain XTP®, the 7.62mm Tokarev has some usefulness in the field.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.136
DIAMETER: 0.309"



90 gr. XTP®
Item No. 31000
C.O.L.: 1.320"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**	**1700**
IMR 800 X	5.8 gr.	6.4 gr.	7.0 gr.			
BLUE DOT	6.4 gr.	6.8 gr.	7.3 gr.			
Accurate No. 7	7.2 gr.	8.0 gr.	8.7 gr.			
Accurate No. 9	7.8 gr.	8.9 gr.	10.1 gr.			
Alliant 2400	8.6 gr.	9.6 gr.	10.7 gr.	11.8 gr.		
VIHT N-110	9.6 gr.	10.1 gr.	10.7 gr.	11.2 gr.	11.8 gr.	
H110	10.3 gr.	11.2 gr.	12.0 gr.	12.9 gr.	13.7 gr.	14.2 gr.
WIN 296	10.2 gr.	11.3 gr.	12.3 gr.	13.3 gr.	14.4 gr.	

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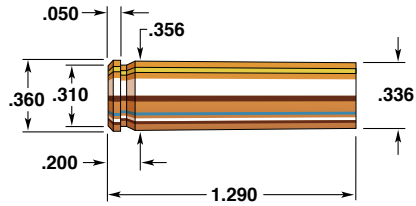


30 M1 Carbine (T/C)

Handgun:	T/C Contender	**Bullet Diameter:**	0.308"
Barrel:	10", 1 in 14" Twist	**Maximum COL:**	1.680"
Case:	Hornady/Frontier	**Max. Case Length:**	1.290"
Primer:	Winchester WSR	**Case Trim Length:**	1.280"

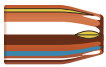
The 30 M1 Carbine easily ranks within the top twenty most frequently reloaded cartridges, a fact hard to explain in light of its performance characteristics. The 32 Winchester Self Loading cartridge from which it arose was considered obsolete as long as fifty years ago; and 30 M1 Carbine rifle performance on game is marginal.

Many excellent commercial cartridges presented in this handbook never enjoyed widespread popularity because of the firearms chambered for them. Such is not the case here. The 30 M1 Carbine, no landmark development in the history of cartridge design, owes its appeal to the easy handling semi-automatic military carbine for which it was developed in 1940. The U.S. military reckoned that many of its ground troops would be better off hitting something with the light, quick shooting 30 M1 Carbine than hitting nothing at all with the 45 ACP they might otherwise have been issued.

Now, ironically, the cartridge developed as an alternative to the 45 Automatic is itself a pistol cartridge. Ruger in 1971 began chambering its heavy framed Blackhawk for the 30 M1 Carbine cartridge. IAI of Irwindale, California started producing a semi-automatic pistol for this round in 1989. No one is currently chambering a handgun for the 30 M1 Carbine. (Caution: we have observed failures of complete ignition with factory ammunition which could leave a bullet in the barrel. Use care when shooting this cartridge in a handgun.)

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.136
DIAMETER: 0.309"



90 gr. XTP®
Item No. 31000
C.O.L.: 1.510"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1600**	**1700**	**1800**	**1900**
VIHT N-110	10.4 gr.	11.3 gr.	12.1 gr.	13.0 gr.	13.8 gr.
Alliant 2400	10.5 gr.	11.5 gr.	12.5 gr.	13.4 gr.	
H110	11.8 gr.	12.8 gr.	13.8 gr.	14.9 gr.	15.9 gr.
WIN 296	11.9 gr.	13.0 gr.	14.1 gr.	15.3 gr.	
IMR 4227	12.5 gr.	13.4 gr.	14.3 gr.		

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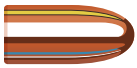
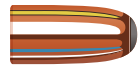
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 1.680"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 1.680"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**
VIHT N-110	8.4 gr.	9.5 gr.	10.3 gr.	11.6 gr.	
Alliant 2400	8.9 gr.	10.0 gr.	11.0 gr.	12.0 gr.	13.0 gr.
H110	8.7 gr.	10.3 gr.	11.9 gr.		

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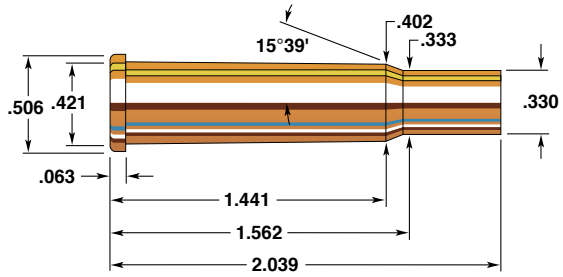


30-30 Winchester (T/C)

Handgun:	T/C Contender	**Bullet Diameter:**	0.308"
Barrel:	10", 1 in 14" Twist	**Maximum COL:**	2.550"
Case:	Hornady/Frontier	**Max. Case Length:**	2.039"
Primer:	Winchester WLR	**Case Trim Length:**	2.029"

Uniformity from shot to shot is necessary for accuracy with any firearm. This uniformity was never really obtained throughout our experimentation. To explain this problem, we need only to look at case capacity versus barrel length. The 30-30 Winchester case was designed to perform efficiently in a rifle, not in a short barreled pistol.

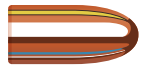
While slow burning powders may give excellent results in a rifle, the opposite is true in the 10" handgun. Too much powder is left unburned, which only contributes to poor accuracy and loud muzzle blast. When powders fast enough to give suitable velocities are used, poor loading density is the result, leading to wide velocity variations and corresponding indifferent accuracy. Also, to insure good ignition, accuracy, and case life, cases should be neck sized or partially resized which allows headspacing on the shoulder of the case.

The powders listed, performed the best of those tested during our experimentation. Accurate 2460 performed the best with the 110 grain Spire Point while Hodgdon's H 335 and BL-C(2) gave good results with the 130 grain single shot Spire Point and the 150 grain Spire Point. The 130 grain Single Shot Spire Point is probably the best all around choice for hunting with the 30-30 Thompson/Center Contender. Results with our 30-30 T/C were never on par with our 30 Herrett T/C, a more efficient cartridge.

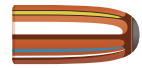
110 GRAIN BULLETS

SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

110 gr. V-MAX®
Item No. 23010
C.O.L.: 2.660"
G1 B.C.: 0.290



110 gr. FMJ-RN
Item No. 3017
C.O.L.: 2.660"
G1 B.C.: 0.178



110 gr. RN
Item No. 3015
C.O.L.: 2.660"
G1 B.C.: 0.150

110 gr. SP
Item No. 3010
C.O.L.: 2.660"
G1 B.C.: 0.256

	VELOCITY (FPS – feet per second)						
POWDER	**1850**	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**
Accurate 2460	28.7 gr.	29.6 gr.	30.4 gr.	31.3 gr.			
VIHT N-130		29.9 gr.	30.6 gr.	31.3 gr.	31.9 gr.	32.6 gr.	33.3 gr.
Alliant RL-7	29.4 gr.	30.3 gr.	31.3 gr.	32.3 gr.	33.3 gr.		
IMR 3031		33.4 gr.	34.1 gr.	34.8 gr.	35.4 gr.		
VIHT N-135		34.2 gr.	34.8 gr.	35.4 gr.			
H335	36.0 gr.	36.9 gr.	37.7 gr.				

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130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

130 gr. SP
Item No. 3020
C.O.L.: 2.660"
G1 B.C.: 0.295

	VELOCITY (FPS – feet per second)						
POWDER	**1700**	**1750**	**1800**	**1850**	**1900**	**1950**	**2000**
Alliant RL-7		24.4 gr.	25.7 gr.	27.0 gr.	28.4 gr.	29.7 gr.	31.0 gr.
VIHT N-130		26.8 gr.	27.6 gr.	28.5 gr.	29.3 gr.	30.1 gr.	31.0 gr.
Accurate 2460	27.8 gr.	29.7 gr.	30.6 gr.				
IMR 3031		30.0 gr.	30.8 gr.	31.5 gr.	32.2 gr.	32.9 gr.	
VIHT N-135		31.1 gr.	32.3 gr.	33.4 gr.	34.6 gr.		
H335	31.5 gr.	32.2 gr.	32.9 gr.	33.7 gr.			
BL-C(2)	32.8 gr.	33.7 gr.	34.6 gr.	35.5 gr.			
WIN 748	34.7 gr.	35.6 gr.	36.4 gr.	37.2 gr.			

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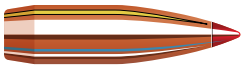
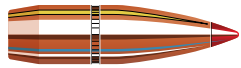
150-155 GRAIN BULLETS

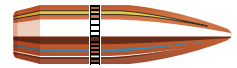
SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"



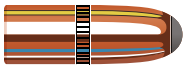
150 gr. InterBond®
Item No. 30309
C.O.L.: 2.715"
G1 B.C.: 0.415



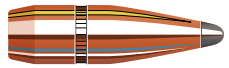
150 gr. SST®
Item No. 30302
C.O.L.: 2.715"
G1 B.C.: 0.415



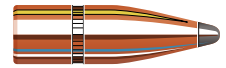
150 gr. FMJ-BT
Item No. 3037
C.O.L.: 2.715"
G1 B.C.: 0.398



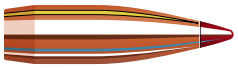
150 gr. InterLock® RN
Item No. 3035
C.O.L.: 2.715"
G1 B.C.: 0.186



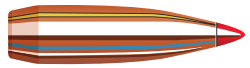
150 gr. InterLock® BTSP
Item No. 3033
C.O.L.: 2.715"
G1 B.C.: 0.349



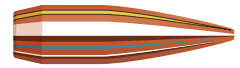
150 gr. InterLock® SP
Item No. 3031
C.O.L.: 2.715"
G1 B.C.: 0.338



***155 gr. ELD® Match**
Item No. 30313
C.O.L.: 2.715"
G1 B.C.: 0.439
G7 B.C.: 0.223



155 gr. A-MAX®
Item No. 30312
C.O.L.: 2.715"
G1 B.C.: 0.435



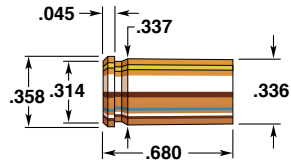
^155 gr. BTHP Match™
Item No. 3039
C.O.L.: 2.715"
G1 B.C.: 0.405

	VELOCITY (FPS – feet per second)						
POWDER	**1600**	**1650**	**1700**	**1750**	**1800**	**1850**	**1900**
Alliant RL-7		24.6 gr.	25.6 gr.	26.6 gr.	27.6 gr.	28.6 gr.	
VIHT N-130		25.3 gr.	25.9 gr.	26.6 gr.	27.2 gr.	27.9 gr.	28.5 gr.
IMR 4895	26.8 gr.	27.5 gr.	28.1 gr.				
Accurate 2460	26.4 gr.	27.6 gr.	28.7 gr.	29.9 gr.			
IMR 3031		28.3 gr.	29.0 gr.	29.6 gr.	30.2 gr.	30.9 gr.	
VIHT N-135		29.5 gr.	30.2 gr.	30.9 gr.			
H335	29.9 gr.	30.9 gr.	31.9 gr.	32.9 gr.			
BL-C(2)	30.6 gr.	31.7 gr.	32.8 gr.	33.9 gr.	35.0 gr.		
WIN 748	33.7 gr.	34.8 gr.	35.9 gr.	37.0 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics

*****NOTE:*** *Most BCs are measured at 200 yards. ELD-X® and ELD® Match bullets are measured at 800 yards with Doppler radar. While 200 yard BCs are higher, 800 yard values are better for shooting at distance. Visit Hornady.com/BC to view 200, 500 and 1,000+ yard BCs for these bullets.*

*^****NOTE:*** *This match bullet lists a BC measured at 200 yards. Visit Hornady.com/BC to view the latest Doppler radar measured BCs that will incorporate better values for longer range shooting.*



32 Automatic (7.65mm Browning)

Handgun: . . . . . Mauser M 1914
Barrel:. . . . . 3.6", 1 in 16" Twist
Case:. . . . . .Hornady/Frontier
Primer: . . . . . Winchester WSP

Bullet Diameter:. . . . . 0.311 – 0.312"
Maximum COL: . . . . . 0.984"
Max. Case Length:. . . . . 0.680"
Case Trim Length: . . . . . 0.670"

Also known as the 7.65mm Browning, this small, semi-rimmed cartridge was designed by John Browning in 1899. This modestly powered cartridge has survived for a number of reasons. First, its relatively low operating pressure allows it to be used in a variety of handgun designs, most commonly compact, straight blow-back semi-automatic pistols. Second, its light recoil lends itself to new shooters or recoil sensitive shooters. Third, the compact pistols fit those with small hands.

Although the 32 Automatic lacks the power of the 9mm Luger, 380 Automatic or even the 32 H&R Magnum, it is a minimal self-defense cartridge. What it lacks in power, it perhaps makes up in controllability and handiness. It is certainly much better than the 25 Automatic for self defense. It is most interesting in retrospect to note that the 25 Automatic was introduced three years after the 32 Automatic. Perhaps we've become so used to going from small to large to magnum that thinking about shrinking firepower is odd.

As a self-protection weapon, a handgun must be reliable. Most pistols require a minimum of 800 fps for certain functioning. Accuracy can be surprisingly good. In our testing, Bullseye, Green Dot and VIHT N-320 produced good results. Because of the small charges involved in reloading, pay careful attention to powder measure charging. Good functioning is one thing—overloads another.

60 GRAIN BULLETS

SECTIONAL DENSITY: 0.088
DIAMETER: 0.311"

60 gr. XTP®
Item No. 32010
C.O.L.: 0.925"
G1 B.C.: 0.090

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**1000**
CLAYS	1.4 gr.	1.5 gr.	1.6 gr.	1.6 gr.	
VIHT N-310	1.5 gr.	1.5 gr.	1.6 gr.	1.7 gr.	
INTERNATIONAL CLAYS	1.7 gr.	1.8 gr.	1.9 gr.	2.0 gr.	
VIHT N-320	1.6 gr.	1.8 gr.	1.9 gr.	2.1 gr.	
IMR 700 X	1.8 gr.	1.9 gr.	2.0 gr.	2.2 gr.	2.3 gr.
HP-38	1.9 gr.	2.0 gr.	2.2 gr.	2.3 gr.	
BULLSEYE	1.9 gr.	2.0 gr.	2.2 gr.	2.3 gr.	
GREEN DOT	2.1 gr.	2.2 gr.	2.3 gr.	2.4 gr.	
Accurate No. 2	1.7 gr.	2.0 gr.	2.2 gr.	2.5 gr.	
WIN 231	2.0 gr.	2.2 gr.	2.3 gr.	2.5 gr.	

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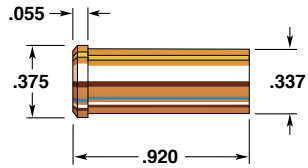

32 S & W Long

Handgun: . . . . . S & W Model 31
Barrel:. . . . . 3", 1 in 18¾" Twist
Case:. . . . . Winchester
Primer: . . . . . Winchester WSP
Bullet Diameter:. . . . . 0.312 – 0.314"
Maximum COL: . . . . . 1.280"
Max. Case Length:. . . . . .0.920"
Case Trim Length: . . . . . .0.910"

Smith & Wesson in 1896 introduced its new solid frame, "Hand- Ejector First Model," and a new cartridge to accompany it—the 32 S&W Long. Though introduced as a new cartridge, the Long was merely an extension of an existing 32 S&W round, being just .02 inches longer and 10 grains heavier than the S&W version.

Colt jumped into the market by introducing a virtually identical handgun named the 32 Colt New Police. The differences between the S&W Long and Colt New Police cartridge are minimal, existing only in bullet shape and powder charge. They can be used interchangeably, and either gun will shoot the shorter 32 Smith & Wesson.

Once considered adequate for police work, the 32 S&W Long is currently far more popular for small game hunting, and superior to the 22 rimfire for that purpose. Its excellent accuracy and light recoil make it a favorite for serious target shooters.

Early Smith & Wesson revolvers declined in popularity as other manufacturers began to make precision target autoloaders. Firearms such as the Hammerli and Walther combined match grade accuracy with a minimum of recoil. In these firearms, HBWC bullets are seated nearly flush with the case mouth, extending no more than .01 inch beyond the case. Attempts to seat HBWCs further out can result in pressures higher than expected.

85 GRAIN BULLETS

SECTIONAL DENSITY: 0.125
DIAMETER: 0.312"

85 gr. XTP®
Item No. 32050
C.O.L.: 1.160"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)				
POWDER	**550**	**600**	**650**	**700**	**750**
HP-38	1.5 gr.	1.6 gr.	1.8 gr.	2.0 gr.	2.1 gr.
RED DOT	1.5 gr.	1.7 gr.	1.8 gr.	2.0 gr.	2.1 gr.
IMR 700 X	1.6 gr.	1.7 gr.	1.9 gr.	2.0 gr.	
BULLSEYE	1.6 gr.	1.7 gr.	1.9 gr.	2.1 gr.	
GREEN DOT	1.8 gr.	2.0 gr.	2.1 gr.	2.3 gr.	
WIN 231	2.0 gr.	2.2 gr.	2.4 gr.	2.6 gr.	2.8 gr.
UNIQUE	2.2 gr.	2.3 gr.	2.5 gr.	2.6 gr.	
Accurate No. 5	2.6 gr.	2.8 gr.	2.9 gr.	3.1 gr.	3.2 gr.

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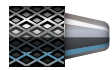
90 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.314"

90 gr. HBWC *(Discontinued)*
Item No. 10028
C.O.L.: 0.920"
G1 B.C.: 0.040



90 gr. SWC *(Discontinued)*
Item No. 10008
C.O.L.: 1.185"
G1 B.C.: 0.096

	VELOCITY (FPS – feet per second)				
POWDER	**550**	**600**	**650**	**700**	**750**
IMR 700 X	1.4 gr.	1.6 gr.	1.7 gr.	1.8 gr.	1.9 gr.
HP-38	1.4 gr.	1.6 gr.	1.7 gr.	1.9 gr.	
RED DOT	1.5 gr.	1.7 gr.	1.8 gr.	2.0 gr.	2.1 gr.
BULLSEYE	1.6 gr.	1.7 gr.	1.9 gr.	2.0 gr.	
GREEN DOT	1.7 gr.	1.9 gr.	2.1 gr.	2.2 gr.	
UNIQUE	1.7 gr.	1.9 gr.	2.1 gr.	2.3 gr.	2.5 gr.
WIN 231	1.8 gr.	2.1 gr.	2.3 gr.	2.5 gr.	

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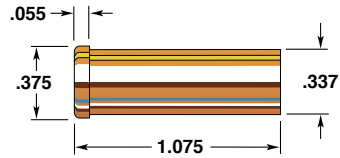


32 H & R Magnum

Handgun: . . . . . .Ruger Single Six
Barrel:. . . . . .6½", 1 in 16" Twist
Case:. . . . . .Hornady
Primer: . . . . . .CCI 500
Bullet Diameter:. . . . . .0.312"
Maximum COL: . . . . . 1.350"
Max. Case Length:. . . . . .1.075"
Case Trim Length: . . . . . .1.065"

Harrington & Richardson's 32 H&R Magnum was the result of a collaboration between that arms maker and the Federal Cartridge Company. Introduced in 1984, it was an effort to reconcile many interests and several cautions.

Many handgun shooters and hunters had wanted a high velocity, low recoiling cartridge for some time. It was thought that the 32-20 Winchester might work, but that presented a problem. With a substantial population of older revolvers for the 32-20, many of them of unknown strength, safety problems were predictable.

Thus the engineers at Harrington & Richardson and Federal decided on an entirely new cartridge, the 32 H&R Magnum. Essentially, an elongated 32 S&W Long case, it is loaded to much higher pressures and velocities. One of the advantages of chamberings for this new cartridge in H&R's Model 504, 532, and 586 revolvers and revolvers from Dan Wesson, Charter Arms, and Ruger is that the 32 H&R Magnum pistols can shoot both 32 S&W and 32 S&W Long cartridges as well.

The 32 H&R Magnum is useful for hunting small game, informal target shooting and home protection. Muzzle energy rivals 38 Special loads, making it a cartridge useable for self defense. Recoil sensitive shooters will certainly appreciate this cartridge.

85 GRAIN BULLETS

SECTIONAL DENSITY: 0.125
DIAMETER: 0.312"

85 gr. XTP®
Item No. 32050
C.O.L.: 1.325"
G1 B.C.: 0.145

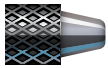
	VELOCITY (FPS – feet per second)					
POWDER	**800**	**900**	**1000**	**1100**	**1150**	**1200**
TITEGROUP	2.1 gr.	2.5 gr.	2.9 gr.	3.3 gr.		
IMR 700 X	2.1 gr.	2.6 gr.	3.0 gr.	3.5 gr.	3.7 gr.	
UNIQUE	2.0 gr.	2.6 gr.	3.2 gr.	3.7 gr.	4.0 gr.	
WIN 231	2.4 gr.	2.9 gr.	3.4 gr.	3.8 gr.		
HP-38	2.1 gr.	2.7 gr.	3.3 gr.	3.9 gr.	4.2 gr.	
WIN AutoComp	2.8 gr.	3.3 gr.	3.7 gr.	4.1 gr.	4.3 gr.	
POWER PISTOL	2.7 gr.	3.3 gr.	3.9 gr.	4.4 gr.	4.7 gr.	5.0 gr.
True Blue	3.3 gr.	3.9 gr.	4.5 gr.	5.1 gr.	5.4 gr.	
HS-6	3.4 gr.	4.0 gr.	4.6 gr.	5.2 gr.	5.4 gr.	
BLUE DOT	3.6 gr.	4.2 gr.	4.8 gr.	5.3 gr.	5.6 gr.	5.9 gr.
Accurate No. 7	4.2 gr.	4.8 gr.	5.5 gr.	6.1 gr.	6.4 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.314"

90 gr. HBWC *(Discontinued)*
Item No. 10028
C.O.L.: 1.100"
G1 B.C.: 0.040



90 gr. SWC *(Discontinued)*
Item No. 10008
C.O.L.: 1.350"
G1 B.C.: 0.096

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**1000**
BULLSEYE	1.7 gr.	2.0 gr.	2.3 gr.	2.6 gr.	2.9 gr.
TITEGROUP	2.0 gr.	2.2 gr.	2.4 gr.	2.7 gr.	2.9 gr.
HP-38	2.4 gr.	2.6 gr.	2.8 gr.	3.0 gr.	3.2 gr.
WIN 231	2.4 gr.	2.6 gr.	2.8 gr.	3.0 gr.	3.2 gr.
Accurate No. 2	2.4 gr.	2.6 gr.	2.8 gr.	3.0 gr.	3.2 gr.
UNIQUE	2.5 gr.	2.6 gr.	2.8 gr.	3.0 gr.	3.2 gr.
ZIP	2.2 gr.	2.5 gr.	2.7 gr.	3.0 gr.	3.3 gr.

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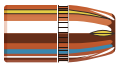
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.147
DIAMETER: 0.312"



100 gr. XTP®
Item No. 32070
C.O.L.: 1.315"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**800**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	2.3 gr.	2.7 gr.	2.9 gr.	3.1 gr.		
UNIQUE	2.4 gr.	2.9 gr.	3.1 gr.	3.4 gr.	3.6 gr.	
WIN 231	2.6 gr.	3.1 gr.	3.3 gr.			
HP-38	2.7 gr.	3.1 gr.	3.3 gr.			
WIN AutoComp	2.9 gr.	3.4 gr.	3.6 gr.	3.8 gr.		
POWER PISTOL	3.1 gr.	3.5 gr.	3.7 gr.	4.0 gr.	4.2 gr.	
IMR SR-4756	3.4 gr.	3.7 gr.	3.9 gr.	4.0 gr.	4.2 gr.	
True Blue	3.5 gr.	4.1 gr.	4.4 gr.	4.7 gr.		
HS-6	3.8 gr.	4.2 gr.	4.4 gr.	4.6 gr.	4.8 gr.	
BLUE DOT	4.0 gr.	4.5 gr.	4.7 gr.	4.9 gr.	5.2 gr.	5.4 gr.
Accurate No. 7	4.1 gr.	4.7 gr.	5.0 gr.	5.4 gr.		

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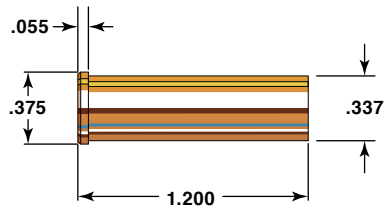

327 Federal Magnum

Handgun: . . . . . Ruger GP 100
Barrel:. . . . . 4.2", 1 in 16" Twist
Case:. . . . . Starline
Primer: . . . . . Federal 205
Bullet Diameter:. . . . . .0.312"
Maximum COL: . . . . . .1.475"
Max. Case Length:. . . . . 1.200"
Case Trim Length: . . . . . .1.190"

Introduced in 2007, the 327 Federal Magnum was marketed primarily as a self-defense round. Other 32 (technically .312) caliber rimmed cartridges have come before it, including the 32-20 Winchester, 32 S&W, 32 S&W Long and most recently the 32 H&R Magnum.

Round capacity is a selling point of the 327 Federal Magnum. Handguns that would normally hold 5 rounds (i.e. Ruger SP-101) of 38 Special or 357 Magnum are capable of holding 6 rounds of 327 Federal Magnum. In traditional 6 shot 38/357 cylinders, seven rounds of 327 Federal Magnum are held. Eight shot models are available as well.

Pressure levels for the 327 Federal far exceed the other 32 caliber cartridges, in fact, they also exceed that of the 357 and 44 magnums. Recoil and muzzle blast are significant in spite of the relatively small cartridge. The high pressure levels, coupled with relatively light bullets result in the 327 Federal Magnum having muzzle velocities in excess of 1,500 fps with an 85gr XTP® and 1,450 fps with a 100 grain XTP out of our 4.2" Ruger GP-100. Those velocities translate into more than 400 foot pounds of energy at the muzzle. It should be noted that less than maximum velocities may be preferred for bullet performance. Shooting maximum velocity loads at close targets may cause bullet failures.

Much like 38 Special ammunition is used in 357 Magnum revolvers, the shorter 32 S&W Long and 32 H&R Magnum cartridges are compatible in a 327 Federal Magnum handgun. This allows lower pressure and even lower recoiling ammunition to be used when needed or preferred.

85 GRAIN BULLETS

SECTIONAL DENSITY: 0.125
DIAMETER: 0.312"

85 gr. XTP®
Item No. 32050
C.O.L.: 1.450"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1350**	**1400**	**1450**	**1500**
TITEGROUP	5.1 gr.	5.4 gr.	5.6 gr.		
WIN 231	5.7 gr.	6.1 gr.			
WIN AutoComp	6.1 gr.	6.4 gr.	6.7 gr.	7.0 gr.	
SILHOUETTE	6.0 gr.	6.5 gr.	7.1 gr.	7.6 gr.	
HS-6	7.3 gr.	7.6 gr.	7.9 gr.	8.3 gr.	
Accurate No. 5	7.4 gr.	7.7 gr.	8.0 gr.	8.3 gr.	
True Blue	7.5 gr.	7.8 gr.	8.1 gr.	8.5 gr.	
Accurate No. 9		12.7 gr.	13.0 gr.	13.4 gr.	13.7 gr.

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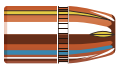
100 GRAIN BULLETS

SECTIONAL DENSITY: 0.147
DIAMETER: 0.312"



100 gr. XTP®
Item No. 32070
C.O.L.: 1.450"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1250**	**1300**	**1350**	**1400**	**1450**
TITEGROUP	5.0 gr.	5.3 gr.				
WIN 231	5.3 gr.	5.8 gr.				
WIN AutoComp	5.5 gr.	5.8 gr.	6.1 gr.			
HS-6	6.6 gr.	6.9 gr.	7.3 gr.	7.6 gr.		
Accurate No. 5	6.7 gr.	7.1 gr.	7.5 gr.	7.9 gr.		
True Blue	7.0 gr.	7.4 gr.	7.7 gr.	8.1 gr.		
Accurate No. 9		11.3 gr.	11.6 gr.	12.0 gr.	12.3 gr.	12.7 gr.

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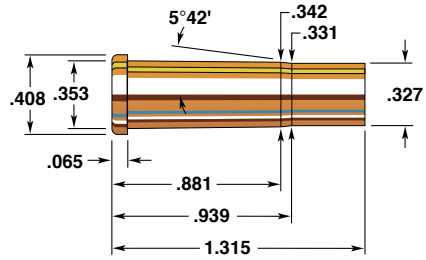


32-20 Winchester (T/C)

Handgun:	T/C Contender	**Bullet Diameter:**	.312"
Barrel:	10", 1 in 16" Twist	**Maximum COL:**	1.592"
Case:	Winchester	**Max. Case Length:**	1.315"
Primer:	Federal 100	**Case Trim Length:**	1.305"

Loads presented here are for use only in Thompson/Center pistols and modern rifles in good condition. They are not to be used in any older firearms!

Introduced by Winchester in 1882, this cartridge has had a resurgence in popularity a century later due to the introduction of several new firearms. One of these is the Thompson/Center Contender, primarily used in NRA Hunter's Pistol and IHMSA Field Pistol Silhouette competition, but also used by some small game hunters.

The Thompson/Center Contender pistol has a barrel with a .308" groove diameter. Our test shooting with 32 caliber (.312" diameter) bullets presented no problems for us. Nevertheless, we encourage in your own load development to start with low or the lowest loads and work upwards. Care must be used in handling 32-20 cases as the brass is thin and necks are easily crumpled.

The Hornady 32 caliber 85 grain Hollow Point, Extreme Terminal Performance, is designed for ideal impact velocities of 750-1500 fps. Higher velocities might produce faster than desired expansion. If you are hunting small, edible game with this cartridge/bullet combination—and if you might like to have something left to eat—lower muzzle velocities would be in order.

85 GRAIN BULLETS

SECTIONAL DENSITY: 0.125
DIAMETER: 0.312"

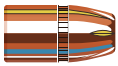
85 gr. XTP®
Item No. 32050
C.O.L.: 1.550"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)						
POWDER	**1450**	**1500**	**1550**	**1600**	**1650**	**1700**	**1750**
BLUE DOT	7.4 gr.	7.6 gr.	7.9 gr.	8.2 gr.	8.4 gr.	8.7 gr.	
Alliant 2400	9.0 gr.	9.5 gr.	10.0 gr.	10.4 gr.	10.9 gr.	11.4 gr.	
WIN 296	11.7 gr.	12.2 gr.	12.8 gr.	13.4 gr.	13.9 gr.	14.5 gr.	15.0 gr.
IMR 4227	11.7 gr.	12.4 gr.	13.0 gr.	13.7 gr.	14.4 gr.	15.0 gr.	15.7 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

100 GRAIN BULLETS

SECTIONAL DENSITY: 0.147
DIAMETER: 0.312"



100 gr. XTP®
Item No. 32070
C.O.L.: 1.550"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**
Alliant 2400	9.6 gr.	9.9 gr.	10.2 gr.		
Accurate No. 9	9.3 gr.	9.8 gr.	10.3 gr.	10.9 gr.	11.5 gr.
H110		11.0 gr.	11.8 gr.	12.5 gr.	13.1 gr.
IMR 4227	12.1 gr.	12.8 gr.	13.0 gr.	13.5 gr.	14.4 gr.

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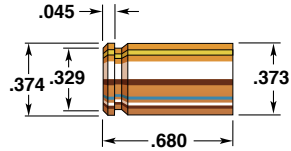

380 Automatic (9mm Kurz)

Handgun:	Beretta 84 F	**Bullet Diameter:**	0.355"
Barrel:	3.88", 1 in 10" Twist	**Maximum COL:**	0.980"
Case:	Hornady/Frontier	**Max. Case Length:**	0.680"
Primer:	Winchester WSP	**Case Trim Length:**	0.675"

Kurz is the German word for short and a logical part of the four different names by which this one cartridge is known. The 9 x 17mm and 380 Automatic round out more of the list. The 380 Automatic is a fine 9mm cartridge that has been in military and police use in many countries. It's a design of the legendary John Browning and was introduced in Belgium in 1912 as the 9mm Browning Short, yet another moniker.

The 380 Automatic is regarded in the U.S. as an adequate defense and back up cartridge. Much of its popularity derives from the many different firearms made for it, both European and American.

The 380 has sufficient power for hunting small game such as rabbits, but the firearm for which it is chambered are generally not accurate enough for such use. Most of these firearms are constructed for self defense, where a high degree of accuracy is not necessary. However some of the better models with adjustable sights are suitable for informal target shooting and hunting small game at limited distances.

All powders listed performed adequately, with WIN 231 giving the best overall results.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.102
DIAMETER: 0.355"

90 gr. XTP®
Item No. 35500
C.O.L.: 0.965"
G1 B.C.: 0.099

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	2.2 gr.	2.4 gr.	2.6 gr.	2.9 gr.	3.1 gr.	3.4 gr.
VIHT N-320	2.7 gr.	2.9 gr.	3.0 gr.			
IMR 700 X	2.8 gr.	3.0 gr.	3.1 gr.			
HP-38	2.9 gr.	3.1 gr.	3.2 gr.	3.4 gr.	3.5 gr.	
BULLSEYE	3.0 gr.	3.1 gr.	3.3 gr.	3.4 gr.		
WIN 231	3.2 gr.	3.4 gr.	3.6 gr.			
VIHT N-330	3.3 gr.	3.5 gr.	3.6 gr.	3.8 gr.		
UNIVERSAL	3.4 gr.	3.6 gr.	3.7 gr.	3.8 gr.		
WIN AutoComp	3.9 gr.	4.0 gr.	4.2 gr.			
POWER PISTOL	4.0 gr.	4.2 gr.	4.5 gr.	4.7 gr.		

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100 GRAIN BULLETS

SECTIONAL DENSITY: 0.113
DIAMETER: 0.355"

100 gr. FMJ-RN
Item No. 35527B
C.O.L.: 0.980"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**700**	**750**	**800**	**850**	**900**	**950**
TITEGROUP	2.3 gr.	2.4 gr.	2.6 gr.	2.8 gr.	3.0 gr.	
BULLSEYE	2.3 gr.	2.5 gr.	2.7 gr.	2.9 gr.	3.1 gr.	
IMR 700 X	2.4 gr.	2.6 gr.	2.7 gr.	2.9 gr.		
Accurate No. 2	2.5 gr.	2.7 gr.	2.8 gr.	3.0 gr.	3.2 gr.	
HP-38	2.5 gr.	2.7 gr.	2.9 gr.	3.1 gr.	3.3 gr.	
WIN 231	2.6 gr.	2.9 gr.	3.1 gr.	3.3 gr.	3.5 gr.	
UNIVERSAL	2.8 gr.	3.0 gr.	3.1 gr.	3.3 gr.	3.4 gr.	
VIHT N-330	2.9 gr.	3.1 gr.	3.2 gr.	3.4 gr.		
WIN AutoComp	3.3 gr.	3.4 gr.	3.6 gr.	3.8 gr.	4.0 gr.	
POWER PISTOL	3.0 gr.	3.3 gr.	3.6 gr.	3.9 gr.	4.1 gr.	4.4 gr.

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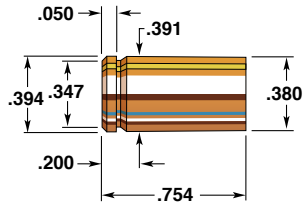

9mm Luger (9 X 19mm, 9mm Parabellum)

Handgun:	S & W Model 39	**Bullet Diameter:**	0.355"
Barrel:	4", 1 in 10" Twist	**Maximum COL:**	1.169"
Case:	Hornady/Frontier	**Max. Case Length:**	0.754"
Primer:	Winchester WSP	**Case Trim Length:**	0.749"

Georg Luger's 9mm round is the most widely chambered military pistol cartridge in the world. It was introduced in 1902 in his Luger Pistole-08 and adopted by the German Armed Forces just six years later. It has become extremely popular in the U.S. in recent years and is used by a large number of law enforcement agencies.

The 9mm Luger is economical and relatively easy to reload (though there can be troublesome case variations among manufacturers.) With the ending of World War II, many military surplus semi-autos were sold in the U.S., adding to its popularity. Today every major U.S. manufacturer offers a firearm in this caliber. Foreign producers offer fine firearms in the 9mm Luger as well. The large number of firearms in 9mm prompted the need for commercial ammunition and reloading supplies.

Powders that worked exceptionally well in our test weapon were Accurate #7, and Alliant Power Pistol. Power Pistol produced excellent velocity and uniformity with all bullet weights and is our choice when loading for the 9mm Luger. Velocity differences between 4" and 5" barrels were negligible. Use little or no crimp when reloading the 9mm since it headspaces on the mouth of the case.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.102
DIAMETER: 0.355"

90 gr. XTP®
Item No. 35500
C.O.L.: 1.070"
G1 B.C.: 0.099

	VELOCITY (FPS – feet per second)					
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
IMR 700 X	4.2 gr.	4.4 gr.	4.6 gr.			
BULLSEYE	4.4 gr.	4.7 gr.	4.9 gr.	5.2 gr.	5.5 gr.	
UNIVERSAL	4.5 gr.	4.8 gr.	5.0 gr.	5.3 gr.		
VIHT N-330	4.6 gr.	4.9 gr.	5.2 gr.	5.5 gr.	5.8 gr.	
VIHT N-340	4.7 gr.	5.0 gr.	5.3 gr.	5.5 gr.	5.8 gr.	6.1 gr.
WIN 231	4.7 gr.	5.0 gr.	5.3 gr.	5.6 gr.		
Accurate No. 2	5.0 gr.	5.3 gr.	5.5 gr.	5.8 gr.		
POWER PISTOL	5.6 gr.	5.9 gr.	6.2 gr.	6.5 gr.	6.8 gr.	7.2 gr.
WIN AutoComp	5.7 gr.	6.0 gr.	6.2 gr.	6.4 gr.	6.6 gr.	6.8 gr.
Accurate No. 5	6.5 gr.	6.7 gr.	7.0 gr.			
HS-6	6.5 gr.	6.9 gr.	7.2 gr.			

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100 GRAIN BULLETS

SECTIONAL DENSITY: 0.113
DIAMETER: 0.355"

100 gr. FMJ-RN
Item No. 35527B
C.O.L.: 1.085"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**
TITEGROUP	3.8 gr.	4.1 gr.	4.3 gr.	4.5 gr.		
BULLSEYE	4.2 gr.	4.4 gr.	4.7 gr.	5.0 gr.	5.2 gr.	
UNIVERSAL	4.4 gr.	4.6 gr.	4.8 gr.	5.1 gr.		
WIN 231	4.5 gr.	4.8 gr.	5.0 gr.	5.3 gr.		
VIHT N-340	4.6 gr.	4.8 gr.	5.1 gr.	5.4 gr.	5.6 gr.	
UNIQUE	4.2 gr.	4.7 gr.	5.2 gr.	5.6 gr.		
CFE Pistol	4.9 gr.	5.1 gr.	5.5 gr.	5.7 gr.	6.0 gr.	
BE-86	4.9 gr.	5.2 gr.	5.5 gr.	5.7 gr.	6.0 gr.	6.3 gr.
WIN AutoComp	5.1 gr.	5.4 gr.	5.7 gr.	6.0 gr.	6.2 gr.	
POWER PISTOL	5.3 gr.	5.7 gr.	6.0 gr.	6.4 gr.	6.7 gr.	7.0 gr.
Accurate No. 5	6.1 gr.	6.4 gr.	6.6 gr.	6.8 gr.		
HS-6	6.2 gr.	6.5 gr.	6.8 gr.	7.0 gr.		

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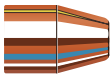
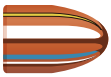
115 GRAIN BULLETS

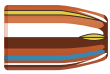
SECTIONAL DENSITY: 0.130
DIAMETER: 0.355"



115 gr. HAP®
Item No. 355281
C.O.L.: 1.075"
G1 B.C.: 0.129



115 gr. FMJ-RN
Item No. 35557
C.O.L.: 1.100"
G1 B.C.: 0.140



115 gr. XTP®
Item No. 35540
C.O.L.: 1.075"
G1 B.C.: 0.129

	VELOCITY (FPS – feet per second)					
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**	**1250**
TITEGROUP	3.7 gr.	3.9 gr.	4.1 gr.			
BULLSEYE	3.9 gr.	4.2 gr.	4.4 gr.	4.6 gr.		
UNIVERSAL	4.0 gr.	4.2 gr.	4.5 gr.			
WIN 231	4.1 gr.	4.4 gr.	4.7 gr.			
UNIQUE	4.3 gr.	4.7 gr.	5.0 gr.	5.4 gr.		
Accurate No. 2	4.3 gr.	4.7 gr.	5.1 gr.			
BE-86	4.5 gr.	4.8 gr.	5.2 gr.	5.5 gr.		
WIN AutoComp	4.7 gr.	5.0 gr.	5.2 gr.	5.5 gr.		
CFE Pistol	4.7 gr.	4.9 gr.	5.3 gr.	5.5 gr.	5.8 gr.	
VIHT N-350	4.9 gr.	5.2 gr.	5.5 gr.	5.7 gr.		
POWER PISTOL	4.8 gr.	5.2 gr.	5.6 gr.	6.0 gr.	6.4 gr.	6.7 gr.
VIHT 3N37	5.0 gr.	5.3 gr.	5.6 gr.	5.9 gr.		
IMR SR-4756	5.2 gr.	5.5 gr.	5.8 gr.	6.1 gr.	6.4 gr.	
SW Auto Pistol	5.4 gr.	5.7 gr.	6.0 gr.	6.3 gr.		
HS-6	5.7 gr.	5.9 gr.	6.2 gr.	6.4 gr.		
Accurate No. 7	7.0 gr.	7.4 gr.	7.8 gr.	8.2 gr.	8.6 gr.	

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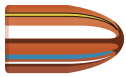
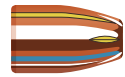
124 GRAIN BULLETS

SECTIONAL DENSITY: 0.141
DIAMETER: 0.355"



124 gr. FMJ-RN
(Discontinued)
Item No. 355771
C.O.L.: 1.150"
G1 B.C.: 0.145



124 gr. XTP®
Item No. 35571
C.O.L.: 1.060"
G1 B.C.: 0.165

124 gr. FMJ-FP *(Discontinued)*
Item No. 35567B
C.O.L.: 1.050"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)					
POWDER	**900**	**950**	**1000**	**1050**	**1100**	**1150**
UNIQUE	4.0 gr.	4.2 gr.	4.5 gr.	4.7 gr.	5.0 gr.	
HERCO	4.0 gr.	4.3 gr.	4.6 gr.	4.8 gr.		
BE-86	3.9 gr.	4.3 gr.	4.5 gr.	4.9 gr.	5.2 gr.	
WIN AutoComp	4.2 gr.	4.4 gr.	4.7 gr.	4.9 gr.		
CFE Pistol	4.2 gr.	4.4 gr.	4.6 gr.	4.9 gr.	5.1 gr.	5.3 gr.
VIHT N-350	4.4 gr.	4.6 gr.	4.9 gr.	5.2 gr.		
POWER PISTOL	4.3 gr.	4.7 gr.	5.0 gr.	5.3 gr.	5.7 gr.	
IMR SR-4756	4.1 gr.	4.6 gr.	5.0 gr.	5.5 gr.		
SW Auto Pistol	4.7 gr.	5.1 gr.	5.5 gr.	5.9 gr.		
HS-6	5.1 gr.	5.4 gr.	5.6 gr.	5.9 gr.		
BLUE DOT	4.8 gr.	5.2 gr.	5.7 gr.	6.1 gr.	6.6 gr.	
Accurate No. 7	6.2 gr.	6.6 gr.	6.9 gr.	7.2 gr.	7.6 gr.	7.9 gr.

