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October 2024

WE ARE PROUD TO CONTINUE OUR PARTNERSHIP with the team at *Shooting Times* magazine to print our newest *Hodgdon Annual Manual*. In this new publication, we are excited to share a first look at new reloading data for the 22 ARC and new data for the 257 Roberts and the 257 Roberts +P. We also added data for 86 rifle and 30 pistol cartridges, along with more than 1,000 new shotshell loads.

They say the only constant in life is change, and at my age, I can certainly testify to this truth. I just wish it didn't change quite so fast sometimes.

The early years of Hodgdon were special—our founder Bruce Hodgdon was able to purchase surplus powders from the U.S. military like H4895 and H4831 and sold those powders to consumers. Bruce's sons J.B. and Bob Hodgdon were able to expand the business by manufacturing muzzleloading propellants like Pyrodex, Triple Se7en, and IMR White Hots, as well as partnering with manufacturers to produce new bench favorites like Hodgdon H4350, Varget, Retumbo, and H1000. The last decade saw Hodgdon focus on new powder families like the Winchester StaBALL family and the Hodgdon CFE family, with new features such as copper-fouling-reducing agents and temperature stability.

While we continue to deal with raw material shortages and unprecedented price increases; supply limitations due to increased military demands; and a litany of transportation, financial, regulatory, and insurance challenges, we have also seen some return to normalcy after the peak powder demand of the early 2020s. In fact, one of the highlights of our summer was being able to take many of our Hodgdon employees and their families to the NRA Annual Meetings & Exhibits in Dallas, Texas.

Our Hodgdon employees are enthusiasts just like you—we are reloaders, hunters, and shooters. We love spending time outdoors with our families. We like teaching the next generation at our reloading benches. We are proud to provide the powder to fuel your enjoyment and success at the range and in the field. Our work product is a testament to our belief that handloading is still the best way to maximize the performance of your firearms, and save money as well.

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Steve Kehrwald
President & CEO



Hodgdon employees and families at the 2024 NRA Annual Meetings & Exhibits

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COVER PHOTO BY GAVIN GEAR

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WARNING:

Ballistic data shown in this manual was obtained in the Hodgdon laboratory under strictly controlled conditions.

Your reloads must contain the exact combinations listed in this manual. **NEVER EXCEED** charge recommendations in this manual.

Ballistic data varies considerably depending on many factors, including components used, how such components are assembled, the type of firearm used, and the reloading techniques and safety precautions utilized by the individual.

NEVER mix any two powders regardless of type, brand, or source. **NEVER** substitute any smokeless powder for black powder, Pyrodex®, or Triple Seven®.

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The individual assumes the risk of safe loading practices. Failure to do so or violation of any of the above warnings could result in severe personal injury (including death) or gun damage to the user or bystanders.

Do not use pointed bullets in any rifle with a tubular magazine, unless that pointed bullet was designed with a collapsible tip, made for tubular magazines.

USE THIS DATA WITH HODGDON, IMR, WINCHESTER, ACCURATE, AND RAMSHOT BRAND POWDERS ONLY. DO NOT EXCEED THE LOADS SHOWN IN THIS GUIDE.

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SMOKELESS POWDER BURN RATES

BY JUSTIN SCHRADER, HODGDON STAFF

UNDERSTANDING POWDER BURN RATES IS ONE OF THE MOST important factors in being able to select a powder for your specific application. At Hodgdon, we do our best to test and list every powder that can be used effectively in any given load combination. The Hodgdon Relative Burn Rate Chart (located on page 59) has been compiled over time and contains all the powders in the Hodgdon family of powder brands, as well as our other product lines. It is a tool to reference when selecting powders appropriate for a given load. Our reload data could list as few as three or as many as 25 powders, depending on the load. The loads listed online and in the *Hodgdon Annual Manual* are arranged in order of charge weight—the heaviest charge weights (the slower powders) are listed first, working down to the lightest charge weights (the fastest powders) that will work in that load combination. If a powder is not listed, there is a good chance that it is either too fast (resulting in high pressure or too much air space in the case) or too slow (resulting in low pressures and low velocities) for that load combination. Too much airspace in the case can create an unsafe state when the propellant shifts in the case and goes from a powder-to-primer condition to a powder-to-bullet condition. Let's discuss a couple of loading scenarios.

Let's say that you are preparing to load up a large amount of range ammo for target shooting. You want something that will be accurate and reliable while maximizing the number of rounds that you'll be able to load per pound of powder. Your first stop should be the online Hodgdon Reloading Data Center to find a load that matches the bullet, case, and primer that you'll be using. After you have input your components and are ready to review your results, you'll want to choose from the lighter charge weights toward the bottom of the list; this will give you more loaded rounds per pound of powder than the ones at the top of the list. For example, if you are loading 223 Remington ammunition with 55-grain bullets, the difference between loading the slowest powder versus the fastest powder could be 5.5 to 6.0 grains per round. That doesn't sound like much, but that works out to an additional 100 rounds per pound of powder—something worth considering if you are loading thousands of rounds of ammo.

Now let's switch gears and talk about loading for accuracy. One of the variables that contributes to accuracy is case fill, a.k.a. load density. The reason is a full case is more likely to shoot the same velocity regardless of the powder resting against the primer or the bullet. Once again, the first stop is the online Hodgdon Reloading Data Center to find a load that matches the bullet, case, and primer that you'll be using. This time, however, you should be looking for powders toward the top of the list. In many cases, these will have a "C" behind them to indicate they are compressed, meaning these loads have a load density that is over 100 percent. While these charges are compressed, our ballistics testing shows that they still have consistent ignition. By selecting one of these loads featuring these slower powders, you are effectively removing load density as a variable that could affect your accuracy. The downside, as we've already seen above, is that this requires more powder.

In addition, the Relative Burn Rate Chart can be used to identify not-yet-tried powders that have similar burn rates. You might hear someone say a powder is a "4350" burn speed or a "Varget" burn speed. You can use the chart to identify powders that are a bit faster or maybe a little bit slower. Perhaps, you'll try a new-to-you powder that gives you those tiny groups that we're all chasing.

Hodgdon is proud to offer a broad range of propellants that will work in just about every application imaginable. It's our hope that the tools available here and online at hodgdonreloading.com will help get you to the range and keep you on target.

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ALTERNATIVES TO BOOK-PUBLISHED 9MM SMALL PISTOL PRIMERS

BY CALLAHAN McIVER, HODGDON STAFF

IF YOU HAVE BEEN SMALL PISTOL PRIMER SHOPPING AND NOT found your desired primer on the shelf, you may have opted for a different company's primer to keep on shooting. Or perhaps you found a cheaper-priced primer than your usual brand and want to give it a try but are nervous about how it will perform. These are common predicaments in which many reloaders find themselves.

Hodgdon is specific on which company's cases and primers were used in the generation of the load data. In the "Warning" on page 73, you'll read that "If the reloader makes any changes in components or gets new lot numbers, he should begin again with the starting loads and work up to maximum cautiously."

It would be impossible to give a blanket statement saying something to the effect of "If you switch to X primer, drop down Y percent grains, and your pressures will be the same." Instead, the purpose of this article is to provide information that will help create safe handloads no matter what primer brand you have on the reloading bench.

For this test, a midrange 9mm Luger load was selected with a 115-grain lead RN bullet and two popular Hodgdon pistol powders: Titegroup and CFE Pistol. The Hodgdon data was shot at ambient conditions with the CCI 500 Small Pistol primer, but how do other primers perform? Looking at the numbers shows that the results with various primers are promising.

The accompanying table will show the difference for various primers versus the book-load CCI 500.

First, looking at the velocities, it is hard to complain about any differences! The furthest any primer got was 34 fps away from the CCI 500. The rest were within the teens or single digits of the velocity for book-load components. That means your velocity and power factor are going to remain consistent if you change primers.

Second, and more importantly, a look at the pressures reveals that the furthest from the CCI 500 load was 3,400 psi. Almost all the other pressures were less than 2,000 psi away. Many were only hundreds of psi away.

Third, the fact that the same primer varied above or below the mean in the two tests shows that other variations, such as loading tolerances, etc., may play as big a part in the variation as the primer type.

The S.A.A.M.I. Maximum Average Pressure (MAP) for 9mm Luger is 35,000 psi. A cursory look through Hodgdon data shows that many loads leave a buffer of pressure below MAP. We do this to ensure the handloader does not exceed the S.A.A.M.I. max-pressure limit.

If you are trying to push all the way to the published Maximum Load, using the exact components in the Hodgdon data will make for a safe load. Even in this instance, starting low and working up cautiously is the recommended practice, as many variables, such as powder lot, primer lot, and case lot, can change pressure and velocity.

For those who have the goal of changing a component like primer brand, maintain the practice of starting low and working up cautiously. Check for pressure signs and shoot over a chronograph to watch velocities. You will be able to get a load that shoots similarly to your original primer.

Stay safe and enjoy shooting!

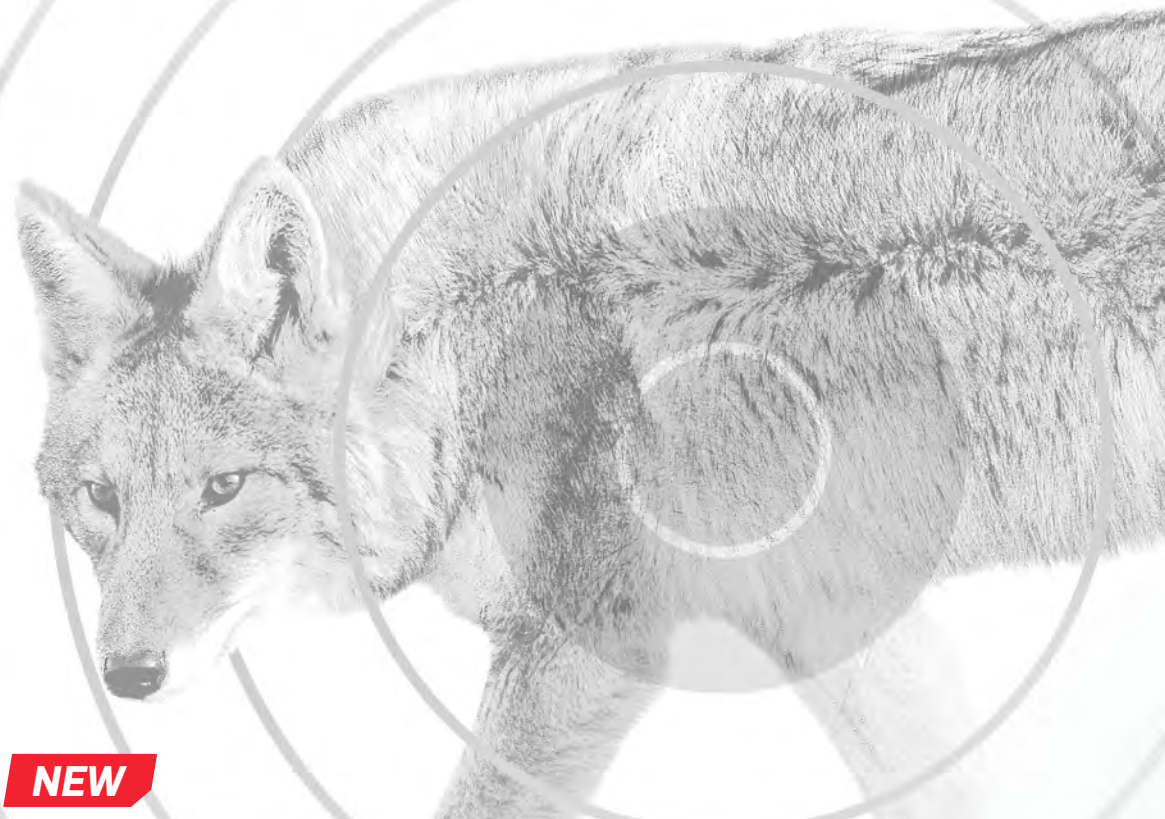
ALTERNATE 9MM SMALL PISTOL PRIMER COMPARISON

PRIMER	DIFFERENCE FROM CCI 500 (FPS)	(PSI)
9mm Luger, CCI 500, Winchester Brass, 115-Gr. LRN, 1.100" COL, 4.1 Grs. Titegroup		
Aguila Small Pistol Primer	11	-1100
Fiocchi Small Pistol Primer	-16	-2000
Fiocchi Lead-Free Small Pistol Primer	3	-900
Servicios & Aventuras Small Pistol Primer	13	-500
UNIS GINEX Small Pistol Primer	-8	-1300
Winchester Small Pistol Primer	14	-400
9mm Luger, CCI 500, Winchester Brass, 115-Gr. LRN, 1.100" COL, 5.2 Grs. CFE Pistol		
Aguila Small Pistol Primer	34	3400
Fiocchi Small Pistol Primer	-7	-700
Fiocchi Lead-Free Small Pistol Primer	6	900
Servicios & Aventuras Small Pistol Primer	18	1800
UNIS GINEX Small Pistol Primer	-1	0
Winchester Small Pistol Primer	13	1200

NOTES: All data was fired in a S.A.A.M.I.-spec barrel, 4.0 inches in length, in a universal receiver.