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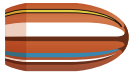
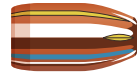
147 GRAIN BULLETS

SECTIONAL DENSITY: 0.167
DIAMETER: 0.355"



147 gr. FMJ-RN-BT
Item No. 35597B
C.O.L.: 1.165"
G1 B.C.: 0.212



147 gr. XTP®
Item No. 35580
C.O.L.: 1.100"
G1 B.C.: 0.212

	VELOCITY (FPS – feet per second)					
POWDER	**750**	**800**	**850**	**900**	**950**	**1000**
BE-86	3.2 gr.	3.5 gr.	3.8 gr.	4.1 gr.	4.4 gr.	4.7 gr.
CFE Pistol	3.3 gr.	3.6 gr.	3.8 gr.	4.1 gr.	4.3 gr.	
WIN AutoComp	3.5 gr.	3.7 gr.	4.0 gr.	4.1 gr.		
VIHT N-350	3.6 gr.	3.8 gr.	4.1 gr.	4.3 gr.	4.6 gr.	
IMR SR-4756	3.4 gr.	3.8 gr.	4.1 gr.	4.5 gr.	4.9 gr.	
POWER PISTOL	3.5 gr.	3.8 gr.	4.2 gr.	4.5 gr.	4.8 gr.	5.1 gr.
HS-6	4.1 gr.	4.4 gr.	4.7 gr.	5.0 gr.	5.3 gr.	
BLUE DOT	4.2 gr.	4.5 gr.	4.8 gr.	5.1 gr.	5.4 gr.	5.7 gr.
Accurate No. 7	5.0 gr.	5.3 gr.	5.7 gr.	6.0 gr.	6.3 gr.	6.7 gr.

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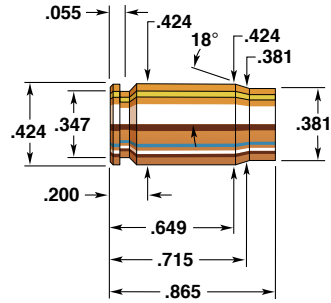

357 Sig

Handgun:	SIG P229	**Bullet Diameter:**	0.355"
Barrel:	3.84", 1 in 16" Twist	**Maximum COL:**	1.140"
Case:	Hornady	**Max. Case Length:**	0.865"
Primer:	Winchester WSP	**Case Trim Length:**	0.860"

Promise and potential is what arms and ammunition makers consider when deciding what to manufacture. Does a cartridge or firearm serve a purpose that will attract buyers? And will enough buyers be attracted to create satisfactory market demand?

In the case of the 357 Sig its promise is clear. Based on the 40 S&W case necked to 9mm caliber and given a sharp shoulder, the 357 Sig was designed to deliver 357 Magnum ballistics from semi-auto sidearms. The compact 357 Sig dimensions permit its employment in smaller-framed semi-autos more appropriate to shooters with smaller hands. And its use of lighter bullets at higher velocities than larger bore semi-autos make it easier to handle and shoot.

The combination of relatively large powder capacity in a short barreled firearm creates a tradeoff, however: somewhat reduced recoil vs. substantial muzzle blast. As engineers have long known, free lunches are hard to come by.

Factory ammunition availability is a plus. Hornady produces two factory loads for the 357 Sig. Important as well is the enormous number of jacketed 9mm caliber Hornady Bullets that can be loaded in the 357 Sig. Will this cartridge realize its promise? We believe the cartridge has a lot going for it, but time will tell.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.102
DIAMETER: 0.355"

90 gr. XTP®
Item No. 35500
C.O.L.: 1.140"
G1 B.C.: 0.099

	VELOCITY (FPS – feet per second)					
POWDER	**1250**	**1300**	**1350**	**1400**	**1450**	**1500**
BULLSEYE	5.8 gr.	6.1 gr.	6.4 gr.	6.7 gr.	7.0 gr.	7.3 gr.
Accurate No. 2	6.2 gr.	6.6 gr.	6.9 gr.	7.3 gr.		
HP-38	6.2 gr.	6.6 gr.	7.0 gr.	7.3 gr.	7.7 gr.	
UNIQUE	7.3 gr.	7.8 gr.	8.3 gr.	8.8 gr.		
IMR SR-4756	8.3 gr.	8.6 gr.	8.9 gr.	9.2 gr.		

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100 GRAIN BULLETS

SECTIONAL DENSITY: 0.113
DIAMETER: 0.355"

100 gr. FMJ-RN
Item No. 35527B
C.O.L.: 1.140"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
BULLSEYE	5.1 gr.	5.5 gr.	5.8 gr.	6.2 gr.	6.6 gr.	7.0 gr.
Accurate No. 2	5.6 gr.	6.0 gr.	6.4 gr.	6.7 gr.	7.1 gr.	
HP-38	6.1 gr.	6.4 gr.	6.7 gr.	7.0 gr.	7.2 gr.	7.5 gr.
UNIVERSAL	6.3 gr.	6.6 gr.	6.8 gr.	7.0 gr.	7.3 gr.	7.5 gr.
UNIQUE	6.4 gr.	7.0 gr.	7.5 gr.	8.1 gr.	8.7 gr.	9.2 gr.
IMR SR-4756	7.5 gr.	8.2 gr.	8.8 gr.			

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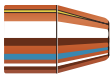
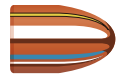
115 GRAIN BULLETS

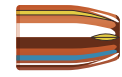
SECTIONAL DENSITY: 0.130
DIAMETER: 0.355"



115 gr. HAP®
Item No. 355281
C.O.L.: 1.140"
G1 B.C.: 0.129



115 gr. FMJ-RN
Item No. 35557
C.O.L.: 1.140"
G1 B.C.: 0.140



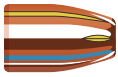
115 gr. XTP®
Item No. 35540
C.O.L.: 1.140"
G1 B.C.: 0.129

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1150**	**1200**	**1250**	**1300**	**1350**
UNIVERSAL	5.6 gr.	6.0 gr.	6.3 gr.	6.7 gr.	7.0 gr.	
UNIQUE	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.	7.9 gr.	8.3 gr.
IMR SR-4756	6.9 gr.	7.2 gr.	7.5 gr.	7.8 gr.	8.1 gr.	8.4 gr.
VIHT N-350	7.2 gr.	7.5 gr.	7.7 gr.	8.0 gr.	8.3 gr.	8.6 gr.
POWER PISTOL	6.9 gr.	7.4 gr.	7.8 gr.	8.2 gr.	8.7 gr.	9.1 gr.
Accurate No. 5	7.9 gr.	8.2 gr.	8.5 gr.	8.9 gr.	9.2 gr.	
HS-6	8.0 gr.	8.3 gr.	8.7 gr.	9.1 gr.	9.4 gr.	9.8 gr.
BLUE DOT	8.1 gr.	8.6 gr.	9.2 gr.	9.7 gr.	10.3 gr.	10.8 gr.
Accurate No. 7	9.4 gr.	9.9 gr.	10.5 gr.	11.0 gr.	11.6 gr.	12.1 gr.

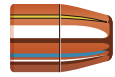
Create custom ballistic tables using our online calculators at hornady.com/ballistics

124 GRAIN BULLETS

SECTIONAL DENSITY: 0.141
DIAMETER: 0.355"



124 gr. XTP®
Item No. 35571
C.O.L.: 1.140"
G1 B.C.: 0.165



124 gr. FMJ-FP *(Discontinued)*
Item No. 35567B
C.O.L.: 1.140"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1150**	**1200**	**1250**	**1300**	**1350**
UNIVERSAL	5.7 gr.	6.1 gr.	6.5 gr.	6.9 gr.		
UNIQUE	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.	7.9 gr.	
IMR SR-4756	6.6 gr.	7.0 gr.	7.3 gr.	7.7 gr.	8.1 gr.	
VIHT N-350	6.9 gr.	7.3 gr.	7.6 gr.	8.0 gr.		
POWER PISTOL	6.9 gr.	7.3 gr.	7.8 gr.	8.2 gr.	8.7 gr.	
Accurate No. 5	7.4 gr.	7.9 gr.	8.4 gr.	8.9 gr.		
HS-6	7.8 gr.	8.2 gr.	8.6 gr.	9.0 gr.	9.5 gr.	
BLUE DOT	8.3 gr.	8.8 gr.	9.2 gr.	9.7 gr.	10.1 gr.	10.5 gr.
Accurate No. 7	9.8 gr.	10.3 gr.	10.7 gr.	11.1 gr.	11.6 gr.	

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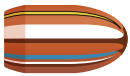
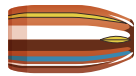
147 GRAIN BULLETS

SECTIONAL DENSITY: 0.167
DIAMETER: 0.355"



147 gr. FMJ-RN-BT
Item No. 35597B
C.O.L.: 1.140"
G1 B.C.: 0.212



147 gr. XTP®
Item No. 35580
C.O.L.: 1.140"
G1 B.C.: 0.212

	VELOCITY (FPS – feet per second)					
POWDER	**900**	**950**	**1000**	**1050**	**1100**	**1150**
POWER PISTOL	5.2 gr.	5.7 gr.	6.1 gr.	6.5 gr.	6.9 gr.	7.3 gr.
BLUE DOT	5.6 gr.	6.1 gr.	6.6 gr.	7.2 gr.	7.7 gr.	8.2 gr.
HS-6	6.3 gr.	6.6 gr.	7.0 gr.	7.4 gr.	7.8 gr.	
Accurate No. 7	7.6 gr.	8.0 gr.	8.5 gr.	8.9 gr.	9.4 gr.	9.8 gr.

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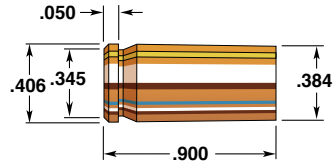


38 Automatic

Handgun:	Colt Model 1902	**Bullet Diameter:**	0.355 – 0.357"
Barrel:	.6", 1 in 16" Twist	**Maximum COL:**	1.280"
Case:	Winchester	**Max. Case Length:**	0.900"
Primer:	Winchester WSP	**Case Trim Length:**	0.895"

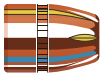
The 38 Automatic Colt Pistol is yet another example of the fruitful collaboration between Colt and John Browning. Developed as a potential military service pistol, the 38 Automatic first appeared in 1900 in a model which could fire eight rounds on full automatic. Though faster and more powerful than the 38 Long Colt which served as the Army's official sidearm from 1892 to 1911, the 38 Automatic eventually lost out in the design competition when the military opted for the 45 caliber as the minimum for its service handguns. True, the 38 Automatic cartridge did not get official certification, but the Colt and Browning team won this prize with a bigger bore entry, the 45 Automatic.

The 38 Automatic became obsolete in 1929 when Colt introduced the more powerful 38 Super Automatic, an improved version of the 38 Automatic loaded to much higher pressures. The cartridges are identical in appearance, but the Super version is dangerous if fired in handguns designed for the original cartridge.

Factory ammunition for the 38 Automatic was loaded with the 130 grain bullets to a muzzle velocity of 1040 fps. With the lightweight Hornady 110 grain Hollow Point, it is possible to speed things up to a full 1250 fps. In terms of power, the 38 Automatic is about the equivalent of the 9mm Luger cartridge.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.123
DIAMETER: 0.357"



110 gr. XTP®
Item No. 35700
C.O.L.: 1.100"
G1 B.C.: 0.131

	VELOCITY (FPS – feet per second)			
POWDER	**1100**	**1150**	**1200**	**1250**
IMR 700 X		4.4 gr.	4.7 gr.	5.0 gr.
BULLSEYE	4.5 gr.	4.8 gr.	5.1 gr.	5.4 gr.
UNIQUE	5.4 gr.	5.8 gr.	6.1 gr.	6.4 gr.

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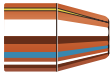
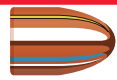
115 GRAIN BULLETS

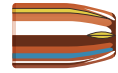
SECTIONAL DENSITY: 0.130
DIAMETER: 0.355"



115 gr. HAP®
Item No. 355281
C.O.L.: 1.115"
G1 B.C.: 0.129



115 gr. FMJ-RN
Item No. 35557
C.O.L.: 1.115"
G1 B.C.: 0.140



115 gr. XTP®
Item No. 35540
C.O.L.: 1.115"
G1 B.C.: 0.129

	VELOCITY (FPS – feet per second)			
POWDER	**1000**	**1050**	**1100**	**1150**
RED DOT	4.0 gr.	4.3 gr.	4.6 gr.	4.9 gr.
BULLSEYE	4.2 gr.	4.4 gr.	4.7 gr.	5.0 gr.
UNIQUE	5.1 gr.	5.4 gr.	5.7 gr.	6.0 gr.

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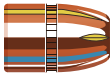
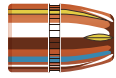
125 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.357"



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.060"
G1 B.C.: 0.148



125 gr. XTP®
Item No. 35710
C.O.L.: 1.060"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)		
POWDER	**1000**	**1050**	**1100**
BULLSEYE	4.1 gr.	4.4 gr.	4.7 gr.
RED DOT	4.2 gr.	4.5 gr.	4.7 gr.
UNIQUE	5.2 gr.	5.4 gr.	5.7 gr.
HERCO	5.6 gr.	5.9 gr.	6.2 gr.

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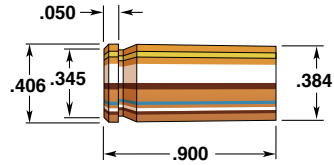

38 Super Automatic

Handgun:	Colt 38 Super	**Bullet Diameter:**	0.355"
Barrel:	.5", 1 in 16" Twist	**Maximum COL:**	1.280"
Case:	Remington	**Max. Case Length:**	0.900"
Primer:	Winchester WSP	**Case Trim Length:**	0.895"

Developed in the late 1920's and first chambered in Colt's Model 1911, the 38 Super is dimensionally the identical to 38 Automatic cartridge but loaded to higher pressure. Since its formal introduction in 1929 the 38 Super has been chambered by many manufacturers.

In 2001 Hornady introduced the Hornady Action Pistol or HAP line of bullets with some designed specifically for the IPSC shooter using the 38 Super. The 38 caliber HAP bullets have essentially the same profile as XTP® bullets of similar weight, but do not have serrated jackets and other features that promote expansion.

The 38 Super falls directly between the 38 Special and the 357 Magnum in terms of power. XTP® bullets are the best choice for hunting small game and varmints, but the 38 Super is primarily a competitive cartridge that is used to knock down metal plates, a job which all bullets listed will do efficiently. Power Pistol gave excellent results in terms of accuracy and pressure/velocity consistency.

90 GRAIN BULLETS

SECTIONAL DENSITY: 0.102
DIAMETER: 0.355"

90 gr. XTP®
Item No. 35500
C.O.L.: 1.220"
G1 B.C.: 0.099

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1250**	**1300**	**1350**	**1400**	**1450**
BULLSEYE	5.1 gr.	5.4 gr.	5.7 gr.	6.0 gr.	6.3 gr.	6.6 gr.
HP-38	5.0 gr.	5.4 gr.	5.7 gr.	6.1 gr.	6.4 gr.	6.8 gr.
VIHT N-340	5.5 gr.	5.9 gr.	6.2 gr.	6.6 gr.	6.9 gr.	

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100 GRAIN BULLETS

SECTIONAL DENSITY: 0.113
DIAMETER: 0.355"

100 gr. FMJ-RN
Item No. 35527B
C.O.L.: 1.210"
G1 B.C.: 0.115

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1150**	**1200**	**1250**	**1300**	**1350**
BULLSEYE	4.5 gr.	4.8 gr.	5.1 gr.	5.4 gr.	5.7 gr.	6.0 gr.
HP-38	4.4 gr.	4.8 gr.	5.2 gr.	5.6 gr.	6.0 gr.	6.4 gr.
WIN 231	4.6 gr.	5.0 gr.	5.4 gr.	5.8 gr.	6.2 gr.	6.6 gr.
VIHT N-340	5.0 gr.	5.4 gr.	5.7 gr.	6.1 gr.	6.5 gr.	6.9 gr.

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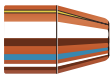
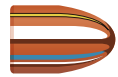
115 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.355"



115 gr. HAP®
Item No. 355281
C.O.L.: 1.245"
G1 B.C.: 0.129



115 gr. FMJ-RN
Item No. 35557
C.O.L.: 1.245"
G1 B.C.: 0.140

115 gr. XTP®
Item No. 35540
C.O.L.: 1.245"
G1 B.C.: 0.129

VELOCITY (FPS – feet per second)

POWDER	1050	1100	1150	1200	1250	1300
VIHT N-340	5.1 gr.	5.4 gr.	5.7 gr.	6.0 gr.	6.3 gr.	
UNIQUE	5.2 gr.	5.6 gr.	6.1 gr.	6.6 gr.		
POWER PISTOL	5.3 gr.	5.7 gr.	6.2 gr.	6.7 gr.	7.1 gr.	7.6 gr.
IMR SR-4756	6.4 gr.	6.7 gr.	7.1 gr.	7.5 gr.	7.9 gr.	
HS-6	6.4 gr.	6.8 gr.	7.1 gr.	7.5 gr.	7.8 gr.	8.2 gr.
Accurate No. 5	6.6 gr.	6.9 gr.	7.3 gr.	7.6 gr.	8.0 gr.	
Vectan SP 2	5.3 gr.	6.4 gr.	7.5 gr.	8.5 gr.		

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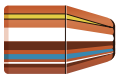
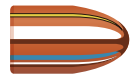
121-125 GRAIN BULLETS

SECTIONAL DENSITY: 0.136-0.141
DIAMETER: 0.355-0.357"

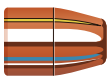


121 gr. HAP® *(Discontinued)*
Item No. 35530B
C.O.L.: 1.210"
G1 B.C.: 0.147

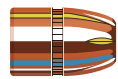


124 gr. FMJ-RN
(Discontinued)
Item No. 355771
C.O.L.: 1.250"
G1 B.C.: 0.145

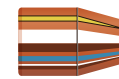
124 gr. XTP®
Item No. 35571
C.O.L.: 1.210"
G1 B.C.: 0.165



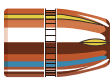
124 gr. FMJ-FP *(Discontinued)*
Item No. 35567B
C.O.L.: 1.200"
G1 B.C.: 0.160



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.200"
G1 B.C.: 0.148



125 gr. HAP® *(Discontinued)*
Item No. 355721
C.O.L.: 1.210"
G1 B.C.: 0.158



125 gr. XTP®
Item No. 35710
C.O.L.: 1.200"
G1 B.C.: 0.151

VELOCITY (FPS – feet per second)

POWDER	1000	1050	1100	1150	1200	1250
VIHT N-340	5.1 gr.	5.4 gr.	5.6 gr.	5.8 gr.	6.1 gr.	
POWER PISTOL	5.5 gr.	5.9 gr.	6.2 gr.	6.5 gr.	6.8 gr.	7.1 gr.
IMR SR-4756	5.7 gr.	6.1 gr.	6.5 gr.	6.8 gr.	7.2 gr.	
HS-6	6.0 gr.	6.4 gr.	6.8 gr.	7.1 gr.	7.5 gr.	
BLUE DOT	6.2 gr.	6.6 gr.	7.0 gr.	7.4 gr.	7.9 gr.	
Vectan SP 2	6.4 gr.	6.9 gr.	7.3 gr.	7.8 gr.		
VIHT N-105	8.2 gr.	8.4 gr.	8.6 gr.	8.7 gr.	8.9 gr.	
Accurate No. 7	8.0 gr.	8.4 gr.	8.9 gr.	9.4 gr.	9.8 gr.	

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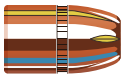
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"



140 gr. XTP®
Item No. 35740
C.O.L.: 1.210"
G1 B.C.: 0.169

	VELOCITY (FPS – feet per second)					
POWDER	**950**	**1000**	**1050**	**1100**	**1150**	**1200**
Vectan AO	4.0 gr.	4.5 gr.	5.0 gr.	5.5 gr.		
POWER PISTOL	4.8 gr.	5.1 gr.	5.5 gr.	5.9 gr.	6.3 gr.	
VIHT N-105	6.1 gr.	6.4 gr.	6.6 gr.	6.9 gr.	7.2 gr.	7.5 gr.
Accurate No. 7	7.3 gr.	7.8 gr.	8.2 gr.	8.7 gr.		

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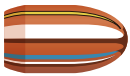
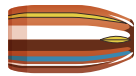
147 GRAIN BULLETS

SECTIONAL DENSITY: 0.167
DIAMETER: 0.355"



147 gr. FMJ-RN-BT
Item No. 35597B
C.O.L.: 1.260"
G1 B.C.: 0.212



147 gr. XTP®
Item No. 35580
C.O.L.: 1.260"
G1 B.C.: 0.212

	VELOCITY (FPS – feet per second)					
POWDER	**900**	**950**	**1000**	**1050**	**1100**	**1150**
Vectan AO	4.3 gr.	4.7 gr.	5.1 gr.	5.5 gr.	5.9 gr.	
POWER PISTOL	4.4 gr.	4.9 gr.	5.4 gr.	5.9 gr.	6.3 gr.	
IMR 800 X	4.9 gr.	5.4 gr.	5.9 gr.	6.3 gr.	6.8 gr.	7.3 gr.
BLUE DOT	5.8 gr.	6.2 gr.	6.6 gr.	6.9 gr.	7.3 gr.	
Vectan SP 2	5.7 gr.	6.2 gr.	6.6 gr.	7.1 gr.	7.6 gr.	
VIHT N-105	7.0 gr.	7.3 gr.	7.5 gr.	7.7 gr.	7.9 gr.	
Accurate No. 7	7.0 gr.	7.5 gr.	7.9 gr.	8.3 gr.	8.7 gr.	9.2 gr.
Accurate No. 9	7.9 gr.	8.5 gr.	9.0 gr.	9.6 gr.	10.1 gr.	10.7 gr.

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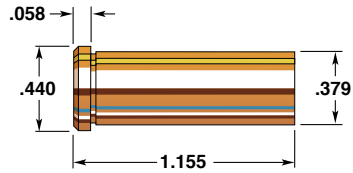


38 Special

Handgun:	S & W Model 15	**Bullet Diameter:**	0.357"
Barrel:	.4", 1 in 18¾" Twist	**Maximum COL:**	1.550"
Case:	Hornady/Frontier	**Max. Case Length:**	1.155"
Primer:	Winchester WSP	**Case Trim Length:**	1.145"

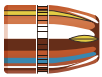
Smith & Wesson introduced the 38 Special in 1902 in their Military and Police Model revolver. Since that time, the 38 Special has become one of the world's most reloaded centerfire cartridges. It is a very popular sidearm, once used by law enforcement agencies throughout the U. S. Because of its popularity the 38 is chambered in nearly all revolvers.

The versatility of the 38 Special is to the handgunner what the 308 Winchester is to the rifleman. The 38 Special can be used for everything from self-defense to plinking to small game hunting to target shooting, with excellent results.

To realize the full potential of the 38 Special, Hornady offers 11 bullet choices — 5 lead bullets and 6 jacketed bullets. The 148 HBWC is the most accurate target bullet. Wadcutters are not suitable for high velocity loads. For best results in target shooting, loads at 800 fps give optimum performance. Maximum loads listed with an asterisk yield +P pressures. +P pressures are above the SAAMI standard for the 38 Special and should only be used in modern guns designed by the manufacturer for +P pressures. Some powders do not show +P loads because the next increment would yield higher than +P pressures. Our test weapon produced its best groups using Bullseye and Unique, with the highest velocities obtained from Power Pistol.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.123
DIAMETER: 0.357"



110 gr. XTP®
Item No. 35700
C.O.L.: 1.445"
G1 B.C.: 0.131

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
TITEGROUP	4.0 gr.	4.4 gr.	4.7 gr.	5.0 gr.	*5.4 gr.	
IMR 700 X	4.1 gr.	4.4 gr.	4.7 gr.	5.0 gr.	*5.3 gr.	*5.5 gr.
SW Clean Shot	4.1 gr.	4.4 gr.	4.7 gr.	*5.0 gr.		
BULLSEYE	4.2 gr.	4.5 gr.	4.9 gr.	5.2 gr.	*5.6 gr.	*6.0 gr.
VIHT N-320	4.5 gr.	4.8 gr.	5.0 gr.	5.2 gr.		
WIN 231	4.6 gr.	5.0 gr.	5.3 gr.	5.6 gr.	5.9 gr.	*6.3 gr.
Accurate No. 2	4.7 gr.	5.1 gr.	5.4 gr.	*5.7 gr.		
BE-86	4.9 gr.	5.2 gr.	5.5 gr.	5.9 gr.	*6.2 gr.	
UNIQUE	5.2 gr.	5.5 gr.	5.7 gr.	6.0 gr.	*6.3 gr.	
WIN AutoComp	5.2 gr.	5.5 gr.	5.8 gr.	6.1 gr.	*6.4 gr.	
VIHT N-340	5.5 gr.	5.9 gr.	6.2 gr.	*6.6 gr.		
POWER PISTOL	5.6 gr.	6.0 gr.	6.4 gr.	6.7 gr.	7.1 gr.	*7.5 gr.
HS-6	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.	*8.4 gr.	
Accurate No. 5	6.9 gr.	7.3 gr.	7.7 gr.	8.0 gr.	*8.4 gr.	

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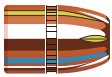
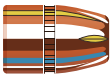
NOTE: ** = +P loads*

125 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.357"



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.450"
G1 B.C.: 0.148



125 gr. XTP®
Item No. 35710
C.O.L.: 1.450"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)					
POWDER	**800**	**850**	**900**	**950**	**1000**	**1050**
IMR 700 X	4.0 gr.	4.3 gr.	4.7 gr.	*5.0 gr.		
BULLSEYE	4.5 gr.	4.7 gr.	5.0 gr.	*5.3 gr.		
BE-86	4.6 gr.	4.9 gr.	5.2 gr.	*5.5 gr.		
UNIVERSAL	4.8 gr.	5.0 gr.	5.3 gr.	5.5 gr.	*5.8 gr.	
WIN AutoComp	4.7 gr.	5.1 gr.	5.4 gr.	*5.7 gr.		
WIN 231	4.8 gr.	5.1 gr.	5.4 gr.	*5.7 gr.		
UNIQUE	5.1 gr.	5.3 gr.	*5.6 gr.	*5.8 gr.		
POWER PISTOL	5.4 gr.	5.7 gr.	6.1 gr.	6.4 gr.	6.8 gr.	*7.1 gr.
IMR 800 X	5.6 gr.	6.0 gr.	6.4 gr.	6.8 gr.	*7.1 gr.	*7.5 gr.
VIHT 3N37	6.0 gr.	6.2 gr.	6.5 gr.	6.8 gr.	*7.1 gr.	
Accurate No. 5	6.6 gr.	6.9 gr.	7.3 gr.	7.6 gr.		
HS-6	6.6 gr.	7.0 gr.	7.3 gr.	*7.7 gr.	*8.1 gr.	

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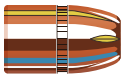
NOTE: ** = +P loads*

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"



140 gr. XTP®
Item No. 35740
C.O.L.: 1.450"
G1 B.C.: 0.169

	VELOCITY (FPS – feet per second)					
POWDER	**750**	**800**	**850**	**900**	**950**	**1000**
IMR 700 X	3.9 gr.	4.2 gr.	*4.5 gr.			
BULLSEYE	4.2 gr.	4.4 gr.	4.7 gr.	*5.0 gr.		
WIN 231	4.5 gr.	4.8 gr.	5.1 gr.	*5.5 gr.		
UNIVERSAL	4.6 gr.	4.9 gr.	5.1 gr.	*5.3 gr.		
UNIQUE	4.2 gr.	4.7 gr.	5.2 gr.	*5.8 gr.		
BE-86	4.5 gr.	4.9 gr.	*5.3 gr.			
WIN AutoComp	4.7 gr.	5.0 gr.	5.3 gr.	*5.5 gr.		
VIHT N-340	4.9 gr.	5.1 gr.	5.3 gr.	*5.6 gr.		
IMR 800 X	5.2 gr.	5.5 gr.	5.8 gr.	*6.1 gr.		
POWER PISTOL	5.2 gr.	5.5 gr.	5.8 gr.	6.1 gr.	*6.4 gr.	*6.7 gr.
VIHT 3N37	5.8 gr.	6.0 gr.	6.2 gr.	*6.4 gr.	*6.7 gr.	
HS-6	6.1 gr.	6.4 gr.	6.8 gr.	*7.1 gr.	*7.4 gr.	
Accurate No. 5	6.3 gr.	6.6 gr.	*6.9 gr.			

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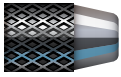
NOTE: ** = +P loads*

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.358"



140 gr. COWBOY™
Item No. 10078
C.O.L.: 1.450"
G1 B.C.: 0.127

	VELOCITY (FPS – feet per second)					
POWDER	**700**	**750**	**800**	**850**	**900**	**950**
TITEGROUP	3.0 gr.	3.3 gr.	3.7 gr.	4.0 gr.	4.3 gr.	4.7 gr.
BULLSEYE	3.0 gr.	3.4 gr.	3.8 gr.	4.2 gr.	4.6 gr.	
IMR 700 X	3.1 gr.	3.4 gr.	3.7 gr.	4.0 gr.	4.3 gr.	
AMERICAN SELECT	3.2 gr.	3.6 gr.	4.1 gr.	4.5 gr.	4.9 gr.	
VIHT N-320	3.4 gr.	3.6 gr.	3.9 gr.	4.2 gr.	4.5 gr.	
Trail Boss	3.4 gr.	3.8 gr.				
WIN 231	3.5 gr.	3.9 gr.	4.2 gr.	4.6 gr.	5.0 gr.	5.3 gr.
Accurate No. 2	3.6 gr.	4.0 gr.	4.3 gr.	4.7 gr.		
UNIVERSAL	4.0 gr.	4.2 gr.	4.5 gr.	4.7 gr.	4.9 gr.	5.2 gr.
UNIQUE	3.9 gr.	4.3 gr.	4.6 gr.	5.0 gr.	5.3 gr.	

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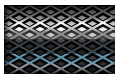
148 GRAIN BULLETS

SECTIONAL DENSITY: 0.165
DIAMETER: 0.358"



148 gr. HBWC
Item No. 10208
C.O.L.: 1.180"
G1 B.C.: 0.047

	VELOCITY (FPS – feet per second)					
POWDER	**550**	**600**	**650**	**700**	**750**	**800**
TITEGROUP	1.9 gr.	2.1 gr.	2.3 gr.	2.5 gr.	2.8 gr.	3.0 gr.
IMR 700 X	1.9 gr.	2.1 gr.	2.4 gr.	2.6 gr.	2.8 gr.	
VIHT N-320	2.1 gr.	2.3 gr.	2.5 gr.	2.7 gr.	3.0 gr.	
BULLSEYE	2.1 gr.	2.4 gr.	2.6 gr.	2.8 gr.	3.0 gr.	
AMERICAN SELECT	2.1 gr.	2.4 gr.	2.7 gr.	3.0 gr.	3.2 gr.	
WIN 231	2.2 gr.	2.5 gr.	2.8 gr.	3.0 gr.	3.3 gr.	3.5 gr.
UNIVERSAL	2.6 gr.	2.8 gr.	3.0 gr.	3.2 gr.	3.4 gr.	3.6 gr.
UNIQUE	2.4 gr.	2.7 gr.	2.9 gr.	3.2 gr.	3.5 gr.	

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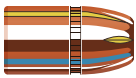
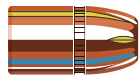
158 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.357"



158 gr. FP-XTP®
Item No. 35780
C.O.L.: 1.450"
G1 B.C.: 0.199



158 gr. XTP®
Item No. 35750
C.O.L.: 1.450"
G1 B.C.: 0.206

	VELOCITY (FPS – feet per second)					
POWDER	**600**	**650**	**700**	**750**	**800**	**850**
IMR 700 X	3.3 gr.	3.5 gr.	3.8 gr.	4.0 gr.	*4.3 gr.	
BULLSEYE	3.4 gr.	3.7 gr.	3.9 gr.	4.2 gr.	*4.5 gr.	
UNIVERSAL	4.1 gr.	4.3 gr.	4.4 gr.	4.6 gr.	*4.8 gr.	
WIN 231	3.7 gr.	4.0 gr.	4.3 gr.	4.6 gr.	*4.9 gr.	
BE-86	3.8 gr.	4.1 gr.	4.4 gr.	4.7 gr.	*5.0 gr.	
UNIQUE	3.9 gr.	4.2 gr.	4.5 gr.	4.8 gr.	*5.1 gr.	
VIHT N-340	4.3 gr.	4.5 gr.	4.7 gr.	4.9 gr.	*5.1 gr.	
POWER PISTOL	4.4 gr.	4.8 gr.	5.1 gr.	5.4 gr.	5.7 gr.	*6.0 gr.
VIHT 3N37	5.0 gr.	5.2 gr.	5.4 gr.	5.6 gr.	5.8 gr.	*6.0 gr.
IMR 800 X	4.7 gr.	5.0 gr.	5.4 gr.	5.7 gr.	6.1 gr.	*6.5 gr.
Accurate No. 5	5.2 gr.	5.5 gr.	5.8 gr.	6.1 gr.	*6.4 gr.	
HS-6	5.1 gr.	5.4 gr.	5.8 gr.	6.2 gr.	*6.5 gr.	

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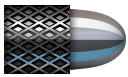
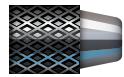
NOTE: ** = +P loads*

158 GRAIN BULLETS

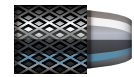
SECTIONAL DENSITY: 0.176
DIAMETER: 0.358"



158 gr. LRN
Item No. 10508
C.O.L.: 1.455"
G1 B.C.: 0.159



158 gr. SWC-HP
Item No. 10428
C.O.L.: 1.455"
G1 B.C.: 0.139



158 gr. SWC
Item No. 10408
C.O.L.: 1.455"
G1 B.C.: 0.135

	VELOCITY (FPS – feet per second)				
POWDER	**650**	**700**	**750**	**800**	**850**
IMR 700 X	2.7 gr.	3.0 gr.	3.3 gr.	3.7 gr.	
BULLSEYE	2.8 gr.	3.1 gr.	3.4 gr.	3.7 gr.	
AMERICAN SELECT	2.8 gr.	3.2 gr.	3.5 gr.	3.9 gr.	
WIN 231	3.2 gr.	3.5 gr.	3.8 gr.	4.1 gr.	4.4 gr.
Accurate No. 2	3.3 gr.	3.6 gr.	3.8 gr.		
UNIQUE	3.3 gr.	3.6 gr.	3.9 gr.	4.2 gr.	
UNIVERSAL	3.4 gr.	3.7 gr.	3.9 gr.	4.2 gr.	4.4 gr.
Trail Boss	2.9 gr.	3.5 gr.	4.1 gr.		
VIHT N-340	3.6 gr.	3.9 gr.	4.2 gr.	4.5 gr.	
POWER PISTOL	4.0 gr.	4.3 gr.	4.6 gr.	4.9 gr.	5.2 gr.

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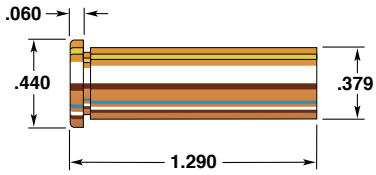


357 Magnum

Handgun:	Colt Python	**Bullet Diameter:**	0.357"
Barrel:	8", 1 in 16" Twist	**Maximum COL:**	1.590"
Case:	Frontier	**Max. Case Length:**	1.290"
Primer:	Winchester WSPM	**Case Trim Length:**	1.280"

The 357 Magnum was introduced in 1935 by Smith & Wesson with the intention of improving on the 38 Special round for hunting and law enforcement. The 357 case is approximately 0.12" longer than the 38 Special, a very original design feature at the time to prevent the higher pressure loads of the 357 Magnum from being used in the 38 Special (though not conversely). It is a superb law enforcement cartridge and is sufficient for hunting small game up to deer at moderate ranges.

Lead bullets make good small game and target rounds. Velocities, however, should not exceed 1100 fps, as undesirable leading of the barrel can occur in just a few rounds. Also, no loads are listed for the 148 grain wadcutter bullets since they are primarily target bullets and should not be fired at velocities exceeding 900 fps. When reloading 148 grain wadcutters, use 38 Special data.

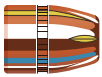
Many powders produced excellent results with the Hornady jacketed bullets. These powders include A No. 9, H 110, and WIN 296. Unique provided the best performance with the lead bullets. VIHT N-110 provides near maximum performance with less flash and blast than other powders.

Please pay careful attention when loading the 0.357" 140 grain FTX® bullet as it requires a different case trim length than is prescribed for conventional bullets. Trimming the case to allow for the longer ogive of the bullet changes case capacity and makes the 0.357" 140 grain FTX® data different from conventional data. Do not deviate from the printed data.

When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.123
DIAMETER: 0.357"



110 gr. XTP®
Item No. 35700
C.O.L.: 1.590"
G1 B.C.: 0.131

	VELOCITY (FPS – feet per second)					
POWDER	**1300**	**1350**	**1400**	**1450**	**1500**	**1550**
POWER PISTOL	8.5 gr.	8.9 gr.	9.2 gr.	9.6 gr.	10.0 gr.	10.4 gr.
VIHT N-105	10.7 gr.	11.0 gr.	11.4 gr.	11.7 gr.	12.0 gr.	12.3 gr.
Accurate No. 7	11.0 gr.	11.5 gr.	11.9 gr.	12.4 gr.		
Accurate No. 9	12.6 gr.	13.3 gr.	14.0 gr.	14.8 gr.		
VIHT N-110	14.7 gr.	15.5 gr.	16.4 gr.	17.3 gr.		
Alliant 2400	15.0 gr.	15.9 gr.	16.9 gr.	17.9 gr.	18.8 gr.	

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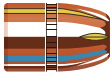
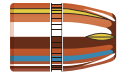
125 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.357"



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.590"
G1 B.C.: 0.148



125 gr. XTP®
Item No. 35710
C.O.L.: 1.590"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)							
POWDER	**1250**	**1300**	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**
VIHT N-105	10.0 gr.	10.2 gr.	10.5 gr.	10.7 gr.				
Accurate No. 7	10.5 gr.	10.8 gr.	11.2 gr.	11.5 gr.				
Accurate No. 9	11.9 gr.	12.8 gr.	13.6 gr.	14.5 gr.				
VIHT N-110	13.3 gr.	13.9 gr.	14.5 gr.	15.0 gr.	15.6 gr.	16.1 gr.		
Alliant 2400	13.9 gr.	14.9 gr.	15.9 gr.	16.9 gr.				
IMR 4227	14.8 gr.	15.8 gr.	16.9 gr.	17.9 gr.				
WIN 296	16.9 gr.	17.6 gr.	18.2 gr.	18.9 gr.	19.6 gr.	20.3 gr.		
H110	17.4 gr.	17.9 gr.	18.4 gr.	18.9 gr.	19.4 gr.	19.9 gr.		
Power Pro 300-MP	18.1 gr.	18.4 gr.	18.8 gr.	19.1 gr.	19.4 gr.	19.7 gr.	20.1 gr.	20.4 gr.

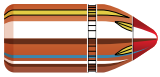
Create custom ballistic tables using our online calculators at hornady.com/ballistics

140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"

CASE TRIM LENGTH: 1.240"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



140 gr. FTX®
Item No. 35745
C.O.L.: 1.585"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)						
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**
VIHT N-105			9.3 gr.	9.6 gr.	9.8 gr.	10.1 gr.	10.3 gr.
Accurate No. 7	9.1 gr.	9.6 gr.	10.0 gr.	10.4 gr.	10.8 gr.		
Accurate No. 9			10.9 gr.	11.5 gr.	12.1 gr.	12.7 gr.	13.3 gr.
ENFORCER	11.7 gr.	12.2 gr.	12.6 gr.	13.1 gr.	13.5 gr.	13.9 gr.	14.4 gr.

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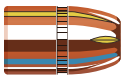
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"



140 gr. XTP®
Item No. 35740
C.O.L.: 1.590"
G1 B.C.: 0.169

	VELOCITY (FPS – feet per second)					
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
Accurate No. 7	10.3 gr.	10.7 gr.	11.1 gr.			
Accurate No. 9	11.2 gr.	11.6 gr.	12.0 gr.	12.5 gr.	12.9 gr.	
Alliant 2400	11.9 gr.	12.8 gr.	13.7 gr.	14.6 gr.	15.5 gr.	
VIHT N-110	12.7 gr.	13.2 gr.	13.7 gr.	14.2 gr.	14.8 gr.	
H110	15.7 gr.	16.2 gr.	16.8 gr.	17.3 gr.	17.9 gr.	18.4 gr.
WIN 296	15.8 gr.	16.4 gr.	17.0 gr.	17.6 gr.	18.2 gr.	
VIHT N-120	16.5 gr.	17.0 gr.	17.5 gr.	17.9 gr.	18.4 gr.	

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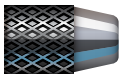
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.358"



140 gr. COWBOY™
Item No. 10078
C.O.L.: 1.550"
G1 B.C.: 0.127

	VELOCITY (FPS – feet per second)					
POWDER	**750**	**800**	**850**	**900**	**950**	**1000**
CLAYS	2.3 gr.	2.9 gr.	3.5 gr.	4.2 gr.		
TITEGROUP	3.1 gr.	3.5 gr.	4.0 gr.	4.4 gr.		
AMERICAN SELECT	3.4 gr.	3.7 gr.	4.1 gr.	4.4 gr.		
UNIQUE	3.7 gr.	4.0 gr.	4.3 gr.	4.6 gr.	4.9 gr.	5.2 gr.

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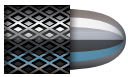
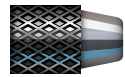
158 GRAIN BULLETS

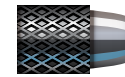
SECTIONAL DENSITY: 0.176
DIAMETER: 0.358"



158 gr. LRN
Item No. 10508
C.O.L.: 1.590"
G1 B.C.: 0.159



158 gr. SWC-HP
Item No. 10428
C.O.L.: 1.590"
G1 B.C.: 0.139



158 gr. SWC
Item No. 10408
C.O.L.: 1.590"
G1 B.C.: 0.135

	VELOCITY (FPS – feet per second)					
POWDER	**700**	**750**	**800**	**850**	**900**	**950**
CLAYS	2.5 gr.	2.9 gr.	3.3 gr.	3.6 gr.	4.0 gr.	4.4 gr.
TITEGROUP	2.9 gr.	3.2 gr.	3.5 gr.	3.8 gr.	4.1 gr.	
AMERICAN SELECT	3.2 gr.	3.5 gr.	3.9 gr.	4.2 gr.		
UNIQUE	3.3 gr.	3.6 gr.	4.0 gr.	4.3 gr.	4.7 gr.	5.0 gr.
VIHT N-340	3.9 gr.	4.2 gr.	4.5 gr.	4.9 gr.	5.2 gr.	5.5 gr.
Accurate No. 5	5.5 gr.	5.9 gr.	6.2 gr.	6.6 gr.	7.0 gr.	7.3 gr.

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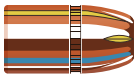
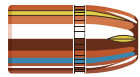
158 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.357"



158 gr. FP-XTP®
Item No. 35780
C.O.L.: 1.590"
G1 B.C.: 0.199



158 gr. XTP®
Item No. 35750
C.O.L.: 1.590"
G1 B.C.: 0.206

	VELOCITY (FPS – feet per second)								
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
Accurate No. 9	9.7 gr.	10.1 gr.	10.6 gr.	11.0 gr.	11.5 gr.				
VIHT N-110	11.4 gr.	11.8 gr.	12.3 gr.	12.7 gr.	13.1 gr.				
Alliant 2400	10.5 gr.	11.4 gr.	12.4 gr.	13.3 gr.	14.3 gr.				
H110	12.7 gr.	13.3 gr.	13.9 gr.	14.4 gr.	15.0 gr.	15.6 gr.			
WIN 296	12.4 gr.	13.1 gr.	13.8 gr.	14.5 gr.	15.2 gr.	16.0 gr.			
IMR 4227	12.4 gr.	13.1 gr.	13.8 gr.	14.5 gr.					
Power Pro 300-MP	14.7 gr.	15.0 gr.	15.3 gr.	15.6 gr.	15.9 gr.	16.1 gr.	16.4 gr.	16.7 gr.	17.0 gr.
VIHT N-120	14.2 gr.	14.9 gr.	15.6 gr.	16.4 gr.					

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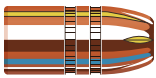
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.202
DIAMETER: 0.357"



180 gr. XTP®
Item No. 35771
C.O.L.: 1.590"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)					
POWDER	**900**	**950**	**1000**	**1050**	**1100**	**1150**
Accurate No. 9	9.3 gr.	9.7 gr.	10.1 gr.	10.5 gr.		
VIHT N-110	10.5 gr.	10.8 gr.	11.1 gr.	11.4 gr.	11.8 gr.	
Alliant 2400	10.3 gr.	10.7 gr.	11.2 gr.	11.7 gr.	12.1 gr.	12.6 gr.
WIN 296	11.1 gr.	11.8 gr.	12.4 gr.	13.1 gr.	13.7 gr.	
H110	11.3 gr.	11.9 gr.	12.5 gr.	13.1 gr.		
IMR 4227	11.9 gr.	12.3 gr.	12.8 gr.			
VIHT N-120	12.9 gr.	13.4 gr.	13.8 gr.	14.3 gr.		

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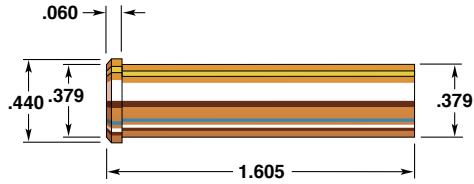


357 Remington Maximum

Handgun: . . . Ruger Super Blackhawk
Barrel:. . . . . 10½", 1 in 14" Twist
Case:. . . . . Remington
Primer: . . . . . Remington 7½
Bullet Diameter:. . . . . 0.357"
Maximum COL: . . . . . .1.990"
Max. Case Length:. . . . . .1.605"
Case Trim Length: . . . . . .1.595"

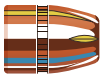
Versatility and wide spread popularity made the 357 Magnum case the basis of yet another, and more powerful, revolver cartridge. Remington and Sturm, Ruger & Co. announced the 357 Maximum in 1982. This new cartridge is similar to the 357 Magnum, but 0.305" longer to hold more powder. Ruger's Super Blackhawk had a longer cylinder and frame to accommodate the 357 Maximum. The intent of this new cartridge was a more powerful round for hunting or silhouette shooting, yet still allowing the use of the readily available 357 bullets and reloading dies.

Design intentions were achieved as 158 grain bullets could be propelled up to 1600 fps in our test revolver. In our testing, we found that this cartridge performed best when loaded close to maximum loads. IMR 4227, WIN 296, and H 110 performed best in our tests, especially with the heavier bullets. A heavy crimp and the Remington 7½ primer are recommended for ballistic uniformity.

Ruger revolvers showed some flame cutting of the frame by the propellant gases. High velocity revolvers present this particular difficulty as a design challenge. Ruger ceased production of this firearm, though Dan Wesson continued producing revolvers and Thompson/Center continued producing single shot pistols in this caliber. This data can be used in these pistols with safety and with a slight gain in velocity in the Thompson/Center Contender.

110 GRAIN BULLETS

SECTIONAL DENSITY: 0.123
DIAMETER: 0.357"



110 gr. XTP®
Item No. 35700
C.O.L.: 1.890"
G1 B.C.: 0.131

	VELOCITY (FPS – feet per second)					
POWDER	**1750**	**1800**	**1850**	**1900**	**1950**	**2000**
IMR SR-4759	19.2 gr.	19.9 gr.				
VIHT N-110	20.2 gr.	20.8 gr.	21.5 gr.	22.2 gr.		
Accurate 5744	23.1 gr.	23.9 gr.				
H110	26.4 gr.	27.0 gr.	27.5 gr.	28.1 gr.		
WIN 296	26.9 gr.	27.3 gr.	27.8 gr.	28.2 gr.	28.6 gr.	29.0 gr.

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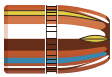
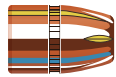
125 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.357"



125 gr. FP-XTP®
Item No. 35730
C.O.L.: 1.890"
G1 B.C.: 0.148



125 gr. XTP®
Item No. 35710
C.O.L.: 1.890"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1650**	**1700**	**1750**	**1800**	**1850**
VIHT N-110	18.7 gr.	19.8 gr.				
Alliant 2400	19.2 gr.	19.8 gr.	20.4 gr.	20.9 gr.	21.5 gr.	
Accurate 5744	21.9 gr.	22.6 gr.				
IMR 4227	22.5 gr.	23.1 gr.	23.7 gr.	24.3 gr.	24.9 gr.	
H110	22.7 gr.	23.4 gr.	24.0 gr.	24.7 gr.	25.4 gr.	26.0 gr.
WIN 296	22.9 gr.	23.5 gr.	24.0 gr.	24.6 gr.	25.1 gr.	25.7 gr.

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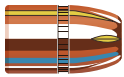
140 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.357"



140 gr. XTP®
Item No. 35740
C.O.L.: 1.890"
G1 B.C.: 0.169

	VELOCITY (FPS – feet per second)				
POWDER	**1500**	**1550**	**1600**	**1650**	**1700**
H110	20.7 gr.	21.3 gr.	21.9 gr.	22.5 gr.	23.1 gr.
Accurate 5744	20.9 gr.	21.6 gr.	22.4 gr.		
WIN 296	21.3 gr.	21.8 gr.	22.4 gr.	23.0 gr.	23.6 gr.
VIHT N-120	22.7 gr.	23.4 gr.	24.1 gr.	24.8 gr.	25.5 gr.

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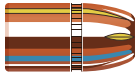
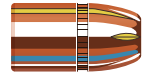
158 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.357"



158 gr. FP-XTP®
Item No. 35780
C.O.L.: 1.890"
G1 B.C.: 0.199



158 gr. XTP®
Item No. 35750
C.O.L.: 1.890"
G1 B.C.: 0.206

	VELOCITY (FPS – feet per second)					
POWDER	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**
Alliant 2400	14.9 gr.	15.8 gr.	16.6 gr.	17.4 gr.	18.3 gr.	19.1 gr.
VIHT N-110	15.9 gr.	16.6 gr.	17.3 gr.	18.0 gr.		
H110	18.2 gr.	18.7 gr.	19.2 gr.	19.6 gr.	20.1 gr.	20.6 gr.
IMR 4227	18.3 gr.	18.9 gr.	19.6 gr.	20.3 gr.	21.0 gr.	
WIN 296	18.6 gr.	19.2 gr.	19.8 gr.	20.4 gr.	21.0 gr.	21.5 gr.

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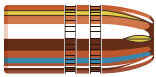
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.202
DIAMETER: 0.357"



180 gr. XTP®
Item No. 35771
C.O.L.: 1.890"
G1 B.C.: 0.230

	VELOCITY (FPS – feet per second)				
POWDER	**1250**	**1300**	**1350**	**1400**	**1450**
LIL' GUN	10.4 gr.	13.3 gr.	16.2 gr.	19.1 gr.	22.0 gr.
Alliant 2400	15.0 gr.	15.6 gr.	16.3 gr.	17.0 gr.	
H110	16.6 gr.	17.0 gr.	17.5 gr.	18.0 gr.	18.5 gr.
WIN 296	16.2 gr.	17.4 gr.	17.8 gr.	18.2 gr.	18.5 gr.
IMR 4227	16.7 gr.	17.4 gr.	18.0 gr.		
VIHT N-120	18.6 gr.	19.3 gr.			

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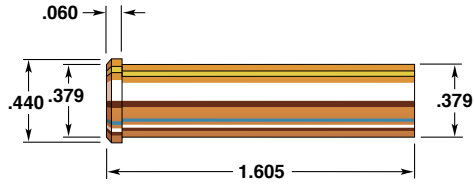


357 Remington Maximum (T/C)

Handgun: . . . . . .T/C Contender
Barrel:. . . . . .10", 1 in 14" Twist
Case:. . . . . Remington
Primer: . . . . . Remington 7½
Bullet Diameter:. . . . . 0.357 – 0.358"
Maximum COL: . . . . . .1.990"
Max. Case Length:. . . . . .1.605"
Case Trim Length: . . . . . .1.595"

The 357 Maximum cartridge began as a joint venture between Remington and Sturm, Ruger & Co. Their goal was clear and specific. They sought to produce an ultra-high velocity revolver cartridge, flat shooting and powerful enough for silhouette shooting competition or hunting. Ruger had the first platform for the new cartridge, its heavy single action 357 Maximum Ruger Blackhawk, and the new revolver/cartridge combination came to market in 1983. Dan Wesson soon followed suit with a stainless steel double-action revolver. It appeared a new era had begun.

Shortly after Remington and Ruger introduced this new cartridge, Thompson/Center offered their excellent Contender pistol in the 357 Remington Maximum caliber. Their effort was to survive.

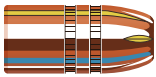
Cylinder/barrel gaps in the revolvers chambered for the new cartridge quickly led to high temperature flame cutting forward of the frame. Ruger withdrew the 357 Maximum Blackhawk. Dan Wesson offered a second barrel with the purchase of the revolver. The damage, however, was done.

T/C's Contender has no cylinder gap to lose propellant gases, and velocities are thus higher. Lacking the length limitation of the Ruger's cylinder, longer and hence heavier bullets can be used in the Contender than could be in the Ruger. Data is listed elsewhere in the handbook for the Ruger Super Blackhawk Revolver.

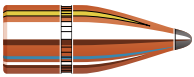
Note: Due to being a single shot, most loads exceed maximum C.O.L.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.201-0.202
DIAMETER: 0.357-0.358"



180 gr. XTP®
Item No. 35771
C.O.L.: 1.890"
G1 B.C.: 0.230



180 gr. InterLock® SP-SSP *(Discontinued)*
Item No. 3505
C.O.L.: 2.250"
G1 B.C.: 0.248

	VELOCITY (FPS – feet per second)					
POWDER	**1450**	**1500**	**1550**	**1600**	**1650**	**1700**
Alliant 2400	17.1 gr.	17.8 gr.	18.5 gr.	19.3 gr.		
LIL' GUN	16.7 gr.	17.7 gr.	18.6 gr.	19.6 gr.	20.6 gr.	21.6 gr.
WIN 296	17.1 gr.	17.9 gr.	18.6 gr.	19.4 gr.	20.2 gr.	21.0 gr.
H110	17.3 gr.	18.0 gr.	18.6 gr.	19.3 gr.	20.0 gr.	
IMR 4227	17.5 gr.	18.2 gr.	19.0 gr.			
VIHT N-120	19.4 gr.	20.0 gr.	20.7 gr.	21.3 gr.		

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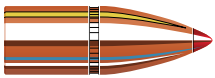
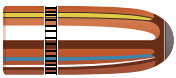
200 GRAIN BULLETS

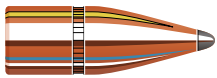
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.250"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.200"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 2.250"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1450**	**1500**	**1550**	**1600**	**1650**
LIL' GUN	17.0 gr.	17.9 gr.	18.8 gr.	19.7 gr.	20.6 gr.	21.5 gr.
H110	17.4 gr.	18.1 gr.	18.8 gr.	19.5 gr.		
WIN 296	17.5 gr.	18.3 gr.	19.1 gr.	19.9 gr.		
VIHT N-120	20.2 gr.	21.1 gr.	21.9 gr.			
Alliant RL-7	22.9 gr.	23.6 gr.	24.2 gr.	24.9 gr.	25.5 gr.	
VIHT N-130	23.4 gr.	24.1 gr.	24.7 gr.			

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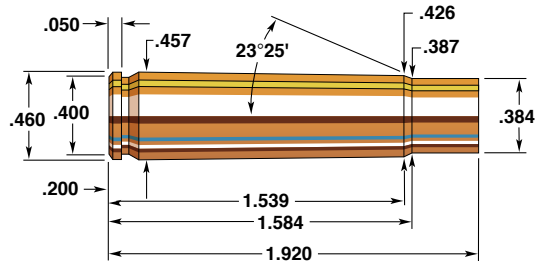


35 Remington

Handgun: . . . . . Remington XP-100
Barrel:. . . . . 15", 1 in 16" Twist
Case:. . . . . Winchester
Primer: . . . . . Federal 210
Bullet Diameter:. . . . . 0.358"
Maximum COL: . . . . . 2.525"
Max. Case Length:. . . . . .1.920"
Case Trim Length: . . . . . .1.910"

In 1908 Remington introduced the 35 Remington in their Model 8 semi-automatic rifle and later in their Model 14, 141, and 760 pump action rifles and the Model 81 semi-automatic rifle. The 35 Remington is a short range, woodlands hunting cartridge that is a favorite of deer hunters who hunt the crowded areas and need a short, fast handling and effective deer rifle.

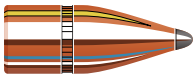
With the rising popularity of Handgun Silhouette shooting and handgun hunting, the 35 Remington cartridge enjoyed an increased following. Thompson Center Arms Company offered their single shot Contender pistol in the venerable 35 Remington cartridge as well as Remington in their XP-100 which was used for this data.

The XP-100 is a bolt action pistol. It is quite strong and very accurate. Because it does not have a tubular magazine, pointed bullets can be used. Perhaps the best choice for the 35 Remington, is the 200 grain FTX® bullet. It is an exceptional bullet specifically designed to bring out the best in the 35 Remington.

This data can be used in the Thompson/Center Contender pistol and should be considered maximum loads. As always, approach maximum loads with caution.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.201
DIAMETER: 0.358"



180 gr. InterLock® SP-SSP *(Discontinued)*
Item No. 3505
C.O.L.: 2.550"
G1 B.C.: 0.248

	VELOCITY (FPS – feet per second)						
POWDER	**1900**	**1950**	**2000**	**2050**	**2100**	**2150**	**2200**
Alliant RL-7	28.1 gr.	29.2 gr.	30.2 gr.	31.2 gr.	32.2 gr.		
H4198	29.2 gr.	30.0 gr.	30.9 gr.	31.7 gr.	32.6 gr.		
VIHT N-130		31.5 gr.	32.5 gr.	33.5 gr.	34.5 gr.	35.4 gr.	36.4 gr.
H322			34.4 gr.	35.4 gr.	36.5 gr.	37.5 gr.	38.6 gr.
Accurate 2230	35.3 gr.	36.1 gr.	37.0 gr.	37.8 gr.	38.7 gr.		
IMR 3031	35.9 gr.	36.7 gr.	37.6 gr.	38.4 gr.	39.2 gr.		
IMR 4895	37.8 gr.	38.7 gr.	39.7 gr.				
WIN 748	40.6 gr.	41.5 gr.	42.5 gr.	43.4 gr.			

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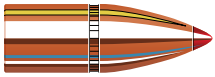
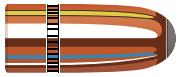
200 GRAIN BULLETS

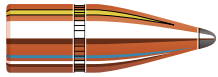
SECTIONAL DENSITY: 0.223
DIAMETER: 0.358"



200 gr. FTX®
Item No. 35105
C.O.L.: 2.495"
G1 B.C.: 0.300



200 gr. InterLock® RN
Item No. 3515
C.O.L.: 2.510"
G1 B.C.: 0.195



200 gr. InterLock® SP
Item No. 3510
C.O.L.: 2.540"
G1 B.C.: 0.282

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1750**	**1800**	**1850**	**1900**	**2000**
Alliant RL-7	26.1 gr.	27.1 gr.	28.2 gr.	29.3 gr.		
H4198	27.0 gr.	28.0 gr.	28.9 gr.			
H322		31.6 gr.	32.4 gr.	33.2 gr.		
VIHT N-135	31.0 gr.	31.9 gr.	32.9 gr.	33.8 gr.	34.8 gr.	36.7 gr.
Accurate 2230	33.0 gr.	33.7 gr.	34.4 gr.	35.1 gr.	35.8 gr.	
IMR 3031	34.5 gr.	35.1 gr.	35.8 gr.			
H4895	35.1 gr.	36.0 gr.	37.0 gr.	38.0 gr.	39.0 gr.	
IMR 4064	36.0 gr.	37.0 gr.	38.0 gr.	39.0 gr.	40.0 gr.	
WIN 748	37.6 gr.	38.4 gr.	39.3 gr.			

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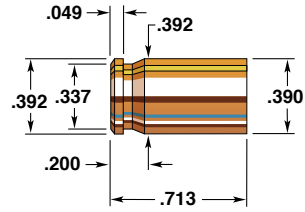

9 X 18mm Makarov

Handgun: . . . . East German Model M
Barrel:. . . . . 3.7", 1 in 12" Twist
Case:. . . . . Hornady
Primer: . . . . . Winchester WSP

Bullet Diameter:. . . . . 0.365"
Maximum COL: . . . . . 0.984"
Max. Case Length:. . . . . .0.713"
Case Trim Length: . . . . . 0.708"

Known also as the 9mm Russian Makarov, this cartridge currently serves as the official Russian military pistol cartridge. Adopted by the Soviet military following World War II, its capacity and power place it on a scale between the 380 Automatic and the 9mm Luger. By western standards it is perhaps "underpowered." Recall, however, that near the beginning of the 20th century the U. S. Army adopted the 45 Automatic as its standard and now uses the 9mm. Likewise, many nations in Europe and elsewhere began this same period with far less powerful official cartridges only to gravitate toward the 9mm Parabellum "standard" over time.

During the lengthy Cold War period following WW II, Eastern Block countries adopted the Soviet 9 x 18mm standard, producing a large number of sidearms in the process. As is so often the case, military cartridges and firearms become either surplus or get exported for profit by their originating nations. A flood of mostly well-made Makarov and Stechkin auto pistols for this round have found their way to the U. S. and interest in it has risen quickly.

Hornady not only manufactures a 9 x 18mm Makarov bullet (.365" diameter) for this cartridge, a 95 grain Hollow Point, Extreme Terminal Performance projectile, it also manufactures reloading dies and loaded ammunition as well. Our factory loads propel the 95 grain Makarov bullet to nearly 1000 fps muzzle velocities.

95 GRAIN BULLETS

SECTIONAL DENSITY: 0.102
DIAMETER: 0.365"

95 gr. Makarov XTP®
Item No. 36500
C.O.L.: 0.964"
G1 B.C.: 0.127

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**975**
VIHT N-310	2.4 gr.	2.5 gr.	2.7 gr.	2.8 gr.	
SOLO 1000	2.5 gr.	2.7 gr.	2.9 gr.		
INTERNATIONAL CLAYS	2.8 gr.	2.9 gr.	3.1 gr.	3.2 gr.	3.3 gr.
Accurate No. 2	2.8 gr.	3.0 gr.	3.2 gr.	3.4 gr.	3.5 gr.
IMR 700 X	2.9 gr.	3.1 gr.	3.4 gr.		
BULLSEYE	3.0 gr.	3.2 gr.	3.4 gr.	3.5 gr.	3.6 gr.
WIN 231	3.3 gr.	3.5 gr.	3.6 gr.	3.8 gr.	
UNIQUE	3.4 gr.	3.6 gr.	3.9 gr.	4.1 gr.	4.2 gr.
Accurate No. 5	4.9 gr.	5.2 gr.	5.6 gr.		

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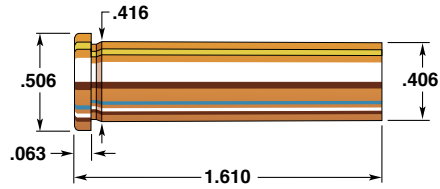


375 Super Magnum

Handgun: . . . . . .Dan Wesson
Barrel:. . . . . 8", 1 in 18¾" Twist
Case:. . . . . Winchester Reformed
Primer: . . . . . Winchester WLR
Bullet Diameter:. . . . . 0.375"
Maximum COL: . . . . . 2.080"
Max. Case Length:. . . . . .1.610"
Case Trim Length: . . . . . 1.600"

Handgun silhouette shooting has had a profound effect on notions of what is or isn't needed in good cartridge design. It has given rise to a new level of inventiveness, creativity, and enthusiasm among shooters seeking competitive advantage. The Era of Silhouette Competition makes earlier periods in shooting history look passive by comparison. "Just buy what the factory has to sell" is no longer an appropriate motto in a great many circles.

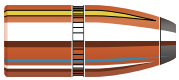
One of the great pioneers in and promoters of contemporary handgun metallic silhouette shooting was Elgin Gates, an energetic and prolific wildcatter. The 375 Super Magnum is another cartridge developed and popularized by him for metallic silhouette shooting. It is one of a series of 1.610" cartridges, including a prototype 357 Maximum and the 445 Super Magnum.

The 375 Super Magnum is based on the 375 Winchester case trimmed to 1.610". Cases should not be made from 30-30 Winchester cases since they have thinner brass in the head area compared to 375 Winchester brass. The thicker brass of the 375 Winchester better withstands the pressures of the 375 Super Magnum.

Whether you are a hunter or a metallic silhouette shooter, the 375 Super Magnum has ample power and accuracy required for successful shooting.

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.375"



220 gr. InterLock®
FP *(Discontinued)*
Item No. 3705
C.O.L.: 2.080"
G1 B.C.: 0.217

	VELOCITY (FPS – feet per second)				
POWDER	**1050**	**1100**	**1150**	**1200**	**1250**
Alliant 2400	14.4 gr.	15.6 gr.	16.7 gr.	17.8 gr.	18.9 gr.
IMR 4227	18.4 gr.	19.3 gr.	20.1 gr.	20.9 gr.	21.8 gr.
H110	19.2 gr.	20.1 gr.	20.9 gr.	21.8 gr.	22.6 gr.
WIN 296	20.4 gr.	21.0 gr.	21.6 gr.	22.3 gr.	22.9 gr.
Alliant RL-7	23.6 gr.	24.3 gr.	25.1 gr.	25.9 gr.	26.6 gr.

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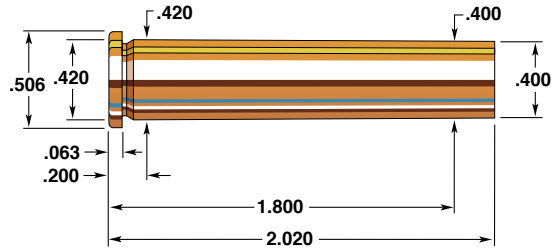


375 Winchester (T/C)

Handgun: . . . . . .T/C Contender
Barrel:. . . . . .14", 1 in 12" Twist
Case:. . . . . Winchester
Primer: . . . . . Winchester WLR
Bullet Diameter:. . . . . 0.375"
Maximum COL: . . . . . 2.560"
Max. Case Length:. . . . . 2.020"
Case Trim Length: . . . . . .2.010"

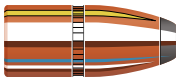
Engineers at Winchester probably did not foresee to what uses their new 375 Winchester cartridge would be put. They saw it as an alternative to the 30-30 in standard Model 94 lever-actions. Those actions had been beefed up to use the new 375 Winchester cartridge to best advantage—and to yield performance comparable to the 35 Remington. Heavy cover hunting; short range hunting; deer and black bear quarry; these types of hunting make a convenient, quick-handling rifle essential. Perhaps that comes close to capturing their thoughts in 1978, the year of the 375 Winchester's introduction.

Today we find the 375 Winchester in a remarkably different context. It is (1) used on the target range, (2) applauded for its knock-down power in competition, and (3) required to flatten both large and small heavy metallic silhouette targets in the shape of their flesh and blood counterparts.

Longer and more powerful than the 357 Remington Maximum or the 375 Super Magnum, both also popular in silhouette shooting, the 375 Winchester retains its original mission even chambered in Thompson/Center single shot pistols. Its hunting role is still there, though, for handgunners; and it has a new competitive shooting role as well. Not bad for a cartridge meant for a new lever-action rifle.

220 GRAIN BULLETS

SECTIONAL DENSITY: 0.223
DIAMETER: 0.375"



220 gr. InterLock®
FP *(Discontinued)*
Item No. 3705
C.O.L.: 2.560"
G1 B.C.: 0.217

	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1750**	**1800**	**1850**	**1900**	**1950**
IMR 4198	29.9 gr.	30.8 gr.	31.8 gr.	32.7 gr.		
Alliant RL-7	31.5 gr.	32.3 gr.	33.0 gr.	33.8 gr.	34.5 gr.	35.3 gr.
Accurate 2015	33.6 gr.	34.4 gr.	35.2 gr.	36.0 gr.	36.8 gr.	
H322	35.5 gr.	36.4 gr.	37.4 gr.	38.3 gr.	39.3 gr.	

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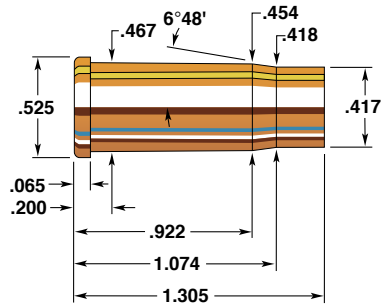


38-40 Winchester

Handgun: . . . . . Ruger Blackhawk
Barrel:. . . . . 6½", 1 in 20" Twist
Case:. . . . . Winchester
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.400"
Maximum COL: . . . . . 1.590"
Max. Case Length:. . . . . .1.305"
Case Trim Length: . . . . . .1.295"

Odyssey, an extended adventurous trip, precisely describes the more than century-old history of the 38-40 Winchester. It began in 1874 as a rifle cartridge for Winchester's Model 73 leveraction. It became a revolver cartridge a decade later in Colt's 38 WCF Single Action Army. Other manufacturers chambered it both for revolvers and rifles alike. It dwindled in favor as a medium game cartridge in rifles, while it continued a following in revolver chamberings.

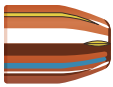
And now, because of late-20th century interest in 40 caliber handguns, the 38-40 has returned to the scene and gained new advocates. New bullets intended for new 40 caliber handguns have given the 38-40 a new lease on life.

At one time Winchester offered a high-velocity load for rifles. These rifle loads caused problems in revolvers, especially early revolvers made for black powder. This data was developed in the modern, strong Ruger Blackhawk revolver. It should only be used in modern firearms in good condition and comparable strength.

Caution and care must be used in working with 38-40 brass. It is very thin and easily crushed during resizing and bullet seating. Although a rimmed case, care should be taken in not setting the shoulder back during resizing. Case life will be better if the case closely fits the chamber.

155 GRAIN BULLETS

SECTIONAL DENSITY: 0.138
DIAMETER: 0.400"



155 gr. XTP®
Item No. 40000
C.O.L.: 1.590"
G1 B.C.: 0.137

	VELOCITY (FPS – feet per second)				
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**
UNIQUE	7.2 gr.	7.8 gr.	8.4 gr.	9.0 gr.	9.6 gr.
IMR SR-4756	7.8 gr.	8.3 gr.	8.7 gr.	9.2 gr.	
Accurate No. 7	11.2 gr.	11.9 gr.	12.6 gr.	13.3 gr.	
Alliant 2400	12.4 gr.	13.1 gr.	13.9 gr.	14.6 gr.	15.3 gr.
IMR 4227	15.5 gr.	16.6 gr.	17.6 gr.	18.6 gr.	19.7 gr.

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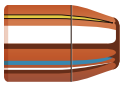
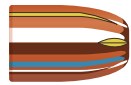
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.161
DIAMETER: 0.400"



180 gr. FMJ-FP *(Discontinued)*
Item No. 400471
C.O.L.: 1.590"
G1 B.C.: 0.188



180 gr. XTP®
Item No. 40040
C.O.L.: 1.590"
G1 B.C.: 0.164

	VELOCITY (FPS – feet per second)				
POWDER	**900**	**950**	**1000**	**1050**	**1100**
UNIQUE	7.0 gr.	7.6 gr.	8.1 gr.	8.7 gr.	9.3 gr.
IMR SR-4756	7.3 gr.	7.8 gr.	8.3 gr.	8.8 gr.	
Accurate No. 9	11.1 gr.	11.9 gr.	12.7 gr.	13.5 gr.	14.3 gr.
Alliant 2400	11.5 gr.	12.3 gr.	13.0 gr.	13.7 gr.	14.5 gr.
IMR 4227	14.4 gr.	15.4 gr.	16.5 gr.	17.5 gr.	18.5 gr.

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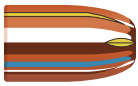
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.179
DIAMETER: 0.400"



200 gr. XTP®
Item No. 40060
C.O.L.: 1.590"
G1 B.C.: 0.199

	VELOCITY (FPS – feet per second)					
POWDER	**800**	**850**	**900**	**950**	**1000**	**1050**
VIHT N-340	5.1 gr.	5.5 gr.	5.9 gr.	6.3 gr.	6.6 gr.	7.0 gr.
UNIQUE	6.4 gr.	6.9 gr.	7.4 gr.	7.9 gr.	8.4 gr.	
IMR SR-4756	7.1 gr.	7.6 gr.	8.1 gr.	8.5 gr.	9.0 gr.	
Alliant 2400			11.7 gr.	12.4 gr.	13.0 gr.	13.7 gr.
Accurate No. 9	10.6 gr.	11.2 gr.	11.8 gr.	12.5 gr.	13.1 gr.	13.8 gr.
IMR 4227			15.0 gr.	16.2 gr.	17.4 gr.	18.6 gr.

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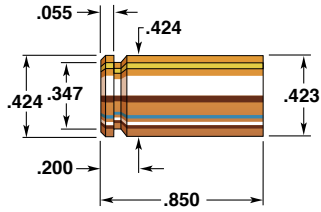


40 Smith & Wesson

Handgun:	Glock 22	**Bullet Diameter:**	0.400"
Barrel:	4½", 1 in 9.8" Twist	**Maximum COL:**	1.135"
Case:	Hornady	**Max. Case Length:**	0.850"
Primer:	Winchester WSP	**Case Trim Length:**	0.845"

Stopping power is a topic that fuels enough debates to heat Green Bay, Wisconsin every winter. What is it? What do we need? When is enough enough? Why don't we have it? It's not just a topic for the Hot Stove League, but one that gets periodically frenzied when some agency or organization reviews its weaponry.

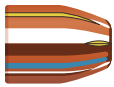
So the FBI did in the late 1980s. Experimentation with the recent (1983) 10mm Automatic got them interested. Reportedly they were close to reaching caliber/bullet/velocity standards when Winchester and Smith & Wesson came on the scene, formed an almost instantaneous joint venture, and developed and standardized the 40 Smith & Wesson.

The 40 S & W is similar in length to the 9mm Luger and accordingly a 9mm sized pistol was modified for it, producing the Model 4006.

The larger bore, greater capacity, and short barrel of the Model 4006 made it powerful and easy to handle—but noisy with a lot of muzzle blast. The 40 S & W quickly eclipsed the 41 Action Express. With improved loads its performance can rival that of the 45 Automatic.

155 GRAIN BULLETS

SECTIONAL DENSITY: 0.138
DIAMETER: 0.400"



155 gr. XTP®
Item No. 40000
C.O.L.: 1.125"
G1 B.C.: 0.137

	VELOCITY (FPS – feet per second)						
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**
TITEGROUP	4.7 gr.	5.0 gr.	5.3 gr.				
CFE Pistol	6.0 gr.	6.4 gr.	6.8 gr.	7.1 gr.			
VIHT N-340	6.1 gr.	6.4 gr.	6.8 gr.	7.1 gr.			
BE-86	6.1 gr.	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.		
WIN AutoComp	6.1 gr.	6.5 gr.	6.9 gr.	7.4 gr.	7.8 gr.		
POWER PISTOL	5.8 gr.	6.4 gr.	7.0 gr.	7.6 gr.	8.2 gr.	8.9 gr.	
SILHOUETTE	6.4 gr.	6.9 gr.	7.4 gr.	7.8 gr.			
LONGSHOT	6.6 gr.	7.1 gr.	7.6 gr.	8.1 gr.	8.6 gr.	9.1 gr.	9.6 gr.
SW Auto Pistol	6.8 gr.	7.3 gr.	7.7 gr.	8.1 gr.			
IMR 800 X	7.1 gr.	7.5 gr.	7.8 gr.	8.2 gr.			
IMR SR-4756	7.1 gr.	7.5 gr.	7.8 gr.	8.1 gr.	8.4 gr.		
HS-6	7.5 gr.	7.9 gr.	8.3 gr.	8.7 gr.			
Accurate No. 5	7.3 gr.	7.8 gr.	8.4 gr.				
BLUE DOT	8.2 gr.	8.7 gr.	9.2 gr.	9.7 gr.	10.2 gr.		
Accurate No. 7	9.2 gr.	9.7 gr.	10.3 gr.	10.9 gr.	11.5 gr.		

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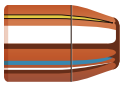
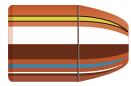
180 GRAIN BULLETS

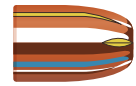
SECTIONAL DENSITY: 0.161
DIAMETER: 0.400"



180 gr. FMJ-FP *(Discontinued)*
Item No. 400471
C.O.L.: 1.125"
G1 B.C.: 0.188



180 gr. HAP®
Item No. 400421
C.O.L.: 1.125"
G1 B.C.: 0.164



180 gr. XTP®
Item No. 40040
C.O.L.: 1.125"
G1 B.C.: 0.164

VELOCITY (FPS – feet per second)

POWDER	850	900	950	1000	1050	1100
CFE Pistol	4.9 gr.	5.2 gr.	5.6 gr.	5.9 gr.		
BE-86	4.8 gr.	5.2 gr.	5.6 gr.	6.0 gr.	6.4 gr.	
WIN AutoComp	5.1 gr.	5.4 gr.	5.8 gr.	6.1 gr.		
LONGSHOT	4.8 gr.	5.3 gr.	5.9 gr.	6.4 gr.	6.9 gr.	7.5 gr.
POWER PISTOL	5.1 gr.	5.6 gr.	6.1 gr.	6.6 gr.	7.1 gr.	
IMR SR-4756	5.2 gr.	5.7 gr.	6.2 gr.	6.6 gr.	7.1 gr.	
SILHOUETTE	5.5 gr.	5.8 gr.	6.2 gr.	6.6 gr.	6.9 gr.	
IMR 800 X	5.4 gr.	5.9 gr.	6.4 gr.	6.9 gr.	7.4 gr.	
SW Auto Pistol	5.7 gr.	6.1 gr.	6.5 gr.	6.9 gr.		
HS-6	6.2 gr.	6.5 gr.	6.8 gr.	7.2 gr.		
Accurate No. 5	5.9 gr.	6.4 gr.	6.8 gr.	7.3 gr.		
BLUE DOT	6.4 gr.	6.9 gr.	7.3 gr.	7.8 gr.	8.3 gr.	
Accurate No. 7	7.2 gr.	7.8 gr.	8.4 gr.	9.0 gr.		

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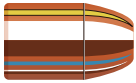
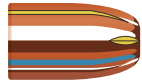
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.179
DIAMETER: 0.400"



200 gr. HAP®
Item No. 40061B
C.O.L.: 1.125"
G1 B.C.: 0.199



200 gr. XTP®
Item No. 40060
C.O.L.: 1.125"
G1 B.C.: 0.199

VELOCITY (FPS – feet per second)

POWDER	700	750	800	850	900	950
CFE Pistol	3.8 gr.	4.1 gr.	4.4 gr.	4.7 gr.	5.0 gr.	
BE-86	3.8 gr.	4.2 gr.	4.5 gr.	4.9 gr.	5.3 gr.	
WIN AutoComp	3.9 gr.	4.3 gr.	4.6 gr.	5.0 gr.	5.3 gr.	
LONGSHOT	3.6 gr.	4.1 gr.	4.6 gr.	5.2 gr.	5.7 gr.	
POWER PISTOL	4.2 gr.	4.6 gr.	4.9 gr.	5.3 gr.	5.6 gr.	
SILHOUETTE	4.3 gr.	4.7 gr.	5.0 gr.	5.3 gr.	5.6 gr.	
IMR SR-4756	4.4 gr.	4.7 gr.	5.0 gr.	5.3 gr.	5.6 gr.	
IMR 800 X	4.3 gr.	4.7 gr.	5.2 gr.	5.7 gr.	6.1 gr.	6.6 gr.
Accurate No. 5	4.8 gr.	5.2 gr.	5.6 gr.	5.9 gr.	6.3 gr.	
HS-6	4.9 gr.	5.3 gr.	5.7 gr.	6.0 gr.	6.4 gr.	
BLUE DOT	5.3 gr.	5.7 gr.	6.0 gr.	6.4 gr.	6.8 gr.	
Accurate No. 7	6.1 gr.	6.5 gr.	7.0 gr.	7.4 gr.		

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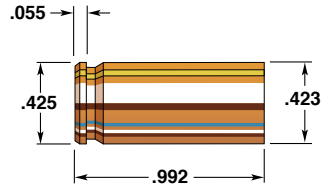


10mm Automatic

Handgun:	Colt Delta Elite	**Bullet Diameter:**	0.400"
Barrel:	.5", 1 in 16" Twist	**Maximum COL:**	1.260"
Case:	Hornady	**Max. Case Length:**	0.992"
Primer:	Winchester WLP	**Case Trim Length:**	0.987"

Venting frustration over the "insufficient" power of such established cartridges as the 9mm Luger, 38 Super, or 45 Automatic has led many shooters and wildcatters to take direct action. Believing the answer to this dilemma to be a totally new cartridge, Whit Collins, John Adams, and Irving Stone with the assistance of Jeff Cooper, set out to create one. Using cut-off 30 Remington cases with a 40 caliber 180 grain bullet from the 38-40 Winchester, they created the 10mm Automatic. The Bren Ten was the first production firearm for the new cartridge, but production problems caused the end of the manufacturing plant and the pistol as well.

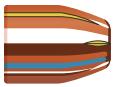
Colt, however, recognized some potential with the 10mm Automatic and started producing a modified M1911, known as the Delta Elite. Several other manufacturers offered firearms in 10mm Automatic.

The 10mm Automatic appeared in 1989 as the FBI reviewed its sidearm requirements and its prospects looked good. The advent of the 40 S&W changed this perspective.

Hornady offers three different bullet weights (155 grain, 180 grain, and the 200 grain) in 40 caliber designs. Velocities and energies are impressive as is accuracy. Excellent results were obtained with Accurate No. 7, Blue Dot and Accurate No. 9 in our testing.

155 GRAIN BULLETS

SECTIONAL DENSITY: 0.138
DIAMETER: 0.400"



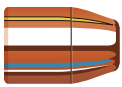
155 gr. XTP®
Item No. 40000
C.O.L.: 1.260"
G1 B.C.: 0.137

	VELOCITY (FPS – feet per second)						
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**	**1450**
WIN 231	7.1 gr.	7.6 gr.	8.0 gr.				
VIHT N-340	7.3 gr.	7.7 gr.	8.1 gr.				
UNIQUE	7.3 gr.	7.8 gr.	8.4 gr.	8.9 gr.			
HERCO	7.8 gr.	8.5 gr.	9.2 gr.	9.9 gr.			
POWER PISTOL	8.4 gr.	8.8 gr.	9.2 gr.	9.6 gr.	10.0 gr.		
VIHT 3N37	8.4 gr.	8.8 gr.	9.3 gr.				
IMR 800 X	8.1 gr.	9.0 gr.	9.8 gr.	10.7 gr.	11.5 gr.		
IMR SR-4756	8.8 gr.	9.3 gr.	9.8 gr.	10.3 gr.	10.9 gr.	11.4 gr.	
HS-6	9.4 gr.	9.9 gr.	10.3 gr.	10.8 gr.	11.2 gr.		
Accurate No. 5	9.6 gr.	10.1 gr.	10.5 gr.	11.0 gr.			
BLUE DOT	10.2 gr.	10.7 gr.	11.1 gr.	11.5 gr.	12.0 gr.	12.4 gr.	12.9 gr.
Accurate No. 7	11.9 gr.	12.4 gr.	12.7 gr.				

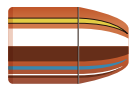
Create custom ballistic tables using our online calculators at hornady.com/ballistics

180 GRAIN BULLETS

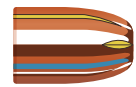
SECTIONAL DENSITY: 0.161
DIAMETER: 0.400"



180 gr. FMJ-FP *(Discontinued)*
Item No. 400471
C.O.L.: 1.260"
G1 B.C.: 0.188



180 gr. HAP®
Item No. 400421
C.O.L.: 1.260"
G1 B.C.: 0.164



180 gr. XTP®
Item No. 40040
C.O.L.: 1.260"
G1 B.C.: 0.164

	VELOCITY (FPS – feet per second)						
POWDER	**950**	**1000**	**1050**	**1100**	**1150**	**1200**	**1250**
UNIQUE	5.8 gr.	6.2 gr.	6.7 gr.	7.1 gr.			
VIHT N-340	5.9 gr.	6.3 gr.	6.7 gr.	7.1 gr.	7.5 gr.		
HERCO	6.3 gr.	6.8 gr.	7.2 gr.	7.7 gr.	8.2 gr.		
LONGSHOT	6.4 gr.	6.9 gr.	7.3 gr.	7.8 gr.	8.2 gr.		
POWER PISTOL	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.	8.4 gr.		
VIHT 3N37	6.9 gr.	7.3 gr.	7.7 gr.	8.1 gr.	8.5 gr.		
IMR SR-4756	6.8 gr.	7.3 gr.	7.8 gr.	8.3 gr.	8.8 gr.		
IMR 800 X	6.7 gr.	7.3 gr.	7.8 gr.	8.4 gr.	9.0 gr.	9.6 gr.	10.1 gr.
Accurate No. 5	7.8 gr.	8.1 gr.	8.5 gr.	8.9 gr.	9.2 gr.		
BLUE DOT	7.5 gr.	8.1 gr.	8.6 gr.	9.1 gr.	9.6 gr.	10.2 gr.	10.7 gr.
Accurate No. 7	9.3 gr.	9.8 gr.	10.4 gr.	10.9 gr.	11.4 gr.	12.0 gr.	
Accurate No. 9	11.5 gr.	12.0 gr.	12.6 gr.	13.2 gr.	13.8 gr.	14.4 gr.	14.9 gr.