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BISMUTH
AND THE 16 GAUGE

To say the least, loading bismuth shot in the 16 gauge is a challenge. But the efforts can result in top-notch handloads.

BY TERRY WIELAND

SO. YOU WANT TO LOAD BISMUTH SHOT IN 16-GAUGE SHOTshells. You probably have a nice old 16-gauge double gun or pump shotgun, and you want to hunt upland birds in the public preserves that are increasingly demanding nontoxic shot. Well, understand that this undertaking is not easy, and it's not cheap. You need patience and determination to see it through to the end. However, it can be a challenging but fun exercise for an experienced handloader.

Bismuth shot has certain intrinsic qualities that seriously affect how it must be loaded for optimal results, while the 16 gauge presents challenges all its own due to limited selection of hulls, wads, and other bits and pieces. Based on my experience—and please just take my word for it because space limitations prevent me giving you chapter and verse to back it up—here is what you need to do to get started.

First, buy a copy of *The Bismuth Manual* and *The 16-Gauge Manual* in their latest editions from Ballistic Products and read them thoroughly. The next step is to get yourself a 16-gauge MEC (or other single-stage) press. It doesn't have to be the most expensive. In fact, since our project is what might be called "boutique" loading, with each single round requiring close attention and hand labor, a progressive press just complicates things and gets in the way.

Given the price of bismuth shot—five to seven times that of lead—you are not going to be mass-producing ammunition to demolish clays by the hundreds. Most likely, you have a trip in the offing and need two or three boxes of shotshells to see you through. With a little practice, that's two to three hours' work.

The next step, and this will provoke some argument, is that you should forget everything you think you know about loading shotshells and start learning again from the beginning. This is because many of the usual techniques don't work with bismuth. For example, measuring shot. A charge bar that throws an ounce of No. 8 lead is *not* going to throw an ounce of bismuth of any size.

The answer, along with your new press, is Ballistic Products's adjustable charge bar. It's another C-note on top of the price of the press, but it's well worth it. Attempting to substitute fixed-amount charge bars to match your requirements will be expensive and frustrating. You also need a scale, which most handloaders already have.

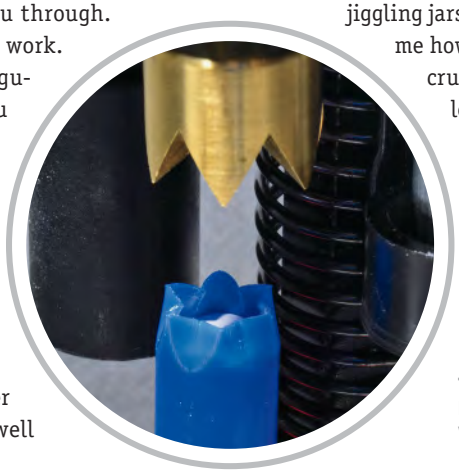
Bismuth Properties

To understand what you're up against, you have to understand the nature of the physical element, bismuth. It's a nontoxic lead substitute that can be formed into pellets that can then be fired from a shotgun. Pure bismuth is brittle—the pellets will crumble under pressure—so it's alloyed with tin to make it more cohesive and malleable. Being about 15 percent lighter than lead, pellet for pellet, an ounce of bismuth takes up more space. This not only affects charge measurement, but it also dictates which wads can and cannot be used.

Not only that, bismuth does not have the natural lubricity of lead—the ability of pellets to happily rub and roll around together and sort themselves out. To overcome this, manufacturers have produced tin-plated bismuth, which is about half-again more expensive ($17/pound versus $12/pound). Standard bismuth requires a buffer to cushion the shot and keep the pellets separate. Since bismuth tends to crush, even in alloyed form, it's essential to cushion the pellets on firing to prevent this. Otherwise, you end up with deformed pellets and erratic patterns—obviously not desirable in a premium-quality hunting load.

While I'm on the subject, this lack of lubricity also causes pellets to clog in the loading machine. A few pellets drop, you raise the bar, the jiggling jars the rest loose, and they're scattered all over. (Ask me how I know this.) The brittleness also causes enough crushed and deformed pellets to magnify the problem. And the larger the pellets, the worse it gets. To match the weight and get the penetration of a No. 7½ lead pellet, you need a No. 5 bismuth, which is that much more likely to clog.

It's good practice, after dropping the shot but before raising the handle, to rap the charging tube several times to loosen any jams. And you



The deluxe brass crimp starter from Ballistic Products pays off when starting with new hulls.



The two most useful powders for loading 16-gauge bismuth are Hodgdon's Longshot and Universal. Hodgdon High Gun, Winchester Super Field, and Winchester Super Handicap are good substitutes.

need to do this for every single round. Forget to do it once, and you're on your hands and knees picking up pellets. The good news is that because they don't have lead's free-spirited bounce and roll, they don't travel as far under the bench. It proved to be enough of a headache that, henceforth, I'll pay more and get the tin-plated shot for its greater lubricity.

Ballistic Products goes to great lengths in its bismuth manual to caution against any—that's *any*—substitution of components: hulls, primers, wads (shot cup, cushion, or over-shot), or powders. So critical is this that some of the load formulae in the manual even stipulate what size shot they're for: No. 5, No. 6, and so on. They don't say you can't use No. 6 shot in a No. 5 recipe, but the implication is there.

16-Gauge Considerations

Now to the challenges that afflict all loaders of the 16 gauge and have for a century. Most can be blamed on the gauge's exclusion when Skeet took off in the 1920s. Skeet loads in 12, 20, and 28 gauge resulted in top-quality hulls in great profusion along with a suitable plethora of wads. Target hulls like Winchester AA and Remington STS are made to be easily reloaded. Such cases don't exist in American 16 gauge, most of which are old-fashioned hunting loads using equally old-fashioned hulls.

Fortunately, Europeans look at the 16 gauge differently, and you can buy new Cheddite and Fiocchi hulls, primed or unprimed, 2¾ and 2½ inch, and it makes sense to simply buy several hundred of these and go from there. Most of Ballistic Products's data calls for Cheddite or Fiocchi hulls anyway, with matching Cheddite and Fiocchi primers.

Out of 32 loads for 2¾-inch shells in the Ballistic Products manual, exactly one (1) used Federal hulls; all the others were Cheddite or Fiocchi. On the Hodgdon website, there is data for Federal, Remington, and Winchester hulls, as well as Fiocchi.

Of course, starting with new hulls requires a skiving tool and a premium crimp-starting tool.

The next step is to pick out one load that looks like it will serve your purpose, then acquire all the necessary components. I chose one from the Ballistic Products data that is very close to a load also found on the Hodgdon website, the difference being that Ballistic Products calls for both a buffer and an over-shot wad, with half a grain less powder, for 1,300 fps versus 1,350 fps. The load is one ounce of bismuth with 25.5 grains of Longshot.

Incidentally, the two powders that have the most applications with bismuth are Hodgdon's Longshot and Universal, followed by International. The good folks at Hodgdon tell me that the availability of Universal and International is going to be limited, but they indicate that High Gun is an excellent alternative for International, and Winchester Super Handicap and Super Field could be able substitutes for Universal. Of course, for safety, you'll want to check with Hodgdon for their recommended powder charge weights if you substitute these powders.

Setup takes a while, mainly adjusting the charge bar to throw one ounce (437.5 grains) of shot, then 25.5 grains of Longshot.

Starting with new, primed Fiocchi hulls, you eliminate the first three steps (depriming, sizing, and repriming) and go straight to the charging station. Drop the powder, seat the wad, then the shot.

On Ballistic Products's advice, I treated the wads with some of their "Wad Slick" to make everything, well, slicker, and it worked well.

After dropping the shot, you then tap in 10 grains of "BSB Buffer." If you have a set of the Lee powder scoops, one is sure to measure 10 grains; otherwise, it's a matter of figuring something out. Ideally, you would weigh 10 grains to get it exact. Tap the case gently as you pour it in, and the buffer sorts itself out among the pellets. Then comes the over-shot wad, which not only gives you the ideal size for a perfect crimp, but it also keeps the buffer from leaking out. Ballistic Products also recommends a dab of crimp sealer, which is always a good idea anyway with cartridges that will jostle around while hunting.

Fiocchi hulls come already skived, so I was able to skip that step. Ballistic Products's brass crimp starter—a "deluxe" item—did an excellent job on new plastic hulls, and the resulting crimp looked like the shell rolled off Fiocchi's assembly line. The Cheddite hulls show no indication of skiving, but the walls are sufficiently thin at the mouth to allow an excellent crimp.

And there it is. *Voilà!* Sixteen-gauge bismuth.



Being about 15 percent lighter than lead, pellet for pellet, an ounce of bismuth takes up more space than an ounce of lead shot. This affects charge measurement and dictates which wads can and cannot be used.



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THE VERSATILE 257 ROBERTS



Revisiting the 257 Roberts on its 90th birthday is a great way to remind us just how great this cartridge is.

BY LANE PEARCE

BY THE 1920S AND '30S, DEVELOPMENT of modern smokeless propellant cartridges was in full swing. And just like in recent years, not all the activity was occurring in the major ammunition manufacturers' facilities. Independent riflemen and handloaders like Newton, Niedner, Mann, Gipson, Lindahl, Whelen, and other like-minded fellows vigorously pursued efforts to improve their rifles' ballistic performances. Bolt-action rifles, war-proven to be inherently stronger and more reliable, also had claimed center stage in the sporting arms marketplace.

Among the other enterprising fellows trying to create ever "better" hunting cartridges was Major (ret.) Ned H. Roberts. Recognized by his peers as a diligent experimenter, Roberts focused on the .25-caliber (i.e., quarter-bore) cartridge. He, with advice from Mann and Niedner, test-fired thousands of rounds in multiple barrels chambered and rifled in yet another slightly different configuration. Whereas Niedner and Mann worked with the 30-06 as the parent case, Roberts chose the 7mm Mauser because its reduced case capacity was similar to that of the venerable 30-40 Krag.

By the late 1920s, he was satisfied with his wildcat cartridge, which was known as the 25 Roberts. His handloads used the same 87- and 100-grain bullets that topped the popular 250-3000 cartridge Newton had developed for Savage a few years earlier. However, because the 25 Roberts had a little greater case capacity, it could achieve about 5 percent more velocity. Griffin & Howe and other custom makers built an estimated 600 25 Roberts-chambered rifles before Remington adopted the wildcat as a factory round in 1934.

To improve its manufacturing capability, Remington's engineers made modest changes to Roberts's case design. A slightly sharper shoulder angle and reduced body taper precluded chambering the new cartridge in the earlier custom rifles. The marketing gurus also changed the name to 257 Remington-Roberts to further distinguish the factory round from the 25 Roberts wildcat cartridge.