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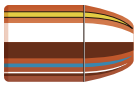
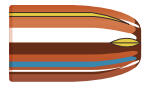
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.179
DIAMETER: 0.400"



200 gr. HAP®
Item No. 40061B
C.O.L.: 1.260"
G1 B.C.: 0.199



200 gr. XTP®
Item No. 40060
C.O.L.: 1.260"
G1 B.C.: 0.199

	VELOCITY (FPS – feet per second)						
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**	**1150**
UNIQUE	5.3 gr.	5.7 gr.	6.0 gr.	6.4 gr.			
HERCO	5.3 gr.	5.8 gr.	6.2 gr.	6.6 gr.	7.0 gr.		
LONGSHOT	5.7 gr.	6.1 gr.	6.5 gr.	6.9 gr.	7.3 gr.		
POWER PISTOL	6.0 gr.	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.		
VIHT 3N37	6.3 gr.	6.6 gr.	7.0 gr.	7.4 gr.	7.8 gr.		
IMR SR-4756	6.2 gr.	6.7 gr.	7.1 gr.	7.5 gr.	8.0 gr.		
IMR 800 X	6.0 gr.	6.6 gr.	7.1 gr.	7.6 gr.	8.1 gr.		
Accurate No. 5	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.			
BLUE DOT	6.9 gr.	7.3 gr.	7.8 gr.	8.2 gr.	8.6 gr.	9.0 gr.	9.4 gr.
HS-6	7.0 gr.	7.4 gr.	7.8 gr.	8.3 gr.			
Accurate No. 7	8.3 gr.	8.9 gr.	9.4 gr.	9.9 gr.			
Accurate No. 9	9.7 gr.	10.3 gr.	10.9 gr.	11.5 gr.	12.0 gr.	12.6 gr.	13.2 gr.

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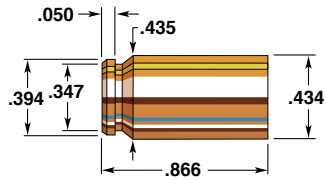


41 Action Express

Handgun:	UZI	**Bullet Diameter:**	.0.410"
Barrel:	16", 1 in 18½" Twist	**Maximum COL:**	.1.150"
Case:	IMI	**Max. Case Length:**	0.866"
Primer:	WSP	**Case Trim Length:**	.0.861"

Developed by Evan Whilden, vice president of Action Arms, the 41 Action Express was intended to improve the performance of the Uzi submachine gun. Initial experiments produced a variety of designs (one of which was nearly identical to the 40 S&W). The final configuration was based on 41 Magnum cases trimmed to .866" with the head altered to match that of the 9mm Luger case. The result was a short, squat 41 caliber cartridge with a rebated rim. It would allow any owner of an Uzi or other firearm to change from 9mm to 41 AE by simply switching barrels and magazines. Other parts of the firearm, such as the extractor need not be altered.

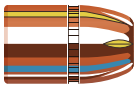
Several manufacturers offered pistols in 41 AE, including Taurus, F.I.E., Excam and K.B.I., and Action Arms offered conversion kits. Factory ammunition came from Action Arms and Samson.

Though the 41 AE is a fine cartridge, the introduction of the 10mm Auto and the 40 S&W and firearms for these cartridges from most large American manufacturers quickly eroded interest in the Action Express. Few bullets are available in 41 caliber, compared to 10mm, so even handloading the 41 AE doesn't offer a bright future.

A 16" barrel produced our data, and velocities in a 5" pistol barrel would probably average 100 to 150 fps lower than those listed.

210 GRAIN BULLETS

SECTIONAL DENSITY: 0.178
DIAMETER: 0.410"



210 gr. XTP®
Item No. 41000
C.O.L.: 1.150"
G1 B.C.: 0.182

	VELOCITY (FPS – feet per second)					
POWDER	**800**	**900**	**1000**	**1050**	**1100**	**1150**
BULLSEYE	3.8 gr.	4.2 gr.	4.7 gr.	4.9 gr.	5.1 gr.	
WIN 231	4.0 gr.	4.3 gr.	4.7 gr.	4.9 gr.		
WIN WSF	4.2 gr.	4.7 gr.	5.2 gr.	5.5 gr.	5.7 gr.	6.0 gr.
UNIQUE	4.3 gr.	4.8 gr.	5.3 gr.	5.5 gr.	5.7 gr.	
Accurate No. 5	5.4 gr.	5.8 gr.	6.3 gr.	6.5 gr.	6.8 gr.	7.0 gr.
HS-6	5.7 gr.	6.2 gr.	6.8 gr.	7.0 gr.		
Accurate No. 7	6.6 gr.	7.3 gr.	8.1 gr.	8.5 gr.	8.8 gr.	

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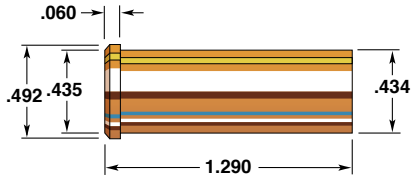


41 Remington Magnum

Handgun:	S & W Model 57	**Bullet Diameter:**	.0.410"
Barrel:	.6", 1 in 18¾" Twist	**Maximum COL:**	1.590"
Case:	Remington	**Max. Case Length:**	1.290"
Primer:	Federal 150	**Case Trim Length:**	1.280"

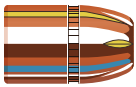
The 41 Remington Magnum came into being in 1964, along with the Model 57 Smith & Wesson revolver chambered for it. Elmer Keith made a pre-press release announcement of its pending arrival to a group of several dozen in the Guns & Ammo suite at the NRA convention. Elmer beamed his pride in his role "in saving peace officers' lives" through his lobbying efforts.

The 41 was originally designed to fill the gap between the 357 Magnum and the 44 Magnum. Initially two loads were available—a high velocity load for hunting and a medium velocity for police work. The 41 Magnum does exactly that. It supplies increased power over the 357 Magnum with more tolerable recoil than the 44. However, its acceptance has been minimal to spotty at best.

A surge of law enforcement enthusiasm failed to develop. The hunting fraternity, however, was much more interested. The 41 supplies all the power needed for hunting deer, or even black bear. Law enforcement, ironically, two decades later showed considerable interest in a 40 caliber cartridge at medium velocity as originally proposed in 1964. In testing the 41 Magnum, we found that recoil was reasonable, even with full power loads, and that accuracy was more than adequate. Our Model 57 pushed the Hornady 210 grain Jacketed Hollow Point–XTP® at 1400 fps, creating nearly one thousand foot pounds of muzzle energy.

210 GRAIN BULLETS

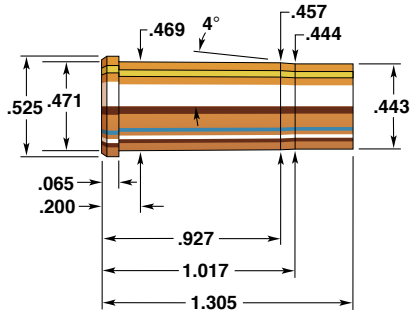
SECTIONAL DENSITY: 0.178
DIAMETER: 0.410"



210 gr. XTP®
Item No. 41000
C.O.L.: 1.580"
G1 B.C.: 0.182

	VELOCITY (FPS – feet per second)						
POWDER	**1100**	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
IMR 800 X	9.5 gr.	10.3 gr.	11.0 gr.	11.7 gr.	12.5 gr.	13.2 gr.	
Accurate No. 7	13.1 gr.	13.6 gr.	14.2 gr.	14.7 gr.	15.3 gr.	15.9 gr.	16.4 gr.
Accurate No. 9	15.3 gr.	16.0 gr.	16.8 gr.	17.0 gr.	17.8 gr.	18.5 gr.	19.2 gr.
Alliant 2400	16.0 gr.	16.8 gr.	17.6 gr.	18.4 gr.	19.2 gr.	20.0 gr.	
VIHT N-110	16.7 gr.	17.3 gr.	18.0 gr.	18.6 gr.	19.2 gr.	19.9 gr.	
WIN 296	17.6 gr.	18.5 gr.	19.3 gr.	20.1 gr.	20.9 gr.	21.7 gr.	22.6 gr.
Accurate 5744	18.2 gr.	19.1 gr.	20.0 gr.	20.8 gr.	21.7 gr.	22.6 gr.	
LIL' GUN	18.2 gr.	19.2 gr.	20.2 gr.	21.2 gr.	22.2 gr.		
IMR 4227	18.2 gr.	19.3 gr.	20.5 gr.				
H110	19.5 gr.	20.0 gr.	20.6 gr.	21.1 gr.	21.7 gr.	22.2 gr.	22.7 gr.
Vectan SP 3	20.1 gr.	20.7 gr.	21.2 gr.	21.8 gr.	22.4 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



44-40 Winchester

Handgun:	Cimarron Model P	**Bullet Diameter:**	0.427"
Barrel:	4¾", 1 in 30" Twist	**Maximum COL:**	1.592"
Case:	Hornady/Frontier	**Max. Case Length:**	1.305"
Primer:	Federal 150	**Case Trim Length:**	1.295"

Not all cartridges maintain their popularity with the shooting public as long as the 44-40 Winchester (or 44 WCF). Its dual role as a rifle and, later, revolver cartridge has much to do with this longevity. In times past a shooter might carry both a rifle and a pistol in this caliber. That certainly simplified logistics.

The 44-40 Winchester was introduced in 1873 in the firm's famous Model 1873 lever-action rifle. Colt followed soon with a revolver chambering for the 44-40 Winchester, and over its lifetime the 44-40 has been chambered in both rifles and revolvers manufactured by European as well as American firms.

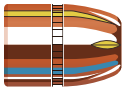
The Cimarron Model P used in our tests could easily withstand the higher pressures of smokeless loads, but thin 44-40 cases demanded extreme care in handling.

We experienced difficulties in our load development with bullets heavier than 200 grains. Factory and fired cases have a strong cannelure, designed to keep the factory loaded 200 grain bullet from being pushed too deep. Heavier bullets caused this cannelure to bulge out, producing chambering problems. The 44-40 Winchester is at its best with 200 grain bullets. During our testing 2400 and IMR 4227 performed well with jacketed bullets.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"

NOTE:
200 grain HP-XTP® data was fired in a Ruger Blackhawk. This bullet cannot be fired in the Cimarron Model P, as it is designed for .427" bullets only.



200 gr. XTP®
Item No. 44100
C.O.L.: 1.600"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**800**	**900**	**1000**	**1050**	**1100**	**1150**
UNIQUE	7.3 gr.	8.3 gr.	9.3 gr.	9.8 gr.		
WIN WSF	7.4 gr.	8.5 gr.	9.5 gr.	10.0 gr.		
IMR SR-4756	8.8 gr.	9.4 gr.	10.1 gr.	10.4 gr.		
Alliant 2400		14.3 gr.	15.3 gr.	15.7 gr.	16.2 gr.	
Accurate No. 9		14.1 gr.	15.2 gr.	15.8 gr.	16.4 gr.	16.9 gr.
IMR 4227		17.6 gr.	18.9 gr.	19.6 gr.	20.3 gr.	20.9 gr.

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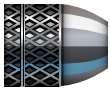
205 GRAIN BULLETS

SECTIONAL DENSITY: 0.161
DIAMETER: 0.427"



205 gr. COWBOY™
(Discontinued)
Item No. 11208
C.O.L.: 1.570"
G1 B.C.: 0.123

	VELOCITY (FPS – feet per second)			
POWDER	**600**	**650**	**700**	**750**
TITEGROUP	4.3 gr.	4.6 gr.	4.9 gr.	5.2 gr.
Trail Boss	4.3 gr.	4.7 gr.	5.2 gr.	
AMERICAN SELECT	4.6 gr.	5.1 gr.	5.6 gr.	
HP-38	5.1 gr.	5.6 gr.	6.0 gr.	
GREEN DOT	5.3 gr.	5.7 gr.	6.1 gr.	6.5 gr.
WIN 231	5.2 gr.	5.8 gr.	6.4 gr.	
UNIQUE	5.7 gr.	6.1 gr.	6.5 gr.	7.0 gr.
UNIVERSAL	5.9 gr.	6.5 gr.	7.2 gr.	
IMR 800 X	6.3 gr.	6.9 gr.	7.4 gr.	8.0 gr.
VIHT N-340	6.5 gr.	7.0 gr.	7.5 gr.	

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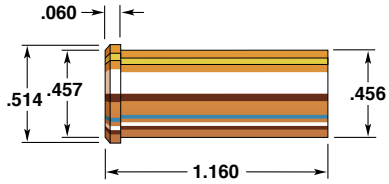


44 Special

Handgun: . . . . . Charter Arms
Barrel:. . . . . 3", 1 in 18" Twist
Case:. . . . . Hornady
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.430"
Maximum COL: . . . . . 1.500"
Max. Case Length:. . . . . 1.165"
Case Trim Length: . . . . . 1.155"

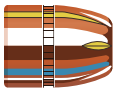
Introduced by Smith & Wesson in 1907, the 44 Special was developed to improve on its black powder predecessor, the 44 Russian, a big bore target cartridge. The 44 Special case was longer than the 44 Russian and could more easily handle the new, bulkier smokeless powder. For four decades the 44 Special reigned as one of the most accurate and powerful big bore pistol cartridges.

Never loaded to its full potential by factories, and certainly never loaded powerfully enough to satisfy Elmer Keith, the 44 Special was an endangered species. With the development of the 44 Magnum in 1955, the 44 Special rapidly lost popularity.

When comparing the 44 Magnum and 44 Special, the 44 Magnum operates at 36,000 psi maximum, and the 44 Special works at only 15,500 psi, a substantial difference. Hornady's XTP® bullets offer good accuracy and expansion, even at low velocity. Best in our test gun was the 180 grain HP/XTP®.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



180 gr. XTP®
Item No. 44050
C.O.L.: 1.480"
G1 B.C.: 0.138

	VELOCITY (FPS – feet per second)					
POWDER	**750**	**800**	**850**	**900**	**950**	**1000**
AMERICAN SELECT	4.8 gr.	5.4 gr.	5.9 gr.	6.4 gr.		
BULLSEYE	5.2 gr.	5.6 gr.	6.1 gr.	6.5 gr.		
WIN 231	5.9 gr.	6.3 gr.	6.7 gr.	7.2 gr.		
UNIVERSAL	6.3 gr.	6.6 gr.	7.0 gr.	7.3 gr.	7.7 gr.	
UNIQUE	5.9 gr.	6.4 gr.	7.0 gr.	7.5 gr.		
VIHT N-340	6.7 gr.	7.0 gr.	7.3 gr.	7.6 gr.	7.9 gr.	
POWER PISTOL	6.9 gr.	7.5 gr.	8.0 gr.	8.5 gr.	9.1 gr.	
VIHT N-350	7.7 gr.	8.2 gr.	8.6 gr.	9.0 gr.		
IMR SR-4756	7.8 gr.	8.2 gr.	8.6 gr.	9.0 gr.	9.4 gr.	
Accurate No. 5	8.0 gr.	8.5 gr.	9.0 gr.	9.4 gr.	9.9 gr.	10.4 gr.
HS-6	8.0 gr.	8.6 gr.	9.2 gr.	9.8 gr.	10.4 gr.	

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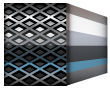
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



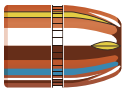
180 gr. COWBOY™
Item No. 11058
C.O.L.: 1.490"
G1 B.C.: 0.114

	VELOCITY (FPS – feet per second)					
POWDER	**700**	**750**	**800**	**850**	**900**	**950**
Vectan AS	4.4 gr.	4.8 gr.	5.2 gr.	5.6 gr.	6.0 gr.	6.4 gr.
TITEGROUP	4.9 gr.	5.3 gr.	5.6 gr.	6.0 gr.	6.3 gr.	
IMR 700 X	4.4 gr.	4.9 gr.	5.4 gr.	5.9 gr.	6.4 gr.	
VIHT N-320	5.0 gr.	5.4 gr.	5.8 gr.	6.2 gr.	6.6 gr.	
AMERICAN SELECT	4.8 gr.	5.3 gr.	5.8 gr.	6.2 gr.	6.7 gr.	
WIN 231	5.2 gr.	5.7 gr.	6.2 gr.	6.7 gr.	7.2 gr.	
UNIQUE	5.5 gr.	6.0 gr.	6.5 gr.	7.0 gr.	7.5 gr.	8.0 gr.
UNIVERSAL	6.0 gr.	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.470"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**650**	**700**	**750**	**800**	**850**	**900**
BULLSEYE	4.3 gr.	4.8 gr.	5.2 gr.	5.7 gr.	6.1 gr.	
WIN 231	4.9 gr.	5.4 gr.	5.9 gr.	6.4 gr.	6.9 gr.	
UNIQUE	5.2 gr.	5.6 gr.	6.1 gr.	6.6 gr.	7.0 gr.	
UNIVERSAL	5.8 gr.	6.1 gr.	6.4 gr.	6.7 gr.	7.0 gr.	
POWER PISTOL	5.9 gr.	6.4 gr.	6.9 gr.	7.5 gr.	8.0 gr.	8.5 gr.
IMR SR-4756	6.7 gr.	7.1 gr.	7.4 gr.	7.8 gr.	8.1 gr.	8.5 gr.
VIHT N-350	6.7 gr.	7.1 gr.	7.5 gr.	7.9 gr.	8.3 gr.	8.7 gr.
Accurate No. 5	7.2 gr.	7.6 gr.	8.1 gr.	8.6 gr.	9.0 gr.	9.5 gr.
HS-6	7.0 gr.	7.6 gr.	8.2 gr.	8.8 gr.	9.3 gr.	
BLUE DOT	7.6 gr.	8.1 gr.	8.7 gr.	9.2 gr.	9.7 gr.	10.3 gr.

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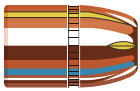
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



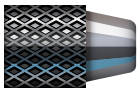
240 gr. XTP®
Item No. 44200
C.O.L.: 1.480"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)				
POWDER	**650**	**700**	**750**	**800**	**850**
BULLSEYE	4.5 gr.	5.0 gr.			
UNIQUE	5.1 gr.	5.7 gr.			
UNIVERSAL	5.3 gr.	5.7 gr.	6.1 gr.		
POWER PISTOL	5.8 gr.	6.3 gr.	6.8 gr.		
IMR SR-4756	6.2 gr.	6.6 gr.	7.1 gr.	7.6 gr.	
VIHT N-350	6.3 gr.	6.7 gr.	7.2 gr.		
Accurate No. 5	6.4 gr.	7.0 gr.	7.7 gr.	8.3 gr.	
HS-6	6.4 gr.	7.1 gr.	7.9 gr.	8.7 gr.	
BLUE DOT	6.9 gr.	7.4 gr.	7.9 gr.	8.4 gr.	9.0 gr.

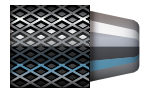
Create custom ballistic tables using our online calculators at hornady.com/ballistics

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. SWC-HP
Item No. 11118
C.O.L.: 1.490"
G1 B.C.: 0.204



240 gr. SWC
Item No. 11108
C.O.L.: 1.490"
G1 B.C.: 0.182

	VELOCITY (FPS – feet per second)					
POWDER	**650**	**700**	**750**	**800**	**850**	**900**
BULLSEYE	4.0 gr.	4.5 gr.	5.0 gr.	5.5 gr.		
AMERICAN SELECT	4.6 gr.	5.1 gr.	5.6 gr.			
WIN 231	4.9 gr.	5.4 gr.	5.8 gr.	6.2 gr.		
UNIQUE	4.9 gr.	5.4 gr.	6.0 gr.	6.5 gr.		
UNIVERSAL	5.2 gr.	5.7 gr.	6.1 gr.	6.6 gr.		
POWER PISTOL	5.4 gr.	6.0 gr.	6.5 gr.	7.0 gr.		
VIHT N-350	6.1 gr.	6.5 gr.	6.8 gr.	7.2 gr.		
IMR SR-4756	6.3 gr.	6.8 gr.	7.2 gr.	7.7 gr.		
BLUE DOT	6.7 gr.	7.2 gr.	7.7 gr.	8.2 gr.	8.7 gr.	9.1 gr.
Accurate No. 5	6.8 gr.	7.3 gr.	7.8 gr.	8.4 gr.	8.9 gr.	
HS-6	7.1 gr.	7.6 gr.	8.1 gr.	8.5 gr.	9.0 gr.	

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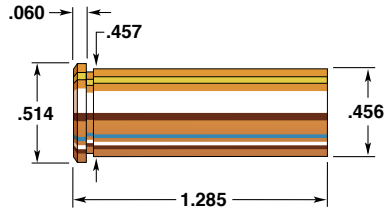


44 Remington Magnum

Handgun: . . . . . Ruger Redhawk
Barrel:. . . . . 7½", 1 in 20" Twist
Case:. . . . . Hornady
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.430"
Maximum COL: . . . . . .1.610"
Max. Case Length:. . . . . .1.285"
Case Trim Length: . . . . . .1.275"

One of the most powerful commercial handgun cartridges available today, the 44 Remington Magnum was introduced in 1955. A joint development of Smith & Wesson and Remington, it owes a debt to the efforts of hunter, wildcatter, and writer Elmer Keith. Since its introduction, the 44 Magnum has been chambered by many manufacturers and offered in rifles such as Ruger's semiautomatic carbine, and Browning, Marlin, and Winchester leveractions.

Given the power of the 44 Magnum, recoil and muzzle blast are substantial and not all handgunners can handle it. However, by using reduced loads and by practicing, a shooter can learn to use this caliber accurately and effectively. The 44 Magnum is effective on deer, black bear, elk, and other large species.

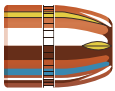
During testing, our Ruger performed exceptionally well with Blue Dot and WIN 296 using Hornady 240 grain Jacketed Hollow Points. With the Hornady 265 grain Flat Point, best accuracy and uniformity was obtained with WIN 296 and IMR 4227. For those shooters who are searching for practice and small game loads, 7.6 grains of Unique and the Hornady 240 grain Semi-Wadcutter make an accurate and efficient combination. VIHT N-105 provides outstanding performance with Hornady 180 and 200 grain bullets. VIHT N-110 works very well with heavier bullets. Both produce much less flash and blast than many other powders.

We've also included data for our new 225 grain FTX® bullet. Please note the different trim length required to load this bullet to an acceptable C.O.L. This shorter trim length also effects case capacity and the data listed for the 225 grain FTX® should not be deviated from.

When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



180 gr. XTP®
Item No. 44050
C.O.L.: 1.600"
G1 B.C.: 0.138

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1400**	**1500**	**1600**	**1700**
UNIVERSAL	10.7 gr.	11.8 gr.			
UNIQUE	9.4 gr.	11.9 gr.	14.4 gr.		
VIHT N-340	10.8 gr.	12.1 gr.	13.5 gr.		
IMR 800 X	11.0 gr.	13.0 gr.	15.0 gr.	16.9 gr.	18.9 gr.
VIHT N-105	10.9 gr.	13.6 gr.	16.4 gr.	19.2 gr.	
BLUE DOT	12.7 gr.	14.3 gr.	15.8 gr.	17.3 gr.	
Accurate No. 7	13.5 gr.	16.0 gr.	18.6 gr.	21.1 gr.	
VIHT N-110	20.1 gr.	21.6 gr.	23.2 gr.	24.7 gr.	26.2 gr.
Alliant 2400	22.2 gr.	23.7 gr.	25.1 gr.	26.6 gr.	

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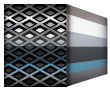
180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



180 gr. COWBOY™
Item No. 11058
C.O.L.: 1.600"
G1 B.C.: 0.114

	VELOCITY (FPS – feet per second)					
POWDER	**850**	**900**	**950**	**1000**	**1050**	**1100**
IMR 700 X	5.2 gr.	5.6 gr.	6.0 gr.	6.5 gr.	6.9 gr.	7.3 gr.
TITEGROUP	5.2 gr.	5.7 gr.	6.1 gr.	6.6 gr.	7.0 gr.	7.5 gr.
Vectan AS	5.5 gr.	5.9 gr.	6.3 gr.	6.6 gr.	7.0 gr.	7.4 gr.
BULLSEYE	5.3 gr.	5.8 gr.	6.3 gr.	6.8 gr.	7.3 gr.	7.8 gr.
VIHT N-320	5.9 gr.	6.3 gr.	6.6 gr.	7.0 gr.	7.3 gr.	7.7 gr.
AMERICAN SELECT	5.7 gr.	6.2 gr.	6.7 gr.	7.2 gr.	7.6 gr.	8.1 gr.
WIN 231	6.4 gr.	6.8 gr.	7.2 gr.	7.7 gr.	8.1 gr.	8.6 gr.
UNIQUE	6.3 gr.	6.8 gr.	7.3 gr.	7.8 gr.	8.2 gr.	8.7 gr.
UNIVERSAL	7.3 gr.	7.6 gr.	7.9 gr.	8.2 gr.	8.4 gr.	8.7 gr.
Trail Boss	5.8 gr.	6.9 gr.	8.0 gr.	9.1 gr.		

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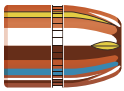
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.600"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1400**	**1500**	**1550**	**1600**
IMR 800 X	9.8 gr.	12.7 gr.	15.7 gr.	17.2 gr.	
UNIQUE	11.4 gr.	12.9 gr.			
BLUE DOT	13.8 gr.	15.1 gr.	16.4 gr.	17.1 gr.	
VIHT N-105	15.3 gr.	17.1 gr.	18.9 gr.	19.8 gr.	
Accurate No. 7	15.8 gr.	17.4 gr.	19.0 gr.		
Accurate No. 9	20.5 gr.	22.1 gr.	23.7 gr.	24.5 gr.	
VIHT N-110	21.0 gr.	22.2 gr.	23.5 gr.	24.1 gr.	24.8 gr.
ENFORCER	20.7 gr.	22.6 gr.	24.4 gr.	25.3 gr.	26.2 gr.
LIL' GUN	20.7 gr.	22.8 gr.	25.0 gr.	26.1 gr.	27.1 gr.
Alliant 2400	22.1 gr.	23.4 gr.	24.7 gr.	25.3 gr.	
IMR 4227	24.5 gr.	25.8 gr.	27.1 gr.	27.8 gr.	
Power Pro 300-MP	25.5 gr.	27.0 gr.	28.5 gr.	29.2 gr.	29.9 gr.
H110	25.8 gr.	27.3 gr.	28.7 gr.		

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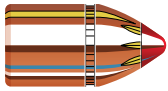
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.174
DIAMETER: 0.430"

CASE TRIM LENGTH: 1.255"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



225 gr. FTX®
Item No. 44105
C.O.L.: 1.645"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1200**	**1300**	**1350**	**1400**	**1450**
Accurate No. 9	13.0 gr.	15.1 gr.				
Alliant 2400	13.6 gr.	15.5 gr.				
ENFORCER	13.1 gr.	15.6 gr.	18.1 gr.			
LIL' GUN	15.6 gr.	17.1 gr.	18.6 gr.	19.4 gr.	20.1 gr.	20.9 gr.
WIN 296	16.4 gr.	18.0 gr.	19.6 gr.	20.4 gr.	21.2 gr.	
H110	16.4 gr.	18.1 gr.	19.9 gr.	20.7 gr.		
IMR 4227	18.9 gr.	20.5 gr.				

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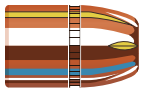
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 1.600"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)				
POWDER	**1100**	**1200**	**1300**	**1350**	**1400**
UNIQUE	9.5 gr.	10.7 gr.			
IMR 800 X	10.5 gr.	11.9 gr.	13.4 gr.	14.1 gr.	
BLUE DOT	11.8 gr.	13.0 gr.	14.3 gr.	15.0 gr.	
VIHT N-105	11.8 gr.	13.7 gr.	15.5 gr.	16.4 gr.	
LIL' GUN	14.6 gr.	17.1 gr.	19.6 gr.	20.9 gr.	22.2 gr.
ENFORCER	15.5 gr.	17.8 gr.	20.1 gr.	21.2 gr.	
Accurate No. 9	16.3 gr.	18.0 gr.	19.6 gr.	20.5 gr.	21.3 gr.
VIHT N-110	17.6 gr.	18.7 gr.	19.9 gr.	20.5 gr.	21.3 gr.
Alliant 2400	17.4 gr.	18.9 gr.	20.4 gr.	21.2 gr.	
Power Pro 300-MP	19.8 gr.	21.7 gr.	23.7 gr.	24.6 gr.	25.6 gr.
IMR 4227	20.4 gr.	21.7 gr.	23.0 gr.	23.7 gr.	
WIN 296	20.7 gr.	22.0 gr.	23.3 gr.	23.9 gr.	24.5 gr.
H110	20.7 gr.	22.1 gr.	23.5 gr.	24.1 gr.	24.8 gr.

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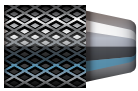
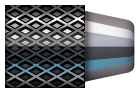
INDICATES MAXIMUM LOAD — USE WITH CAUTION

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. SWC-HP
Item No. 11118
C.O.L.: 1.610"
G1 B.C.: 0.204



240 gr. SWC
Item No. 11108
C.O.L.: 1.610"
G1 B.C.: 0.182

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**1000**
TITEGROUP	4.8 gr.	5.2 gr.	5.7 gr.	6.1 gr.	6.6 gr.
SOLO 1000	5.0 gr.	5.5 gr.	6.0 gr.	6.5 gr.	6.9 gr.
BULLSEYE	5.0 gr.	5.6 gr.	6.1 gr.	6.6 gr.	7.1 gr.
UNIVERSAL	6.0 gr.	6.4 gr.	6.8 gr.	7.1 gr.	7.5 gr.
AMERICAN SELECT	5.3 gr.	5.9 gr.	6.5 gr.	7.0 gr.	7.6 gr.
UNIQUE	5.7 gr.	6.2 gr.	6.6 gr.	7.1 gr.	7.6 gr.
WIN 231	5.5 gr.	6.0 gr.	6.6 gr.	7.1 gr.	7.7 gr.
VIHT N-340	6.4 gr.	6.8 gr.	7.2 gr.	7.6 gr.	8.1 gr.
IMR SR-4756	7.0 gr.	7.4 gr.	7.9 gr.	8.3 gr.	8.8 gr.
Trail Boss	6.6 gr.	7.4 gr.	8.1 gr.	8.8 gr.	9.6 gr.

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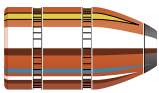
265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"



265 gr. InterLock® FP
Item No. 4300
C.O.L.: 1.610"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**1100**	**1200**	**1300**	**1350**	**1400**
BLUE DOT	11.8 gr.	13.2 gr.			
VIHT N-105	12.8 gr.	14.5 gr.			
Accurate No. 9	15.8 gr.	17.8 gr.	19.8 gr.		
VIHT N-110	17.3 gr.	18.4 gr.	19.4 gr.		
H110	18.7 gr.	20.5 gr.	22.4 gr.	23.3 gr.	
WIN 296	19.7 gr.	20.9 gr.	22.2 gr.	22.9 gr.	23.5 gr.
IMR 4227	19.7 gr.	21.1 gr.	22.6 gr.		

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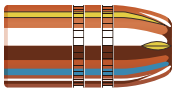
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 1.600"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)				
POWDER	**1000**	**1050**	**1100**	**1150**	**1200**
BLUE DOT	10.8 gr.	11.4 gr.	12.0 gr.		
VIHT N-105	11.7 gr.	12.3 gr.	12.8 gr.		
LIL' GUN	13.0 gr.	14.1 gr.	15.3 gr.	16.4 gr.	
ENFORCER	13.8 gr.	14.8 gr.	15.8 gr.	16.8 gr.	
VIHT N-110	14.9 gr.	15.5 gr.	16.1 gr.	16.6 gr.	
Alliant 2400	14.8 gr.	15.6 gr.	16.3 gr.	17.1 gr.	
Accurate No. 9	15.0 gr.	15.7 gr.	16.5 gr.		
WIN 296	16.8 gr.	17.6 gr.	18.3 gr.	19.1 gr.	19.9 gr.
Power Pro 300-MP	17.1 gr.	17.9 gr.	18.7 gr.	19.4 gr.	
H110	17.5 gr.	18.2 gr.	18.8 gr.	19.5 gr.	20.1 gr.
IMR 4227	17.6 gr.	18.4 gr.	19.2 gr.		

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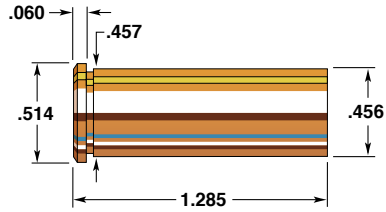


44 Remington Magnum (T/C)

Handgun:	T/C Contender	**Bullet Diameter:**	0.430"
Barrel:	14", 1 in 22" Twist	**Maximum COL:**	1.610"
Case:	Hornady	**Max. Case Length:**	1.285"
Primer:	Winchester WLP	**Case Trim Length:**	1.275"

Remington and Smith & Wesson's 1955 collaboration developed the 44 Remington Magnum. Originally it was seen as a response to demands for a truly powerful big bore handgun cartridge. (It was promptly employed by a number of rifle manufacturers as well.) The 44 Remington Magnum has proved to be an effective, reliable handgun hunting cartridge. Perhaps some saw ancillary law enforcement uses, but hunting was the 44 Magnum's reason for being.

It is doubtful that developers could predict a future role as a competitive target round for use on metallic silhouette targets—and in single shot pistols no less.

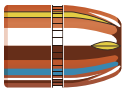
The 14" Thompson/Center chambered in 44 Remington Magnum yielded results very near those obtained with the 44 Remington Magnum Ruger Carbine. It makes quite a bit of difference for the 44 Magnum to be shot from a longer barrel than the 7½" barrel of our Ruger Super Blackhawk test revolver. The 14" T/C and the 44 Magnum cartridge make an excellent combination for metallic silhouette shooting and offer the big game hunter ample power for hunting deer, black bear, and even moose at close ranges.

With all powders tested throughout the range of bullets, accuracy was very good. However, best accuracy and uniformity were obtained using WIN 296 and H-110.

Note: For 44 Cal 225 grain FTX®, data please use the data on page 925. Velocities from the T/C will be approximately 400 fps higher than listed in page 925.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.600"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1750**	**1800**	**1850**	**1900**	**1950**	**2000**
IMR 800 X	16.5 gr.	17.4 gr.				
VIHT N-105	19.3 gr.	20.1 gr.				
VIHT N-110	23.3 gr.	23.8 gr.	24.4 gr.	24.9 gr.	25.5 gr.	
Accurate No. 9	23.3 gr.	24.0 gr.	24.6 gr.	25.3 gr.		
Alliant 2400	24.1 gr.	24.7 gr.	25.3 gr.	25.9 gr.		
WIN 296	26.0 gr.	26.7 gr.	27.4 gr.	28.1 gr.	28.8 gr.	
H110	26.3 gr.	27.0 gr.	27.6 gr.	28.2 gr.	28.9 gr.	29.5 gr.
IMR 4227	27.1 gr.	27.8 gr.				

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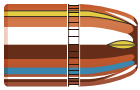
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 1.600"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)				
POWDER	**1600**	**1650**	**1700**	**1750**	**1800**
VIHT N-110	20.7 gr.	21.2 gr.			
Alliant 2400	21.8 gr.	22.3 gr.	22.8 gr.		
H110	23.6 gr.	24.2 gr.	24.8 gr.	25.3 gr.	25.9 gr.
IMR 4227	23.7 gr.	24.3 gr.			
WIN 296	24.0 gr.	24.5 gr.	25.0 gr.	25.5 gr.	

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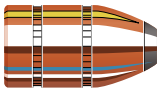
265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"



265 gr. InterLock® FP
Item No. 4300
C.O.L.: 1.610"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**
VIHT N-110	18.4 gr.	18.9 gr.	19.3 gr.			
Accurate No. 9	19.1 gr.	19.7 gr.	20.3 gr.			
H110	20.7 gr.	21.2 gr.	21.7 gr.	22.3 gr.	22.8 gr.	23.3 gr.
WIN 296	21.0 gr.	21.5 gr.	22.1 gr.	22.6 gr.	23.2 gr.	

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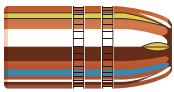
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 1.600"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
VIHT N-110	15.5 gr.	15.9 gr.	16.4 gr.			
Alliant 2400	15.8 gr.	16.2 gr.	16.7 gr.	17.2 gr.		
Accurate No. 9	15.7 gr.	16.3 gr.	16.9 gr.			
H110	17.5 gr.	17.9 gr.	18.4 gr.	18.9 gr.	19.3 gr.	19.8 gr.
WIN 296	17.7 gr.	18.2 gr.	18.8 gr.	19.3 gr.	19.9 gr.	
IMR 4227	18.4 gr.	19.0 gr.	19.5 gr.			

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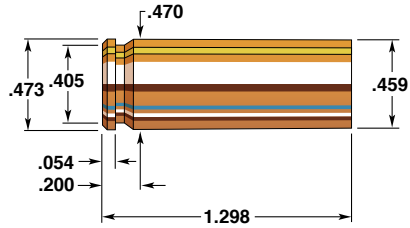


44 Auto Magnum

Handgun: . . . . . Auto Mag
Barrel:. . . . . .6½", 1 in 18" Twist
Case:. . . . . 308 Frontier Reformed
Primer: . . . . . CCI 350 LP Mag
Bullet Diameter:. . . . . 0.430"
Maximum COL: . . . . . .1.695"
Max. Case Length:. . . . . 1.298"
Case Trim Length: . . . . . .1.293"

The origin of the Auto Mag dates to 1971 when it was developed by Harry Sanford of Pasadena, California. This impressive firearm was constructed solely of stainless steel with the exception of the polyurethane grips. It was a wonder to behold when it first arrived in our lab! Alas, it was to lead a short and unhappy life. It is no longer manufactured, either by Sanford or High Standard. Everything that could go wrong apparently did.

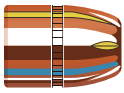
The cartridge is based on a 308, 30-06, or 243 case cut to a length of 1.298". The necks of the cases must be reamed to a depth of .490" to accept a 44 caliber bullet. (At one time Norma made ammunition for the 44 Auto Mag but no longer does so.) Bullets should not be crimped in the case because the cartridge headspaces on the mouth of the case.

Our test firearm had a special requirement of cleanliness to maintain its reliability. It is apparent that the Auto Mag (ours anyway), only functioned properly at maximum or near maximum loads. Also, after fifty rounds or so, the powder fouling in the action decreased reliable functioning of the gun.

The Auto Mag shoots accurately and when properly maintained can be enjoyable to shoot. With the Hornady 240 grain HP/XTP® velocities of 1450 were obtained.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.600"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1350**	**1400**	**1450**	**1500**	**1550**	**1600**
Alliant 2400	21.2 gr.	22.2 gr.	23.1 gr.			
H110	24.0 gr.	24.6 gr.	25.2 gr.	25.8 gr.	26.4 gr.	27.0 gr.
WIN 296	24.4 gr.	25.0 gr.	25.7 gr.	26.4 gr.	27.0 gr.	
IMR 4227	25.2 gr.	25.8 gr.	26.5 gr.	27.1 gr.		

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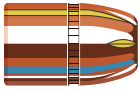
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 1.600"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1250**	**1300**	**1350**	**1400**	**1450**
Alliant 2400	18.6 gr.	19.4 gr.	20.1 gr.	20.8 gr.		
H110	19.7 gr.	20.4 gr.	21.2 gr.	22.0 gr.	22.8 gr.	23.5 gr.
WIN 296	20.4 gr.	21.2 gr.	22.1 gr.	22.9 gr.	23.8 gr.	
IMR 4227	22.2 gr.	22.8 gr.	23.4 gr.	24.1 gr.		

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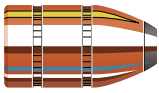
265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"



265 gr. InterLock® FP
Item No. 4300
C.O.L.: 1.695"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**
Alliant 2400	17.2 gr.	17.9 gr.	18.7 gr.	19.4 gr.		
H110	18.2 gr.	18.8 gr.	19.4 gr.	20.0 gr.	20.6 gr.	
WIN 296	18.6 gr.	19.3 gr.	20.1 gr.	20.8 gr.	21.6 gr.	22.4 gr.
IMR 4227	19.9 gr.	20.7 gr.	21.4 gr.	22.2 gr.	22.9 gr.	

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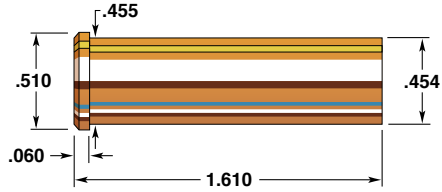


445 Super Magnum

Handgun:	.Dan Wesson	**Bullet Diameter:**	0.430"
Barrel:	8", 1 in 18" Twist	**Maximum COL:**	.1.965"
Case:	IHMSA	**Max. Case Length:**	.1.610"
Primer:	Federal 155	**Case Trim Length:**	1.600"

Knocking down heavy metal silhouette targets at 200 meters requires considerable momentum. Elgin Gates, one of the pioneers and great promoters of competitive silhouette shooting, designed the 445 Super Magnum to provide all the momentum needed. The cartridge is a 44 Remington Magnum nearly 3⁄8" longer than its parent. In spite of the “445” in its name it uses the same .430" bullets and propels them nearly 200 fps faster than the 44 Remington Magnum.

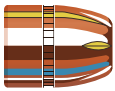
The Dan Wesson revolver we used in our testing for this cartridge is immense and when mounted with a scope, weighs nearly as much as some ultra-light rifles. But it is also nearly as effective up to moderate ranges. It is most effective with either of the 240 grain bullets, the 265 grain Flat Point or the 300 grain HP-XTP®.

There is considerable muzzle blast and recoil with this gun, and it is clearly not a pistol for the inexperienced shooter nor, for that matter, the timid or frail shooter, either. Those who are willing to practice and become inured to its recoil and noise will be rewarded with an accurate, extremely powerful handgun.

If silhouette shooting or handgun hunting is your sport, and if you don’t mind some punishment while getting used to it, the 445 Super Magnum may be worth considering.

180 GRAIN BULLETS

SECTIONAL DENSITY: 0.139
DIAMETER: 0.430"



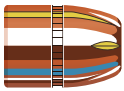
180 gr. XTP®
Item No. 44050
C.O.L.: 1.925"
G1 B.C.: 0.138

	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1500**	**1600**	**1650**	**1700**
Accurate 5744	30.3 gr.	32.5 gr.	34.6 gr.	35.7 gr.	36.8 gr.
IMR 4227	33.1 gr.	34.7 gr.	36.3 gr.	37.1 gr.	
WIN 296	35.7 gr.	36.9 gr.	38.1 gr.	38.6 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



200 gr. XTP®
Item No. 44100
C.O.L.: 1.925"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)			
POWDER	**1300**	**1400**	**1500**	**1600**
Accurate 5744	29.0 gr.	30.8 gr.	32.5 gr.	34.3 gr.
IMR 4227	30.4 gr.	32.0 gr.	33.5 gr.	35.1 gr.
WIN 296	31.9 gr.	33.8 gr.	35.6 gr.	
H110	32.6 gr.	34.2 gr.	35.8 gr.	