Remington chambered the updated Model 30-S Express rifle in 257 Remington-Roberts. The earlier Remington Model 30 was a refined, sporting version of the P17 30-06 bolt action manufactured for our "doughboys" fighting World War I in Europe. I purchased a Model 30-S Express rifle chambered in 257 Roberts through Guns International, intending to use it for working up the handloads in this report. It's fitted with a factory-installed Lyman 48R adjustable aperture rear sight on the receiver instead of the typical notched blade rear sight



Early 257 rifles like the Remington Model 30-S Express (top) had blocked magazines and short throat/leades specifically for stubby 257 Roberts cartridges. The Remington Model 700 Classic, circa 1982 (bottom), has a 30-06-length action and follower, which allows longer COLs for 257 handloads. (Photos by Bill Feltner.)

dovetailed into the barrel. The barrel is 22 inches long and measures 0.600 inch in diameter at the muzzle. As noted earlier, the action is based on the P17 30-06 rifle, but the blocked magazine and short throat/leade allow using only S.A.A.M.I.-standard (2.750-inch COL) rounds. The action was modified in the past to accommodate a side-mounted scope, but the rifle retains the P17's two-stage military-style trigger.

Winchester soon followed Remington's lead and added the new round as an option in their 1903 Springfield-derived Model 54. When the Model 54 was superseded a couple years later by the improved Model 70, the 257 Roberts remained on the available cartridges list. An interesting aside, the then-new round was also listed in period ammunition catalogs as the 257 Winchester-Roberts.

For reasons now lost to obscurity, the original 257 Roberts loading was unduly burdened with three features that singly and altogether severely curtailed its ballistic performance. Ned Roberts had loaded only roundnose bullets because there were no accurate pointed bullets available. Remington's stubby 117-grain RN bullet copied his lead. Although Roberts modeled the round after the 7mm Mauser with a cartridge overall length (COL) of about three inches, the 257 Roberts's COL is specified as only 2.750 inches. The P17/Model 30 action would accommodate the 30-06's COL of 3.25+ inches; however, the Model 30-S Express magazine is blocked at the rear for the shorter 257 Roberts round.



Originally a wildcat cartridge, the 257 Roberts was domesticated by Remington in 1934. In 1974 S.A.A.M.I. approved the +P version of the 257 Roberts, which has a significantly higher chamber pressure. (Photo by Bill Feltner.)

Finally, the maximum average pressure (MAP) of the Roberts round was specified as the same as the 250-3000 Savage at only 45,000 CUP (approximately 54,000 psi). That's about 10 percent less than other period "modern" rifle cartridges, including the 30-06 and the 270 Winchester. Ostensibly, that reflects a cautious step to avoid damaging future custom rifles chambered for the factory version since the new round wouldn't fit the already existing custom rifles.

Who knows?

Remington offered three bullet options in 257 Remington-Roberts ammo. The 87- and 100-grain jacketed softpoints were the same as the 250 Savage. The 117-grain bullet, similar to the 25 Remington and 25-35 WCF loadings, was the third choice. Muzzle velocities modestly exceeded the 250 Savage by 100 to 200 fps. The 117-grain bullets achieved about 2,800 fps, which was more than adequate for deer, antelopes, black bears, and similar size big game.

As Whelen's comment suggests, the 257 Roberts gained many followers during the next 20 years. It also had a popular nickname—the "257 Bob."

Of course, we firearms enthusiasts are often fickle, and allegiances change quickly—especially when popular gun scribes inform us that we can't do without this or that latest new item. When the 243 Winchester and 244

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Lane lucked out and was able to shoot the handloads developed for this report in Robert "Bob" Hodgdon's 257 "Bob" Remington Model 700 Classic, which grandson Joel Hodgdon graciously loaned to him. (Photo by Bill Feltner.)

Remington rounds were introduced in the mid-1950s, the popularity of the 257 Roberts and the 250 Savage began to wane. For anyone who doesn't know, the 244 is simply a necked-down Roberts case, and the 243 is a necked-down 308 Winchester case.

Although both were limited to firing 90/100-grain maximum weight bullets, the MAP for both was significantly greater (approximately 60,000 psi), so they could closely duplicate (and even exceed) the ballistic performance of the 257 Roberts. In 1974 S.A.A.M.I. removed one yoke by approving the +P version of the 257 Roberts, and the MAP was bumped up to about 58,000 psi, allowing the 117-grain factory load to achieve a velocity of nearly 3,000 fps. But the round's too-short COL still restricted using a lower ballistic coefficient roundnose bullet.

The 87-grain factory load has long since disappeared, and unfortunately, Winchester's popular 100-grain Silvertip load also has been discontinued. Norma and Nosler offer 100- and 110-grain factory loads, respectively. Remington's non+P load features the original 117-grain RNSP bullet. Federal only offers custom-loaded, 120-grain Partition ammo. Hornady offers a Superformance load topped with the company's 117-grain SST bullet. HSM's factory load also is available with 117-grain Hornady SST bullets. I fired it first for this report in a Remington Model 700 Classic, and its first group for record measured 0.75 inch.

Remington and Winchester made thousands of 257 Roberts rifles up until the 243/6mm prevailed. When Ruger introduced the single-shot No. 1 and bolt-action Model 77 rifles in the late 1960s, they were soon chambered for 257 Roberts in addition to the usual more popular cartridge choices. In recent years, Winchester and Ruger sporadically made short production runs of 257 Bob rifles. Browning and Kimber offered rifles also. Remington made the aforementioned Model 700 Classic rifle in 1982, and luckily, I was able to use Robert "Bob" Hodgdon's personal Model 700 Classic for this project because his grandson Joel Hodgdon loaned it to me. Can you believe it? I'm shooting Bob Hodgdon's personal 257 "Bob" rifle.

Sans iron sights, the Model 700's receiver is factory drilled and tapped, so my gunsmith, Isaac Gallagher, supplied a steel, one-piece Redfield base and a pair of one-inch steel rings to mount a Leupold 2-7X 36mm scope. The rifle has a 22-inch barrel, and its diameter at the muzzle is 0.655 inch. The action and magazine follower are standard (30-06) length. It weighs about 8.5 pounds, according to my gauge.



Factory-loaded 257 Roberts ammunition can be quite accurate, but it also can be hard to find and darn expensive.





> **"If I had to of necessity confine myself to one rifle only I would choose it in this caliber."**
> (*The Hunting Rifle* by Townsend Whelen, 1940)

I had intended to use two other bolt-action rifles in my inventory for this project—a Remington Model 722 made in 1954 and a more recent production Ruger Model 77 Hawkeye. The Model 722 only accommodates the stubby-length Roberts cartridges, so substituting the Remington Model 700 Classic was a positive step. The Ruger Model 77 is an unblocked, long action but originally retained the unduly "short" S.A.A.M.I.-standard 257 Roberts chamber throat/leade dimensions. Again, using the Model 700 Classic was the better way to go.

Handloading Tips

Some scribes report that handloading the 257 Roberts can be finicky. This is likely because most rifles chambered for the round are short actions with 1:10 twist barrels. You're stymied by both the COL constraint and the reduced spec for MAP, even considering the +P update. In spite of this, you can assemble handloads that will do what Ned Roberts intended his wildcat to do.

The first step is deciding what you will do with your carefully assembled handloads. Will you be shooting paper targets at the range, helping a land owner get rid of some pests or varmints, or taking your rifle on a long-planned deer/antelope hunt? Just like Roberts's wildcat and the subsequent factory-loaded ammo, the 257 Roberts is versatile enough to handle any hunting task short of elk and moose and brown bears. The various reloading companies still offer lab-tested data and myriad components to meet any need.

The diemakers also offer excellent tools. I used an RCBS full-length die set to resize the cases and seat the bullets. I usually decap spent primers with a dedicated decapping die before cleaning the fired brass in a Dillon vibratory tumbler filled with Hornady's corncob media. (It's the best I've ever tried.) I clean inside each case neck with a lightly lubed RCBS case neck brush. I lightly finger-lube each piece of brass with sizing wax before running it into the sizer die that I've adjusted to just barely touch the shoulder.

After wiping the sized cases with an old cotton T-shirt to remove the lube, I carefully inspect each primer pocket to make sure all corncob media has been dislodged. This is yet another opportunity to inspect each case for defects. If the neck is split/cracked, the shoulder is dented, or the case body is severely scratched, toss it into the scrap bucket.

Case necks stretch when the round is fired and also when it's full-length sized, so I measure case length at each load cycle and trim the whole batch when it's necessary. You don't want to squeeze the trigger on a handload with a too-long neck. You may not notice the bolt closing a bit too tightly when the case mouth is crimped into the bullet by the chamber, but that surely will cause excessive pressure and adversely affect obtaining consistent velocity and accuracy.

I'm old-school and usually install a simple-to-use RCBS Ram Priming Unit on my Rock Chucker Supreme single-stage press. After adjusting the die body, I can consistently seat each primer to the same depth with minimal effort. As I remove each primed case from the shellholder, I lightly brush the tip of my index finger over the





257 Roberts handloads built with Hodgdon powders, quality bullets, and RCBS reloading equipment can be tremendously accurate.

case head to feel if the primer is seated a smidgen below flush. That way, if I should accidently flip the primer in the stem cup and seat it upside down, I'll catch it and any correctly-oriented-but-protruding primer before charging the case and seating a bullet. If you encounter a loose primer pocket, scrap the case. If you experience several loose pockets when loading a batch of brass, consider scrapping the whole lot and note that you must reduce the powder charge to lower pressures.

I prefer to "throw" powder charges; however, if my mechanical powder measure won't dispense consistent charges (+/- 0.1 grain) of a certain propellant, I will use an electronic dispenser or simply throw multiple charges and weigh each one on a standalone RCBS electronic scale. If the charge is within range, I pour it through the funnel into a primed case. If it's too high or too low, I dump it back into the hopper and throw/weigh another one. If you're doing small batches of a few rounds each of several different component combinations, it's much faster to use the mechanical measure. When the cases are all charged, I use a small penlight to inspect every one to verify there's powder present and they all look the same.

Finally, as with any important task, the job's not done until the paperwork is completed. Keep good records and include load data with each box of handloads. Also keep results from range sessions so you know for sure what worked or didn't. Buy a chronograph to measure velocities. Between that information and the accuracy results, you have two of the most important factors for achieving the best performance from your firearm. I was an engineer for many years and learned that if you're not measuring the process, you have little or no chance to manage it.

257 Roberts Ammo and Components

Today, you have to search to find 257 Roberts ammunition and brass. As I mentioned earlier, Hornady, HSM, Nosler, and Remington still make runs of excellent ammo. I checked Graf's website and noted both Nosler and Winchester offer unprimed cases. Winchester was priced much cheaper, but only the Nosler brass was in stock. You can

257 ROBERTS FACTORY LOAD ACCURACY & VELOCITY

AMMUNITION	COL (IN.)	VEL. (F.P.S.)	E.S. (F.P.S.)	S.D. (F.P.S.)	100-YD. ACC. (IN.)
Remington Model 700 Classic, 22-in. Barrel, Nikon 2-7X					
Nosler Trophy Grade 110-gr. AccuBond +P	2.767	2715	46	14	1.46
Hornady Superformance 117-gr. SST	2.775	2899	39	12	0.95
HSM Tipping Point 117-gr. SST +P	2.865	2890	41	15	1.11
Remington 117-gr. Core-Lokt	2.720	2575	36	14	0.98
Federal 120-gr. Partition +P	2.775	2715	46	14	1.56

NOTES: Accuracy is the average of two, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured with a Garmin Xero C1 Pro Doppler chronograph.

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reform 7mm Mauser and 6mm Remington cases into 257 Roberts cases. I've never tried to do so, but they're also often in short supply. Bullets, primers, and powder are readily available, notwithstanding the recent shortages mostly caused by hoarding.

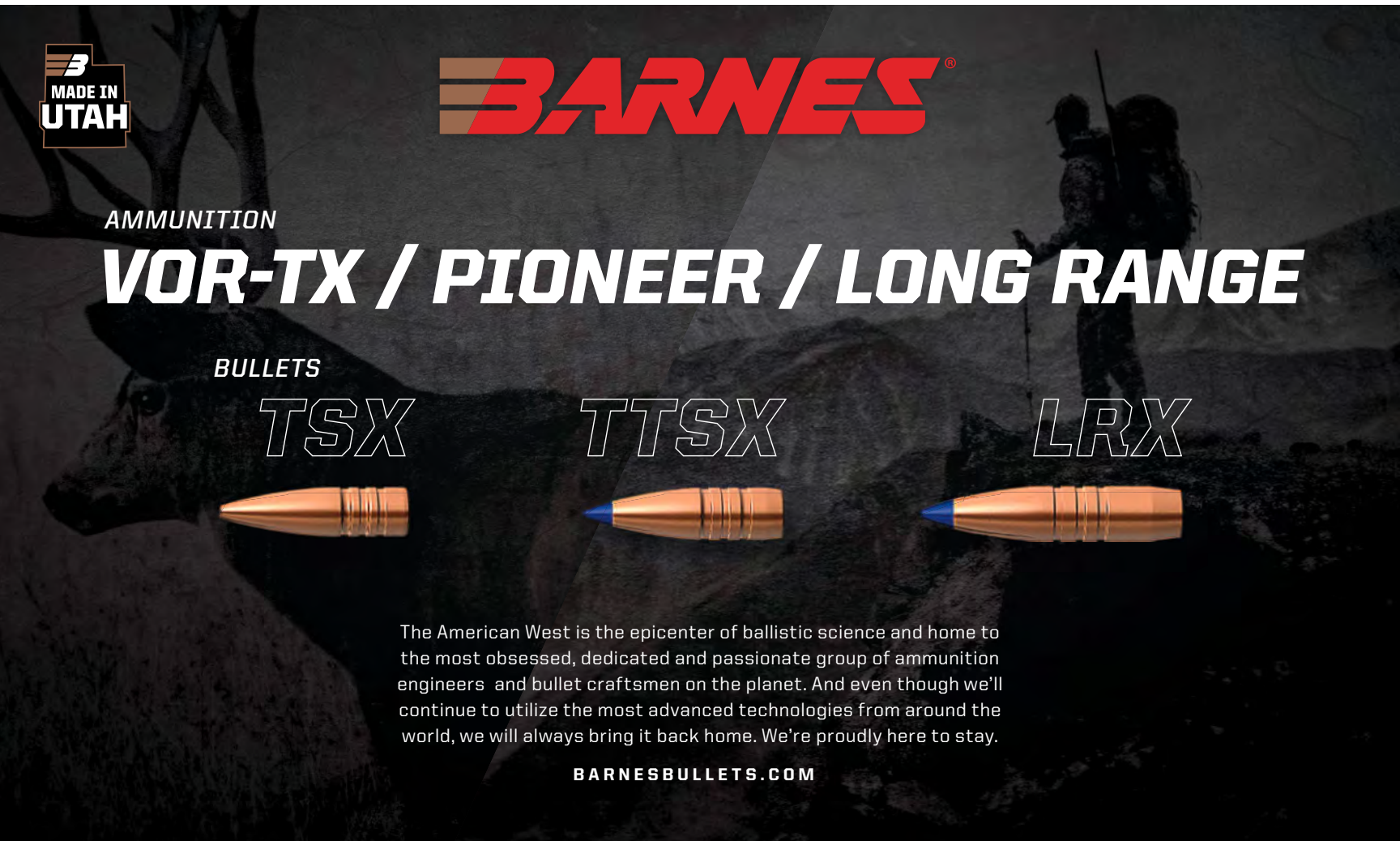
As you can see in the accompanying chart, the 257 Roberts is a very versatile cartridge—just like Roberts intended. Considering Whelen's comment, it should be more popular today than it is. If you're interested in rediscovering a relatively soft-recoiling (less than 12 ft-lbs) compared to a 30-30 (roughly 14 ft-lbs), 270 Winchester (approximately 19.5 ft-lbs), or 30-06 (around 25 ft-lbs), you can find a suitable rifle on the used-gun market.

Unlike Whelen's declaration from years ago, today, the fickle sporting community has chosen other cartridges as the "best" instead of the 90-year-old 257 Roberts. But know this, even years after he originally made that statement, the 257 Roberts was still one of his two best cartridges. That's a heck of a declaration from a military officer who cut his teeth on shooting and hunting with Krag and Springfield rifles.

257 ROBERTS LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (F.P.S.)	E.S. (F.P.S.)	S.D. (F.P.S.)	100-YD. ACC. (IN.)
Remington Model 700 Classic, 22-in. Barrel, Nikon 2-7X									
Remington	Rem. 9½	H4350	49.0	Speer 87-gr. TNT	2.870	3256	41	14	0.97
Remington	Rem. 9½	Accurate 4350	46.5	Sierra 90-gr. GameKing	2.795	2814	50	15	1.08
Winchester +P	WLR	Accurate 4064	40.0	Sierra 100-gr. Pro-Hunter	2.950	2896	42	13	1.01
Winchester +P	WLR	H4831SC	48.5	Sierra 100-gr. Pro-Hunter	2.950	2902	39	14	1.07
Federal +P	Fed. 210M	H4831SC	48.5	PPU 100-gr. PSP	2.990	2931	33	11	1.43
Federal +P	Fed. 210M	W760	45.0	PPU 100-gr. PSP	2.990	3018	51	17	1.98
Hornady	WLR	Big Game	39.5	Hornady 117-gr. InterLock	2.780	2645	51	17	1.07
Hornady	WLR	Superformance	45.0	Hornady 117-gr. InterLock	2.780	2746	46	16	1.42
Remington	Rem. 9½	Hybrid 100V	44.0	Nosler 120-gr. Partition	2.775	2852	43	13	1.37
Remington	Rem. 9½	IMR 7828	46.5	Nosler 120-gr. Partition	2.775	2764	47	15	1.16

NOTES: Accuracy is the average of two, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured with a Garmin Xero C1 Pro Doppler chronograph.







LOADING
410 BORE WITH TSS TUNGSTEN SHOT

Tungsten shot takes 410 shotshell downrange performance to a whole new level.

BY L.P. BREZNY

TSS, OR TUNGSTEN SHOT AS IT IS KNOWN BY ITS POSITION on the periodic table of metals, carries a 0.18 density and is 56 percent heavier than lead, with an advanced weight level of 22 percent over well-known HEVI-Shot. TSS, as it will be referred to here, is the second heaviest metal known on earth, bested only by pure depleted uranium. As such, TSS can do things beyond the muzzle of a shotgun never before experienced by smoothbore shooters simply because the raw strike force ballistics associated with TSS are simply off the known performance charts.

When the subject turns to handloading the 410 Bore shotshell and making use of TSS shot, much like the material itself, handloaders are jumping into a whole new world of both loading methods and terminal ballistics results. By working with Hodgdon, Backridge Ammunition, and Ballistic Products, I have prepared the following packaged review of the results I have obtained by way of handloaded TSS shot as paired with the 410 Bore when taken afield as a turkey-harvesting system. The project covers four full years of research and warm target testing. In effect, I have found that the 410 has moved from a novelty, small-bore fun gun/shotshell combo to a viable tool for hunting this big game bird.

Because turkeys are large birds but present very small kill zones or target areas, selecting shot sizes that allow high pellet counts can be critical. In this case, my research and warm target testing utilized TSS No. 9 and No. 9.5 shot for one very good reason. When loaded to 1/2 ounce, the small No. 9.5 “dust” counts out to more than 100 pellets. Now, with a basic individual weight equal to No. 4 pure lead shot, this puts down a nasty swarm of high-pellet-count projectiles into that small target area (head/neck) and will do so well out to 40+ yards when you’re shooting a correctly choked 410 Bore shotgun.

Loading Tips

Loading the 410 versus other shotshell offerings can present some unique challenges. Because the 410 shotshell is 2½ or 3 inches long, it is something more in line with a straight-wall 444 Marlin or 45-70 cartridge versus a shotshell, and any deviation when handloading will affect pressures and performance. Therefore, you should measure and weigh every last component that goes into a 410 shotshell round of ammunition.

While 410 chamber pressures may not seem to be a major issue, be advised that the smaller the gauge, the greater the chance of a fast chamber-pressure spike. The short form here is the 410 just has darn little internal space to work with, and a slight change in components or powder/shot weight can make for major changes when the shotshell is burned off in the small-bore chamber.

All loads referenced here are lab tested or published data in terms of origin. In some cases, loads published here have been offered up by Backridge Ammunition, being I was hunting and harvesting wild turkeys well before anything was on the market as a factory-rolled shotshell or any proven handloading data existed. Today, almost a half-decade down the trail, Hodgdon now offers the 410 handloader data that is nothing less than a game-changer, and believe me, their 49-load offering, as well as others represented in this report, can handle just about anything required of the 410. By the way, Backridge is a company I consult for located in Dover, Tennessee, and it provided data and custom handloads during the lion's share of my test-shooting against warm targets.

Powder Selection

As for powder selection, some of the loads indicated here were generated using Lil'Gun. When I started handloading TSS shot, most of my test and reference loads came through Backridge and used Lil'Gun because right off the propellant match was letter perfect; downrange ballistics performance was very uniform for the most part.

Because TSS shot is very hard and will not transfer energy in a friendly manner against a shotgun's chamber walls (e.g. chamber-pressure spikes), Lil'Gun was able to generate safe pressures even with some untested components. Ballistics testing in Backridge's lab confirmed safe pressures and gave me a solid starting point when building some of the very first TSS No. 9.5 shot loads that were to be used on wild turkeys. This testing took place in what you could call a dead space well ahead of any TSS factory loads offered up by the industry in general.

When first developed, the 410 shotshell loads were all half-charge and lightweight 1/2-ounce payload packages. This is because Lil'Gun was spot on as a subsonic load propellant. I wanted 410 loads applied to suppressed shotguns and generating chamber pressures under 9,000 pounds, with most being closer to 8,000 psi. Downrange materials testing (ballistic gel) and assorted recovered cadavers indicated good penetration and kinetic energy dump out to 35 yards. If subsonic loads that moved out of the muzzle at 950 fps could do that on targets, full-house velocities of 1,200 fps regardless of pellet size and payload weight would be in a whole new performance class unto itself. Now, add the fact that of the seven gobblers harvested over three seasons, five were taken with the sub-sound Metro Gun system, and two others were dropped using two full-house loads. Any question as to the effectiveness of the 410 on trophy-class gobblers was clearly answered.

Pattern Performance

I do not care how good a load looks over chronograph screens or when pressure tested if it cannot pattern well. If it doesn't do that, it just will not make the grade. As such, the half-charge (8.5 grains of Lil'Gun) loads tested were off the charts good at sub-sound velocities. On average 1/2 ounce of No. 9 TSS consistently printed 53 pellets on a head/neck at 35 yards. There was a time about 30 years ago when building turkey loads for the big 10-gauge magnum and shooting 2-ounce payloads of lead shot that we could not exceed 24 hits on a head/neck target at the same range. Even a move up in velocity, again using Lil'Gun, generated 43 hits on average. I believe for the most part this occurred because of the massive velocity retention of TSS (momentum) and the additional 1/4 ounce of shot sent downrange. (See the accompanying sidebar for more about loads and pattern performances using a commercial head/neck turkey target as a baseline.)

Is it worth your time to handload TSS shot in 410 Bore shotshells? The answer is simple. A pound of raw shot has a price tag of about $76, and a five-round box in the gunshop will cost you over $50. A pound of .18 density tungsten will load 36 1/2-ounce rounds of



Hodgdun Lil'Gun powder is a letter-perfect match for loading TSS shot in the 410 because it produces very uniform downrange ballstics performance.



Tungsten shot takes 410 shotshell performance to a whole new level.

ammunition. By my calculations, when adding the hulls, primers, wads, and powder, along with the shot, those 36 finished shotshells will cost the shooter about $94.04. The over-the-counter price for the same 36 rounds comes out to $360, as offered in five-round boxes. As for the reloading press and dies, the price drops away with every finished round that comes off the last load station. Being that turkey hunters don't care much about high-output reloading or busting 100 straight clays, that 36 rounds might possibly be enough for a lifetime of shooting. But if you load that same number of rounds for yourself and maybe even a buddy, over the long haul, everything pays for itself.