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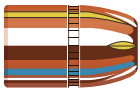
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



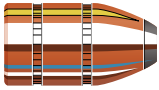
240 gr. XTP®
Item No. 44200
C.O.L.: 1.925"
G1 B.C.: 0.205

	VELOCITY (FPS – feet per second)				
POWDER	**1200**	**1300**	**1400**	**1500**	**1600**
Accurate 5744	26.7 gr.	28.5 gr.	30.4 gr.	32.2 gr.	
IMR 4227	26.4 gr.	28.6 gr.	30.8 gr.		
WIN 296	28.1 gr.	29.7 gr.	31.3 gr.	32.9 gr.	
H110	29.6 gr.	30.7 gr.	31.7 gr.	32.8 gr.	
Accurate 1680	33.2 gr.	34.9 gr.	36.6 gr.	38.3 gr.	40.1 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"



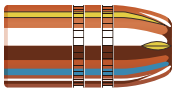
265 gr. InterLock® FP
Item No. 4300
C.O.L.: 1.965"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1200**	**1300**	**1350**	**1400**	**1450**
IMR 4227	26.1 gr.	27.5 gr.	28.9 gr.	29.6 gr.	30.3 gr.	
Accurate 5744	25.0 gr.	26.9 gr.	28.7 gr.	29.6 gr.	30.6 gr.	
WIN 296	26.8 gr.	28.6 gr.	30.4 gr.	31.3 gr.	32.1 gr.	
H110	27.2 gr.	28.8 gr.	30.5 gr.	31.3 gr.	32.2 gr.	
Accurate 1680	30.4 gr.	32.3 gr.	34.1 gr.	35.0 gr.	35.9 gr.	36.8 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 1.935"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)				
POWDER	**1100**	**1200**	**1300**	**1350**	**1400**
WIN 296	24.4 gr.	26.0 gr.	27.7 gr.	28.5 gr.	29.4 gr.
IMR 4227	24.7 gr.	26.4 gr.	28.0 gr.		
H110	24.6 gr.	26.4 gr.	28.2 gr.	29.1 gr.	
Accurate 5744	24.9 gr.	26.6 gr.	28.4 gr.	29.3 gr.	
Accurate 1680	28.6 gr.	30.6 gr.	32.6 gr.	33.6 gr.	34.5 gr.

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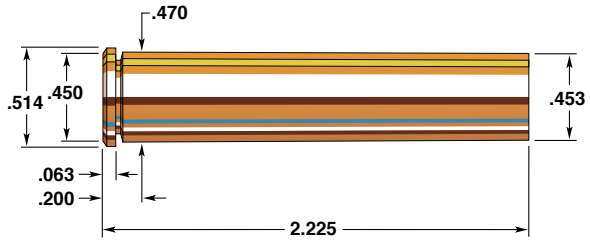


444 Marlin (T/C)

Handgun:	T/C Encore	**Bullet Diameter:**	0.430"
Barrel:	15", 1 in 24" Twist	**Maximum COL:**	2.570"
Case:	Remington	**Max. Case Length:**	2.225"
Primer:	Remington 9½	**Case Trim Length:**	2.215"

Once the 44 Remington Magnum had come on the scene, thus making handgun hunting for larger species more realistic, the cartridge was quickly adapted by rifle manufacturers for use in short semi-automatic carbines or easy handling lever-action rifles. The relatively low velocities and high trajectories from these guns sparked yet another cartridge development in 44 caliber.

The 444 Marlin was announced in 1964, chambered in that firm's Model 336 lever-action. Clearly a more powerful and reliable cartridge over longer ranges, it soon developed a following.

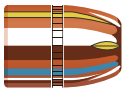
That was not to be the 444 Marlin's only career. When strongly built single shot pistols began to win broad acceptance, the 444 Marlin chambered in a Thompson/Center Encore became possible. It proved to be a reliable handgun hunting round as well. In a handgun chambering it develops a big kick.

Dropping 8" to 10" of barrel length drops attainable muzzle velocities of the T/C single shot pistol, of course. But T/C velocities are high and the 444 Marlin T/C combination can clearly handle its hunting role nicely.

The 265 grain FTX® bullet is a great performer in the 444 Marlin. Please refer to the reloading data printed on pages 746 and 747 as special loading techniques are required.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.155
DIAMETER: 0.430"



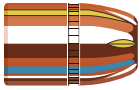
200 gr. XTP®
Item No. 44100
C.O.L.: 2.535"
G1 B.C.: 0.170

	VELOCITY (FPS – feet per second)					
POWDER	**1900**	**2000**	**2100**	**2200**	**2300**	**2400**
IMR 4198	36.5 gr.	39.0 gr.	41.5 gr.	44.0 gr.	46.5 gr.	
H4198	41.3 gr.	43.4 gr.	45.5 gr.	47.6 gr.	49.7 gr.	51.7 gr.
Alliant RL-7	39.9 gr.	42.7 gr.	45.6 gr.	48.5 gr.	51.3 gr.	54.2 gr.
VIHT N-120	46.5 gr.	49.0 gr.	51.5 gr.	54.0 gr.		
VIHT N-130	48.7 gr.	50.5 gr.	52.4 gr.	54.2 gr.	56.0 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.185
DIAMETER: 0.430"



240 gr. XTP®
Item No. 44200
C.O.L.: 2.535"
G1 B.C.: 0.205

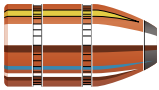
	VELOCITY (FPS – feet per second)					
POWDER	**1700**	**1800**	**1900**	**2000**	**2100**	**2200**
IMR 4198	29.1 gr.	32.4 gr.	35.7 gr.	39.0 gr.	42.3 gr.	
VIHT N-120	32.7 gr.	35.1 gr.	37.5 gr.	39.9 gr.		
H4198	34.6 gr.	37.2 gr.	39.9 gr.	42.6 gr.	45.2 gr.	47.9 gr.
Alliant RL-7	37.0 gr.	39.5 gr.	42.0 gr.	44.5 gr.	47.1 gr.	49.6 gr.
VIHT N-130	42.1 gr.	44.3 gr.	46.6 gr.	48.8 gr.	51.0 gr.	
H335	46.2 gr.	49.1 gr.	52.1 gr.	55.0 gr.	57.9 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics

265 GRAIN BULLETS

SECTIONAL DENSITY: 0.205
DIAMETER: 0.430"

NOTE:
Please refer to pages 746-747 when loading the 265 grain FTX® in the 444 Marlin.



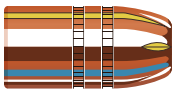
265 gr. InterLock® FP
Item No. 4300
C.O.L.: 2.560"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**	**2100**
IMR 4198	28.6 gr.	31.8 gr.	34.9 gr.	38.0 gr.	41.2 gr.	
H4198	33.4 gr.	35.9 gr.	38.5 gr.	41.0 gr.	43.5 gr.	
Alliant RL-7	34.0 gr.	36.7 gr.	39.3 gr.	42.0 gr.	44.6 gr.	47.3 gr.
VIHT N-130	39.3 gr.	41.6 gr.	43.9 gr.	46.3 gr.	48.6 gr.	50.9 gr.
H335	45.7 gr.	48.4 gr.	51.1 gr.	53.8 gr.	56.6 gr.	59.3 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.232
DIAMETER: 0.430"



300 gr. XTP®
Item No. 44280
C.O.L.: 2.535"
G1 B.C.: 0.245

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1500**	**1600**	**1700**	**1800**	**1900**
IMR 4198	20.4 gr.	24.6 gr.	28.8 gr.	33.0 gr.	37.2 gr.	
H4198	26.4 gr.	29.4 gr.	32.4 gr.	35.4 gr.	38.5 gr.	41.5 gr.
Accurate 1680	26.7 gr.	30.1 gr.	33.5 gr.	36.9 gr.	40.4 gr.	
Alliant RL-7	30.2 gr.	32.8 gr.	35.4 gr.	37.9 gr.	40.5 gr.	43.1 gr.
VIHT N-130	34.6 gr.	37.0 gr.	39.5 gr.	41.9 gr.	44.4 gr.	46.8 gr.
H335	39.4 gr.	42.0 gr.	44.7 gr.	47.3 gr.	49.9 gr.	52.5 gr.
VIHT N-135	24.9 gr.	31.5 gr.	38.2 gr.	44.9 gr.	51.6 gr.	58.3 gr.

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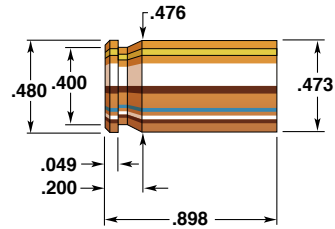


45 Automatic

Handgun:	Springfield 1911	**Bullet Diameter:**	.0.451"
Barrel:	.5", 1 in 16" Twist	**Maximum COL:**	.1.275"
Case:	Hornady	**Max. Case Length:**	0.898"
Primer:	Winchester WLP	**Case Trim Length:**	0.893"

The 45 Automatic was adopted by the United States Ordinance Department in 1911, six years after its introduction by John M. Browning, a singularly American firearms genius.

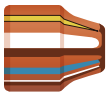
45 ACP is a moniker commonly used to describe the 45 Automatic, however this is the incorrect description of the cartridge, but is the correct descriptor for the gun the cartridge is fired in. (The 45 Automatic Colt Pistol.) The 45 Automatic is a powerful handgun cartridge that requires practice to shoot well. Less recoil is likely one of the reasons that the military later opted for the 9mm Luger as their sidearm of choice. However, the 45 Automatic can be mastered by anyone with the desire to do so.

Hornady has a broad selection of 45 caliber bullets for the 45 Automatic, from the 185 grain XTP® through the 230 grain Full Metal Jacket. In our 1911, Bullseye, Titegroup, and VIHT N-330 performed best with the lighter bullets. For target work, we recommend loads at 800 fps for best accuracy. For the heavier 230 grain bullets, HS-6 and Unique display the best accuracy/velocity combinations. Little or no crimp should be used, as the 45 Automatic headspaces on the mouth of the case.

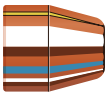
Note: Our listed C.O.L.s are for min-spec chambers. Handloaders may need to load longer, depending on their gun, for correct feeding.

185 GRAIN BULLETS

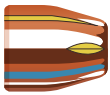
SECTIONAL DENSITY: 0.130
DIAMETER: 0.451"



185 gr. SWC Target
(Discontinued)
Item No. 45137
C.O.L.: 1.135"
G1 B.C.: 0.068



185 gr. HAP®
Item No. 45105B
C.O.L.: 1.245"
G1 B.C.: 0.139



185 gr. XTP®
Item No. 45100
C.O.L.: 1.245"
G1 B.C.: 0.139

	VELOCITY (FPS – feet per second)				
POWDER	**850**	**900**	**950**	**1000**	**1050**
SW Clean Shot	5.1 gr.	5.5 gr.	6.0 gr.		
TITEGROUP	5.5 gr.	5.8 gr.	6.1 gr.		
BULLSEYE	5.4 gr.	5.9 gr.	6.6 gr.		
POWER PISTOL	6.1 gr.	6.8 gr.	7.5 gr.	8.2 gr.	8.9 gr.
BE-86	6.4 gr.	6.9 gr.	7.4 gr.	7.9 gr.	
HP-38	6.5 gr.	6.9 gr.			
VIHT N-330	6.8 gr.	7.0 gr.	7.3 gr.		
CFE Pistol	6.8 gr.	7.2 gr.	7.6 gr.	8.0 gr.	
LONGSHOT	7.2 gr.	7.7 gr.	8.2 gr.	8.7 gr.	9.1 gr.
SW Auto Pistol	7.6 gr.	8.2 gr.	8.8 gr.	9.3 gr.	
IMR SR-4756	8.2 gr.	8.4 gr.	8.6 gr.	8.8 gr.	9.1 gr.
Accurate No. 5	7.7 gr.	8.5 gr.	9.2 gr.		
HS-6	8.7 gr.	9.2 gr.	9.6 gr.	10.1 gr.	

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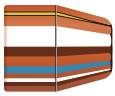
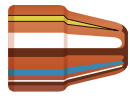
200 GRAIN BULLETS

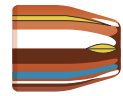
SECTIONAL DENSITY: 0.140
DIAMETER: 0.451"



200 gr. HAP®
Item No. 45159B
C.O.L.: 1.230"
G1 B.C.: 0.151



200 gr. FMJ-C/T
Item No. 45157B
C.O.L.: 1.245"
G1 B.C.: 0.115



200 gr. XTP®
Item No. 45140
C.O.L.: 1.230"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**1000**
TITEGROUP	5.0 gr.	5.3 gr.	5.6 gr.		
BULLSEYE	5.0 gr.	5.4 gr.	5.7 gr.		
WIN 231	5.8 gr.	6.1 gr.	6.3 gr.		
HP-38	5.9 gr.	6.3 gr.	6.6 gr.		
BE-86	6.1 gr.	6.5 gr.	6.9 gr.	7.3 gr.	7.7 gr.
CFE Pistol	6.1 gr.	6.5 gr.	6.9 gr.	7.3 gr.	7.7 gr.
VIHT N-330	6.4 gr.	6.8 gr.	7.1 gr.		
POWER PISTOL	6.6 gr.	7.0 gr.	7.4 gr.	7.8 gr.	8.2 gr.
LONGSHOT	6.6 gr.	7.1 gr.	7.6 gr.	8.1 gr.	8.6 gr.
IMR SR-4756	7.5 gr.	7.8 gr.	8.0 gr.	8.3 gr.	
SILHOUETTE	7.5 gr.	7.8 gr.	8.1 gr.	8.4 gr.	8.7 gr.
Accurate No. 5	7.0 gr.	7.6 gr.	8.2 gr.	8.8 gr.	9.4 gr.
HS-6	7.8 gr.	8.3 gr.	8.8 gr.	9.3 gr.	

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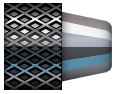
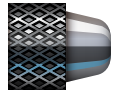
200 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.452"



200 gr. C/T
Item No. 12208
C.O.L.: 1.225"
G1 B.C.: 0.081



200 gr. SWC
Item No. 12108
C.O.L.: 1.200"
G1 B.C.: 0.070

	VELOCITY (FPS – feet per second)				
POWDER	**800**	**850**	**900**	**950**	**1000**
TITEGROUP	4.6 gr.	5.0 gr.	5.3 gr.	5.7 gr.	
BULLSEYE	4.6 gr.	5.0 gr.	5.4 gr.	5.7 gr.	
AMERICAN SELECT	5.0 gr.	5.4 gr.	5.8 gr.		
SOLO 1000	4.9 gr.	5.4 gr.	5.9 gr.		
HP-38	5.4 gr.	5.7 gr.	6.1 gr.	6.5 gr.	
UNIVERSAL	5.6 gr.	5.9 gr.	6.1 gr.	6.3 gr.	
ZIP	5.2 gr.	5.7 gr.	6.2 gr.		
WIN 231	5.4 gr.	5.8 gr.	6.2 gr.		
UNIQUE	5.8 gr.	6.1 gr.	6.5 gr.	6.9 gr.	7.2 gr.

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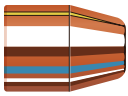
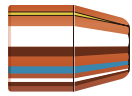
INDICATES MAXIMUM LOAD — USE WITH CAUTION

230 GRAIN BULLETS

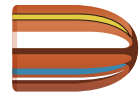
SECTIONAL DENSITY: 0.162
DIAMETER: 0.451"



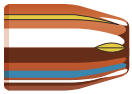
230 gr. FMJ-FP *(Discontinued)*
Item No. 451871
C.O.L.: 1.200"
G1 B.C.: 0.168



230 gr. HAP®
Item No. 451611
C.O.L.: 1.210"
G1 B.C.: 0.188



230 gr. FMJ-RN
Item No. 45177
C.O.L.: 1.210"
G1 B.C.: 0.184



230 gr. XTP®
Item No. 45160
C.O.L.: 1.230"
G1 B.C.: 0.188

	VELOCITY (FPS – feet per second)				
POWDER	**700**	**750**	**800**	**850**	**900**
SW Clean Shot	4.1 gr.	4.5 gr.	4.8 gr.		
TITEGROUP	4.3 gr.	4.5 gr.	4.8 gr.		
WIN 231	5.0 gr.	5.3 gr.	5.7 gr.		
UNIQUE	5.2 gr.	5.6 gr.	5.9 gr.	6.2 gr.	6.6 gr.
REX-3	5.4 gr.	5.6 gr.	5.9 gr.		
CFE Pistol	5.2 gr.	5.6 gr.	6.0 gr.	6.4 gr.	6.9 gr.
VIHT N-330	5.5 gr.	5.8 gr.	6.0 gr.	6.3 gr.	
BE-86	5.3 gr.	5.7 gr.	6.1 gr.	6.4 gr.	
POWER PISTOL	5.5 gr.	5.9 gr.	6.3 gr.	6.7 gr.	7.1 gr.
LONGSHOT	6.1 gr.	6.4 gr.	6.7 gr.	7.1 gr.	7.4 gr.
SILHOUETTE	6.4 gr.	6.7 gr.	7.0 gr.	7.3 gr.	7.6 gr.
IMR SR-4756	6.5 gr.	6.7 gr.	7.0 gr.	7.3 gr.	7.6 gr.
SW Auto Pistol	6.3 gr.	6.8 gr.	7.3 gr.	7.9 gr.	
Accurate No. 5	6.5 gr.	7.0 gr.	7.4 gr.	7.9 gr.	
HS-6	6.7 gr.	7.2 gr.	7.7 gr.	8.2 gr.	

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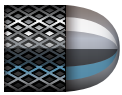
230 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.452"



230 gr. LRN
Item No. 12308
C.O.L.: 1.210"
G1 B.C.: 0.207

	VELOCITY (FPS – feet per second)			
POWDER	**750**	**800**	**850**	**900**
TITEGROUP	4.2 gr.	4.6 gr.	5.1 gr.	
BULLSEYE	4.4 gr.	4.7 gr.	5.1 gr.	5.5 gr.
AMERICAN SELECT	4.6 gr.	5.1 gr.	5.6 gr.	
SOLO 1000	4.8 gr.	5.2 gr.		
ZIP	5.0 gr.	5.4 gr.	5.9 gr.	
WIN 231	5.0 gr.	5.4 gr.	5.8 gr.	
UNIVERSAL	5.2 gr.	5.4 gr.	5.7 gr.	
HP-38	5.1 gr.	5.6 gr.	6.0 gr.	
UNIQUE	5.3 gr.	5.7 gr.	6.1 gr.	6.6 gr.

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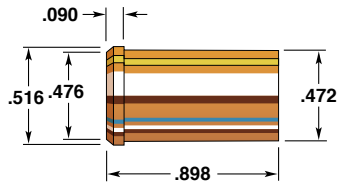


45 Auto Rim

Handgun:	45 Colt Model 1917	**Bullet Diameter:**	.0.451"
Barrel:	.5½", 1 in 16" Twist	**Maximum COL:**	1.220"
Case:	Remington	**Max. Case Length:**	0.898"
Primer:	Federal 150	**Case Trim Length:**	0.888"

Unpreparedness was the mother of invention in the case of the 45 Auto Rim cartridge. How military emergency led to this invention is a most interesting bit of firearms history.

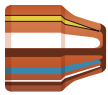
As America entered World War I, it had insufficient stocks of 1911 45 Automatic pistols for its troops. To answer this need for sidearms, both Smith & Wesson and Colt produced revolvers chambered for the 45 Automatic. To facilitate extraction, a three shot "half-moon" clip was used to hold the rimless 45 Automatic cartridge. Revolvers from both companies were made in quantity during World War I, and thousands of these revolvers were sold to civilians after that conflict.

In 1920 the Peters Cartridge Company produced a rimmed version of the service cartridge—the 45 Auto Rim—to eliminate the need for the pesky half-moon clips. Remington loaded this round in factory ammunition until recently.

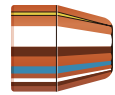
The 45 caliber 185 grain HP-XTP® (.451" diameter) in the Hornady bullet line is an outstanding choice for the 45 Auto Rim as it is for the 45 Automatic. Jacketed Hornady pistol bullets prevent leading at top obtainable velocities, and expansion is excellent. Since this cartridge headspaces on the rim, a light crimp to hold the bullets in place is appropriate.

185 GRAIN BULLETS

SECTIONAL DENSITY: 0.130
DIAMETER: 0.451"



185 gr. SWC Target
(Discontinued)
Item No. 45137
C.O.L.: 1.135"
G1 B.C.: 0.068



185 gr. HAP®
Item No. 45105B
C.O.L.: 1.220"
G1 B.C.: 0.139

185 gr. XTP®
Item No. 45100
C.O.L.: 1.220"
G1 B.C.: 0.139

	VELOCITY (FPS – feet per second)					
POWDER	**700**	**750**	**800**	**850**	**900**	**950**
IMR 700 X	4.8 gr.	5.1 gr.	5.4 gr.	5.7 gr.	5.9 gr.	6.2 gr.
BULLSEYE	4.6 gr.	4.9 gr.	5.3 gr.	5.7 gr.	6.1 gr.	6.4 gr.
RED DOT	4.9 gr.	5.2 gr.	5.5 gr.	5.8 gr.	6.2 gr.	6.5 gr.
UNIQUE	6.3 gr.	6.7 gr.	7.1 gr.	7.4 gr.	7.8 gr.	8.2 gr.

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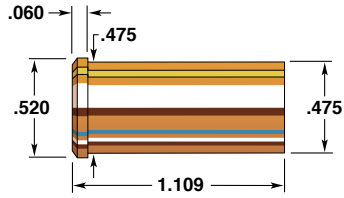


45 S & W Schofield

Handgun: . . . Ruger Bisley Blackhawk
Barrel:. . . . . .7½", 1 in 16" Twist
Case:. . . . . Blackhills
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.452"
Maximum COL: . . . . . .1.410"
Max. Case Length:. . . . . .1.109"
Case Trim Length: . . . . . 1.099"

How could a revolver cartridge, possibly used by General George Armstrong Custer at the Battle of the Little Big Horn, still be around and steadily gaining popularity? Recent interest in firearms of the American West explains part of the reason. Greater availability of strong replica firearms explains another part. And the remarkable rise of the Cowboy Shooting movement may explain the rest. The Colt Single Action Army wasn't the only sidearm of the West.

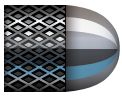
The 45 Smith & Wesson Schofield revolver and blackpowder cartridge for it were introduced in 1875 and adopted by the U. S. Army that same year. The Schofield was a single-action hinged frame gun with a latch designed by General Schofield. Because of the revolver's shorter cylinder, the 45 S & W cartridge was shorter than the 45 Colt. Nevertheless, it could be used in the Colt, and was manufactured by U. S. arsenals and used in both weapons.

Commercial ammunition continued to be loaded until just before World War II and did not reappear until Black Hills Ammunition began producing factory loads in this caliber.

Our loads for the Schofield are smokeless loads only. Work them up from the bottom instead of starting at the top. And do not under any circumstances use these loads in an older, weaker firearm.

230 GRAIN BULLETS

SECTIONAL DENSITY: 0.162
DIAMETER: 0.452"



230 gr. LRN
Item No. 12308
C.O.L.: 1.410"
G1 B.C.: 0.207

	VELOCITY (FPS – feet per second)					
POWDER	**550**	**600**	**650**	**700**	**750**	**800**
IMR 700 X	3.4 gr.	3.7 gr.	4.0 gr.	4.3 gr.	4.7 gr.	
VIHT N-320	3.1 gr.	3.6 gr.	4.1 gr.	4.6 gr.	5.1 gr.	
AMERICAN SELECT	3.8 gr.	4.1 gr.	4.5 gr.	4.9 gr.	5.2 gr.	
Vectan A1	3.6 gr.	4.1 gr.	4.6 gr.	5.0 gr.	5.5 gr.	
HP-38	4.4 gr.	4.7 gr.	4.9 gr.	5.2 gr.		
WIN 231	4.6 gr.	4.9 gr.	5.2 gr.	5.4 gr.	5.7 gr.	
IMR 800 X	3.5 gr.	4.3 gr.	5.1 gr.	5.9 gr.	6.7 gr.	7.5 gr.
UNIQUE	4.3 gr.	4.8 gr.	5.4 gr.	5.9 gr.		

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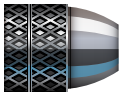
255 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.454"



255 gr. FP COWBOY™
Item No. 12458
C.O.L.: 1.380"
G1 B.C.: 0.117

	VELOCITY (FPS – feet per second)					
POWDER	**550**	**600**	**650**	**700**	**750**	**800**
IMR 700 X	3.1 gr.	3.5 gr.	3.9 gr.	4.3 gr.		
AMERICAN SELECT	3.0 gr.	3.5 gr.	4.0 gr.	4.5 gr.		
VIHT N-320	3.4 gr.	3.8 gr.	4.1 gr.	4.4 gr.		
HP-38	3.5 gr.	3.9 gr.	4.4 gr.			
WIN 231	3.9 gr.	4.4 gr.	4.8 gr.	5.2 gr.		
Vectan A1	4.0 gr.	4.4 gr.	4.8 gr.			
UNIQUE	4.6 gr.	4.9 gr.	5.2 gr.	5.5 gr.		
IMR 800 X	5.2 gr.	5.5 gr.	5.8 gr.	6.1 gr.	6.5 gr.	6.8 gr.

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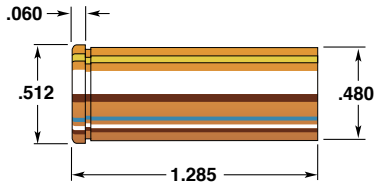


45 Colt (Revolver)

Handgun: . . . Ruger Bisley Blackhawk
Barrel:. . . . . .7½", 1 in 16" Twist
Case:. . . . . .Hornady
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.452"
Maximum COL: . . . . . 1.600"
Max. Case Length:. . . . . .1.285"
Case Trim Length: . . . . . .1.275"

This century old cartridge was originally chambered in Colt's famous Peacemaker and enjoyed an illustrious career in the Old West. It declined in favor as double action revolvers came to dominate the handgun scene, but has managed to stage a comeback with renewed shooter interest in single actions. It is also currently chambered in Winchester 94 and Marlin 1894S lever actions.

Like many of its outlaw contemporaries, the 45 Colt is known by at least one alias, the best known being "45 Long Colt". This is the improper name for the cartridge, and was never used as a legitimate descriptor for the cartridge. It was likely coined to help differentiate the 45 Colt from the younger, shorter, 45 S&W Schofield which could be used in guns chambered for 45 Colt, but not vice-versa. Like many legends from the Old West, one can only speculate where the "45 Long Colt" moniker originated.

Our propellant of choice for the 250 grain XTP® is Power Pistol; it produced both consistent pressures and good accuracy. When loading lead bullets for the 45 Colt, velocities should be kept below 1100 fps or excessive fouling may occur.

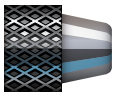
This data may be used in older guns as long as they are in good condition; it is equally suitable for use in any of the Colt replicas.

We have also included data for our 45 Cal 225 grain FTX® bullets. The flexible elastomer tip makes them safe to use in firearms with tubular magazines AND improves the bullets terminal performance characteristics. The data for the FTX® bullets is developed specifically for FTX® bullets, and the handloader should not deviate from the data as published.

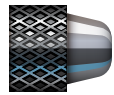
When loading FTX® bullets, case trim lengths and cartridge overall lengths will be specified by individual cartridge and bullet in the data chart.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.140
DIAMETER: 0.452"



200 gr. C/T
Item No. 12208
C.O.L.: 1.595"
G1 B.C.: 0.081



200 gr. SWC
Item No. 12108
C.O.L.: 1.595"
G1 B.C.: 0.070

	VELOCITY (FPS – feet per second)						
POWDER	**800**	**850**	**900**	**950**	**1000**	**1050**	**1100**
AMERICAN SELECT		5.2 gr.	5.9 gr.	6.6 gr.	7.4 gr.	8.1 gr.	
TITEGROUP		5.7 gr.	6.2 gr.	6.6 gr.	7.1 gr.	7.5 gr.	
IMR 700 X		5.7 gr.	6.2 gr.	6.6 gr.	7.1 gr.		
BULLSEYE		5.9 gr.	6.4 gr.	6.9 gr.	7.4 gr.	7.9 gr.	
VIHT N-320		6.3 gr.	6.6 gr.	7.0 gr.	7.4 gr.	7.8 gr.	
UNIQUE	5.8 gr.	6.4 gr.	6.9 gr.	7.5 gr.	8.0 gr.	8.6 gr.	
WIN 231	5.8 gr.	6.4 gr.	7.0 gr.	7.6 gr.	8.2 gr.	8.8 gr.	
Trail Boss	6.4 gr.	7.1 gr.					
UNIVERSAL	6.9 gr.	7.3 gr.	7.7 gr.	8.1 gr.	8.5 gr.	8.9 gr.	9.3 gr.
Accurate No. 5		8.4 gr.	9.1 gr.	9.9 gr.	10.7 gr.	11.4 gr.	12.2 gr.

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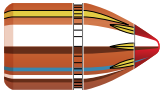
225 GRAIN BULLETS

SECTIONAL DENSITY: 0.157
DIAMETER: 0.452"

CASE TRIM LENGTH: 1.215"

The data below was developed with FTX® bullets. Due to the longer ogive it is critical that cartridge cases be trimmed to the length specified.



225 gr. FTX® (45 Colt)
Item No. 45218
C.O.L.: 1.645"
G1 B.C.: 0.140

	VELOCITY (FPS – feet per second)			
POWDER	**850**	**900**	**950**	**1000**
LONGSHOT	8.1 gr.	8.6 gr.	9.1 gr.	9.6 gr.
True Blue	9.1 gr.	9.5 gr.	9.9 gr.	
IMR SR-4756		9.8 gr.		
Accurate No. 5	9.2 gr.	9.8 gr.	10.3 gr.	
HS-6	9.7 gr.	10.3 gr.	10.9 gr.	
BLUE DOT	11.3 gr.	11.7 gr.	12.0 gr.	
VIHT N-105		13.5 gr.		

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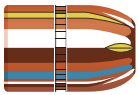
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.175
DIAMETER: 0.452"



250 gr. XTP®
Item No. 45200
C.O.L.: 1.595"
G1 B.C.: 0.146

	VELOCITY (FPS – feet per second)					
POWDER	**600**	**650**	**700**	**750**	**800**	**850**
TITEGROUP	5.4 gr.	5.7 gr.	6.0 gr.	6.3 gr.		
BULLSEYE	5.7 gr.	6.0 gr.	6.3 gr.	6.5 gr.		
UNIQUE	6.2 gr.	6.5 gr.	6.8 gr.	7.1 gr.	7.4 gr.	
WIN 231	6.1 gr.	6.5 gr.	6.9 gr.	7.3 gr.		
UNIVERSAL	6.5 gr.	6.9 gr.	7.2 gr.	7.5 gr.	7.9 gr.	8.2 gr.
HERCO	6.8 gr.	7.1 gr.	7.4 gr.	7.7 gr.	8.0 gr.	8.3 gr.
POWER PISTOL	6.9 gr.	7.3 gr.	7.6 gr.	8.0 gr.	8.3 gr.	8.7 gr.
VIHT N-340	7.2 gr.	7.5 gr.	7.7 gr.	8.0 gr.	8.3 gr.	
Accurate No. 5	7.7 gr.	8.3 gr.	8.8 gr.	9.3 gr.	9.9 gr.	10.4 gr.

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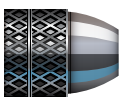
255 GRAIN BULLETS

SECTIONAL DENSITY: 0.177
DIAMETER: 0.454"



255 gr. FP COWBOY™
Item No. 12458
C.O.L.: 1.575"
G1 B.C.: 0.117

	VELOCITY (FPS – feet per second)					
POWDER	**650**	**700**	**750**	**800**	**850**	**900**
TITEGROUP		4.5 gr.	4.9 gr.	5.2 gr.	5.6 gr.	
IMR 700 X		4.4 gr.	4.9 gr.	5.4 gr.	5.9 gr.	
RED DOT		4.6 gr.	5.1 gr.	5.6 gr.	6.1 gr.	
AMERICAN SELECT		4.8 gr.	5.3 gr.	5.8 gr.	6.3 gr.	
VIHT N-320		5.1 gr.	5.6 gr.	6.0 gr.	6.5 gr.	
Trail Boss	4.7 gr.	5.2 gr.	5.6 gr.			
UNIQUE	4.6 gr.	5.0 gr.	5.7 gr.	6.3 gr.	7.0 gr.	
HP-38	4.8 gr.	5.2 gr.	5.8 gr.	6.3 gr.	6.9 gr.	
WIN 231	4.8 gr.	5.3 gr.	5.8 gr.	6.4 gr.	7.0 gr.	
UNIVERSAL	5.6 gr.	6.1 gr.	6.6 gr.	7.0 gr.	7.4 gr.	7.9 gr.
IMR 800 X		6.5 gr.	7.0 gr.	7.5 gr.	8.1 gr.	8.6 gr.

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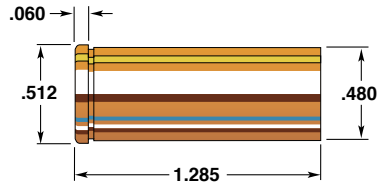


45 Colt (Ruger & T/C)

Handgun: . . . . . .T/C Contender
Barrel:. . . . . .10", 1 in 22" Twist
Case:. . . . . Winchester
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . 0.452"
Maximum COL: . . . . . 1.600"
Max. Case Length:. . . . . .1.285"
Case Trim Length: . . . . . .1.275"

On the basis of its long history and the renewed interest it gathered as shooters became interested in single action revolvers, the 45 Colt ends the 20th century with popularity near levels it enjoyed at the beginning. Not only have old 45 Colts returned to regular use, new handguns of far greater strength and power have been created for them.

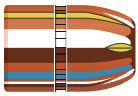
The following data is to be used only in the T/C or the Ruger Blackhawk. While the pressures of the loading data in the previous section are safe and within limits appropriate to earlier 45 Colt revolvers or their replicas, the data below absolutely should not be used in these firearms. These loads were developed in and intended for Ruger and Thompson/Center handguns. It should prove safe when used in the Marlin 1894S or the Winchester Model 94 rifles produced in 45 Colt, but always start load development low and work up.

The loads that follow are for the handgun hunter or metallic silhouette shooter. If loads are desired for the 200 grain LSWC, the data for the standard 45 Colt should be used. 2400 and IMR 4227 produced the best results with our firearm. Note: When loading for the Ruger Blackhawk, a heavy crimp is necessary to prevent bullets from sliding out of the case during recoil.

Note: Please refer to the data on page 951 when loading the 45 Cal 225 grain FTX® bullet. FTX® bullets require specialized loading techniques and the handloader should not deviate from published data.

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.168
DIAMETER: 0.452"



240 gr. XTP® Mag
Item No. 45220
C.O.L.: 1.655"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)					
POWDER	**1200**	**1250**	**1300**	**1350**	**1400**	**1450**
VIHT N-105	14.8 gr.	15.2 gr.	15.6 gr.	15.9 gr.		
Accurate No. 9	17.9 gr.	18.9 gr.	19.9 gr.	20.9 gr.	21.9 gr.	22.9 gr.
Alliant 2400	20.4 gr.	21.1 gr.	21.8 gr.	22.5 gr.	23.2 gr.	23.9 gr.
Accurate 5744	22.1 gr.	23.0 gr.	23.9 gr.			
IMR 4227	23.0 gr.	24.0 gr.	25.0 gr.	26.1 gr.		

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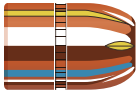
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.175
DIAMETER: 0.452"



250 gr. XTP®
Item No. 45200
C.O.L.: 1.595"
G1 B.C.: 0.146

	VELOCITY (FPS – feet per second)				
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**
VIHT N-105	14.0 gr.	14.3 gr.	14.7 gr.	15.1 gr.	
Accurate No. 9	16.8 gr.	17.8 gr.	18.7 gr.	19.7 gr.	20.6 gr.
Alliant 2400	19.7 gr.	20.2 gr.	20.8 gr.		
Accurate 5744	20.7 gr.	21.5 gr.	22.4 gr.		
IMR 4227	20.2 gr.	21.5 gr.	22.9 gr.	24.2 gr.	

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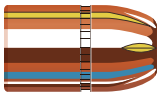
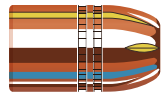
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.210
DIAMETER: 0.452"



300 gr. XTP® Mag
Item No. 45235
C.O.L.: 1.655"
G1 B.C.: 0.200



300 gr. XTP®
Item No. 45230
C.O.L.: 1.580"
G1 B.C.: 0.180

	VELOCITY (FPS – feet per second)					
POWDER	**1050**	**1100**	**1150**	**1200**	**1250**	**1300**
LIL' GUN	15.0 gr.	15.9 gr.	16.8 gr.	17.7 gr.		
Accurate No. 9	15.5 gr.	16.3 gr.	17.0 gr.			
VIHT N-110	16.0 gr.	16.6 gr.	17.2 gr.	17.8 gr.		
Alliant 2400	16.5 gr.	17.3 gr.	18.0 gr.			
WIN 296	17.9 gr.	18.7 gr.	19.4 gr.	20.2 gr.	21.0 gr.	21.7 gr.
IMR 4227	18.7 gr.	19.5 gr.				

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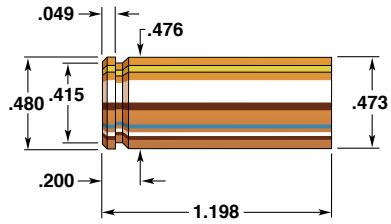


45 Winchester Magnum

Handgun:	LAR Grizzly	**Bullet Diameter:**	.0.451"
Barrel:	.5", 1 in 16" Twist	**Maximum COL:**	.1.575"
Case:	Winchester	**Max. Case Length:**	.1.198"
Primer:	Winchester WLP	**Case Trim Length:**	.1.193"

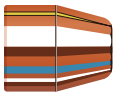
The 45 Winchester Magnum was one of a pair of new cartridges developed in the late seventies for the Swedish designed Wildey semi-automatic pistol. The other cartridge, the 9mm Winchester Magnum, and the pistol were short lived and rarely seen today. The 45 Winchester Magnum is mostly encountered in the Thompson/Center Contender and the L.A.R. Grizzly semi-auto pistol. The cartridge is essentially an elongated 45 Automatic, preventing chambering in firearms for the 45 Automatic. The 45 Winchester Magnum is loaded to much higher pressure, propelling the factory loaded 230 grain FMJ-RN to 1350 fps with nearly twice the energy of the same bullet in the 45 Automatic.

This cartridge has found acceptance in metallic silhouette shooters and big game handgun hunters. The Hornady 250 grain HP/XTP® is an excellent choice for either hunting or silhouette shooting. Win 296 gave us the best results in our test gun.

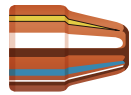
Despite the substantial power of the 45 Winchester Magnum, and despite frustrations in finding a popular semi-auto firearm platform from which it could be promoted, the 45 Winchester Magnum's future as one of the world's most powerful semi-auto hunting handgun cartridges is not bright. Expensive firearms and the absence of commercial ammunition for hunting work against it. Only the reloader can bring out the maximum potential of this cartridge.

200 GRAIN BULLETS

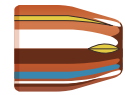
SECTIONAL DENSITY: 0.140
DIAMETER: 0.451"



200 gr. HAP®
Item No. 45159B
C.O.L.: 1.495"
G1 B.C.: 0.151



200 gr. FMJ-C/T
Item No. 45157B
C.O.L.: 1.500"
G1 B.C.: 0.115



200 gr. XTP®
Item No. 45140
C.O.L.: 1.495"
G1 B.C.: 0.151

	VELOCITY (FPS – feet per second)					
POWDER	**1300**	**1350**	**1400**	**1450**	**1500**	**1550**
HERCO	13.5 gr.	14.2 gr.	14.9 gr.	15.6 gr.	16.3 gr.	
BLUE DOT	16.1 gr.	17.0 gr.	18.0 gr.	19.0 gr.	19.9 gr.	20.9 gr.
Accurate No. 9	21.4 gr.	22.1 gr.	22.9 gr.	23.6 gr.	24.4 gr.	
Alliant 2400	21.5 gr.	22.2 gr.	22.9 gr.	23.6 gr.	24.3 gr.	25.0 gr.
WIN 296	25.5 gr.	26.2 gr.	26.9 gr.	27.6 gr.		

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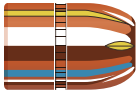
250 GRAIN BULLETS

SECTIONAL DENSITY: 0.175
DIAMETER: 0.452"



250 gr. XTP®
Item No. 45200
C.O.L.: 1.480"
G1 B.C.: 0.146

	VELOCITY (FPS – feet per second)					
POWDER	**1150**	**1200**	**1250**	**1300**	**1350**	**1400**
BLUE DOT	14.5 gr.	15.1 gr.	15.8 gr.	16.4 gr.		
Accurate No. 9	18.3 gr.	19.0 gr.	19.6 gr.	20.3 gr.		
Alliant 2400	18.3 gr.	19.0 gr.	19.7 gr.	20.4 gr.	21.2 gr.	21.9 gr.
WIN 296	21.4 gr.	22.1 gr.	22.9 gr.	23.6 gr.	24.4 gr.	25.1 gr.
H110	22.0 gr.	22.6 gr.	23.1 gr.	23.7 gr.	24.3 gr.	24.8 gr.
IMR 4227	22.7 gr.	23.4 gr.	24.1 gr.	24.8 gr.		

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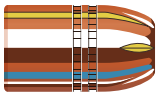
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.210
DIAMETER: 0.452"



300 gr. XTP®
Item No. 45230
C.O.L.: 1.480"
G1 B.C.: 0.180

	VELOCITY (FPS – feet per second)					
POWDER	**950**	**1000**	**1050**	**1100**	**1150**	**1200**
Alliant 2400	14.6 gr.	15.2 gr.	15.8 gr.	16.4 gr.		
Accurate No. 9	14.5 gr.	15.2 gr.	15.9 gr.	16.6 gr.	17.3 gr.	
WIN 296	16.7 gr.	17.4 gr.	18.1 gr.	18.8 gr.	19.5 gr.	
H110	17.1 gr.	17.6 gr.	18.1 gr.	18.6 gr.	19.1 gr.	19.6 gr.
IMR 4227	18.5 gr.	19.1 gr.	19.7 gr.			

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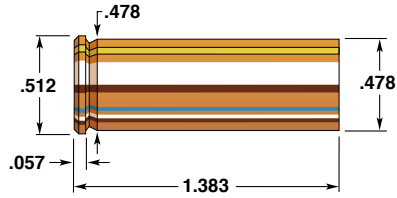


454 Casull

Handgun: . . . . . Freedom Arms
Barrel:. . . . . 7½", 1 in 24" Twist
Case:. . . . . Hornady
Primer: . . . . . Federal 205

Bullet Diameter:. . . . . 0.452"
Maximum COL: . . . . . .1.765"
Max. Case Length:. . . . . 1.383"
Case Trim Length: . . . . . 1.373"

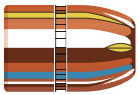
The sports of handgun hunting and metallic silhouette shooting stimulated the production of increasingly powerful pistols. Dick Casull concocted one of if not the most powerful production repeating handguns in existence. The pistol is a superb five shot unfluted cylinder revolver manufactured from stainless steel by Freedom Arms. It is designed especially for the 454 Casull cartridge and its operating pressures. The Freedom Arms revolver is not only extraordinarily well made, precise in fit and finish, but a gun that inspires confidence. Other firearms chambered for the 454 Casull should, perhaps, be loaded up more cautiously.