Hodgdon can supply the propellants suitable for loading the 410 and Ballistic Products out of Minnesota has all the necessary components to get you up and running in short order. A few words of advice in terms of field equipment: Do not shoot TSS ammunition in high-value shotguns. Do not shoot this ammunition in guns using lead shot choke systems. TSS will weld a choke to the barrel in as little as two rounds.

Safety warning: TSS has a great deal of extended range capability. For example, a 1,400-fps No. 2 load listed in this report is lethal at 60 yards, even with major pattern disruption. Watch your backstop.

In the data, listed field loads for turkeys note a .15 and .18 density tungsten. Because tungsten will react differently regarding its basic density weight, this distinction has been noted and indicated. Know what you are loading as chamber pressure will be different, even with the same powder charge. This is tricky stuff as such, and care in terms of the fine details is necessary regarding a successful experience when loading and using tungsten shot. Be advised, this is not lead or steel shot, and do not use any data as a substitute for actual TSS data when loading pure .15 or .18 density tungsten shot.

Also, you do not have to move TSS at some supersonic speed to obtain an effective load. The density of this metal is so great that by just getting it moving, it seems to take care of those retained energy issues all by itself. There is no need to burn up a shotgun barrel or split a choke tube when you're loading TSS.

410 TSS LOAD DATA

LOAD #1 (BACKRIDGE AMMUNITION)
Federal or Winchester 3-inch hull. 209 primer. BP extended nontoxic shot wad. 1/2 oz. No. 9.5 or No. 9 TSS shot. 8.5 grains Lil'Gun. BP Bismuth Buffer. B card over/crimp star or roll.
Pressure: 9,000 psi.
Velocity: 950 fps.
Effective range: 30 yards.
Pattern performance: At 30 yards, averaged 47.6 head/neck hits, using Rossi Tuffy with Metro Gun extended sound suppression choke tube system.

LOAD #2 (BALLISTIC PRODUCTS)
Cheddite 3-inch hull. Cheddite 209 primer. 18.0 grains Lil'Gun. TPS410 wad. FC310 in base. 1/2 oz. (218.8 grs.) No. 9 TSS. Roll crimp.
Pressure: 12,774 psi.
Velocity: 1,431 fps.
Effective range: 40 yards.
Pattern performance: At 37 yards, averaged 33 head/neck hits. (Hot load. Shoot this load in steel shot safe chokes and barrels only.)

LOAD #3 (BALLISTIC PRODUCTS)
Cheddite 3-inch hull. Federal 209 primer. 16.0 grains H110. TPS410 wad. FC 310 in base. 1 1/16 oz. (300.8 grs.) No. 9 or No. 9.5 TSS. Roll crimp over shot card.
Pressure: 11,798 psi.
Velocity: 1,177 fps.
Effective range: 35 to 40 yards. (Heavy field load)

LOAD #4 (BALLISTIC PRODUCTS)
Cheddite 3-inch hull. Federal 209 primer. 14.0 grains Lil'Gun. TPS410 wad. 5/8 oz. No. 9 or No. 7* TSS
Pressure: 12,650 psi.
Velocity: 1,215 fps.
Effective range: 30 yards.
Pattern performance: At 30 yards, averaged 43 head/neck hits. (Good overall turkey load. This load harvested three birds over the past two seasons.)

LOAD #5 (HODGDON)
Winchester 3-inch hull. Winchester 209 primer. 13.5 grains H110. TPS410 wad. 3/4 oz. No. 9 or No. 7 TSS.
Pressure: 12,300 psi.
Velocity: 1,040 fps.
Effective range: 40 yards.
Pattern performance: At 40 yards, averaged 31 head/neck hits. (Solid over decoy turkey load. This load harvested two birds last season.)

LOAD #6 (HODGDON)
Cheddite 3-inch hull. Federal 209 primer. 15 grains Accurate 11 FS. TPS10 wad. 3/4 oz. No. 9 or No. 7 TSS.
Pressure: 12,500 psi.
Velocity: 1,030 fps.
Effective range: 30 yards.

LOAD #7 (HODGDON)
Cheddite 3-inch hull. Federal 209A primer. 14.4 grains H110. TPS10 wad. 13/16 oz. No. 7 TSS
Pressure: 12,000 psi.
Velocity: 1,040 fps.
Effective range: 30 yards.

LOAD #8 (BALLISTICS RESEARCH & DEVELOPMENT)
Cheddite 3-inch hull. Federal 209 primer. 12.0 grains Lil'Gun. TPS410 wad. 5/8 oz. No. 9 or No. 7 TSS.
Velocity: approx. 1,100 fps. (Approx.)
Effective range: 25 to 30 yards.
Pattern performance: At 25 to 30 yards, averaged 61 head/neck hits. (This is a good overall turkey load. It is a reduced version of Load #4 by two grains, and it will produce 20 percent better patterns at 25 to 30 yards.)

* TSS .15 density

NOTES: All test loads listed here were individually loaded totally by hand. Shot weights were hand weighed and double-checked using a gram conversion scale as well as a grain weight system. Crimps were rolled with a Ballistic Products roll crimping drill-mounted tool. Test guns included the Mossberg 500, the Rossi Tuffy, and the Browning BPS. Factory Full chokes as well as Metro Gun Suppression Systems (subsonic) were applied afield.

Currently, over 60 new loads are offered between Ballistic Products and Hodgdon for use with TSS .18 density shot as applied to the 410 Bore. Data included in this review has been used under actual field conditions with positive results. Pattern work was produced in clean, still air 3,300 feet above sea level. Temperature averaged 87 degrees Fahrenheit.


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BULLET
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VELOCITY
22-250 Rem.
43.0 C gr.
60 gr. Hdy. V-MAX
Win.
Win. LR
2.350"
3730 fps
243 Win.
49.0 gr.
75 gr. Hdy. HP
Win.
Win. LR
2.640"
3510 fps
308 WSM
73.5 C gr.
155 gr. Hdy. A-MAX
Win.
Win. LRM
2.860"
3405 fps
More data available at www.hodgdon.com
Before Using, See Warnings on Sides
NET WT 1 LBS. (454 grams)

22 CREEDMOOR VERSUS 22-250

If you've wondered how the 22 Creedmoor and the 22-250 compare performance-wise, then we have the answer.

BY LAYNE SIMPSON

THIS IS A TALE OF TWO CARTRIDGES. ONE, AN OLD-TIMER with creaky joints but still second only to the 223 Remington in popularity among varmint shooters, began life soon after rifle designer and builder Charles Newton developed a cartridge adopted by Savage Arms and introduced in 1915 as the 250-3000 Savage. Ever the experimenter, he decided to neck down a few of those cases for 0.228-inch bullets. Why that bullet diameter? Well, around 1910 Newton had necked down the 25-35 Winchester case for a 0.228-inch bullet weighing 70 grains, and he picked up a bit of spending money when Savage bought the idea and introduced it in 1912 as the 22 Hi-Power. Unfortunately, Savage had no interest in another .22-caliber cartridge, so Newton's creation on the .250 Savage case sat on the shelf gathering dust until a gunsmith by the name of Jerry Gebby paid him a visit in 1919.

Gebby took one of the cartridges home, pondered it for just over 10 years, and eventually got around to necking down a batch of 250 Savage cases for bullets with the more common diameter of 0.224 inch. Ammo put together for him in 1930 by friend and custom loader J. Bushnell Smith proved to be quite accurate. Bullet trajectory was banjo-string flat, and long-distance varmints toppled over like bowling pins. In an effort to discourage others from chambering rifles for the new wonder cartridge, Gebby called it the 22 Varminter and paid good money to have the name trademarked. Once word about the cartridge and how easy its case was to form got around, gunsmiths across the country smiled as they stamped ".22-250" on the barrels of rifles built for their customers.

I began shooting the 22-250 when it was a wildcat, and due to the scarcity of 250 Savage cases, the custom rifle came with two RCBS die sets. One set was for the laborious task of forming 22-250 cases from unfired military-surplus 30-06 match brass, and the other was for loading the cartridge.

A company affectionately known as "Big Green" tamed the old wildcat in 1967, called it the 22-250 Remington, and began loading the ammo and chambering very accurate rifles for it. A friend of mine bought the first Model 700 BDL Varmint with a heavy 24-inch barrel in 22-250 to show up at a local gunshop, and he and it gave me and my Remington 40X in 220 Swift a good run for our money in Kentucky groundhog country, where my wife Phyllis and I lived at the time.

The 22 Creedmoor also has a past, but it is far less storied and quite short. Throughout the history of modern cartridges, when a new case is introduced, wildcatters scramble to their loading benches and neck it both up and down for bullets of various diameters. (I plead guilty as charged!) The 284 Winchester is an example. In my collection are 10 wildcats on that case, and they range from the 6mm-284 to the 411-284. With the exception of the latter cartridge, more than one person has staked claim to creating the other nine. Necking down the 6.5 Creedmoor case for 0.224-inch bullets was such a natural thing to do it had to have been quite tempting to a number of varmint shooters, but Texan Derrick Ratliff, founder of Horizon Arms, has to be given a lot of credit for getting the 22 Creedmoor to where it is today. Hornady sponsored the cartridge with S.A.A.M.I. sometime during 2023, and it gained approval in early 2024.



This report is a tale of two cartridges, comparing the performance of the longstanding 22-250 (left) to that of the newcomer 22 Creedmoor (right).

Built by the custom shop at E.R. Shaw, the two test rifles are on Model 110 actions built to Shaw's specifications by Savage. Both rifles have 26-inch stainless-steel barrels with 1:7 twists and S.A.A.M.I. chamber dimensions.



Match-grade unprimed cases from Lapua and Peterson were used for the handloads. The Peterson 22 Creedmoor cases are available with Large Rifle or Small Rifle primer pockets, and Layne used both types.

A Special Test Requires Special Equipment

With the history lesson behind us, I will now get down to the business of comparing these two great cartridges. But first, let's look at the rifles I used.

When I was asked to write this article for the 2025 issue of the *Hodgdon Annual Manual*, the very first thought flashing through my mind was the need for two accurate rifles as identical as possible in every way except the cartridge for which they were chambered. My friends at E.R. Shaw did a great job of delivering exactly what was needed with two Mark VII rifles from their custom shop.

Savage makes the action to E.R. Shaw's specifications and indicates so by giving each a serial number with ERS prefix. Upon receipt at the Bridgeville, Pennsylvania, factory, each action is fully blueprinted, including lapped locking lugs and trued boltface and receiver. Shaw engineers have developed a precision chambering technique for 100 percent concentricity with the bore of the barrel. The familiar Savage barrel retention nut is not used, and the precision-ground recoil lug is much thicker than on Savage rifles. Triple honing of all engagement surfaces, as Shaw describes the process, transforms a good AccuTrigger into an excellent AccuTrigger. The pull weights on my rifles were easily adjusted to a consistent 30 ounces, with neither creep nor overtravel.

When placing an order for the two rifles, I specified match-grade, 26-inch, stainless-steel barrels with the optional varmint contour and 1:7 rifling twists. The diameters are 1.250 inches at the receivers and 0.720 inch at the muzzles, heavy enough for excellent accuracy while being light enough to carry on varmint shoots where a lot of walking is required. All Shaw barrels are button-rifled and lapped. I would be shooting the rifles with Nosler SR-30Ti and SR-30ALTi suppressors and specified 5/8-24 threads.

The two barreled actions were hand-bedded in Shaw's special laminated wood stocks with barrels free floating. The rifles differ only by their serial numbers and by the colors of their stocks—Nutmeg for the 22-250 and Pepper for the 22 Creedmoor. Their weights on my digital postal scale were 8 pounds, 9.9 ounces for the former and 8 pounds, 10 ounces for the latter.