The cartridge case is similar to the 45 Colt, although thicker in the head, made for small rifle primers, and longer, preventing chambering of the 454 Casull in the other firearms. In spite of its name, this cartridge uses .452" diameter bullets.

The 454 Casull is at its best with heavier bullets, either for their momentum or for their penetrating power on game animals. Both bullets listed are excellent for hunting. Hornady loads ammunition for the 454 Casull with both the 240 grain and 300 grain XTP®-MAG™ bullets.

240 GRAIN BULLETS

SECTIONAL DENSITY: 0.168
DIAMETER: 0.452"



240 gr. XTP® Mag
Item No. 45220
C.O.L.: 1.745"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)					
POWDER	**1600**	**1650**	**1700**	**1750**	**1800**	**1850**
VIHT N-105	23.9 gr.	25.0 gr.	26.1 gr.			
VIHT N-110	28.4 gr.	29.4 gr.	30.4 gr.	31.4 gr.	32.4 gr.	
Accurate No. 9	29.4 gr.	30.0 gr.	30.7 gr.	31.3 gr.	32.0 gr.	32.6 gr.
Alliant 2400	30.0 gr.	30.8 gr.	31.7 gr.	32.6 gr.	33.5 gr.	
IMR 4227	32.8 gr.	33.8 gr.	34.8 gr.			
H110	34.1 gr.	34.6 gr.	35.2 gr.	35.8 gr.	36.3 gr.	36.9 gr.
WIN 296	33.9 gr.	34.6 gr.	35.3 gr.	36.0 gr.	36.7 gr.	

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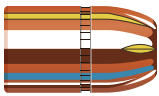
300 GRAIN BULLETS

SECTIONAL DENSITY: 0.210
DIAMETER: 0.452"



300 gr. XTP® Mag
Item No. 45235
C.O.L.: 1.745"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)					
POWDER	**1400**	**1450**	**1500**	**1550**	**1600**	**1650**
VIHT N-110	24.4 gr.	25.3 gr.	26.2 gr.	27.1 gr.		
Accurate No. 9	25.0 gr.	25.8 gr.	26.7 gr.	27.5 gr.		
Alliant 2400	25.4 gr.	26.2 gr.	27.0 gr.	27.8 gr.		
IMR 4227	28.1 gr.	28.9 gr.	29.8 gr.			
H110	28.2 gr.	29.0 gr.	29.8 gr.	30.6 gr.	31.4 gr.	
WIN 296	28.3 gr.	29.1 gr.	29.9 gr.	30.7 gr.	31.5 gr.	32.3 gr.

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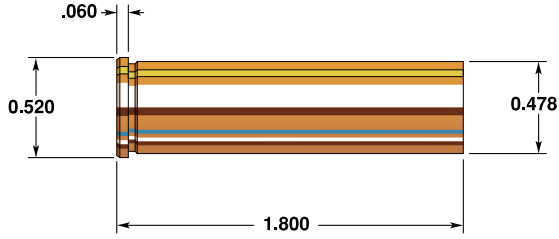


460 Smith & Wesson Magnum

Handgun:	S & W 460 XVR	**Bullet Diameter:**	0.452"
Barrel:	8⅜", 1 in 20" Twist	**Maximum COL:**	2.275"
Case:	Hornady	**Max. Case Length:**	1.800"
Primer:	WLR	**Case Trim Length:**	1.790"

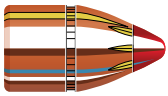
Many times new products are the stuff dreams are made of. Holding off on a purchase to wait for the latest and greatest... the anticipation of getting a new gun for the hunting season or match rifle in the spring is an emotion that all shooters know, and know well. In 2005, when Smith & Wesson introduced their 1 year old X-frame in with the new 460 Smith & Wesson cartridge, shooters took notice. The 460 Smith & Wesson is touted as, and delivers on, being the fastest production revolver cartridge ever. It is capable of driving a 200 grain FTX® bullet well in excess of 2200 fps from a revolver, and that's the factory ammo... The 460 Smith & Wesson really shines when it's handloaded with bullets 240 grains and heavier.

For the handloader Hornady offers three different bullets that are suitable for loading in the 460 Smith & Wesson. First is the 200 grain FTX® which is the same bullet as loaded in our factory ammo second is the 240 grain XTP®-MAG™, this is an excellent bullet for deer, antelope and even hogs. The 460 Smith is capable of pushing the 240 grain bullet at 2000 fps. The 300 grain XTP®-MAG™ is the perfect choice when hunting the largest game, including dangerous game. The 300 grain XTP®-MAG™ can be loaded to 1650 fps and will combine controlled expansion for quick energy transfer, but is tough enough to penetrate through heavy bones. Both of these bullets are best loaded with Hodgdon Lil' Gun, H 110 or Winchester 296.

The 460 is not for the faint of heart. It is a very powerful cartridge and while recoil is generally tolerable in the fairly heavy X-frame revolver, muzzleblast from this cartridge is nothing less than intimidating the first time one pulls the trigger.

200 GRAIN BULLETS

SECTIONAL DENSITY: 0.149
DIAMETER: 0.452"



200 gr. FTX® (460 S&W)
Item No. 45215
C.O.L.: 2.275"
G1 B.C.: 0.145

	VELOCITY (FPS – feet per second)				
POWDER	**1900**	**2000**	**2100**	**2200**	**2250**
BLUE DOT	25.0 gr.	31.9 gr.	35.8 gr.		
Alliant 2400	38.4 gr.	40.8 gr.	43.2 gr.		
VIHT N-110	38.1 gr.	41.1 gr.	44.2 gr.		
ENFORCER	41.0 gr.	44.0 gr.	46.9 gr.		
WIN 296	43.3 gr.	46.0 gr.	48.7 gr.	51.4 gr.	
H110	44.6 gr.	46.9 gr.	49.2 gr.	51.5 gr.	52.7 gr.

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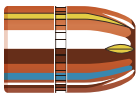
240 GRAIN BULLETS

SECTIONAL DENSITY: 0.168
DIAMETER: 0.452"



240 gr. XTP® Mag
Item No. 45220
C.O.L.: 2.160"
G1 B.C.: 0.160

	VELOCITY (FPS – feet per second)				
POWDER	**1600**	**1700**	**1800**	**1900**	**2000**
VIHT N-110	30.6 gr.	35.8 gr.	41.0 gr.		
ENFORCER	39.0 gr.	41.7 gr.	44.4 gr.	47.1 gr.	
WIN 296	39.5 gr.	41.9 gr.	44.2 gr.	46.5 gr.	48.8 gr.
H110	41.0 gr.	43.8 gr.	46.6 gr.	49.5 gr.	
LIL' GUN	40.1 gr.	43.9 gr.	47.6 gr.	51.4 gr.	
IMR 4227	43.1 gr.	47.3 gr.			

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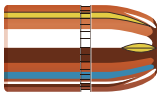
300 GRAIN BULLETS

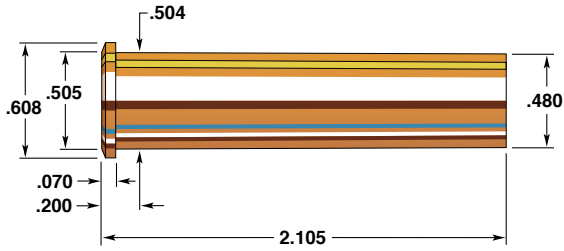
SECTIONAL DENSITY: 0.210
DIAMETER: 0.452"



300 gr. XTP® Mag
Item No. 45235
C.O.L.: 2.165"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1500**	**1550**	**1600**	**1650**
VIHT N-110	28.3 gr.	31.9 gr.	33.7 gr.	35.5 gr.	
LIL' GUN	29.3 gr.	33.9 gr.	36.1 gr.	38.4 gr.	
WIN 296	31.1 gr.	35.2 gr.	37.3 gr.	39.3 gr.	
ENFORCER	25.1 gr.	33.4 gr.	37.5 gr.		
H110	33.4 gr.	37.2 gr.	39.2 gr.		
IMR 4227	36.3 gr.	39.4 gr.	40.9 gr.	42.4 gr.	
Accurate 1680	39.8 gr.	43.7 gr.	45.7 gr.	47.6 gr.	49.6 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics



45-70 Government (T/C Handgun)

Handgun:	T/C Contender	**Bullet Diameter:**	0.458"
Barrel:	16", 1 in 14" Twist	**Maximum COL:**	2.555"
Case:	Winchester	**Max. Case Length:**	2.105"
Primer:	Federal 210	**Case Trim Length:**	2.095"

How did the 45-70, long thought both ancient and obsolete in rifles, reach this section of the Hornady Handbook? It wasn't hard.

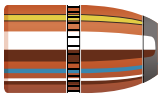
The 45-70-500 cartridge (45 caliber, 70 grains of blackpowder, 500 grain bullet) was the official government military caliber in the 1880s and 90s. The arrival of new military requirements, new firearms, new cartridges, and smokeless powders led to its long decline. However much out of fashion it may have been, a loyal group of hunters and woodsmen kept this effective cartridge alive.

In the 1980s the 45-70 received a new lease on life. New firearms (such as the Ruger No. 1 and Marlin 1895), new loads (high velocity 300 grain hollow points) and fresh shooters brought the cartridge back from obscurity. In 1990 Thompson/Center introduced their Contender in 45-70. It should prove to be an effective combination in the field.

Data is listed for the 300 grain Hollow Point, 350 grain Flat Point, and the 350 grain Round Nose. Due to severe recoil and wear and tear on both the shooter and the firearm, data is not listed for the 500 grain bullet. The 300 grain Hollow Point is probably the best choice for deer sized game. The 350 grain bullet has better penetrating ability and would be a better choice for larger, heavier game. IMR 4198 powder performed best in our tests.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.204
DIAMETER: 0.458"



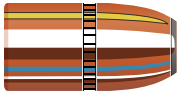
300 gr. HP
Item No. 4500
C.O.L.: 2.540"
G1 B.C.: 0.197

	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1450**	**1500**	**1550**	**1600**
IMR SR-4759	25.0 gr.	26.1 gr.	27.2 gr.	28.2 gr.	29.3 gr.
IMR 4227	28.8 gr.	29.8 gr.	30.9 gr.	31.9 gr.	
VIHT N-120	30.8 gr.	31.9 gr.	33.1 gr.	34.3 gr.	
Accurate 5744	31.6 gr.	32.8 gr.	33.9 gr.	35.1 gr.	36.3 gr.
IMR 4198	33.5 gr.	35.0 gr.	36.5 gr.	37.9 gr.	39.4 gr.

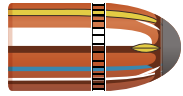
Create custom ballistic tables using our online calculators at hornady.com/ballistics

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.238
DIAMETER: 0.458"



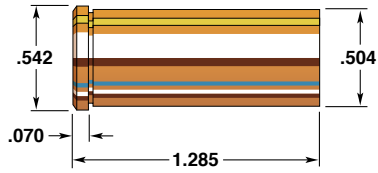
350 gr. InterLock® FP
Item No. 4503
C.O.L.: 2.530"
G1 B.C.: 0.195



350 gr. InterLock® RN
Item No. 4502
C.O.L.: 2.540"
G1 B.C.: 0.189

	VELOCITY (FPS – feet per second)				
POWDER	**1350**	**1400**	**1450**	**1500**	**1550**
IMR SR-4759	25.2 gr.	26.1 gr.			
IMR 4227	28.7 gr.	29.8 gr.			
VIHT N-120	30.7 gr.	31.9 gr.			
Accurate 5744	32.2 gr.	33.5 gr.			
Alliant RL-7	33.0 gr.	34.7 gr.	36.4 gr.	38.1 gr.	39.8 gr.
IMR 4198	33.9 gr.	35.0 gr.	36.1 gr.	37.3 gr.	
VIHT N-130	36.0 gr.	37.5 gr.	39.0 gr.	40.5 gr.	42.0 gr.
H322	39.2 gr.	40.5 gr.	41.7 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics



480 Ruger

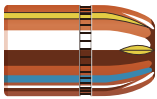
Handgun: . . . . Ruger Super Redhawk
Barrel:. . . . . .9½", 1 in 18" Twist
Case:. . . . . .Hornady
Primer: . . . . . Winchester WLP
Bullet Diameter:. . . . . .0.475"
Maximum COL: . . . . . .1.650"
Max. Case Length:. . . . . .1.285"
Case Trim Length: . . . . . .1.275"

We saw the opportunity to create a handgun cartridge that would exceed 44 Magnum performance, while reducing felt recoil as compared to the 454 Casull and 475 Linebaugh. With the recent development of 475 Linebaugh ammunition, the groundwork was laid to create a new cartridge that could be fired from guns chambered in 475 Linebaugh with less recoil than full-house Linebaugh loads. We then collaborated with Ruger and decided that the Super Redhawk was the best platform from which to launch the new cartridge. The 480 Ruger became a reality.

The 480 Ruger is capable of propelling a 325 grain XTP®-MAG™ to a velocity of 1500 fps. When compared to the 44 Magnum's 300 grain XTP® at a maximum velocity of 1200 fps the performance gain is staggering. The 480 Ruger Super Redhawk went on to be awarded new gun of the year in 2001, and continues to be a good seller in terms of reloading components and ammunition.

325 GRAIN BULLETS

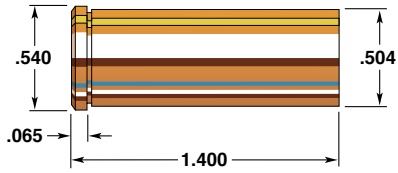
SECTIONAL DENSITY: 0.206
DIAMETER: 0.475"



325 gr. XTP® Mag
Item No. 47500
C.O.L.: 1.620"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)					
POWDER	**1100**	**1200**	**1300**	**1400**	**1450**	**1500**
VIHT N-110	17.0 gr.	18.6 gr.	20.3 gr.	21.9 gr.		
Alliant 2400	16.6 gr.	18.5 gr.	20.5 gr.	22.5 gr.		
Accurate No. 9	16.4 gr.	18.6 gr.	20.8 gr.	23.0 gr.		
LIL' GUN	16.1 gr.	18.6 gr.	21.2 gr.	23.7 gr.	24.9 gr.	
ENFORCER	20.6 gr.	22.0 gr.	23.4 gr.	24.8 gr.		
H110	19.8 gr.	21.7 gr.	23.6 gr.	25.5 gr.	26.4 gr.	27.3 gr.
WIN 296	20.1 gr.	22.3 gr.	24.4 gr.	26.6 gr.	27.7 gr.	
IMR 4227	22.1 gr.	23.8 gr.	25.4 gr.			

Create custom ballistic tables using our online calculators at hornady.com/ballistics



475 Linebaugh

Handgun:	Freedom Arms	**Bullet Diameter:**	.0.475"
Barrel:	7½", 1 in 18" Twist	**Maximum COL:**	.1.765"
Case:	Hornady	**Max. Case Length:**	1.400"
Primer:	Winchester WLR	**Case Trim Length:**	1.390"

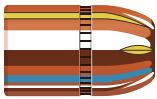
One look at the 475 Linebaugh speaks volumes about the cartridge. John Linebaugh is no stranger to big handguns or proprietary cartridges. The 475 Linebaugh is one of two big bore hunting cartridges developed by Mr. Linebaugh.

Around on the wildcat scene since 1988, this is a revolver cartridge for big game hunting by hunters with big hands and very strong arms. Linebaugh has based his design on a cut off 45–70 Government case adapted to accept 475 caliber bullets. The inventor, using a modified Ruger Bisley revolver with five-shot cylinder and 5½" barrel, worked up loads for 370 and 440 grain bullets. With muzzle velocities of 1495 fps (370 grain bullet) and 1360 fps (440 grain bullet), the 475 Linebaugh produces 1800 ft. lbs. of energy at the muzzle.

This cartridge is in keeping with the long-term trend of developing ever larger magnum handgun cartridges. It certainly has plenty of hunting power, even for larger species, and surely will be sought out by handgunners who want the biggest and the fastest, however tough it is to get it.

325 GRAIN BULLETS

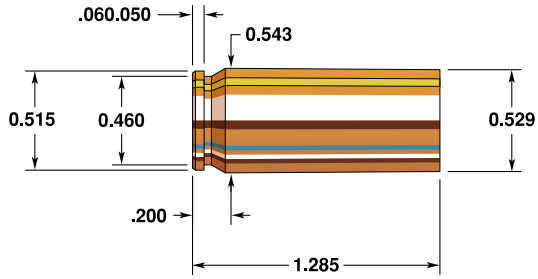
SECTIONAL DENSITY: 0.206
DIAMETER: 0.475"



325 gr. XTP® Mag
Item No. 47500
C.O.L.: 1.740"
G1 B.C.: 0.150

	VELOCITY (FPS – feet per second)				
POWDER	**1300**	**1400**	**1450**	**1500**	**1550**
Alliant 2400	22.8 gr.	25.5 gr.	26.8 gr.		
Accurate No. 9	21.6 gr.	25.5 gr.	27.4 gr.		
LIL' GUN	26.0 gr.	28.3 gr.	29.4 gr.	30.5 gr.	31.6 gr.
H110	27.8 gr.	29.8 gr.	30.8 gr.	31.8 gr.	
WIN 296	27.2 gr.	29.7 gr.	31.0 gr.	32.3 gr.	

Create custom ballistic tables using our online calculators at hornady.com/ballistics



50 Action Express

Handgun:	Desert Eagle	**Bullet Diameter:**	0.500"
Barrel:	6", 1 in 19" Twist	**Maximum COL:**	1.575"
Case:	Starline	**Max. Case Length:**	1.285"
Primer:	WLP	**Case Trim Length:**	1.280"

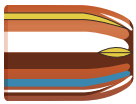
The brainchild of Evan Whildin, who worked for Action Arms at the time of the cartridge's development, the 50 AE is designed specifically for IMI's Desert Eagle pistol.

The 50 AE is a very intelligently designed cartridge. First to simplify firearm manufacture, Whildin based the external dimensions off the 44 Remington Magnum, so the new 50 caliber cartridge would be a seamless transfer to the already designed firearm. The cartridge ended up with a rebated rim, same diameter as the 44 Remington Magnum, it also shares the 44's COL and Case length. But the body diameter is much larger to accommodate a 50 caliber bullet. Which brings up another interesting point, the 50 AE was originally designed to fire a .510" bullet. This landed the gun on the wrong side of the National Firearm Act's definition of a “destructive device” so the case was tapered and bullet diameter was reduced to .500".

The 50 AE is best loaded with H 110 or Winchester 296. The 300 grain Hornady XTP®-MAG™ bullet is perfectly suitable for hunting any game in North America and is more than adequate for all but the largest, meanest game in the world.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.500"



300 gr. XTP® Mag
Item No. 50101
C.O.L.: 1.580"
G1 B.C.: 0.120

	VELOCITY (FPS – feet per second)			
POWDER	**1200**	**1300**	**1400**	**1450**
Accurate No. 9	22.7 gr.	24.5 gr.	26.2 gr.	
Alliant 2400	22.9 gr.	25.8 gr.		
VIHT N-110	24.6 gr.	26.3 gr.	28.0 gr.	
LIL' GUN	24.3 gr.	27.2 gr.	30.2 gr.	31.7 gr.
ENFORCER	25.4 gr.	28.0 gr.	30.7 gr.	
H110	27.7 gr.	30.1 gr.	32.5 gr.	33.7 gr.
WIN 296	27.8 gr.	30.2 gr.	32.7 gr.	33.9 gr.
IMR 4227	30.2 gr.	32.1 gr.		

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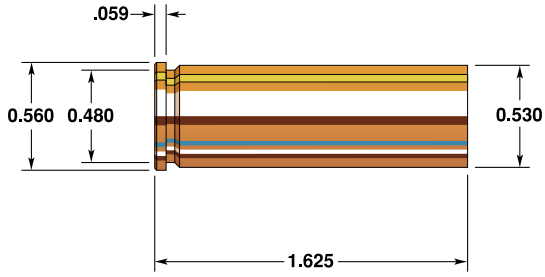


500 Smith & Wesson Magnum

Handgun:	S & W Model 500	**Bullet Diameter:**	0.500"
Barrel:	.8⅜", 1 in 18¾" Twist	**Maximum COL:**	2.250"
Case:	Hornady	**Max. Case Length:**	1.620"
Primer:	WLR	**Case Trim Length:**	1.615"

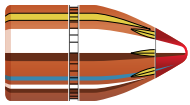
Elmer Keith would have loved the 500 Smith & Wesson. Never one to be under gunned, Elmer helped usher us into the world of high performance big bore cartridges… way back in 1955; he was instrumental in bringing the 44 Remington Magnum to the shooting world. The 500 Smith & Wesson was introduced at the 2004 SHOT show in Las Vegas in Smith & Wesson's brand new Xframe revolver. It was then and is now, the largest, most powerful revolver to ever be mass produced.

The 500 Smith & Wesson is not for the beginning handgun shooter. Recoil is punishing, as the cartridge is capable of driving a 500 grain bullet at velocities well in excess of 1300 fps. Compare that to original 45-70 rifle ballistics, a 405 grain bullet at just over 1300 fps. The 500 Smith & Wesson is a lot of gun.

In our testing the 500 Smith & Wesson is best when loaded with Hodgdon Lil' Gun, H 110 or Winchester 296. If the handloader desires to slow things down a bit, they would be hard pressed to find better powders than IMR 4227 or Alliant 2400. The 350 grain XTP®-MAG™ is an excellent all around bullet choice and more than enough bullet for any game in the world, save dangerous game. If dangerous game is in the neighborhood or on the menu, the 500 grain XTP® FP is the bullet to choose. It delivers controlled expansion for exceptional transfer of energy, and is super tough to penetrate deep and ensure adequate tissue damage. For longer range shots where flatter trajectory is desired the 300 grain FTX® is your bullet. The flexible elastomer tip serves two functions, first it helps to streamline the bullet's profile for efficient flight and second it initiates consistent expansion upon impacting the target.

300 GRAIN BULLETS

SECTIONAL DENSITY: 0.171
DIAMETER: 0.500"



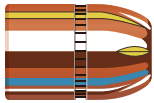
300 gr. FTX®
Item No. 50102
C.O.L.: 2.195"
G1 B.C.: 0.200

	VELOCITY (FPS – feet per second)				
POWDER	**1700**	**1800**	**1900**	**1950**	**2000**
POWER PISTOL	25.1 gr.	28.1 gr.			
Accurate No. 9	38.5 gr.	40.7 gr.	43.0 gr.	44.1 gr.	
VIHT N-110	37.8 gr.	40.8 gr.	43.7 gr.		
Alliant 2400	38.7 gr.	40.9 gr.	43.2 gr.		
LIL' GUN	40.1 gr.	43.1 gr.	46.0 gr.	47.5 gr.	49.0 gr.
ENFORCER	40.6 gr.	43.9 gr.	47.1 gr.		
WIN 296	43.0 gr.	45.7 gr.	48.4 gr.	49.8 gr.	
H110	43.6 gr.	46.2 gr.	48.8 gr.	50.1 gr.	51.4 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

350 GRAIN BULLETS

SECTIONAL DENSITY: 0.200
DIAMETER: 0.500"



350 gr. XTP® Mag
Item No. 50100
C.O.L.: 2.000"
G1 B.C.: 0.145

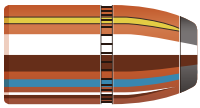
	VELOCITY (FPS – feet per second)				
POWDER	**1400**	**1500**	**1550**	**1600**	**1650**
Accurate No. 9	27.2 gr.	32.6 gr.	35.3 gr.	38.0 gr.	
Alliant 2400	30.5 gr.	34.4 gr.	36.3 gr.	38.2 gr.	
VIHT N-110	31.0 gr.	34.9 gr.	36.9 gr.	38.9 gr.	
LIL' GUN	32.6 gr.	36.5 gr.	38.4 gr.	40.3 gr.	42.3 gr.
ENFORCER	35.9 gr.	38.6 gr.	40.0 gr.	41.3 gr.	42.7 gr.
H110	36.5 gr.	39.7 gr.	41.4 gr.	43.0 gr.	44.7 gr.
WIN 296	35.9 gr.	39.6 gr.	41.5 gr.	43.3 gr.	
IMR 4227	36.5 gr.	40.0 gr.	41.7 gr.	43.5 gr.	
Power Pro 300-MP	39.5 gr.	42.5 gr.	44.0 gr.	45.5 gr.	47.1 gr.
VIHT N-120	43.2 gr.	45.7 gr.	47.0 gr.		

Create custom ballistic tables using our online calculators at hornady.com/ballistics

***NOTE:** This data developed for use with large pistol primers only.*

500 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.500"

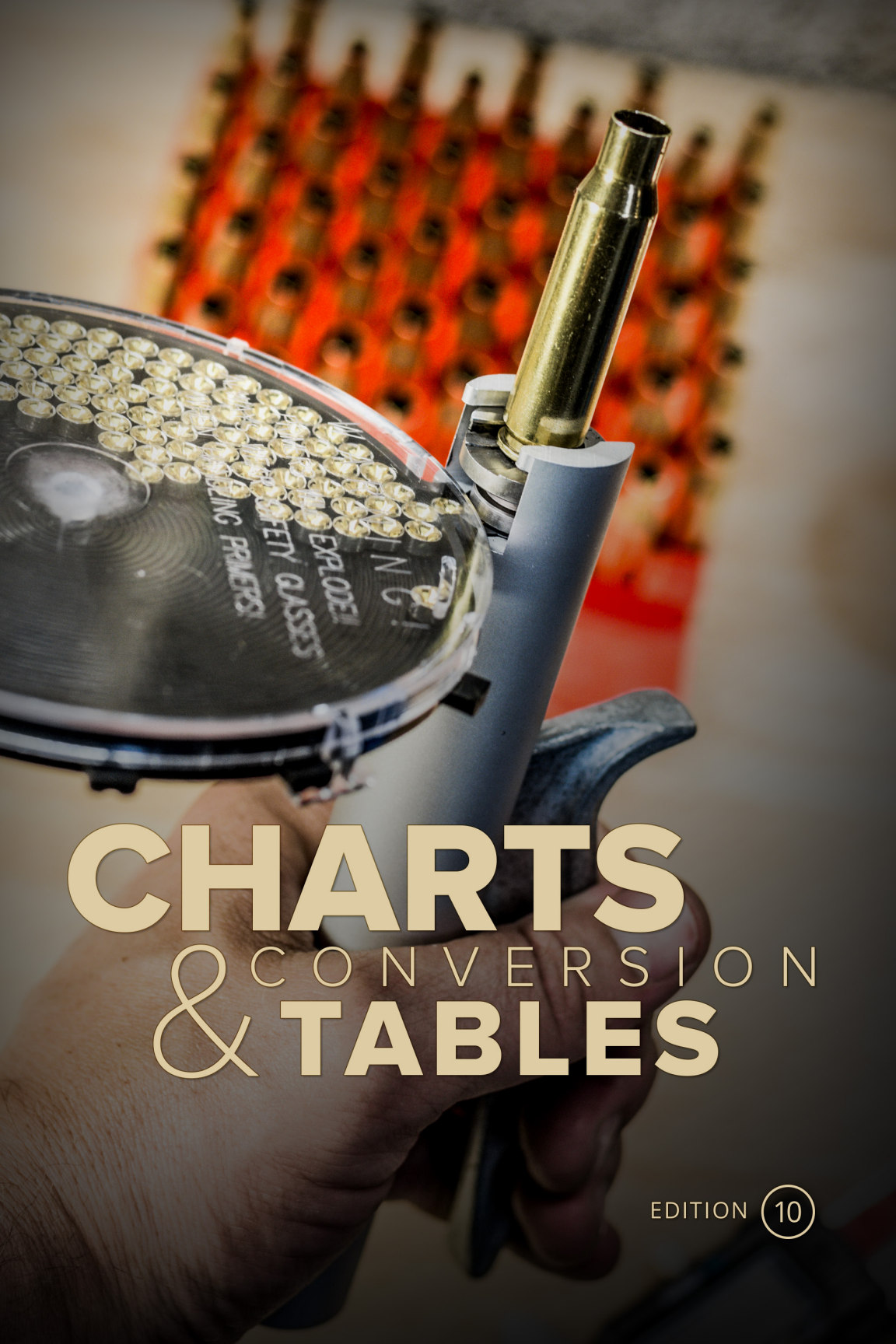


500 gr. FP
Item No. 50105
C.O.L.: 2.065"
G1 B.C.: 0.185

	VELOCITY (FPS – feet per second)				
POWDER	**1000**	**1100**	**1200**	**1250**	**1300**
LIL' GUN	21.6 gr.	25.2 gr.	28.8 gr.	30.6 gr.	32.4 gr.
Alliant 2400	23.1 gr.	25.9 gr.	28.8 gr.	30.2 gr.	
ENFORCER	23.5 gr.	26.7 gr.	29.9 gr.	31.5 gr.	33.1 gr.
VIHT N-110	21.7 gr.	25.9 gr.	30.0 gr.		
H110	25.3 gr.	28.4 gr.	31.5 gr.	33.0 gr.	34.6 gr.
WIN 296	24.1 gr.	27.9 gr.	31.8 gr.	33.7 gr.	35.6 gr.
IMR 4227	25.2 gr.	28.6 gr.	32.0 gr.	33.7 gr.	
Power Pro 300-MP	27.1 gr.	30.0 gr.	32.9 gr.	34.3 gr.	35.8 gr.
VIHT N-120	31.3 gr.	34.0 gr.	36.8 gr.	38.2 gr.	39.6 gr.
Accurate 1680	34.7 gr.	37.8 gr.	40.9 gr.	42.5 gr.	44.0 gr.

Create custom ballistic tables using our online calculators at hornady.com/ballistics

NOTE: *This data developed for use with large pistol primers only.*


CHARTS
& CONVERSION
TABLES
EDITION 10

Rifle Dies

RIFLE CARTRIDGE	Bullet Diameter (inches)	Die Set	Die Series	Full-Length Size Die	Seating Die	Expander Die	Taper Crimp Die Only	Neck Size Die	Bullet Feeder Die
BLANK CART 22-45 CAL	—	544591	IV	—	—	—	—	—	—
17 HORNET	.172	546118	I	046202	044101	—	—	—	—
17 REM FIREBALL	.172	546117	I	046200	044101	—	—	—	—
17 REM	.172	546200	III	046201	044101	—	—	—	—
17-222	.172	546202	IV	—	—	—	—	—	—
17-223	.172	546204	IV	—	—	—	—	—	—
20 VT	.204	546205	III	046206	044139	—	—	046038	—
20 TACTICAL	.204	546209	III	046208	044139	—	—	046038	—
204 RUGER	.204	546201	I	046590	044139	—	—	046038	—
22 HORNET	.224	546212	I	046213	044206	—	—	046066	—
22 K-HORNET	.224	546214	IV	—	—	—	—	046066	—
5.7X28 FN	.224	546203	III	046212	044136	—	—	—	—
218 BEE	.224	546206	IV	—	—	—	—	046066	—
221 REM FIREBALL	.224	546210	III	046211	044102	—	—	046040	095340
222 REM	.224	546224	I	046225	044102	—	—	046040	095340
223 REM	.224	546228	I	046229	044102	—	—	046040	095340
223 REM MATCH	.224	544207	—	544229	044102	—	—	544227	095340
22 PPC	.224	546216	IV	—	—	—	—	046053	095340
5.6X50 MAG	.224	546234	IV	—	—	—	—	046040	095340
219 ZIPPER	.224	546208	IV	—	—	—	—	046040	095340
225 WIN	.224	546232	III	046233	044127	—	—	046040	095340
224 WBY MAG	.224	546230	IV	—	—	—	—	046040	095340
22-250 REM	.224	546220	I	046221	044102	—	—	046040	095340
22-250 ACKLEY IMP	.224	546219	IV	—	—	—	—	046040	095340
220 SWIFT	.224	546222	I	046223	044127	—	—	046054	095340
5.6X57	.224	546236	IV	—	—	—	—	—	—
223 WSSM	.224	546223	I	046558	044707	—	—	—	—
22-6MM	.224	546249	III	046238	044127	—	—	046054	095340
22 SAVAGE HP	.227	546240	IV	—	—	—	—	—	095340
5.6X52R	.227	546238	IV	—	—	—	—	—	095340
6MM-223	.243	546248	IV	—	—	—	—	046047	—
6MM TCU	.243	546256	IV	—	—	—	—	046047	—
6MMX47 REM	.243	546258	IV	—	—	—	—	046047	—
6MMx47 LAPUA MATCH	.243	544610	—	—	—	—	—	—	—
6MM PPC	.243	546254	IV	—	—	—	—	046052	—
6MM PPC MATCH	.243	544241	—	544255	—	—	—	544253	—
6MM BR REM	.243	546432	IV	—	—	—	—	046047	—
6MM BR REM MATCH	.243	544249	—	544251	—	—	—	544259	—
6MM HAGAR	.243	546303	IV	—	—	—	—	—	—
6MM CREEDMOOR	.243	546295	IV	—	—	—	—	046041	—
6MM CREEDMOOR MATCH	.243	544247	—	046204	—	—	—	—	—
243 WIN	.243	546244	I	046245	044103	—	—	046041	—
6MM REM	.243	546246	I	046247	044103	—	—	046041	—
6MM-284	.243	546250	IV	—	—	—	—	046041	—
240 WBY MAG	.243	546242	IV	—	—	—	—	046041	—
243 WSSM	.243	546225	I	046557	044708	—	—	—	—
25-20 WIN	.257	546264	IV	—	—	—	—	—	—
256 WIN	.257	546272	IV	—	—	—	—	—	—
25-35 WIN	.257	546266	IV	—	—	—	—	—	—
25 REM	.257	546260	III	046276	044104	—	—	—	—
250 SAVAGE	.257	546270	IV	—	—	—	—	046042	—
257 ROBERTS	.257	546274	III	046275	044104	—	—	046042	—
25 WSSM	.257	546263	IV	—	—	—	—	—	—
25-06 REM	.257	546262	I	046263	044104	—	—	046042	—
257 WBY MAG	.257	546276	III	046277	044104	—	—	046042	—

RIFLE CARTRIDGE	Bullet Diameter (inches)	Die Set	Die Series	Full-Length Size Die	Seating Die	Expander Die	Taper Crimp Die Only	Neck Size Die	Bullet Feeder Die
6.5X47 LAPUA MATCH	.264	544650	—	—	—	—	—	—	—
6.5 TCU	.264	546296	IV	—	—	—	—	046048	—
6.5 JAP	.264	546290	III	046291	044106	—	—	046043	—
6.5 GRENDEL	.264	546291	I	046598	044164	—	—	—	—
6.5X54 M-SCH	.264	546292	IV	—	—	—	—	046043	—
6.5X55	.264	546282	I	046283	044106	—	—	046043	—
6.5X55 MATCH	.264	544281	—	046216	—	—	—	—	—
260 REM	.264	546269	III	046441	044106	—	—	046043	—
260 REM MATCH	.264	544277	—	046214	—	—	—	—	—
6.5 CREEDMOOR	.264	546289	I	046596	044135	—	—	046043	—
6.5 CREEDMOOR MATCH	.264	544655	—	—	—	—	—	—	—
6.5X57	.264	546284	III	046285	044106	—	—	046043	—
6.5-284	.264	546301	III	046443	044106	—	—	046043	—
6.5-284 NORMA MATCH	.264	544295	—	046218	—	—	—	—	—
6.5-06	.264	546280	III	046281	044123	—	—	046043	—
6.5 REM MAG	.264	546294	IV	—	—	—	—	046043	—
264 WIN MAG	.264	546278	III	046279	044123	—	—	046043	—
6.5X68	.264	546286	III	046287	044123	—	—	046043	—
26 NOSLER	.264	546279	III	046280	044191	—	—	046043	—
6.5X52 CARCANO	.267	546288	III	046289	044134	—	—	046043	—
6.8MM REM SPC	.277	546299	III	046711	044713	—	—	—	—
270 REN	.277	—	—	—	—	—	—	—	—
270 WIN	.277	546300	I	046301	044107	—	—	046051	—
270 WSM	.277	546297	I	046450	044161	—	—	046055	—
270 WBY MAG	.277	546298	III	046299	044107	—	—	046051	—
7MM-223 INGRAM	.284	546318	IV	—	—	—	—	046049	—
7MM TCU	.284	546328	IV	—	—	—	—	046049	—
7MM BR REM	.284	546324	IV	—	—	—	—	046049	—
7-30 WATERS	.284	546304	IV	—	—	—	—	046049	—
7MM-08 REM	.284	546316	I	046317	044108	—	—	046044	—
7X57	.284	546308	I	046309	044133	—	—	046044	—
7X57R	.284	546311	I	046310	044133	—	—	046044	—
284 WIN	.284	546302	III	046303	044108	—	—	046044	—
284 WIN MATCH	.284	544303	—	046232	—	—	—	—	—
280 REM	.284	546320	I	046321	044133	—	—	046044	—
280 ACKLEY IMP	.284	546321	III	046304	044133	—	—	046044	—
280 ACKLEY IMP MATCH	.284	544323	—	046228	—	—	—	—	—
7X65R	.284	546314	IV	—	—	—	—	046044	—
7X61 S&H	.284	546310	IV	—	—	—	—	046044	—
7X64	.284	546312	IV	—	—	—	—	046044	—
7MM REM SA ULTRA MAG	.284	546309	III	046452	044108	—	—	046056	—
7MM REM SA ULTRA MAG MATCH	.284	544311	—	046224	—	—	—	—	—
7MM REM MAG	.284	546326	I	046327	044133	—	—	046044	—
7MM REM MAG MATCH	.284	544325	—	046234	—	—	—	—	—
7MM WSM	.284	546327	I	046451	044108	—	—	046056	—
7MM WSM MATCH	.284	544329	—	046226	—	—	—	—	—
7MM WBY MAG	.284	546330	III	046331	044133	—	—	046044	—
28 NOSLER	.284	546329	III	046330	044133	—	—	046044	—
7MM STW	.284	546440	IV	—	—	—	—	046044	—
7MM REM ULTRA MAG	.284	546307	III	046454	044133	—	—	046056	—
7.35 CARCANO	.300	546332	IV	—	—	—	—	—	—
30 CARBINE	.308	546503	II	046504	044142	044505	—	—	—
30 REM	.308	—	—	—	—	—	—	046050	095345
300 BLACKOUT	.308	546349	I	046459	044165	—	—	—	—
30 HERRETT	.308	546334	IV	—	—	—	—	046050	—
30-30 WIN	.308	546342	I	046343	044111	—	—	046050	095345

RIFLE CARTRIDGE	Bullet Diameter (inches)	Die Set	Die Series	Full-Length Size Die	Seating Die	Expander Die	Taper Crimp Die Only	Neck Size Die	Bullet Feeder Die
30-30 ACKLEY IMP	.308	546345	IV	—	—	—	—	046050	095345
303 SAVAGE	.308	546354	IV	—	—	—	—	046050	095345
300 SAVAGE	.308	546348	III	046349	044111	—	—	046050	095345
30 MERRILL	.308	546338	IV	—	—	—	—	046050	095345
307 WIN	.308	—	—	—	—	—	—	046045	095345
308 MARLIN EXPRESS	.308	546357	I	046358	044111	—	—	046045	095345
7.5 SWISS (7.5X55)	.308	546360	III	046361	044111	—	—	046045	095345
7.5 SWISS K31	.308	546361	III	046362	044111	—	—	046045	095345
308 WIN	.308	546358	I	046359	044111	—	—	046045	095345
308 WIN MATCH	.308	544355	—	544359	—	—	—	544357	095345
7.62X54R	.308	546362	III	046363	044111	—	—	046050	095345
30-40 KRAG	.308	546344	IV	—	—	—	—	046045	095345
30 TC	.308	546335	I	046336	044111	—	—	046045	095345
30-06 SPRG	.308	546340	I	046341	044112	—	—	046045	095345
30-06 SPRG MATCH	.308	544339	—	046236	—	—	—	—	095345
30-06 ACKLEY IMP	.308	546341	IV	—	—	—	—	046045	095345
300 H&H MAG	.308	546346	IV	—	—	—	—	046045	095345
300 OLYMPIC	.308	546355	IV	—	—	—	—	—	—
300 REM SA ULTRA MAG	.308	546347	I	046455	044160	—	—	046057	095345
308 NORMA MAG	.308	546356	IV	—	—	—	—	046045	095345
300 WSM	.308	546369	I	046453	044160	—	—	046057	095345
300 WSM MATCH	.308	544353	—	046242	—	—	—	046057	095345
300 RCM	.308	546353	I	046592	044111	—	—	046057	095345
300 WIN MAG	.308	546352	I	046353	044112	—	—	046045	095345
300 WIN MAG MATCH	.308	544351	—	046240	—	—	—	—	095345
300 WBY MAG	.308	546350	I	046351	044112	—	—	046045	095345
300 NORMA MAG MATCH	.308	544371	—	046248	—	—	—	—	095345
300 REM ULTRA MAG	.308	546365	I	046447	044159	—	—	046057	095345
300 REM ULTRA MAG MATCH	.308	544367	—	046246	—	—	—	—	095345
30-378 WBY MAG	.308	546419	IV	—	—	—	—	046057	095345
32-20 WIN	.312	546364	III	046365	044113	—	—	—	—
7.62X39	.308	546424	I	046425	044126	—	—	—	—
7.65 BELG	.312	546368	III	046369	044114	—	—	—	—
303 BRITISH	.312	546366	I	046367	044114	—	—	—	—
7.7 JAP	.312	546370	III	046371	044114	—	—	—	—
32-40 WIN	.321	546374	IV	—	—	—	—	—	—
32 WIN SPL	.321	546372	IV	—	—	—	—	—	—
32 REM	.321	—	—	—	—	—	—	—	—
7.92X33 KURZ	.323	546375	III	046376	044137	—	—	—	—
8X57	.323	546382	I	046383	044116	—	—	—	—
8X57JRS	.323	546382	I	046383	044116	—	—	—	—
8X57JS	.323	546382	I	046383	044116	—	—	—	—
8X60S	.323	546376	III	046377	044116	—	—	—	—
325 WSM	.323	546387	IV	—	—	—	—	—	—
8X68S	.323	546378	IV	—	—	—	—	—	—
8MM REM MAG	.323	546384	IV	—	—	—	—	—	—
8.15X46R	.324	546386	IV	—	—	—	—	—	—
8X56 HUNGARIAN-MANN	.329	546385	IV	—	—	—	—	—	—
338 FEDERAL	.338	546397	III	046595	044131	—	—	046058	—
338 MARLIN EXPRESS	.338	546359	I	046597	044131	—	—	046058	—
338 RCM	.338	546399	I	046594	044131	—	—	046058	—
338 WIN MAG	.338	546390	I	046391	044117	—	—	046058	—
338 NORMA MAG	.338	—	—	—	—	—	—	046058	—
338 NORMA MAG MATCH	.338	544397	—	046250	—	—	—	046058	—
340 WBY MAG	.338	546392	IV	—	—	—	—	046058	—