With the exceptions of the 338-06 Ackley Improved and several other wildcats, Shaw technicians ream all chambers to S.A.A.M.I. dimensions. Back in the 1930s the 22-250 was designed to push fairly light (short) bullets weighing 50 to 55 grains to maximum velocities, and chamber throat length was cut accordingly. The 22 Creedmoor was designed to push heavy-for-caliber bullets, and for this reason,



Average gross water capacity for the 22-250 Lapua case (left) was 44.3 grains, 49.3 grains for the 22 Creedmoor Peterson case (center), and 50.2 grains for the Federal fire-formed 22-250 Improved cases (right).

chamber throat for it is a bit longer. Further on I will illustrate how this is far less important than is often touted by fans of the 22 Creedmoor in their comparisons of the two cartridges, but first let's take a close look at them and toss in the popular 22-250 Ackley Improved for good measure.

The Cartridges Compared

I checked gross capacities of the three primed cases by weighing them and then weighing again after they were filled to the brim with water. Capacities were 50.2 grains for the 22-250 Improved (Federal fire-formed case), 49.3 grains for the Peterson 22 Creedmoor case, and 44.3 grains for the Lapua 22-250 case. The comparisons will differ a bit with other brands of cases, but capacity rankings should remain the same. For all practical arguments and purposes, the 22 Creedmoor is nothing more or less than the grand old 22-250 Ackley Improved with a 30-degree shoulder rather than 40 degrees. The 22-250 case has a 28-degree shoulder, almost the same

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as the 22 Creedmoor. Peterson offers the 22 Creedmoor case pocketed for Large Rifle or Small Rifle primers, and I tried both with MagPro powder and the Berger 80-grain VLD bullet. And since some competitors commonly use magnum primers in the 22 Creedmoor and other relatively small cartridges, such as the 6mm Dasher and the 6.5x47mm Lapua, I tried the Federal GM215M with the MagPro-VLD combination. Determining which of the three primers is best is a rather lengthy project for another day.

As popular opinion goes, the 22 Creedmoor, with its longer chamber throat, has a huge advantage over the 22-250 because heavy (long) bullets do not have to be seated as deeply into the powder cavity of its case. While this is true of some bullets of older designs, it does not apply to more modern bullets with sleek shapes and extremely long ogives. Berger began offering that type of bullet in weights ranging from 75 to 90 grains during the late 1990s when across-the-course High-Power competitors were transitioning from .30-caliber M1A rifles to AR-15s with heavy, quick-twist barrels. Palma and Fullbore competitors were also happy to see the company introduce uncommonly heavy 0.224-inch match-grade projectiles.

The chamber of the E.R. Shaw rifle in 22-250 featured in this report was precisely reamed to S.A.A.M.I. dimensions, yet when various heavy Berger bullets are seated in the Lapua 22-250 case for 0.020 inch of jump prior to rifling engagement, powder cavity encroachment is minimal to say the least. More specifically, when the finger-long Berger 90-grain VLD Target is seated for a cartridge length of 2.700 inches, its base rests adjacent to the body-shoulder juncture of the case, as it does in the 22 Creedmoor case. Most rifles in 22-250 are built around short actions, the magazines of which are more than long enough to handle that cartridge length. The magazine of my Shaw custom rifle will handle a cartridge length of 2.935 inches, with plenty of space

22 CREEDMOR VS. 22-250 ACCURACY & VELOCITY

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (F.P.S.)	E.S. (F.P.S.)	100-YD. ACC. (IN.)
22 Creedmoor Shaw Mark VII, 26-in. Barrel, 1:7 Twist								
Peterson	Fed. GM210M	Superformance	45.5	Nosler 55-gr. Ballistic Tip	2.490	3805	53	0.54
Peterson	Fed. GM210M	MagPro	48.0	Berger 60-gr. FB Varmint	2.500	3487	16	0.94
Peterson	Fed. GM210M	Hunter	43.5	Nosler 60-gr. Ballistic Tip	2.490	3628	37	0.52
Peterson	Fed. GM210M	H4831SC	45.0	Nosler 60-gr. Partition	2.410	3530	11	0.87
Peterson	Fed. GM210M	IMR 7828 SSC	44.0	Swift 62-gr. Scirocco II	2.535	3462	27	1.19
Peterson	Fed GM210M	Superformance	43.0	Berger 75-gr. VLD Target	2.605	3421	46	1.11
Peterson	Fed. GM210M	Retumbo	46.0	Swift 75-gr. Scirocco II	2.545	3340	44	1.22
Peterson	Fed. GM210M	MagPro	45.5	Berger 80-gr. VLD Target	2.610	3277	64	0.79
Peterson	Fed. GM215M*	MagPro	45.5	Berger 80-gr. VLD Target	2.610	3309	56	0.48
Peterson	Fed. GM 205M**	MagPro	45.5	Berger 80-gr. VLD Target	2.610	3268	22	0.71
Peterson	Fed. GM210M	Hunter	40.0	Nosler 80-gr. Competition	2.600	3256	31	0.62
Peterson	Fed. GM210M	StaBALL HD	47.0	Nosler 80-gr. Competition	2.600	3304	43	0.53
Peterson	Fed. GM 210M	Grand	46.0	Berger 85.5-gr. LRHT	2.650	3312	57	0.37
Peterson	Fed. GM210M	Grand	44.5	Berger 90-gr. VLD Target	2.700	3192	44	0.72
Peterson	Fed. GM210M	Magnum	46.0	Berger 90-gr. VLD Target	2.700	3187	57	0.66
Peterson	Fed. GM210M	StaBALL HD	45.0	Berger 90-gr. VLD Target	2.700	3129	59	0.70
22-250 Shaw Mark VII, 26-in. Barrel, 1:7 Twist								
Lapua	Fed. GM210M	CFE 223	39.0	Nosler 55-gr. Ballistic Tip	2.460	3828	47	0.45
Lapua	Fed. GM210M	StaBALL 6.5	40.5	Berger 60-gr. FB Varmint	2.470	3711	28	0.77
Lapua	Fed. GM210M	Hunter	41.0	Nosler 60-gr Partition	2.375	3631	25	1.18
Lapua	Fed. GM210M	Superformance	42.5	Nosler 60gr. Ballistic Tip	2.455	3726	37	0.61
Lapua	Fed. GM210M	H414	38.5	Swift 62-gr. Scirocco II	2.485	3610	29	1.22
Lapua	Fed. GM210M	Superformance	40.0	Berger 75-gr. VLD Target	2.562	3519	48	1.30
Lapua	Fed. GM210M	IMR 4350	36.0	Swift 75-gr. Scirocco II	2.485	3316	28	0.87
Lapua	Fed. GM210M	Hunter	36.0	Berger 80-gr. VLD Target	2.580	3202	47	0.62
Lapua	Fed. GM210M	Superformance	38.5	Berger 80-gr. VLD Target	2.580	3219	40	0.70
Lapua	Fed. GM210M	W760	35.5	Nosler 80-gr. Competition	2.560	3237	25	0.40
Lapua	Fed. GM210M	H4350	36.0	Nosler 80-gr. Competition	2.560	3150	39	0.75
Lapua	Fed. GM210M	Hybrid 100V	37.0	Nosler 80-gr. Competition	2.560	3187	30	0.66
Lapua	Fed. GM210M	IMR 4350	32.5	Berger 85.5-gr. LRHT	2.625	3165	36	0.48
Lapua	Fed. GM210M	H4350	33.0	Berger 90-gr. VLD Target	2.700	2989	59	0.56
Lapua	Fed. GM210M	Hunter	33.5	Berger 90-gr. VLD Target	2.700	3023	22	0.59
Lapua	Fed. GM210M	W760	32.5	Berger 90-gr. VLD Target	2.700	3048	10	0.61

*Magnum Large Rifle primer **Small Rifle primer

NOTES: Accuracy is the average of two, five-shot groups fired from a sandbag benchrest with the barrels water-cooled after each five shots. Velocity is the average of five rounds measured 15 feet from the guns' muzzles. Ambient temperature was 106 degrees Fahrenheit.

All powder charges were maximum or close to it in the test rifles and should be reduced by 10 percent for starting loads in other rifles. The two rifles had S.A.A.M.I. chamber dimensions, and all bullets were seated in both cartridges for 0.020 inch or more jump prior to rifling engagement.

beyond the nose of a bullet remaining for trouble-free feeding. The magazine of the short Remington Model 700 action is also roomy enough for that cartridge length.

Continuing on with keeping everything as close to the same as possible during my cartridge comparisons, when preparing test loads for the two Shaw rifles, I used a pair of die sets made by the same company. Powder charges were thrown with the same powder measure, and bullets were seated with competition-type dies with precision-ground alignment sleeves and floating seating stem systems. When preparing the rifles for accuracy testing, I used Talley Picatinny rails and Weaver 30mm six-screw rings of medium height for attaching two Bushnell 6-24X 50mm scopes. The 22 Creedmoor wore a Match Pro with the Deploy Mil reticle, and the 22-250 wore an Engage with an MOA reticle. For the money, varmint scopes don't get any better.

During accuracy testing both rifles were snuggled into a Brownells leather bunny-ear sandbag at the rear and a Lyman Match Shooting Bag resting on that company's quick-adjust Bag Jack at the front. Graham wind flags told me when to shoot and when to stay off the trigger.

While bullets weighing from 80 to 90 grains are fun to play with and are just the ticket for long-distance competitive shooting, I believe those weighing 60 grains are more than enough medicine for bumping off coyotes and other varmints at great distances. They can also be less expensive. Examples are the Nosler Ballistic Tip and Berger FB Varmint of that weight. When launched at 3,600 fps from either cartridge, they shoot flat, buck strong winds, and deliver a deadly blow. Where legal and at reasonable distances, the 22 Creedmoor and 22-250 can be very effective on whitetail deer and pronghorn antelopes, and for that, the Nosler 60-grain Partition, Swift 62-grain Scirocco II, and Swift 75-grain Scirocco II exiting the muzzle at maximum speed would be difficult if not impossible to beat.

So many propellants work so well in the two cartridges, naming just one or two as must-haves in the reloading room is not easy. But I will give it a try anyhow. (Drum roll please.) For pushing bullets weighing from 55 to 75 grains at top speeds with excellent accuracy to boot, I will have to go with Superformance. From this point on, the picking and choosing becomes even more difficult, so I will take the easy way out by nominating MagPro, Grand, and StaBALL HD as top contenders. With that said, you cannot go wrong with old-timers like W760, H414, IMR 4350, and H4831SC. Did I mention CFE 223, IMR 7828 SSC, StaBALL 6.5, and StaBALL Match? It should be noted that the powder charge weights listed in my test results charts were maximum or close to it in the test rifles and should be reduced by 10 percent for starting loads in other rifles. Ambient temperature during my testing was 106 degrees Fahrenheit, and the barrels enjoyed being water-cooled after each five-shot group was fired.

As performance in the field goes, the 22 Creedmoor and 22-250 can be equals in every way, and you are in good company when choosing either. Any difference in accuracy and bullet weight limitations between the two has to do with rifles rather than cartridges. I cannot recall when I did not have a rifle in 22-250, and from this day forward, the same will hold true for the 22 Creedmoor.




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Building and Using a Modular Ultimate Reloader-Style Bench

BY GAVIN GEAR, ULTIMATE RELOADER

YOUR RELOADING BENCH IS THE FOUNDATION OF YOUR entire reloading operation. While most handloaders simply bolt down equipment to their benches, there are more flexible options, including the Ultimate Reloader Bench System. Let's explore the system, consider different configurations, and look at how you can use the system to build your own reloading bench or modify an existing one to suit your requirements.

The Ultimate Reloader Bench System arose from my need to show a wide variety of reloading equipment on camera and sometimes change out gear and setups on a daily basis. So simply bolting down reloading presses was just not an option for me. After realizing this I researched different options for mounting gear to workbenches and found many cool ideas from the woodworking community. One of these ideas involved embedding T-tracks into woodworking benches.

After mulling all this over I thought: "That could work great for reloading benches." I ordered some T-tracks and got to work adapting this woodworking concept to my reloading bench. I've used the resultant design since 2009 and have incorporated it into many of the benches that we keep at multiple locations. This bench system is not just for industry professionals—it's also great for everyday reloaders, especially those with limited space where tools (including non-reloading tools) need to be easy to swap out, set up, and tear down.

The Ultimate Reloader Bench System incorporates two T-slot tracks installed on the top surface of a sturdy reloading bench, spaced 8 inches apart center to center. The 3/8-inch bolts slid into the T-tracks with threaded ends pointed upward provide a solid mounting interface for a variety of tools. This also enables easy and flexible side-to-side positioning for each component. This system can be added to your existing bench or form part of a dedicated reloading bench build.

A variety of extruded aluminum T-slot tracks are available today. The most popular types are either 1/4-inch with 20 bolts (smaller, light-duty T-tracks) or 3/8-inch with 16 bolts (heavy-duty T-tracks). At Ultimate Reloader, we use only the heavy-duty type.

Most aluminum T-tracks are anodized. This makes them more durable and scratch-resistant and reduces friction when you're sliding bolts from side to side in the T-track. One possible modification to the off-the-shelf aluminum T-tracks you may want to consider is adding additional mounting holes and enlarging the countersunk screw-mounting recessed areas to accommodate larger screws. At Ultimate Reloader, we like to use at least #10 wood screws to mount the T-tracks to the benchtops. This may be overkill but seems a lot more solid than the setup that most T-tracks come with from the factory.

You can use your existing bench, build a new bench, or buy an off-the-shelf bench. Any of these types can be built or modified to incorporate the Ultimate Reloader Bench System. Here are a few options.

Wall-Mounted or Freestanding Bench

I have built multiple reloading benches with 2x4 dimensional lumber frames, 4x4 post legs, metal brackets for corners, and tabletops composed of 2x6 lumber and plywood. It is important that your T-tracks are mounted over 2x4 (or larger) frame members as pictured (8x2-foot benchtop shown). The T-tracks need a substantial frame support to screw into. I suggest using 3-inch screws so that your T-tracks don't flex upward or pull out of the benchtop.

Note: For a comfortable "standing" reloading bench setup, I typically have my reloading benchtop about 38 inches above the floor surface. But you can build yours at any height you like.

If you're building a freestanding bench from scratch, there are multiple options on the market for corner brackets and related hardware that can make for a sturdy bench without requiring a major woodworking project. These kits and parts can be used with dimensional lumber from your local hardware store.

To build a bench like the examples shown, I recommend these steps for building the benchtop:

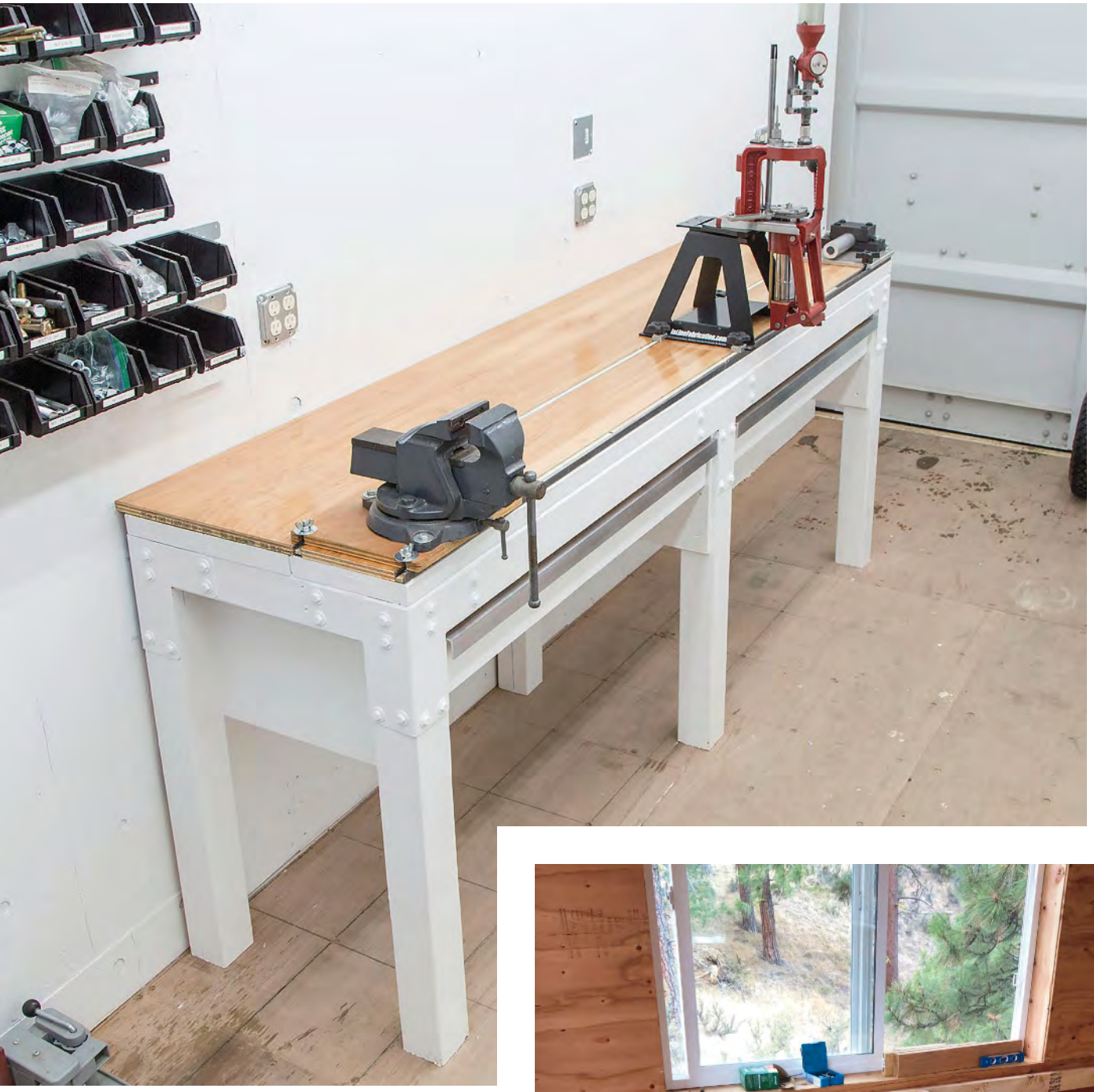
1. Plan your dimensions. I suggest a benchtop at least 24 inches deep and a length of 4, 6, or better yet 8 feet if you have the room. It's a good idea to research the T-track that you intend to buy and plan for multiple lengths of T-track for your bench's width. Bench lengths of 4 or 8 feet will make the most of 8-foot dimensional lumber (you either use the full length or cut it in half). Be sure to keep in mind that stud-length 2x4 lumber is not a full 8 feet long (it's usually 92⅝ inches or thereabouts).

2. Make a drawing outlining how the dimensional lumber will fit together. Check your math to ensure you fully understand the exact dimensions to which you need to cut each piece. Your drawing will help you follow the old adage "measure twice, cut once."

3. Make the appropriate cuts. Lay out the dimensional lumber in the same orientation that you'll end up screwing or nailing it together. Double-check that everything lines up properly.



The Ultimate Reloader Bench System arose from the need to use and switch out a variety of reloading equipment and tools.



For utmost strength and stability, mount your bench to the floor and to the wall.



Here's a wall-mounted bench frame with supports that enable easy sweeping and cleaning and plenty of storage without vertical legs to get in the way. The same top frame can be used with a freestanding bench (with legs) that can be optionally mounted to the floor and/or wall for stability.

4. Screw together the outer frame (bounding rectangle). Make sure that the corners square up at 90 degrees and that the outer dimensions are correct.

5. Screw in the rear T-track support 2x4 from the sides on both ends of the frame. Double-check your dimensions are correct. The center of this mid-span 2x4 should be 8 inches from the line where the center of the front T-track will be mounted. If your T-track is 7/8 inch wide, for example, you'll want the center of your mid-span 2x4 to measure 8 inches minus half of 7/8 inch, which is $7^{9}/_{16}$ inches from the front edge of the frame/bench.

6. Use screws to install 2x4 members between the center-span 2x4 and the front and rear frame members. At the center-span 2x4, you'll need to toenail the screws into the center-span member (angle screws in from the top and bottom). The benchtop frame is now complete. You can add additional transverse 2x4 supports if you want a stiffer benchtop.

7. Not covered here: At this point you should mount the benchtop to legs or wall supports. Doing this now will be easier than if you try to do this after the top boards, T-tracks, and plywood panels are in place.

8. Lay down dimensional lumber on top of the bench and determine if you'll need to rip down one of the boards in order to land at the width you decided on for your bench.

9. If necessary, rip down one of the benchtop boards.

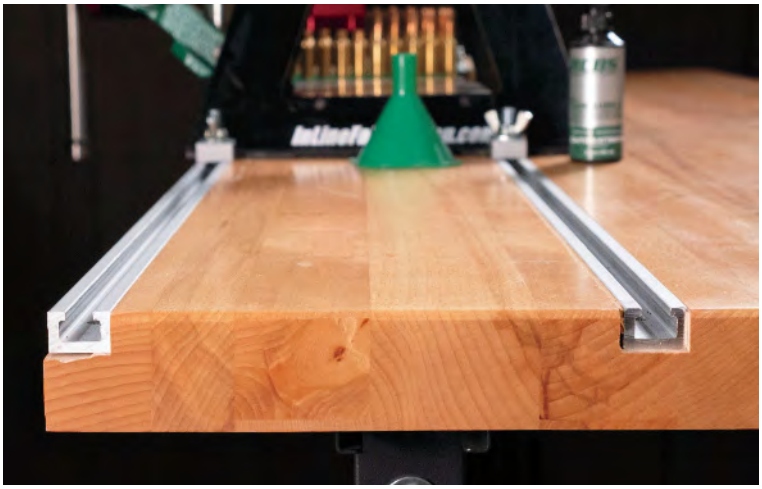
10. Screw down the benchtop boards. Make sure to screw the boards down to each of the frame members underneath. A regular interval of one screw every 12 to 16 inches should be adequate.

11. Optional: Drill additional T-track mounting holes (and countersink them) in the T-tracks and enlarge them for #10 screws if you like.

12. Use a table saw or circular saw to rip plywood tabletop finishing panels to width and length. For an 8-inch separation, use the following formula to calculate the width of the plywood between the T-tracks: Width = 8 inches minus the single T-track width. For 7/8-inch-wide T-track, that would be 8 inches minus 7/8 inch = $7^{1}/_{8}$ inches. The other plywood panel should measure the width of the tabletop, minus two T-track widths, minus the width of the plywood panel between the T-tracks. For a 24-inch-wide benchtop with 7/8-inch T-tracks, that would be 24 inches - 7/8 inch - 7/8 inch - $7^{1}/_{8}$ inch = $15^{1}/_{4}$ inches.



Shown here are custom steel T-tracks mounted to a benchtop with plywood panels beside them.



In this example a butcher block bench has T-tracks embedded in slots.

13. Lay out the T-tracks on your benchtop.

14. Mount the T-tracks to the benchtop boards. Use the narrow plywood benchtop panel to help space the T-tracks properly when installing the rear T-track.

15. Place the plywood benchtop panels carefully and fasten them down with glue, or use wood screws or nails.

At this point, you're finished with your benchtop!

I highly recommend anchoring your bench to a wall, or multiple walls if it's installed in a corner. This will provide a much more solid setup for your reloading presses compared to freestanding options—even when the legs are bolted to the floor.

Mounting T-Tracks

The easiest way to install T-tracks on the top of your bench is to screw them to the top of the table, then install plywood panels on either side of the "inboard" T-track.

Pro tip: You need to ensure the thickness of your chosen plywood is equal to or slightly less than the height of the T-tracks you're going to install. Contact between tool-mounting plates (or the bottom sides of the tool) should be with the plywood top and the T-tracks or just the T-tracks.