RIFLE CARTRIDGE	Bullet Diameter *(inches)*	Die Set	Die Series	Full-Length Size Die	Seating Die	Expander Die	Taper Crimp Die Only	Neck Size Die	Bullet Feeder Die
338 REM ULTRA MAG	.338	546389	III	046446	044117	—	—	046058	—
338 LAPUA MAG	.338	546393	III	046593	044117	—	—	046058	—
338 LAPUA MAG MATCH	.358	544399	—	046252	—	—	—	—	—
338-378 WBY MAG	.338	546391	IV	—	—	—	—	046058	—
348 WIN	.348	546394	IV	—	—	—	—	—	—
35 REM	.358	546398	III	046399	044130	—	—	—	—
356 WIN	.358	—	—	—	—	—	—	046046	—
358 WIN	.358	546408	IV	—	—	—	—	046046	—
350 REM MAG	.358	546402	IV	—	—	—	—	—	—
35 WHELEN	.358	546400	III	046401	044119	—	—	046046	—
358 NORMA MAG	.358	546406	IV	—	—	—	—	046046	—
9.3X57	.366	546410	III	046411	044120	—	—	—	—
9.3X74R	.366	546414	III	046415	044120	—	—	—	—
9.3X62	.366	546412	III	046413	044120	—	—	—	—
38-55 WIN	.375	546537	IV	—	—	—	—	—	—
375 WIN	.375	546530	IV	—	—	—	—	—	—
376 STEYR	.375	546417	IV	—	—	—	—	—	—
375 H&H MAG	.375	546416	I	046417	044121	—	—	—	—
375 RUGER	.375	546415	I	046418	044121	—	—	—	—
375 REM ULTRA MAG	.375	546450	IV	—	—	—	—	—	—
378 WBY MAG	.375	546418	IV	—	—	—	—	—	—
450-400 NITRO EXPRESS 3"	.410	546421	IV	—	—	—	—	—	—
405 WIN	.411	546425	II	046456	044162	044571	—	—	—
10.3X60R SWISS	.415	546420	IV	—	—	—	—	—	—
416 RIGBY	.416	546428	IV	—	—	—	—	—	—
416 RUGER	.416	546429	IV	—	—	—	—	—	—
416 REM MAG	.416	546426	IV	—	—	—	—	—	—
416 WBY MAG	.416	546430	IV	—	—	—	—	—	—
404 JEFFERY	.423	546423	IV	—	—	—	—	—	—
444 MARLIN	.430	546551	II	046552	044149	044553	—	—	—
458 SOCOM	.458	546464	III	046424	044190	—	—	—	—
450 BUSHMASTER	.452	546452	V	046422	044721	044550	044176	—	—
45-70 GOVT	.458	546566	II	046567	044152	044568	—	—	—
450 MARLIN	.458	546553	II	046587	044152	044568	—	—	—
450 NITRO EXPRESS 3¼"	.458	546433	IV	—	—	—	—	—	—
458 WIN MAG	.458	546569	II	046570	044153	044568	—	—	—
458 LOTT	.458	546465	II	046457	044204	044572	—	—	—
460 WBY MAG	.458	546422	IV	—	—	—	—	—	—
470 NITRO EXPRESS 3¼"	.474	546434	IV	—	—	—	—	—	—
50-70 GOVT	.510	546462	IV	—	—	—	—	—	—
50 ALASKAN	.510	546586	IV	—	—	—	—	—	—
500 NITRO EXPRESS 3"	.510	546435	IV	—	—	—	—	—	—

Rifle Reloading Essentials

RIFLE CARTRIDGE	Shell Holder # / Item No.	Shell Plate # / Item No.	Case Feeder Plate Size / Item No.	Trimmer Pilot # / Item No.	Primer Punch	Bullet Puller Collet # / Item No.	Modified Case
BLANK CART 22-45 CAL	—/—	—/—	—/—	—/—	—	—/—	—
17 HORNET	#3/390543	#3/392603	Sm Rfl/095314	*/390942	Small	#1/392154	A17H
17 REM FIREBALL	#16/390556	#16/392616	Sm Rfl/095314	*/390942	Small	#1/392154	B17R
17 REM	#16/390556	#16/392616	Sm Rfl/095314	*/390942	Small	#1/392154	A17
17-222	#16/390556	#16/392616	Sm Rfl/095314	*/390942	Small	#1/392154	—
17-223	#16/390556	#16/392616	Sm Rfl/095314	*/390942	Small	#1/392154	—
20 VT	#16/390556	#16/392616	Sm Rfl/095314	#22/390940	Small	#14/392167	—
20 TACTICAL	#16/390556	#16/392616	Sm Rfl/095314	#22/390940	Small	#14/392167	—
204 RUGER	#16/390556	#16/392616	Sm Rfl/095314	#22/390940	Small	#14/392167	B204
22 HORNET	#3/390543	#3/392603	Sm Rfl/095314	#1/390943	Small	#2/392155	—
22 K-HORNET	#3/390543	#3/392603	Sm Rfl/095314	#1/390943	Small	#2/392155	—
5.7X28 FN	#37/390577	—/—	Sm Rfl/095314	#1/390943	Small	#2/392155	—
218 BEE	#7/390547	#7/392607	Sm Rfl/095314	#1/390943	Small	#2/392155	A218
221 REM FIREBALL	#16/390556	#16/392616	Sm Rfl/095314	#1/390943	Small	#2/392155	A221
222 REM	#16/390556	#16/392616	Sm Rfl/095314	#1/390943	Small	#2/392155	A222
223 REM	#16/390556	#16/392616	Sm Rfl/095314	#1/390943	Small	#2/392155	A223
223 REM MATCH	#16/390556	#16/392616	Sm Rfl/095314	#1/390943	Small	#2/392155	A223
22 PPC	#6/390546	#6/392606	Sm Rfl/095314	#1/390943	Small	#2/392155	—
5.6X50 MAG	#16/390556	#16/392616	Sm Rfl/095314	#1/390943	Small	#2/392155	—
219 ZIPPER	#2/390542	#2/392602	Lg Rfl/095316	#1/390943	Large	#2/392155	—
225 WIN	#4/390544	#4/392604	Lg Rfl/095316	#1/390943	Large	#2/392155	—
224 WBY MAG	#17/390557	—/—	Lg Rfl/095316	#1/390943	Large	#2/392155	—
22-250 REM	#1/390541	#1/392601	Lg Rfl/095316	#1/390943	Large	#2/392155	A22250
22-250 ACKLEY IMP	#1/390541	#1/392601	Lg Rfl/095316	#1/390943	Large	#2/392155	—
220 SWIFT	#4/390544	#4/392604	Lg Rfl/095316	#1/390943	Large	#2/392155	A220
5.6X57	#1/390541	#1/392601	Lg Rfl/095316	#1/390943	Large	#2/392155	—
223 WSSM	#35/390575	#35/392635	Lg Rfl/095316	#1/390943	Large	#2/392155	—
22-6MM	#1/390541	#1/392601	Lg Rfl/095316	#1/390943	Large	#2/392155	—
22 SAVAGE HP	#2/390542	#2/392602	Lg Rfl/095316	#2/390944	Large	#2/392155	—
5.6X52R	#2/390542	#2/392602	Lg Rfl/095316	#2/390944	Large	#2/392155	—
6MM-223	#16/390556	#16/392616	Sm Rfl/095314	#3/390945	Small	#3/392156	—
6MM TCU	#16/390556	#16/392616	Sm Rfl/095314	#3/390945	Small	#3/392156	—
6MMX47 REM	#16/390556	#16/392616	Sm Rfl/095314	#3/390945	Small	#3/392156	—
6MMx47 LAPUA MATCH	#1/390541	#1/392601	Sm Rfl/095314	#3/390945	Small	#3/392156	—
6MM PPC	#6/390546	#6/392606	Sm Rfl/095314	#3/390945	Small	#3/392156	C6PPC
6MM PPC MATCH	#6/390546	#6/392606	Sm Rfl/095314	#3/390945	Small	#3/392156	C6PPC
6MM BR REM	#1/390541	#1/392601	Sm Rfl/095314	#3/390945	Small	#3/392156	A6MMB
6MM BR REM MATCH	#1/390541	#1/392601	Sm Rfl/095314	#3/390945	Small	#3/392156	A6MMB
6MM HAGAR	#12/390552	#12/392612	Sm Rfl/095314	#3/390945	Large	#3/392156	—
6MM CREEDMOOR	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	—
6MM CREEDMOOR MATCH	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	—
243 WIN	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	A243
6MM REM	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	A6MM
6MM-284	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	—
240 WBY MAG	#1/390541	#1/392601	Lg Rfl/095316	#3/390945	Large	#3/392156	B240
243 WSSM	#35/390575	#35/392635	Lg Rfl/095316	#3/390945	Large	#3/392156	B243
25-20 WIN	#7/390547	#7/392607	Sm Rfl/095314	#4/390946	Small	#4/392157	—
256 WIN	#6/390546	#6/392606	Sm Rfl/095314	#4/390946	Large	#4/392157	—
25-35 WIN	#2/390542	#2/392602	Lg Rfl/095316	#4/390946	Large	#4/392157	—
25 REM	#12/390552	#12/392612	Lg Rfl/095316	#4/390946	Large	#4/392157	—
250 SAVAGE	#1/390541	#1/392601	Lg Rfl/095316	#4/390946	Large	#4/392157	A250
257 ROBERTS	#1/390541	#1/392601	Lg Rfl/095316	#4/390946	Large	#4/392157	A257
25 WSSM	#35/390575	#35/392635	Lg Rfl/095316	#4/390946	Large	#4/392157	B25
25-06 REM	#1/390541	#1/392601	Lg Rfl/095316	#4/390946	Large	#4/392157	A2506
257 WBY MAG	#5/390545	#5/392605	Lg Rfl/095316	#4/390946	Large	#4/392157	B257

RIFLE CARTRIDGE	Shell Holder # / Item No.	Shell Plate # / Item No.	Case Feeder Plate Size / Item No.	Trimmer Pilot # / Item No.	Primer Punch	Bullet Puller Collet # / Item No.	Modified Case
6.5X47 LAPUA MATCH	#1/390541	#1/392601	—/—	#5/390947	Small	#4/392157	—
6.5 TCU	#16/390556	#16/392616	Sm Rfl/095314	#5/390947	Small	#4/392157	—
6.5 JAP	#34/390574	—/—	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5 GRENDEL	#6/390546	#6/392606	Sm Rfl/095314	#5/390947	Large	#4/392157	A65G
6.5X54 M-SCH	#20/390560	—/—	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5X55	#19/390559	#19/392619	Lg Rfl/095316	#5/390947	Large	#4/392157	B65X55
6.5X55 MATCH	#19/390559	#19/392619	Lg Rfl/095316	#5/390947	Large	#4/392157	B65X55
260 REM	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	A260
260 REM MATCH	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5 CREEDMOOR	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	A65C
6.5 CREEDMOOR MATCH	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5X57	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5-284	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	B65
6.5-284 NORMA MATCH	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	B65
6.5-06	#1/390541	#1/392601	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5 REM MAG	#5/390545	#5/392605	Lg Rfl/095316	#5/390947	Large	#4/392157	—
264 WIN MAG	#5/390545	#5/392605	Lg Rfl/095316	#5/390947	Large	#4/392157	A264
6.5X68	#30/390570	#30/392630	Lg Rfl/095316	#5/390947	Large	#4/392157	—
26 NOSLER	#5/390545	#5/392605	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.5X52 CARCANO	#21/390561	—/—	Lg Rfl/095316	#5/390947	Large	#4/392157	—
6.8MM REM SPC	#12/390552	#12/392612	Lg Rfl/095316	#6/390948	Small	#5/392158	A68SPC
270 REN	#3/390543	#3/392603	Sm Rfl/095314	#6/390948	Small	#5/392158	—
270 WIN	#1/390541	#1/392601	Lg Rfl/095316	#6/390948	Large	#5/392158	A270
270 WSM	#35/390575	#35/392635	Lg Rfl/095316	#6/390948	Large	#5/392158	B270W
270 WBY MAG	#5/390545	#5/392605	Lg Rfl/095316	#6/390948	Large	#5/392158	B270
7MM-223 INGRAM	#16/390556	#16/392616	Sm Rfl/095314	#7/390949	Small	#6/392159	—
7MM TCU	#16/390556	#16/392616	Sm Rfl/095314	#7/390949	Small	#6/392159	—
7MM BR REM	#1/390541	#1/392601	Sm Rfl/095314	#7/390949	Large	#6/392159	A7MM
7-30 WATERS	#2/390542	#2/392602	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7MM-08 REM	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	A7MM08
7X57	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	A7X57
7X57R	#13/390553	#13/392613	Lg Rfl/095316	#7/390949	Large	#6/392159	—
284 WIN	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	—
284 WIN MATCH	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	—
280 REM	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	A280
280 ACKLEY IMP	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	—
280 ACKLEY IMP MATCH	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7X65R	#13/390553	#13/392613	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7X61 S&H	#35/390575	#35/392635	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7X64	#1/390541	#1/392601	Lg Rfl/095316	#7/390949	Large	#6/392159	B764
7MM REM SA ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	B7MMR
7MM REM SA ULTRA MAG MATCH	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	B7MMR
7MM REM MAG	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	A7MMR
7MM REM MAG MATCH	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	A7MMR
7MM WSM	#35/390575	#35/392635	Lg Rfl/095316	#7/390949	Large	#6/392159	B7WS
7MM WSM MATCH	#35/390575	#35/392635	Lg Rfl/095316	#7/390949	Large	#6/392159	B7WS
7MM WBY MAG	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	B7MMW
28 NOSLER	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7MM STW	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	—
7MM REM ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#7/390949	Large	#6/392159	B7MM
7.35 CARCANO	#21/390561	—/—	Lg Rfl/095316	#8/390950	Large	#7/392160	—
30 CARBINE	#22/390562	#22/392622	Sm Rfl/095314	#9/390951	Small	#7/392160	—
30 REM	#12/390552	#12/392612	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 BLACKOUT	#16/390556	#16/392616	Sm Rfl/095314	#9/390951	Small	#7/392160	A300A
30 HERRETT	#2/390542	#2/392602	Lg Rfl/095316	#9/390951	Large	#7/392160	—
30-30 WIN	#2/390542	#2/392602	Lg Rfl/095316	#9/390951	Large	#7/392160	A3030

RIFLE CARTRIDGE	Shell Holder # / Item No.	Shell Plate # / Item No.	Case Feeder Plate Size / Item No.	Trimmer Pilot # / Item No.	Primer Punch	Bullet Puller Collet # / Item No.	Modified Case
30-30 ACKLEY IMP	#2/390542	#2/392602	Lg Rfl/095316	#9/390951	Large	#7/392160	—
303 SAVAGE	#33/390573	—/—	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 SAVAGE	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	B300S
30 MERRILL	#4/390544	#4/392604	Lg Rfl/095316	#9/390951	Large	#7/392160	—
307 WIN	#33/390573	—/—	Lg Rfl/095316	#9/390951	Large	#7/392160	—
308 MARLIN EXPRESS	#27/390567	#27/392627	Lg Rfl/095316	#9/390951	Large	#7/392160	A308ME
7.5 SWISS (7.5X55)	#2/390542	#2/392602	Lg Rfl/095316	#9/390951	Large	#7/392160	—
7.5 SWISS K31	#2/390542	#2/392602	Lg Rfl/095316	#9/390951	Large	#7/392160	—
308 WIN	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	A308
308 WIN MATCH	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	A308
7.62X54R	#23/390563	#23/392623	Lg Rfl/095316	#9/390951	Large	#7/392160	—
30-40 KRAG	#11/390551	#11/392611	Lg Rfl/095316	#9/390951	Large	#7/392160	—
30 TC	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	A30TC
30-06 SPRG	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	A3006
30-06 SPRG MATCH	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	A3006
30-06 ACKLEY IMP	#1/390541	#1/392601	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 H&H MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	A300H
300 OLYMPIC	#35/390575	#35/392635	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 REM SA ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	B300R
308 NORMA MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 WSM	#35/390575	#35/392635	Lg Rfl/095316	#9/390951	Large	#7/392160	B300W
300 WSM MATCH	#35/390575	#35/392635	Lg Rfl/095316	#9/390951	Large	#7/392160	B300W
300 RCM	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	A300R
300 WIN MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	A300M
300 WIN MAG MATCH	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	A300M
300 WBY MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	A300W
300 NORMA MAG MATCH	#43/390583	—/—	Lg Rfl/095316	#9/390951	Large	#7/392160	—
300 REM ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	B300
300 REM ULTRA MAG MATCH	#5/390545	#5/392605	Lg Rfl/095316	#9/390951	Large	#7/392160	B300
30-378 WBY MAG	#14/390554	#14/392614	Lg Rfl/095316	#9/390951	Large	#7/392160	C30378
32-20 WIN	#7/390547	#7/392607	Sm Rfl/095314	#9/390951	Small	#7/392160	—
7.62X39	#6/390546	#6/392606	Sm Rfl/095314	#9/390951	Large	#7/392160	A762
7.65 BELG	#24/390564	—/—	Lg Rfl/095316	#10/390952	Large	#7/392160	—
303 BRITISH	#11/390551	#11/392611	Lg Rfl/095316	#10/390952	Large	#7/392160	A303
7.7 JAP	#1/390541	#1/392601	Lg Rfl/095316	#10/390952	Large	#7/392160	—
32-40 WIN	#2/390542	#2/392602	Lg Rfl/095316	#11/390953	Large	#8/392161	—
32 WIN SPL	#2/390542	#2/392602	Lg Rfl/095316	#11/390953	Large	#8/392161	A32
32 REM	#12/390552	#12/392612	Lg Rfl/095316	#12/390954	Large	#8/392161	—
7.92X33 KURZ	#1/390541	#1/392601	Sm Rfl/095314	#11/390953	Large	#8/392161	—
8X57	#1/390541	#1/392601	Lg Rfl/095316	#11/390953	Large	#8/392161	A8X57
8X57JRS	#13/390553	#13/392613	Lg Rfl/095316	#11/390953	Large	#8/392161	—
8X57JS	#1/390541	#1/392601	Lg Rfl/095316	#11/390953	Large	#8/392161	A8X57
8X60S	#1/390541	#1/392601	Lg Rfl/095316	#11/390953	Large	#8/392161	—
325 WSM	#35/390575	#35/392635	Lg Rfl/095316	#11/390953	Large	#8/392161	—
8X68S	#30/390570	#30/392630	Lg Rfl/095316	#11/390953	Large	#8/392161	—
8MM REM MAG	#5/390545	#5/392605	Lg Rfl/095316	#11/390953	Large	#8/392161	A8MM
8.15X46R	#2/390542	#2/392602	Lg Rfl/095316	#11/390953	Large	#8/392161	—
8X56 HUNGARIAN-MANN	#47/390603	—/—	Lg Rfl/095316	#11/390953	Large	#8/392161	—
338 FEDERAL	#1/390541	#1/392601	Lg Rfl/095316	#13/390955	Large	#9/392162	—
338 MARLIN EXPRESS	#52/390607	#52/392652	Lg Rfl/095316	#13/390955	Large	#9/392162	A338M
338 RCM	#5/390545	#5/392605	Lg Rfl/095316	#13/390955	Large	#9/392162	A338R
338 WIN MAG	#5/390545	#5/392605	Lg Rfl/095316	#13/390955	Large	#9/392162	A338
338 NORMA MAG	#43/390583	—/—	Lg Rfl/095316	#13/390955	Large	#9/392162	—
338 NORMA MAG MATCH	#43/390583	—/—	Lg Rfl/095316	#13/390955	Large	#9/392162	—
340 WBY MAG	#5/390545	#5/392605	Lg Rfl/095316	#13/390955	Large	#9/392162	A340

RIFLE CARTRIDGE	Shell Holder # / Item No.	Shell Plate # / Item No.	Case Feeder Plate Size / Item No.	Trimmer Pilot # / Item No.	Primer Punch	Bullet Puller Collet # / Item No.	Modified Case
338 REM ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#13/390955	Large	#9/392162	B338
338 LAPUA MAG	#43/390583	—/—	Lg Rfl/095316	#13/390955	Large	#9/392162	C338L
338 LAPUA MAG MATCH	#43/390583	—/—	Lg Rfl/095316	#13/390955	Large	#9/392162	C338L
338-378 WBY MAG	#14/390554	#14/392614	Lg Rfl/095316	#13/390955	Large	#9/392162	—
348 WIN	#25/390565	—/—	Lg Rfl/095316	#14/390956	Large	#9/392162	—
35 REM	#26/390566	—/—	Lg Rfl/095316	#15/390957	Large	#9/392162	A35R
356 WIN	#33/390573	—/—	Lg Rfl/095316	#15/390957	Large	#9/392162	—
358 WIN	#1/390541	#1/392601	Lg Rfl/095316	#15/390957	Large	#9/392162	B358
350 REM MAG	#5/390545	#5/392605	Lg Rfl/095316	#15/390957	Large	#9/392162	A350
35 WHELEN	#1/390541	#1/392601	Lg Rfl/095316	#15/390957	Large	#9/392162	A35
358 NORMA MAG	#5/390545	#5/392605	Lg Rfl/095316	#15/390957	Large	#9/392162	—
9.3X57	#1/390541	#1/392601	Lg Rfl/095316	#20/390962	Large	#9/392162	—
9.3X74R	#13/390553	#13/392613	Lg Rfl/095316	#20/390962	Large	#9/392162	C9374
9.3X62	#1/390541	#1/392601	Lg Rfl/095316	#20/390962	Large	#9/392162	A9362
38-55 WIN	#2/390542	#2/392602	Lg Rfl/095316	#16/390958	Large	#10/392163	—
375 WIN	#2/390542	#2/392602	Lg Rfl/095316	#16/390958	Large	#10/392163	—
376 STEYR	#15/390555	—/—	Lg Rfl/095316	#16/390958	Large	#10/392163	—
375 H&H MAG	#5/390545	#5/392605	Lg Rfl/095316	#16/390958	Large	#10/392163	A375
375 RUGER	#5/390545	#5/392605	Lg Rfl/095316	#16/390958	Large	#10/392163	C375R
375 REM ULTRA MAG	#5/390545	#5/392605	Lg Rfl/095316	#16/390958	Large	#10/392163	—
378 WBY MAG	#14/390554	#14/392614	Lg Rfl/095316	#16/390958	Large	#10/392163	B378
450-400 NITRO EXPRESS 3"	#25/390565	—/—	Lg Rfl/095316	#17/390959	Large	#11/392164	C450
405 WIN	#42/390582	—/—	Lg Rfl/095316	#17/390959	Large	#11/392164	C405
10.3X60R SWISS	#25/390565	—/—	Lg Rfl/095316	#17/390959	Large	#11/392164	—
416 RIGBY	#38/390578	—/—	Lg Rfl/095316	#17/390959	Large	#11/392164	C416R
416 RUGER	#5/390545	#5/392605	Lg Rfl/095316	#17/390959	Large	#11/392164	C416RG
416 REM MAG	#5/390545	#5/392605	Lg Rfl/095316	#17/390959	Large	#11/392164	A416
416 WBY MAG	#14/390554	#14/392614	Lg Rfl/095316	#17/390959	Large	#11/392164	—
404 JEFFERY	#53/390608	—/—	Lg Rfl/095316	#17/390959	Large	#12/392165	—
444 MARLIN	#27/390567	#27/392627	Lg Rfl/095316	#18/390960	Large	#12/392165	—
458 SOCOM	#1/390541	#1/392601	Lg Rfl/095316	#19/390961	Small	#13/392166	—
450 BUSHMASTER	#1/390541	#1/392601	Lg Rfl/095316	#19/390961	Large	#13/392166	A450B
45-70 GOVT	#14/390554	#14/392614	Lg Rfl/095316	#19/390961	Large	#13/392166	A4570
450 MARLIN	#5/390545	#5/392605	Lg Rfl/095316	#19/390961	Large	#13/392166	—
450 NITRO EXPRESS 3¼"	#54/390609	—/—	N/A	#19/390961	Large	#13/392166	C450NE
458 WIN MAG	#5/390545	#5/392605	Lg Rfl/095316	#19/390961	Large	#13/392166	C458W
458 LOTT	#5/390545	#5/392605	Lg Rfl/095316	#19/390961	Large	#13/392166	C458L
460 WBY MAG	#14/390554	#14/392614	Lg Rfl/095316	#19/390961	Large	#13/392166	—
470 NITRO EXPRESS 3¼"	#55/390610	—/—	N/A	#23/390939	Large	—/—	C470N
50-70 GOVT	—/—	—/—	Lg Rfl/095316	#50/390937	Large	—/—	—
50 ALASKAN	#25/390565	—/—	Lg Rfl/095316	#50/390937	Large	—/—	—
500 NITRO EXPRESS 3"	#55/390610	—/—	N/A	#50/390937	Large	—/—	C500N

Handgun Dies

PISTOL CARTRIDGE	Bullet Diameter (inches)	Die Set	Die Series	Full-Length Size Die	Seating Die	Expander Die	Taper Crimp Seater Die	Taper Crimp Die Only	Bullet Feeder Die
22 TCM	.224	546215	IV	—	—	—	—	—	N/A
25 AUTO	.251	—	—	—	—	—	—	—	N/A
30 LUGER	.308	546336	IV	—	—	—	—	—	N/A
30 MAUSER	.309	—	—	—	—	—	—	—	N/A
32 AUTO	.311	546506	II	046507	044113	044508	—	—	N/A
32 S&W LONG	.311	546509	II	046510	044143	044511	—	—	N/A
32 H&R MAG	.311	546509	II	046510	044143	044511	—	—	N/A
327 FEDERAL MAG	.311	546509	II	046510	044143	044511	—	—	N/A
7.5 SWISS ORDNANCE	.312	546504	IV	—	—	—	—	—	N/A
8MM LEBEL REVOLVER	.326	546510	IV	—	—	—	—	—	N/A
380 AUTO	.355	546518	II	046519	044144	044517	—	044170	095330
9MM LUGER TAPER CRIMP DIE SET	.355	546516	II	046516	044177	044517	044177	—	095330
9MM LUGER	.355	546515	II	046516	044144	044517	—	044170	095330
9X21 TAPER CRIMP DIE SET	.355	546516	II	046516	044177	044517	044177	—	095330
9X21	.355	546515	II	046516	044144	044517	—	044170	095330
38 SUPER AUTO	.355	546524	II	046525	044144	044526	—	—	N/A
357 SIG	.355	546575	II	046576	044150	044577	—	—	N/A
38 SPL	.357	546527	II	046528	044145	044523	—	—	095331
COWBOY 38 SPL	.357	546528	III	046528	044169	044591	—	—	N/A
357 MAGNUM	.357	546527	II	046528	044145	044523	—	—	095331
COWBOY 357 MAGNUM	.357	546528	III	046528	044169	044591	—	—	N/A
357 REM MAX	.357	546527	II	046528	044145	044523	—	—	095331
COWBOY 357 REM MAX	.357	546528	III	046528	044169	044591	—	—	N/A
9X23 WIN	.355	546532	IV	—	—	—	—	—	N/A
38 S&W	.357	546521	IV	—	—	—	—	—	N/A
357 HERRETT	.357	546396	IV	—	—	—	—	—	N/A
9X18 MAKAROV	.364	546512	II	046513	044154	044514	—	—	N/A
38-40 WIN	.400	546536	IV	—	—	—	—	—	N/A
40 S&W TAPER CRIMP DIE SET	.400	546534	II	046534	044178	044535	044178	—	095332
40 S&W	.400	546533	II	046534	044146	044535	—	044171	095332
10MM AUTO TAPER CRIMP DIE SET	.400	546534	II	046534	044178	044535	044178	—	095332
10MM AUTO	.400	546533	II	046534	044146	044535	—	044171	095332
400 COR-BON	.400	546538	IV	—	—	—	—	—	N/A
41 AE	.410	546539	II	046540	044147	044541	—	—	N/A
41 REM MAG	.410	546539	II	046540	044147	044541	—	—	N/A
COWBOY 44-40 WIN	.429	546543	III	046460	044166	044593	—	—	N/A
44 SPL	.430	546548	II	046549	044148	044544	—	—	095333
COWBOY 44 SPL	.430	546549	III	046549	044166	044592	—	—	N/A
44 REM MAG	.430	546548	II	046549	044148	044544	—	—	095333
44 AUTO MAG	.430	546545	IV	—	—	—	—	—	095333
445 SUPER MAG	.430	—	—	—	—	—	—	—	N/A
45 AUTO TAPER CRIMP DIE SET	.451	546555	II	046555	044179	044556	044179	—	095334
45 AUTO	.451	546554	II	046555	044151	044556	—	044172	095334
45 AUTO RIMMED	.451	546554	II	046555	044151	044556	—	044172	095334
45 S&W SCHOFIELD	.452	546546	IV	—	—	—	—	—	095334
45 COLT	.452	546582	II	046583	044151	044556	—	—	095334
COWBOY 45 COLT	.452	546581	III	046583	044168	044594	—	—	095334
45 WIN MAG	.451	546554	II	046555	044151	044556	—	044172	095334
454 CASULL	.452	546584	V	046584	044151	044556	—	044588	095334
460 S&W MAG	.452	546583	V	046720	044721	044719	—	044722	095334
455 WEBLEY	.455	—	—	—	—	—	—	—	N/A
475 LINEBAUGH	.475	546547	V	046585	044158	044586	—	044174	N/A
480 RUGER	.475	546547	V	046585	044158	044586	—	044174	N/A
50 ACTION EXP	.500	546580	II	046581	044155	044582	—	—	N/A
500 S&W MAG	.500	546585	V	046699	044700	044701	—	044702	N/A
500 LINEBAUGH	.510	546587	IV	—	—	—	—	—	N/A

Handgun Reloading Essentials

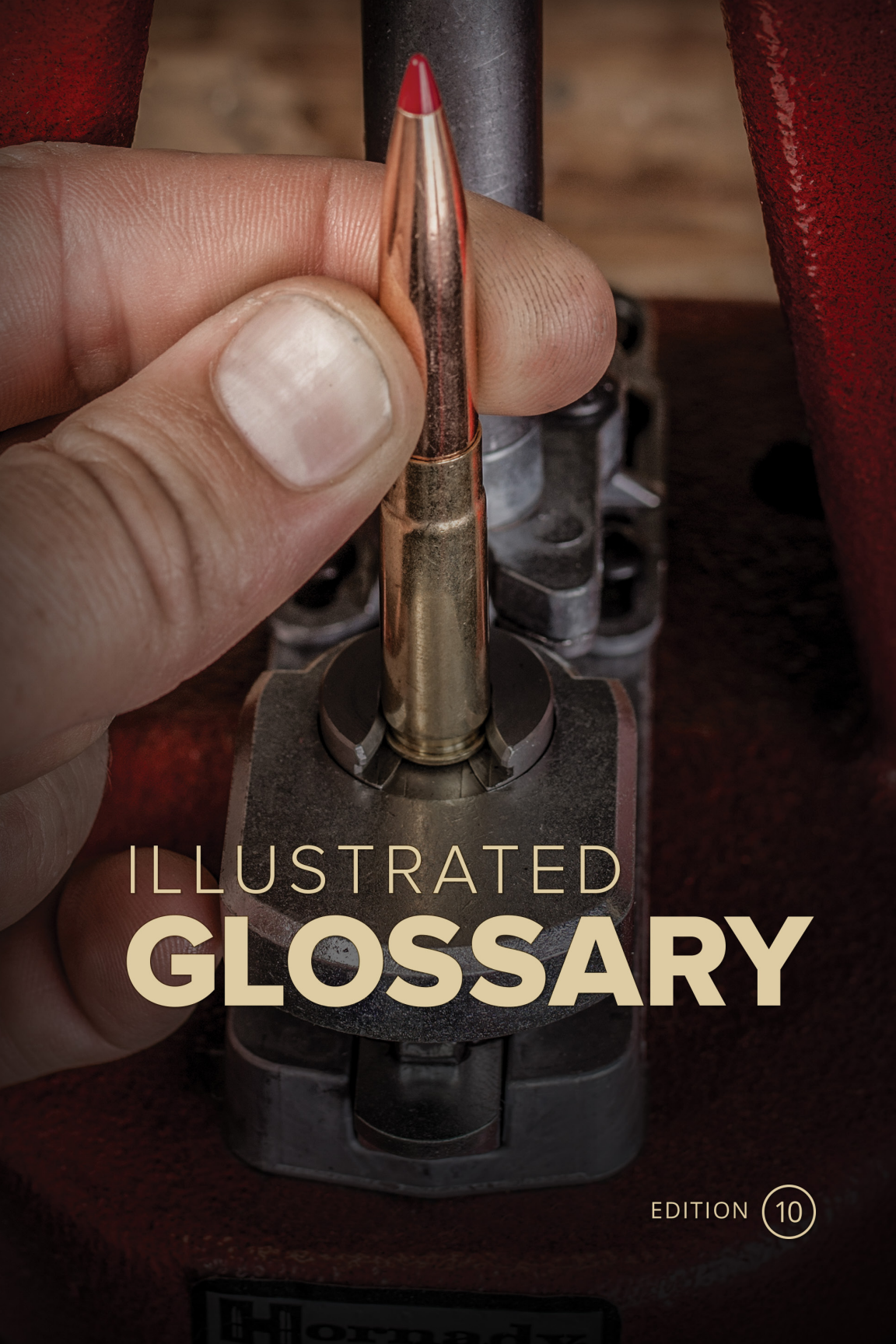
PISTOL CARTRIDGE	Shell Holder # / Item No.	Shell Plate # / Item No.	Case Feeder Plate Size / Item No.	Bullet Feeder Die	Trimmer Pilot # / Item No.	Primer Punch
22 TCM	#16/390556	#16/392616	—/—	—	#1/390943	Small
25 AUTO	#37/390577	—/—	Sm Pstl/095310	N/A	#4/390946	Small
30 LUGER	#8/390548	#8/392608	Sm Pstl/095310	N/A	#9/390951	Small
30 MAUSER	#8/390548	#8/392608	Sm Pstl/095310	N/A	#9/390951	Small
32 AUTO	#22/390562	#22/392622	Sm Pstl/095310	N/A	#10/390952	Small
32 S&W LONG	#36/390576	#36/392636	Sm Pstl/095310	N/A	#10/390952	Small
32 H&R MAG	#36/390576	#36/392636	Sm Pstl/095310	N/A	#10/390952	Small
327 FEDERAL MAG	#36/390576	#36/392636	Sm Pstl/095310	N/A	#10/390952	Small
7.5 SWISS ORDNANCE	#48/390604	—/—	Sm Pstl/095310	N/A	#10/390952	Small
8MM LEBEL REVOLVER	#48/390604	—/—	Lg Pstl/095312	N/A	#11/390953	Large
380 AUTO	#16/390556	#16/392616	Sm Pstl/095310	095330	#15/390957	Small
9MM LUGER TAPER CRIMP DIE SET	#8/390548	#8/392608	Sm Pstl/095310	095330	#15/390957	Small
9MM LUGER	#8/390548	#8/392608	Sm Pstl/095310	095330	#15/390957	Small
9X21 TAPER CRIMP DIE SET	#8/390548	#8/392608	Sm Pstl/095310	095330	#15/390957	Small
9X21	#8/390548	#8/392608	Sm Pstl/095310	095330	#15/390957	Small
38 SUPER AUTO	#8/390548	#8/392608	Sm Pstl/095310	N/A	#15/390957	Small
357 SIG	#10/390550	#10/392610	Sm Pstl/095310	N/A	#15/390957	Small
38 SPL	#6/390546	#6/392606	Lg Pstl/095312	095331	#15/390957	Small
COWBOY 38 SPL	#6/390546	#6/392606	Lg Pstl/095312	N/A	#15/390957	Small
357 MAGNUM	#6/390546	#6/392606	Lg Pstl/095312	095331	#15/390957	Small
COWBOY 357 MAGNUM	#6/390546	#6/392606	Lg Pstl/095312	N/A	#15/390957	Small
357 REM MAX	#6/390546	#6/392606	Lg Pstl/095312	095331	#15/390957	Small
COWBOY 357 REM MAX	#6/390546	#6/392606	Lg Pstl/095312	N/A	#15/390957	Small
9X23 WIN	#8/390548	#8/392608	Sm Pstl/095310	N/A	#15/390957	Small
38 S&W	#28/390568	#28/392628	Lg Pstl/095312	N/A	#15/390957	Large
357 HERRETT	#2/390542	#2/392602	Lg Pstl/095312	N/A	#15/390957	Large
9X18 MAKAROV	#8/390548	#8/392608	Sm Pstl/095310	N/A	#15/390957	Small
38-40 WIN	#9/390549	#9/392609	Lg Pstl/095312	N/A	#21/390941	Large
40 S&W TAPER CRIMP DIE SET	#10/390550	#10/392610	Lg Pstl/095312	095332	#21/390941	Small
40 S&W	#10/390550	#10/392610	Lg Pstl/095312	095332	#21/390941	Small
10MM AUTO TAPER CRIMP DIE SET	#10/390550	#10/392610	Lg Pstl/095312	095332	#21/390941	Large
10MM AUTO	#10/390550	#10/392610	Lg Pstl/095312	095332	#21/390941	Large
400 COR-BON	#45/390606	#45/392645	Lg Pstl/095312	N/A	#21/390941	Large
41 AE	#8/390548	#8/392608	Lg Pstl/095312	N/A	#17/390959	Small
41 REM MAG	#29/390569	#29/392629	Lg Pstl/095312	N/A	#17/390959	Large
COWBOY 44-40 WIN	#9/390549	#9/392609	Lg Pstl/095312	N/A	#18/390960	Large
44 SPL	#30/390570	#30/392630	Lg Pstl/095312	095333	#18/390960	Large
COWBOY 44 SPL	#30/390570	#30/392630	Lg Pstl/095312	N/A	#18/390960	Large
44 REM MAG	#30/390570	#30/392630	Lg Pstl/095312	095333	#18/390960	Large
44 AUTO MAG	#1/390541	#1/392601	Lg Pstl/095312	095333	#18/390960	Large
445 SUPER MAG	#30/390570	#30/392630	Lg Pstl/095312	N/A	#18/390960	Large
45 AUTO TAPER CRIMP DIE SET	#45/390606	#45/392645	Lg Pstl/095312	095334	#19/390961	Large
45 AUTO	#45/390606	#45/392645	Lg Pstl/095312	095334	#19/390961	Large
45 AUTO RIMMED	#31/390571	#31/392631	Lg Pstl/095312	095334	#19/390961	Large
45 S&W SCHOFIELD	#41/390581	—/—	Lg Pstl/095312	095334	#19/390961	Large
45 COLT	#32/390572	#32/392632	Lg Pstl/095312	095334	#19/390961	Large
COWBOY 45 COLT	#32/390572	#32/392632	Lg Pstl/095312	095334	#19/390961	Large
45 WIN MAG	#1/390541	#1/392601	Lg Pstl/095312	095334	#19/390961	Large
454 CASULL	#32/390572	#32/392632	Lg Pstl/095312	095334	#19/390961	Small
460 S&W MAG	#46/390602	#46/392646	Lg Rfl/095316	095334	#19/390961	Large
455 WEBLEY	#51/390601	—/—	Lg Pstl/095312	N/A	#19/390961	Large
475 LINEBAUGH	#14/390554	#14/392614	Lg Pstl/095312	N/A	#23/390939	Large
480 RUGER	#14/390554	#14/392614	Lg Pstl/095312	N/A	#23/390939	Large
50 ACTION EXP	#40/390580	—/—	Lg Rfl/095316	N/A	#50/390937	Large
500 S&W MAG	#44/390584	#44/392644	Lg Rfl/095316	N/A	#50/390937	Large
500 LINEBAUGH	#25/390565	—/—	Lg Rfl/095316	N/A	#50/390937	Large

Conversion Tables

LOADS PER POUND OF POWDER	
Grains of Powder	Number of Loads
5 Grains	1400
10 Grains	700
15 Grains	466
20 Grains	350
25 Grains	280
30 Grains	233
35 Grains	200
40 Grains	175
45 Grains	155
50 Grains	140
55 Grains	127
60 Grains	116
65 Grains	107
70 Grains	100
75 Grains	93
80 Grains	87
85 Grains	82
90 Grains	77
95 Grains	73
100 Grains	70

WEIGHT AND LENGTH EQUIVALENTS		
7000 Grains	=	1 Pound
437.5 Grains	=	1 Ounce
15.43 Grains	=	1 Gram
453.6 Grams	=	1 Pound
25.4 Millimeters	=	1 Inch

CONVERSION FACTORS		
Pounds x 7000	=	Grains
Ounces x 437.5	=	Grains
Grains x .00229	=	Ounces
Grams x 15.4324	=	Grains
Grains x .0648	=	Grams
Inches x 25.4	=	Millimeters
Millimeters x .03937	=	Inches


ILLUSTRATED
GLOSSARY
EDITION 10

4DOF: 4 Degrees of Freedom Ballistic Calculator. The Hornady® 4DOF™ calculator provides trajectory solutions based on projectile drag coefficient (not ballistic coefficient) along with the exact physical modelling of the projectile and its mass and aerodynamic properties. It's the first publicly available program that will correctly calculate the vertical shift a bullet experiences as it encounters a crosswind; referred to as aerodynamic jump. The use of drag coefficients, correct projectile dynamics, aerodynamic jump and spin drift enable the Hornady® 4DOF™ ballistic calculator to be the most accurate commercially available trajectory program available, even at extreme ranges.

ACCURACY: The measure of a bullet's precision; the term describing a firearm's ability to shoot consistently where aimed.

ACP: Automatic Colt Pistol, a term used to describe semi-automatic Colt handguns.

ACTION: The portion of the firearm where the round is loaded, fired, and unloaded.

AERODYNAMIC JUMP: The vertical shift a bullet experiences as it encounters a crosswind.

AIR RESISTANCE: A vacuum is space empty of all matter; but our atmosphere is composed of matter and this matter retards the forward motion of a projectile, slowing it down and limiting its maximum range. The relative ability of a bullet to overcome this resistance is its ballistic efficiency.

A-MAX®: A polymer tipped match bullet. A very efficient and accurate design.

ANNEAL: To soften metal by heating; especially, to soften brass cartridge case necks to prevent cracking from repeated resizing. See *Work Harden*.

ANTIMONY: A metallic element used in lead alloys to harden them. Most lead bullet cores use up to 3% antimony to give them the hardness necessary for best results.

ANVIL: A metallic point against which the explosive compound of a primer is driven by a firing pin, striker, or hammer of a firearm to produce detonation. See also *Boxer Primer (a primer in which the anvil is self-contained) and the Berdan Primer (a primer whose anvil is part of the cartridge case)*.

BALANCE: A weighing instrument which suspends two pans of equal weight from a beam supported precisely in the middle. See *Powder Scale*.

BALL: Another name for a bullet, generally military jargon; "ball ammunition." Generally full metal jacket.

BALLISTICS: The science that studies the behavior of projectiles in motion. Interior Ballistics concerns itself with events inside a gun from primer ignition through the projectile's departure from the muzzle; Exterior Ballistics deals with the motion of the projectile after it leaves the gun. Terminal Ballistics deals with the projectile when it enters the target.

BALLISTIC COEFFICIENT: An index of the manner in which a particular projectile decelerates in free flight expressed mathematically as:

$$c = WID^2$$

Where: c = ballistic coefficient
W = mass, in pounds
I = coefficient of form (a.k.a. form factor)
D = diameter, in inches

Represents the bullet's ability to overcome the air resistance in flight.

BALL POWDER: The name given by Olin Industries to the essentially spherical double based smokeless powder the firm developed for the U.S. Military. Claimed to retard throat erosion.

BARREL: The portion of a firearm that includes the chamber and the bore. As the powder burns in the chamber, a projectile is pushed down the barrel and out the muzzle. See *Chamber, Muzzle, Rifling*.

BARREL CYLINDER GAP: The opening or gap present between the cylinder and the barrel in any revolver.

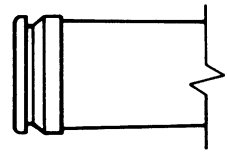
BARREL TIME: The time, usually in milliseconds, the bullet is in the barrel.

BEARING SURFACE: The portion of a bullet that contacts the lands and grooves as it travels through the barrel. Sufficient bearing surface is required for good accuracy. See *Bullet*.

BEDDING: A material and/or method for fitting the barrel and/or action to a stock.

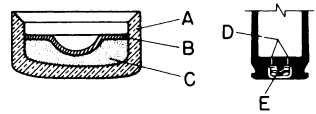
BELL: To bell a case mouth means to slightly open it or flare it to help in bullet seating.

BELTED CASE: Cartridge case which features a raised band around the base and ahead of the extraction groove. Cases of this design headspace off the belt. See *Headspace.*

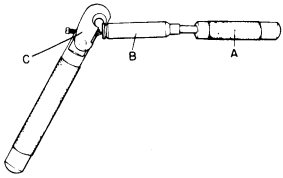


BENCH REST: A table specifically designed to eliminate as much human error as possible by supporting a rifle. Also a type of competitive shooting emphasizing extreme accuracy.

BERDAN PRIMER: Commonly used in European cartridges. Berdan primers have no anvil, but utilize a protrusion from the top of the primer pocket for the purpose. In illustration: A, cup; B, protective disk; C, priming compound; D, flash holes; E, anvil (part of the case).



BERDAN DECAPPING TOOL: A device for depriming Berdan cases. Case holder (A) supports case (B) while decapping unit (C) pries out the primer.

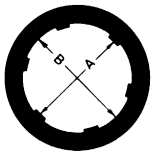


BLACKPOWDER: The earliest propellant powder; made of potassium nitrate, charcoal, and sulphur. Thought to be of Chinese invention, it was known in Europe by the 13th Century, and is still used today in muzzleloading firearms.

BOAT TAIL: A tapered bullet heel used frequently on military and match bullets. See *Bullet Types*.

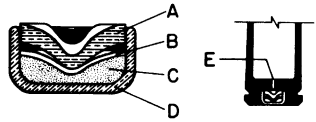
BOLT: The part of a rifle or shotgun that houses the striker and the case extractor mechanism and rotates to lock the cartridge or shell in the firearm's chamber. See also *Locking Lug and Chamber*.

BORE: The inside of a firearm's barrel. In rifled firearms the bore diameter is the original dimension of the barrel before the rifling grooves are cut or swaged (dimension A). Dimension B is the groove diameter.



BORE SIGHT: To align the sights of a rifle with a target by sighting through the barrel.

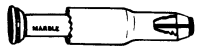
BOXER PRIMER: The type of primer used in American military and sporting rifle and pistol ammunition. Anvil is self contained, case features one central flash hole. In illustration: A, anvil; B, protective disc; C, priming compound; D, cup; E case's flash hole. See *Primer.*



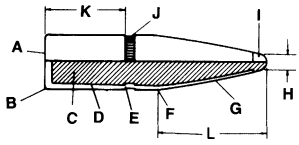
BRASS: An alloy of copper and zinc used to make cartridge cases and bullet jackets. Also, a common name for cases themselves. See *Gilding Metal*.

BRISANCE: Shattering effect of explosives.

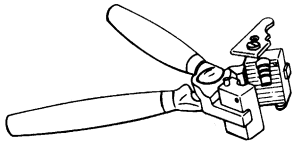
BROKEN SHELL EXTRACTOR: A device for removing headless cases from the chamber of a firearm.



BULLET: The projectile shot from a rifle or pistol. To be accurate its center of gravity must be concentric with its center of form. Bullet parts and dimensions include: A, base; B, heel; C, core; D, interlock ring; E, jacket; F, shoulder; G, ogive; H, meplat; I, point; J, cannelure; K, bearing surface; L, head height.



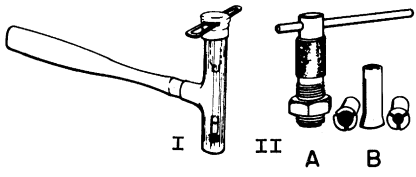
BULLET MOLD: A frame with cavity in which lead bullets are cast. A single cavity mold is illustrated. See also *Gang Mold.*



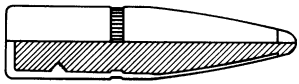
BULLET PATH: The flight path of a bullet after it leaves the firearm, also known as trajectory.

BULLET PULL: The amount of force necessary to pull a bullet from a case.

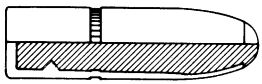
BULLET PULLER: Device for removing bullets from cases. Figure I is inertia type; Figure II is collet type (A, collet closer; B, collets).



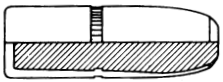
BULLET TYPES: Different bullet designs fit different shooting needs: (sectional views shown)



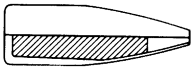
Spire Point: A hunting bullet designed for longer range shooting.



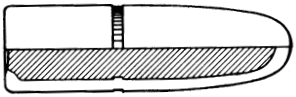
Round Nose: A dependable brush-busting style preferred for hunting in cover.



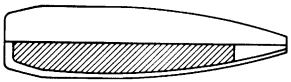
Flat Point: A Round Nose variation used in rifles with tubular magazines.



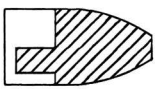
Hollow Point: A popular varmint bullet with open tip and thin jacket. (Varmint bullets also come with lead points and polymer tips.)



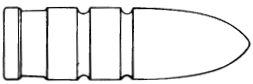
Full Metal Jacket: FMJ's have thick, tough jackets of nickel silver, copper clad steel or 70/30 cartridge case brass. They are most commonly used for hunting dangerous African and Asian game.



Boat Tail Hollow Point: An accurate, very efficient match bullet design.



Short Jacket: An economical semi-jacketed bullet for rifles or pistols



Cast Bullet: Lead bullets cast from molten metal and often used with gas checks.

Hornady makes a variety of tipped bullets whose applications range from big game hunting to target shooting. The purpose of the polymer tip is to increase the ballistic efficiency of the bullet.

The XTP® handgun bullets are designed to expand reliably at a wide range of velocities. The main difference between the XTP® and other hollow points is that the XTP® has jacket material protecting the point; others do not.

BURNING RATE: The relative speed at which smokeless powders burn. Determined by size of granules, perforation, and amount and nature of deterrent coating. See also *Deterrent Coating*.

CALIBER: The diameter of a bullet or other projectile in decimals of an inch or millimeters; the nominal or approximate diameter of a bore expressed similarly.

CANNELURE: An identification, crimping, or lubricant groove on a bullet. See *Bullet*.

CANISTER: A container; powders packed by their manufacturer in canisters are carefully standardized for consistency.

CARTRIDGE: A complete unit of ammunition, especially rifle or handgun ammunition.

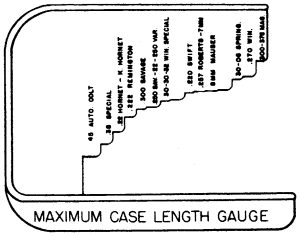
CARTRIDGE DESIGNATIONS: Various cartridge naming systems have been and are employed. Some cartridges are named by caliber and inventor or factory (257 Roberts, 284 Winchester); by special trade names (22 Hornet); by caliber and velocity (250-3000 Savage); by caliber and year of introduction (30- 06, for 1906); by caliber and case from which new cartridge was made (22-250, 338-06); by alteration of original case design (30-06 Improved); in Europe, by metric measurement of caliber and case length (7mm x 57mm); and by caliber, powder charge, and bullet weight (45-70-500) for 45 caliber, 70 grains of black powder, and a 500 grain bullet).

CASE: Or cartridge case; the paper, plastic, or metal container that holds all other components of fixed ammunition. Basic case designs are straight tapered, or bottle necked. For cartridge head styles see also case listed as Belted, Rebated Rim, Rimless, Rimmed, and Semi-Rimless.

CASE FORMING: Changing a cartridge case to another shape by forming in a different sizing die.

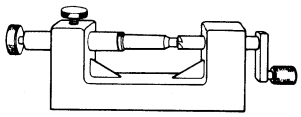
CASE HARDENING: A surface hardening process which changes the outer layer of iron base alloys. Such processes are used to harden reloading dies.

CASE LENGTH GAUGE: Device to measure cartridge case length. Figure 1 is a familiar snap gauge.



CASE NECK BRUSH: A brush used to clean and lubricate the inside of a case neck.

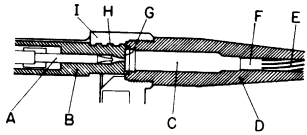
CASE TRIMMER: Cartridge cases stretch with repeated resizing and firing and must be trimmed to the proper length. The Hornady case trimmer handles all types of cases by using the same shellholder as the reloading press.



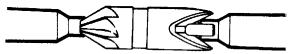
CAST BULLET: A bullet made by pouring molten lead into a mold. See *Bullet Types*.

CENTERFIRE: A type of ammunition whose primer is centrally positioned in the base of the cartridge case and is generally reloadable.

CHAMBER: The breech portion of the barrel that contains and supports the cartridge. In illustration: A, striker; B, bolt; C, chamber; D, barrel; E, rifling; F, leade; G, bolt face; H, locking lugs; I, receiver.



CHAMFERING-DEBURRING TOOL: A device to chamfer (bevel) the inside of a cartridge case mouth to facilitate bullet seating and remove outside burrs from the case.

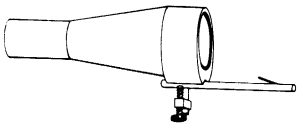


CHARGE: The amount of powder loaded in a case, as "a charge of 23.5 grains of BL-C2."

CHRONOGRAPH: An instrument for measuring time intervals. Chronographs are used to determine the time of flight of projectiles over a fixed length course, and this distance divided by the time of flight is the velocity of the projectile.

C.O.L.: Cartridge Overall Length.

COLLIMATOR: In shooting, an optical device used to align telescopic sights on rifles or handguns.



COMBUSTION: Burning; the chemical process which unites oxygen and the other substances in gunpowder to produce heat and gas.

COMPRESSED CHARGE: A charge of powder that does not allow ample room in the case for the bullet to be seated and is therefore compacted when the bullet is seated.

COMPONENTS: The ingredients necessary in loading a cartridge.

COPPER: The basic metallic element of such alloys as bronze, brass, or gilding metal.

COPPER CRUSHER: A copper alloy cylinder of precise dimensions and known density used in chamber pressure measurement. Compression of the cylinder—its change in length—is an index of pressure and when used with conversion tables prepared specifically for the lot of crusher used denotes chamber pressure in copper units of pressure (CUP). See *Pressure Gun*.

COPPER FOULING: Deposits of copper jacket material in a rifled barrel usually detrimental to accuracy.

CORDITE: A double-based, long tubular shaped powder, mainly found in British cartridges.

CORE: The central portion of a jacketed bullet. See *Bullet*.

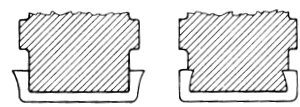
CORROSIVE PRIMER: A type of primer that left water absorbing salts in the barrel, causing rust formation. All current American primers are noncorrosive but some older military and much imported military ammunition have corrosive primers. Prompt cleaning with hot water followed by usual cleaning methods generally eliminates problems.

C PRESS: A popular early reloading press design. So named for its shape. For illustration, see Reloading Press.

CRIMP: To fold in a cartridge case mouth to grip the bullet securely; to fold in the mouth of a shotshell.

CRIMPED PRIMER: In military ammunition, a primer which has been secured in the primer pocket by a flange indented from the mouth of the pocket. Such crimping both helps seal the primer in the case and prevent primer setback on firing. Crimp must be removed before reloading. See *Primer Pocket Swaging, Primer Pocket Reamer.*

CRIMP ON GAS CHECK: A superior gas check design exclusive with Hornady Manufacturing Co., which crimps or pinches on the base of a cast bullet and will not come off in the case or barrel or in flight. Illustrations show gas check on bullet and the gas check crimped on. See also *Gas Check.*



CRIMP REMOVER: A reloading accessory to remove crimps from the mouths of military case primer pockets. See *Primer Pocket Swaging, Primer Pocket Reamer*.

C/T: Combat Target, a style of Hornady bullet used in both combat style competition or target shooting.

DEBURRING TOOL: A device to remove metal burrs from the mouths of newly trimmed cases. See *Chamfering-Deburring Tool*.

DECAP: Deprime; to remove the primer from a cartridge case. See *Berdan Decapping Tool and Resizing Die*.

DETERRENT COATING: The combustion controlling chemical coating used on smokeless powder particles to produce desired burning characteristics.

DGS®: A non-expanding bullet design which features a copper clad steel jacket and a high antimony lead core. Designed for hunting dangerous game.

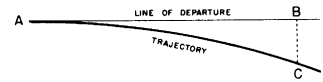
DGX®: The toughest controlled expansion bullet in the Hornady line up, the DGX® is constructed with a copper clad steel jacket and high antimony lead core. Designed for hunting dangerous game.

DIE: Mechanically, a tool for cutting, molding, extruding, stamping, drawing, or shaping. In bullet manufacture, a tool for extruding lead wire, drawing jackets, or swaging bullets or cores. In reloading, a tool for resizing cases or seating bullets. See *Resizing Die and Seating Die*.

DOUBLE BASE POWDER: Smokeless powder made with both nitrocellulose and nitroglycerine.

DRIFT: Slight deviation from a projectile's initial flight course caused by its rotation.

DROP: The fall of a bullet measured from its line of departure. AB, line of departure; AC, trajectory; BC, drop. Bullets fall because of force of gravity acting on them.



ELD® Match: Extremely Low Drag Match bullets. ELD Match® bullets are technologically advanced, enhanced accuracy target bullets featuring Heat Shield® tips with the perfect meplat.

ELD-X®: Extremely Low Drag eXpanding bullets. The ELD-X® bullet is a technologically advanced, match accurate, all-range hunting bullet featuring highest-in-class ballistic coefficients and consistent, controlled expansion at all practical hunting distances.

ELEVATION: Vertical sight adjustment to bring the point of aim up or down to the point of impact.

ENERGY: The capacity for doing work (transferring force). Spoken of in ballistics as Muzzle energy or Remaining Energy. The American measure of energy in ballistics is the Foot Pound.

EROSION: Bore or throat wear in a firearm from the effects of hot gases or friction.

EXPANSION RATIO: A comparison of volumes (see below) useful in comparing powder charges to caliber, thereby indicating powder burning efficiency.

$$\frac{\text{Case Volume + Bore Volume}}{\text{Case Volume}}$$

EXTRUDED POWDER: A type of smokeless powder formed under pressure where the powder kernels look like short rods.

EXTRUDED PRIMER: the pronounced flow of primer metal ("cratering") around the striker or firing pin of a firearm. An indication of excessive pressure.

EXTRUSION: A material forming process in which the material is forced through a die of the desired shape. Lead wire is extruded from large cylindrical billets

EYE RELIEF: The distance the eye must be held from the rear (ocular) lens or eyepiece of a telescope in order to obtain a full field of view.

FIRING PIN: The part of a firearm that the trigger/sear mechanism releases to strike the primer of a cartridge and detonate it. More accurately termed a striker in most bolt action rifles.

FIREFORM: To reform a cartridge case by firing it in a chamber of different dimensions.

FLAKE POWDER: A thin flat disc type smokeless powder, generally very fast burning.

FLASH HOLE: The hole or holes from the primer pocket through the web of a centerfire case through which the primer flame passes to ignite the powder.

FLAT POINT: A bullet style characterized by its blunt point and designed especially for rifles with tubular magazines.

FMJ: See Full Metal Jacket.

FOOT-POUND (FT.–LB.): A unit of work; the energy required to lift one pound one foot.

FORCING CONE: The rear beveled portion of the barrel of a revolver.

FORM FACTOR: A multiplier (also called the coefficient of reduction) which relates the shape of a bullet to the shape of the standard projectile used to prepare a particular ballistic table.

FPS: Feet per second.

FP: See Flat Point.

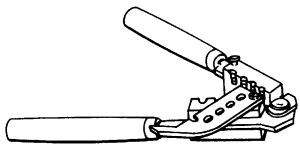
FREEBORE: An unrifled portion of the bore in front of the chamber. See *Chamber, Leade*.

FTX® BULLET: Bullet design pioneered by Hornady Mfg. which allows pointed, ballistically efficient bullets to be safely used in lever guns.

FULL METAL JACKET (FMJ): A bullet whose jacket is open only at the rear. FMJs for hunting are non-expanding and generally used on thick skinned animals. Full metal jacket or full patch bullets are also used by the military. See *Bullet Types*.

GALLING: A roughness on the surface of two metals created from friction as the two surfaces are "rubbed" together—as in resizing a cartridge case in a die with no lubricant.

GANG MOLD: A multiple cavity bullet mold.



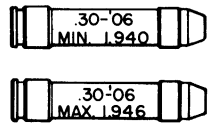
GAS: The vaporous form of a substance capable of expanding indefinitely to fill its container. Gasses are a product of the combustion of gunpowder and expand to propel the projectile down the bore.

GAS CHECK: A rimmed gilding metal disc attached to the base of a cast lead bullet to project it from hot powder gases. See also *Crimp On Gas Check*.

GILDING METAL: The copper-zinc alloy used to make bullet jackets. Hornady Bullets use an alloy of 95% copper, 5% zinc.

GMX®: A monolithic, copper-alloy expanding bullet designed for hunting. GMX® bullets feature a hard polymer tip and can be easily identified by their double cannelure design.

GO, NO-GO GAUGES: Also Minimum-Maximum Gauges. Standard measuring devices to indicate proper headspace in a firearm, proper cartridge length, etc.

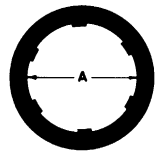


GRAIN: The smallest unit of the British and U.S. system of weights. One pound avoirdupois equals 7,000 grains.

GRAM: The basic unit of weight in the metric system. Equal to 15.4324 grains.

GREASE GROOVE: Circumferential indentation on a swaged or cast bullet to hold lubricant.

GROOVES: Swaged impressions or cuts spiraled through a bore to rotate projectiles. Groove diameter is represented in the illustration by line A.



GROUP: The distribution of bullets on a target fired with a single aiming point and sight setting. Group size is expressed as the distance between centers of the farthest holes and is most easily determined by measuring the extreme spread from outside to outside and subtracting one bullet diameter.

HALF-JACKET: A swaged lead bullet that has a jacket covering half the bullet with the remainder of the lead exposed.

HANDLOADING: The process of manually assembling a cartridge case with a primer, propellant and bullet or wads and shot.

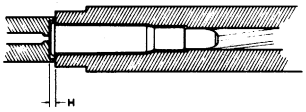
HANGFIRE: An inordinate delay between the striking of the primer and powder ignition.

H.A.P.: Hornady Action Pistol. This bullet is designed for action pistol competitions it is similar in design to the XTP® for optimal function but is not designed to expand on impact. See *XTP®*.

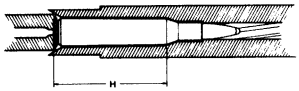
HBWC: Hollow Base Wadcutter. A very accurate type of cylindrical lead target bullet with a hollow base which, when fired, expands to fill the bore, aiding in accuracy.

HEAD HEIGHT: The height of a bullet from its shoulder to the tip of its point. See *Bullet*.

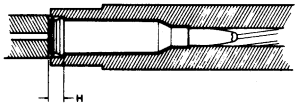
HEADSPACE: The fit of a cartridge in a chamber measured as the distance from breech face to that part of the chamber which stops the case's forward movement. Insufficient headspace hinders complete chambering; excessive headspace permits case stretching or separation. Four different headspace arrangements are illustrated here. H denotes headspace in each example.



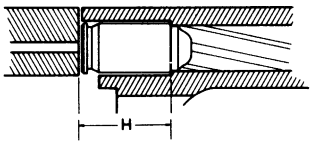
Rimmed Case: Headspace determined by the thickness of the cartridge case rim.



Rimless Case: Shoulder of the case stops it in chamber.



Belted Case: Case is stopped by the top rim of the belt.



Rimless Straight Case: Shown is the 45 ACP cartridge; its forward motion is stopped by the mouth of the case.

HEEL: The edge of a bullet's base. See *Bullet*.

HOLD OVER: The distance a shooter must raise his point of aim to be on target when his firearm is zeroed in at a lesser distance. The Ballistic Tables in this handbook give a more detailed discussion of the subject.

HOLLOW POINT: An opening in the point of a bullet. See *Bullet Types*.

IGNITION: The powder "lighting" (igniting) process.

IMPROVED CARTRIDGE: A cartridge altered to new dimensions by fire forming in an "improved" chamber. Improved cases generally have a sharper shoulder, less taper, and greater powder capacity than standard cases.

IMR: "Improved Military Rifle"; originally DuPont's name for its line of single base canister rifle powders.

INGALLS' TABLES: Ballistic tables computed by the late Col. James M. Ingalls of the U.S. Army. Through their use it is possible to calculate remaining velocities and the trajectories for small arms projectiles.

INTERBOND®: A bonded bullet that works well across a wide velocity range and has a high ballistic coefficient for long range hunting. See also *Bonded Bullet*.

INTERLOCK®: A design, unique to Hornady bullets, where an internal ring locks the core and jacket together. See *Bullet*.

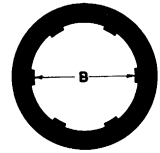
JACKET: The outer casing or covering of a projectile. See *Bullet*.

JHP: Jacketed Hollow Point. A type of jacketed bullet with a hollow space in the tip.

JTC: Jacketed Truncated Cone. A type of jacketed, flat point bullet as opposed to round nose (usually a pistol bullet).

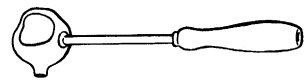
KEYHOLE: The imprint of an unstabilized bullet on a target.

LANDS: Those portions of the bore projecting up from the rifling grooves. Bore diameter is represented by line B.



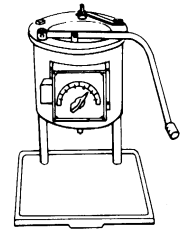
LEAD: The dense, pliable metallic element which (generally) in alloy form is the principal ingredient of bullet cores and swaged or cast bullets.

LEAD DIPPER: A ladle to pour molten lead into bullet molds.



LEADE: Freebore; the unrifled bore area immediately in front of the chamber. In most firearms it is quite short. See *Chamber*.

LEAD FURNACE: A heated container in which lead is melted for casting bullets.

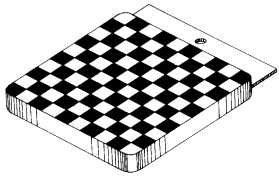


LEADING: The process in which lead is deposited in the bores of rifles or pistols when lead bullets are shot in them. One form of metal fouling.

LINE OF DEPARTURE: A projection of the axis of the bore from which a projectile is fired.

LINE OF SIGHT: The straight line through the sights of a firearm to the aiming point.

LOADING BLOCK: A useful accessory for holding cartridge cases for reloading.



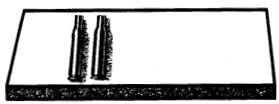
LOADING DENSITY: A volume ratio of powder charge to case capacity. The closer the ratio is 1 to 1 (or nearer 100%), the higher the load density.

LOCK TIME: The amount of time, in milliseconds, between pulling the trigger and ignition of the powder in the cartridge.

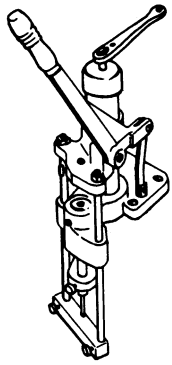
LOCKING LUGS: Bolt projections which fit mating recesses in the receiver to secure the bolt from rearward movement when a cartridge is fired. For illustration, see Chamber.

LRN: Lead Round Nose. A style of swaged lead bullet.

LUBE PAD: A lubricant impregnated pad on which cases are rolled before sizing.



LUBRICATOR-RESIZER: A tool which inserts lubricant in grease grooves, swages cast bullets to final size, and seats gas checks.



MAGNUM: A cartridge or firearm of greater power and capacity than earlier standards in the same caliber.

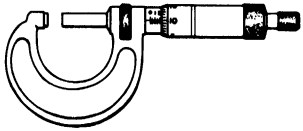
MEAN RADIUS: The average radius of any group of shots from the center of the group.

MEPLAT: The diameter of the blunt end of the tip of a projectile. The smaller the meplat, the greater the projectile's ballistic efficiency. See *Bullet*.

MERCURIC PRIMER: A primer whose explosive mixture contains mercuric compounds which will attack brass cartridge cases after firing.

METAL FOULING: The depositing of bullet or jacket metal in the bore of a firearm, a process detrimental to best accuracy. See *Copper Fouling, Leading*.

MICROMETER: A caliper type measuring instrument with a fine screw adjustment for measuring minute distances. Useful to the reloader for measuring bullets, case head expansion, etc.

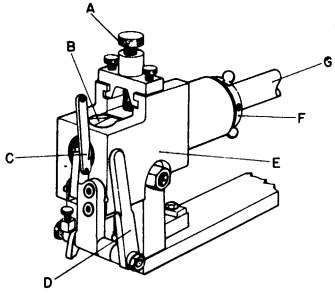


MID-RANGE TRAJECTORY: The height of the trajectory at a point halfway between the muzzle and the point of aim.

MINUTE OF ANGLE (MOA): An angular measurement method used to describe accuracy capability. A minute of angle is one sixtieth of a degree, and subtends 1.047 inches at 100 yards, which for practical shooting purposes is considered to be one inch. A minute of angle group, therefore, equals one inch at 100 yards, two inches at 200 yards, etc.

MISFIRE: A cartridge which fails to fire after its primer is struck.

MODERN-BOND RECEIVER: A strong, heavy laboratory receiver which will accept special barrels of different calibers to measure chamber pressure by the copper crusher method or an electrical transducer. In illustration: A, adjustable anvil; B, breech block; C, firing pin release lever; D, breech locking handle; E, receiver; F, barrel capstan nut; G, barrel. See also *Pressure Gun.*



MONOFLEX®: A bullet design pioneered by Hornady that combines the monolithic expanding bullet as found in the GMX® with the flexible elastomer tip of the FTX® bullet. MonoFlex® bullets can also be found in LEVERevolution® ammunition and in the muzzleloader bullet line.

MOULD BLOCK: Metal blocks with bullet shaped cavities for casting bullets.

MUSHROOM: To expand; said of a bullet which has passed through animal tissue or similar media because of the bullet's expanded shape.

MUZZLE: The end of a gun barrel from which the bullet or shot emerges.

MUZZLE BLAST: The release of gas from the muzzle following the bullet's departure from the barrel. It always produces noise and is often accompanied by light called muzzle flash.

MUZZLE ENERGY: Foot pounds of energy of a projectile at the muzzle of a firearm.

MUZZLE VELOCITY: The velocity of a projectile as it exits the muzzle of a firearm.

NECK: The upper portion of a cartridge case which grips the bullet, expands on firing to release it, and in reloading must be resized to hold a new bullet.

NECK DOWN: To reduce the diameter of the cartridge neck by using a different resizing die (i.e., from a 7mm–08 case to .243 case by using a .243 resizing die)

NECK REAM: The process of removing metal from the inside of the neck of a case.

NECK SIZE: To bring the neck of a case back to its original dimensions to hold a new bullet. Cases fired in the same chamber need neck sizing (resizing) only. See *Resizing Die*.

NECK TURN: To reduce neck thickness by cutting or grinding material from the outside of the case neck.

NECK UP: To increase the diameter of the cartridge neck by using a different resizing die. This is made very easy by Hornady's elliptical expander plug.

NONCORROSIVE: Primers made without potassium chlorate, a chemical which when oxidized forms a water-attracting salt which induces bore rusting. American primers for sporting ammunition have been almost entirely noncorrosive since the 1930's. The U.S. military did not decide to convert all small arms ammunition to noncorrosive priming until 1949 and total conversion was not achieved until several years later.

NTX®: A varmit bullet designed that uses compressed powdered metals other than lead to form the core. Jacket is constructed of conventional gilding metal and it has a copper colored hard polymer tip. NTX® bullets deliver rapid expansion and exceptional accuracy.

O PRESS: A popular and common type of reloading press. See *Reloading Press*.

OGIVE: The curve of a bullet's forward portion. See *Bullet, Secant Ogive, and Tangent Ogive*.

OIL DENT: Small dents in cartridge cases that result from too much lubricant when resizing.

OVERBORE CAPACITY: A firearm chambered for a cartridge that contains more powder than can normally be burned in that bore diameter and volume.

PARALLAX: The condition which exists when the reticle of a scope does not lie directly on the image plane. When the optical error exists, changes of eye position will move the position of the reticle relative to the object sighted.

PIERCED PRIMER: A primer whose cup is completely perforated by the striker. Such a condition permits powder gases to escape rearward into the action.

PLINKING: Informal target shooting.

POINT: The tip of the bullet. See *Bullet. See Bullet Types for various point configurations*.

POINT OF AIM: That point with which a firearm's sights are aligned to the bullet's path.

POINT OF IMPACT: That point which a bullet strikes; usually considered in relation to Point of Aim.

PORT PRESSURE: The pressure at the gas port from a gas operated firearm.

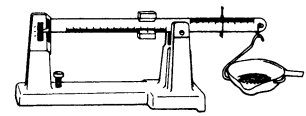
POWDER: Gunpowder; a propellant comprised of mixtures of various substances, that when ignited, produces large volumes of gas. Used in firearms to propel projectiles. See *Blackpowder, Smokeless Powder.*

POWDER BRIDGING: The act of powder kernels interlocking in the drop tube of a powder measure and forming a "bridge" preventing the powder from passing through the tube—common to coarse extruded powders.

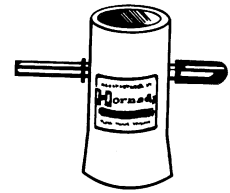
POWDER FUNNEL: A handy reloading accessory which facilitates charging cases with powder.)

POWDER MEASURE: A reloading device designed to throw uniform powder charges. The Hornady Powder Measure illustrated is adjusted by a micrometer dial.

POWDER SCALE: Ameasuring device to weigh powder. Markers are moved along the graduated beam to the desired setting and powder is poured into the pan until the scale balances.



POWDER TRICKLER: A reloading accessory to drop minute quantities of powder to facilitate precise weighing.



PRESSURE: Force per unit area, measured in American interior ballistics in terms of pounds per square inch.

PRESSURE GUN: A laboratory device for measuring the breech pressure of ammunition. Shown in Figure I is a cross section of a Modern-Bond Receiver. A, adjustable anvil; B, copper crusher; C, piston; D gas check; E, inside of cartridge case; F, case wall; G, barrel.)

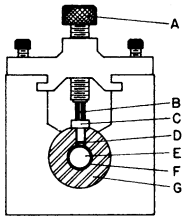


Figure I

In Figure II, cartridge has been fired. Pressure has perforated the wall of the case, driven up the piston and copper cylinder (crusher) against the anvil. See also *Copper Crusher.*

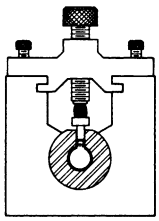


Figure II

In Figure III the schematic depicts a cross section of a Piezo Electronic transducer system. The transducer is ground to the conform to the body of the case just behind the shoulder and take the place of a copper crusher. The transducer contains a quartz crystal which when exposed to pressure produces a minute electrical charge which is then converted to pounds per square inch electronically.

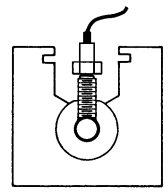
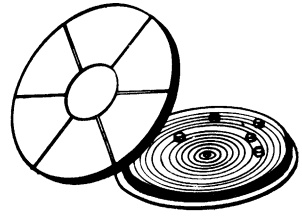


Figure III

PRIMER: The small cup containing an explosive which is detonated to ignite the powder in a centerfire metallic ammunition. Also, caps to ignite charges in muzzle loading arms. See *Berdan Primer and Boxer Primer for illustrations*.

PRIMER TURNING PLATE: An accessory to orient primers in the same direction for convenient use.



PRIMER LEAK: Gases that have escaped between the primer and the primer pocket wall due to excess pressure.

PRIMER POCKET: The cavity in the base of a centerfire case which holds the primer. See *Boxer Primer.*

PRIMER POCKET REAMER: A tool with a sharpened working tip that removes the primer pocket crimp from military cases.

PRIMER POCKET SWAGING: Removing the crimp in a primer pocket of a military case by using a punch and base set. Crimps may also be removed by reaming.

PRIMER TOOL: A hand held tool designed specifically for the priming of cartridge cases.

PROJECTILE: A bullet, shell, golf ball or other object hurled, hit, or shot in space.

PROOF: The test of a firearm's ability to withstand working pressures and strains. High pressure loads (proof loads sometimes called "blue pills") are fired to establish a margin of extra strength in the arm—and thus a margin of safety. European governments oversee such testing by law, but firearms manufacturers in the U.S. conduct proof testing privately and independently.

PROPELLANT: The powder burned to propel a projectile. See *Powder*.

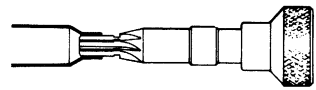
PROTRUDING PRIMER: A primer that, after firing, backs out beyond flush with the case head, normally a result of excess headspace or a low pressure load.

RAM: The main central shaft of the reloading tool. See *Reloading Press*.

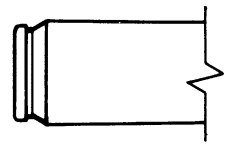
RANGE: The horizontal distance to an intended target.

REAM: To make a cavity or remove material from a cavity with a rotary cutting tool.

REAMER: A rotary cutting tool such as the ones used to make rifle or pistol chambers or reloading dies. Also a small hand tool used to remove crimps form military primer pockets or to ream case necks.



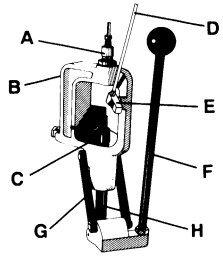
REBATED RIM CASE: A case (such as the 284 Winchester) whose body diameter is greater than it's rim diameter.



RECEIVER: The portion of the firearm that holds the barrel and houses the bolt and firing mechanism. See *Chamber for illustration*.

RECOIL: The rearward motion or "kick" of a gun on firing. Recoil in shooting is the practical effect of Newton's Third Law of Motion: for every action there is an opposite and equal reaction.

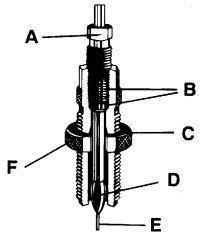
RELOADING PRESS: Atool for reforming cartridge cases and seating bullets in cartridge reloading. Illustrated is the Hornady Lock-N-Load® Classic, an O type press, the most common and popular press design today. A, resizing die; B, frame; C, shell holder; D, primer feed; E, primer arm; F, handle; G, linkage; H, ram.



REMAINING ENERGY: A projectile's energy in foot-pounds at a given range.

REMAINING VELOCITY: A projectile's velocity in feet per second at a given range.

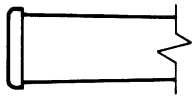
RESIZING DIE: The reloading die which reforms cartridge cases to proper dimension. The cut away diagram of a Hornady New Dimension Die illustrates the following parts: A, wrench flats; B, collar and collar lock; C, zip spindle; D, elliptical expander; E, hardened steel decap pin; F, Sure-Loc lock rings.



RETICLE: The system of crosshairs, fine lines, or dots in the focus of a telescope, used for aiming.

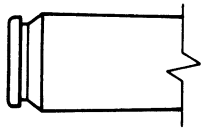
RIFLING: The spiral grooves in the bore of a rifled firearm. The rotation they impart to a projectile stabilizes it in flight.

RIMMED CASE: A case with a flange on its base. This rim is used for both extraction and as a means of headspacing the cartridge.



RIMFIRE: A type of cartridge in which the priming compound is spun into the rim. Not reloadable (i.e., .22 long rifle).

RIMLESS CASE: Cartridge case whose base flange is the same diameter as the case head. Groove ahead of the rim permits extraction.



RN: See Round Nose.

ROTATION: The spin of a projectile imparted to it by the rifling. The faster the twist of the rifling and/or the higher the velocity, the faster the rotation.

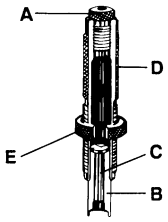
ROUND: One complete unit of ammunition.

ROUND NOSE: A bullet with a blunt rounded tip preferred for hunting at moderate ranges or in brushy country. See *Bullet Types for illustration.*

SABOT: (pronounced say-bo) Literally a "shoe", or lightweight cover containing a smaller bullet and used in larger bore barrel (i.e., a .224" bullet plus sabot in a 308 barrel or .44 bullets in a 50 caliber blackpowder muzzle loader).

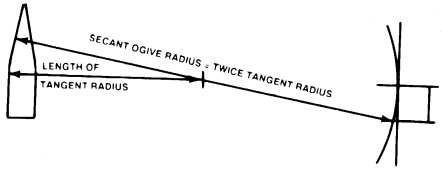
SAAMI: Sporting Arms and Ammunition Manufacturer's Institute. In the U.S., this organization maintains and provides standard specifications for cartridge cases and chamber dimensions.

SEATING DIE: A reloading die that inserts the bullet in the neck of the cartridge case. In the illustration of the Hornady New Dimension Die: A, seating adjustment; B, sliding alignment sleeve; C, floating steel seating stem; D, die body; E die body lock ring.



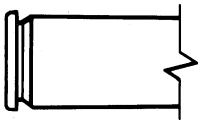
SEATING DEPTH: The length of a bullet seated inside the cartridge case.

SECANT OGIVE: Bullet design in which the cylindrical surface of a bullet is secant to the curve of the head. The design used on Hornady Spire Point Bullets.



SECTIONAL DENSITY: The ratio of a bullet's weight in pounds to the square of its diameter in inches. Bullets of the same shape but with more weight in relation to their diameter retain their velocity and energy better.

SEMI-RIMMED CASE: A cartridge case with a rim slightly larger than the body diameter. Extraction groove is not as deeply cut in this type of case as in a rimless case.



SHANK: The cylindrical section of a bullet.

SHELL HOLDER: The cartridge case holder on a Reloading Press or other tool.

SHOCK: The transference of the kinetic energy of a bullet to animal tissue of other media.

SHOCK WAVE: The atmospheric disturbance produced by a supersonic projectile.

SHORT JACKET: A type of bullet swaged from a lead core and short gilding metal cup. See *Bullet Types*.

SHOULDER: The projection of a bottle necked cartridge case from the neck to the case body; or, the point at which the head of a projectile joins the cylindrical rear portion.

SIGHT: A device for aiming a firearm; gunsight.

SIGHTING IN: Firing a rifle or pistol to determine its point of impact at a specified range and to adjust the sights so that the point of impact has the desired relationship to the point of aim.

SIGHT RADIUS: The distance between front and rear iron sights.

SINGLE BASE POWDER: Smokeless powder made of nitrocellulose.

SJ: Short jacket. A style of inexpensive bullet with a short jacketed portion and a larger than normal lead tip.

SLUG: (1) A hollow based lead bullet used primarily in shotguns for deer hunting. (2) To slug a barrel is to force a soft lead projectile through the bore of a gun to determine bore and groove diameter.

SMOKELESS POWDER: A high energy propellant used in small arms projectiles.

SOFT POINT: Any jacketed bullet with an exposed lead tip.

SPHERICAL POWDER: A type of smokeless powder where the powder kernels are small, round particles (ball powder).

SPIN: The rotation of a projectile imparted by the rifling in a firearm's bore.

SPIRE POINT (SP): An efficient bullet design for long range big game or varmint hunting or target shooting. See *Bullet Types and Secant Ogive*.

SPITZER: A pointed bullet, usually one whose head design is a Tangent Ogive.

SST®: A standard construction Polymer tipped hunting bullet. The Polymer tip increases the bullet's ballistic coefficient for improved down range ballistics.

STABILIZE: To rotate a projectile around its longitudinal axis rapidly enough to keep it point on in flight.

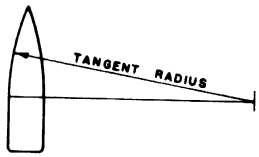
STUCK CASE REMOVER: A device to remove stuck cases in a reloading die.

SWAGE: (pronounced swaje) To form with pressure.

SWC: Semi-Wad Cutter. A type of bullet, usually lead, used for target and general shooting.

SX: Super Explosive, a Hornady designed bullet with a very thin jacket, allowing it to readily expand in small game or varmints or to disintegrate on impact with solid ground, reducing ricochets.

TANGENT OGIVE: A bullet whose cylindrical surface is tangent to the curve of the point. The radius of the ogive is generally expressed in calibers.



THROAT: Leade or freebore; the unrifled portion of the bore immediately in front of the chamber. Generally very short. See *Chamber for illustration*.

TIME OF FLIGHT: The time it takes a projectile to cover a given distance.

TITANIUM NITRIDE: A golden colored alloy with extreme slipperiness used in some Hornady pistol dies, allowing resizing without lubrication.

TRAJECTORY: The flight path of a projectile.

TRANSDUCER: Literally, a device that converts one form of energy into another. Commonly, a quartz crystal is used to convert chamber pressures into a measurable electrical current.

TUNGSTEN CARBIDE: A metal composed of powder carbide of tungsten cemented (fused) together under heat with cobalt. The hardest man-made metal; used in some pistol case resizing dies—and in all the bullet drawing and swaging dies for manufacturing Hornady Bullets.

TUBULAR POWDER: Smokeless powder whose cylindrical granules have one or more longitudinal holes through them.

TWIST: The rate of spiral of the grooves in a barrel, expressed as a revolution per inches, for example one turn in ten inches.

VARMINT: A non-game animal commonly considered a pest—also known as vermin.

VELOCITY: The speed of a projectile expressed as distance per unit time

VERNIER CALIPER: A graduated instrument for measuring distances precisely. Very useful to the reloader in measuring case and overall cartridge lengths.

V-MAX®: A Polymer tipped varmint bullet designed to fragment rapidly on impact to quickly transfer all its energy.

WADCUTTER: A swaged or cast pistol bullet. Its primary purpose is for target shooting. Because of its shape, it cuts neat holes in the target.

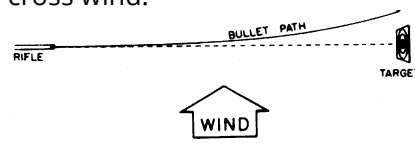
WCF: Winchester Center Fire. A term used by Winchester for cartridges designed by them (i.e., .30 WCF).

WEB: The thickness of the solid portion of a brass cartridge case between primer pocket and case interior; the wall thickness of tubular powder.

WILDCAT: A non-commercial cartridge design.

WINDAGE: Horizontal (lateral) sight adjustment.

WIND DEFLECTION: The lateral deflection of a bullet caused by cross wind.



WORK HARDEN: To change the grain structure of metal by drawing or working. Brittle, work hardened case necks are often annealed to prevent cracking.

XTP®: Extreme Terminal Performance. Hornady's designation for its modern pistol bullet which not only expands at a wide range of velocities but penetrates deeply.

YAW: Normally, a situation where a bullet rotates on its axis at a small angle to the line of flight.

ZERO: In shooting, the sight setting at which point of impact and point of aim coincide at a given range.

Notes

Notes