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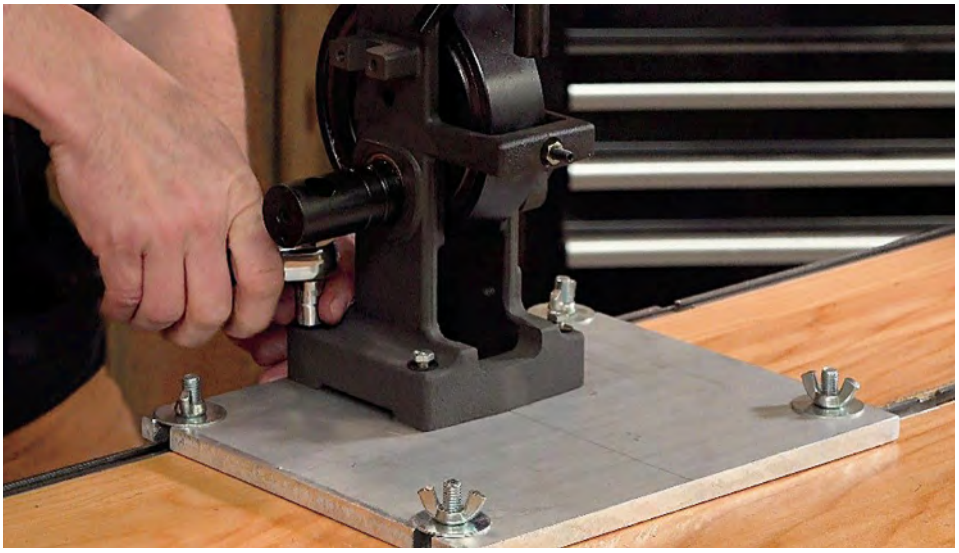
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A simple plywood mounting plate such as this one uses top screws and two side slots.



This aluminum press-mounting plate has side slots and drilled/tapped holes for press bolts.



This photograph shows a gunsmithing vise that utilizes the Ultimate Reloader Bench System.



For extra strength, a mounting plate made of two 3/4-inch-thick pieces of plywood is recommended. Shown here is an RCBS Pro Chucker press.



A blind T-nut on the backside of a wood mounting plate can be used for bolting tools to the bench.



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Be sure that your T-tracks are not lower than the top of the adjacent wood surface.

Embedding T-Tracks

If you have a bench with a solid wood top that's about 1¾ inches or thicker, you can create channels in the top for mounting your T-tracks. This makes for a clean look and can work well with off-the-shelf "butcher block" or other solid wood tabletops.

You can use a table saw with a standard blade and make multiple cuts per channel, or use a dado blade on your table saw that will cut each channel in a single pass. Another way to cut the channel is with a wood router and a straight flute bit. You'll need a straight edge and a steady hand to make this work without any waves or zigzags in your channel.

Pro tip: You can incorporate "drop zones" into your T-tracks for bolts in the middle of the bench or at specific intervals. This is accomplished by cutting away the "ears" at the top of the T-track so that you can drop bolts through the opening. You can use a large-diameter drill bit and drill or a milling machine to make these cuts. A simpler but less elegant way to incorporate drop zones is to leave gaps between adjacent sections of T-track where they butt up against each other. This enables you to swap out tools or presses without having to slide the bolts very far and prevents having to move other equipment to facilitate bolt access.

Mounting Tools

There are many ways to mount your tools using the Ultimate Reloader Bench System. These include making mounting plates, using existing holes (or slots) on the base of the tool being mounted, or drilling holes in tool base flanges. You can also use hold-down clamps that secure the tool base or flange directly without the need for holes or slots.

Mounting plates can be made from wood or metal. If you are making mounting plates from wood for reloading presses, I suggest doubling up 3/4-inch plywood and gluing the two plywood plates together. Drill holes for the side slots and cut out the slots with a jigsaw or similar. For mounting tools that don't need to withstand much force, a single plywood plate with two or four mounting holes or slots is plenty adequate.

For wood mounting plates, I have used T-nuts (mounted from the underside) with a recess cut using a spade bit with great success. The press or other tool is bolted to the plate and engages with the blind nut in order to clamp the press to the plate.

Mounting plates can also be made from plate steel or aluminum, but this requires a bit more skill and specialized tooling. When I make metal press-mounting plates, I first cut the metal plate to size, then drill and tap mounting holes for bolts or studs. Finally, I mill side slots for the hold-down bolts using a milling machine.

Hold-Down Bolts and Clamps

For press and other tool mounting, there are some great options for mounting hardware that act as interfaces between the tool and the bench. These include bolts, threaded knobs, washers, custom hold-down clamps, and off-the-shelf hold-down solutions.

The simplest and most cost-effective hardware is bolts with either wingnuts or threaded knobs and optional washers. Using this simple hardware, you'll be able to secure your presses very effectively with wrenches (if using standard nuts) or by hand (if using knobs or wingnuts).

If you don't have holes or slots in the base of the tool you need to secure, you can use a tab-type hold-down clamp (readily available online) or make something custom. At Ultimate Reloader, we frequently use custom-milled aluminum block hold-downs, which are great because of how quick and flexible these clamps are to use.

With some creativity, you may also be able to use bolts and washers alone to hold down tools, if the profile of the tool base is accommodating. Here at Ultimate Reloader, we have used our bench system for many things, including single-stage and turret presses, progressive presses, case processors, powder measures, priming tools, case inspection tools, precision measurement tools, bench vises, gunsmithing vises and fixtures, barrel vises, and more.

Building a modular reloading bench is an investment that will pay dividends for years to come. I hope you can experience the satisfaction of being able to repurpose and reconfigure your workspace easily and elegantly after implementing a system like the one described here. The Ultimate Reloader Bench System has saved me a tremendous amount of time and frustration, and I have gotten a lot more out of every square foot of my bench space. That's a great feeling!



Types of hold-down hardware include nuts and bolts, bolts and wingnuts, custom hold-down clamps, and bolts with plastic knobs.

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THE PRECISION

Because the three PRC cartridges are designed to excel, and do just that, one or all should be in your battery.

BY JOSEPH VON BENEDIKT

DURING THE LAST PART OF THE LAST CENTURY, HORNADY morphed from being "just" a bulletmaker to becoming the most successful cartridge designer of our era. All, literally *all*, of the widely—and wildly—successful cartridges introduced in the last two decades were engineered by Hornady. Arguably the best of the lineup are the PRC cartridges. For anyone who doesn't know it, PRC stands for Precision Rifle Cartridge. Currently, there are three: 6.5 PRC, 7mm PRC, and 300 PRC.

The introduction of these three market-stormers didn't come in order of size. The 6.5 PRC came first, in 2018. Following in 2019 was the big hammer of the family—the 300 PRC. Hornady took a breather through the COVID 19 pandemic, then introduced the 7mm PRC in 2022. It is potentially the most versatile of the lot.

Before addressing each of the three PRCs individually, let's unpack the defining characteristics shared by all three, those elements that give these rounds an edge over previous cartridges. All are focused on achieving two things: better extended-range performance and better out-of-the-box accuracy.

Fast-Twist Rifling

All three PRCs have fast-twist rifling that's optimized for use with extremely long, high-ballistic-coefficient bullets.

Modern rifle projectiles tend to be engineered for long-range performance. (Whether you admire it or despise it, long-range shooting and hunting is a massive trend.) Increased aerodynamics (ballistic coefficient) are crucial to modern hunting and target bullets, but their use is limited in classic cartridges.

Traditional cartridges aren't compatible with the best iterations of such bullets. Why? Because these modern projectiles have extremely sleek, long shapes, and they tend to be heavier than usual. Such bullets must be spun faster than traditional rifling pitch rates or else they won't stabilize and shoot accurately.



RIFLE CARTRIDGES



Unfortunately, most traditional cartridges feature slowish rifling twist rates. For example, the 270 Winchester, 30-06, and 300 Winchester Magnum are usually built with 1:10 twist rates. The 308 Winchester usually has a 1:11 or 1:12 twist. Even the faster 1:9 twist in a 7mm Remington Magnum is still slow by modern standards.

When Hornady submitted the PRC cartridges to S.A.A.M.I., it specified the 6.5 PRC with a 1:8 twist, the 7mm PRC with a 1:8 twist, and the 300 PRC with a 1:8.5 twist. That's fast enough to stabilize the longest, sleekest heavy-for-caliber bullets available.

Plentiful Head Height

Another reason those long, streamlined bullets aren't compatible with traditional cartridges is that they have noses shaped like a speedboat rather than like the blunt-fronted barge of many classic bullets. As a result, they must be seated with most of the bullet outside the front of the case so that the mouth of the case will not hang over the curve of the bullet's nose.

The trouble is, classic cartridges don't have enough room (termed "head height") in the magazine for bullets that stick way out of the case. When modern long-range bullets are seated in traditional cartridges, they won't fit in the magazine and must be single-fed into the chamber.

Modern cartridges optimized for long shooting—from the 6mm Creedmoor to the 300 PRC—have plentiful head height and are built from the ground up to be ultimately compatible with those long, sleek bullets.

Min-Spec Geometry

The three PRC cartridges are better designed for accuracy than traditional cartridges are. For example, classic cartridges were born in the decades during and after the two World Wars and have some wartime characteristics built in. Most classic cartridges have big dimensional tolerances between the cartridge and the chamber. This enhances reliability when a rifle and the ammo are dirty, bloody, muddy, or compromised with water or snow or ice. However, those generous tolerances are not good for accuracy.

Since precision is such a focus these days, modern cartridges are specced with very snug tolerances. Starting with the 6.5 Creedmoor, Hornady engineered the chamber shape and throat and rifling leade dimensions to optimize accuracy, and the recipe the company uses borders on magic.

That magic is bestowed on all three PRCs. Each is specced with minimum tolerances, and all have the chamber/throat/leade technology that's proven to offer best-in-class accuracy.

Balanced Bore-to-Case-Capacity Ratio

Because they rely so effectively on highly aerodynamic bullets rather than extreme muzzle velocity, the PRC cartridges were not engineered for maximum propellant capacity. Rather, the bore-size-to-case-capacity ratio was optimized for potent but balanced efficiency.

All three rounds generate muzzle speeds between 2,800 and 3,100 fps with the most suitable bullet weights. All have reasonably good barrel life. None is overbore, which means none is temperamental about accuracy.

Naysayers who point out that competing cartridges (the 28 Nosler versus the 7mm PRC, for example) are faster have completely missed the point. The PRCs are dominating the field not by virtue of one characteristic enhanced at the expense of others, but by a balanced set of characteristics all engineered to provide one final optimal result.



Three cartridge lengths are represented by the PRCs. The 6.5 PRC (left) is an intermediate short-action cartridge. The 7mm PRC (center) is a standard 30-06-length cartridge. And the 300 PRC (right) is a true magnum-length cartridge.

PRC cartridges and rifles are engineered to provide nonhandloading hunters and target shooters with a turnkey setup ready to hunt or compete. When each PRC cartridge was introduced, Hornady flooded the market with at least two factory loads (one for hunting and one for long-range match shooting).

The hunting ammo is loaded with heavy, high-ballistic-coefficient ELD-X bullets. Named Precision Hunter ammo, it is just that. Generally, these bullets provide the best factory-loaded ballistic coefficients in their class, and they shoot very well.

The match ammo is loaded with super-heavy, extreme-ballistic-coefficient ELD Match bullets. These are generally head and shoulders above the competition in terms of extremely slippery drag coefficient. In other words, at long range, they dominate.

Both types of ammo provide minimal wind drift and maximum accuracy. Over and over, I've seen production-grade factory rifles, such as Browning X-Bolts and Tikkas and Ruger Americans and Mossberg Patriots, shoot sub-MOA (often 1/2-MOA) groups with both types of ammo.

If you don't want to fiddle with and tune handloads to a special min-spec chamber custom-built in your high-dollar rifle chambered in a classic cartridge, pick a PRC. It'll most likely shoot wonderfully with factory ammo and a production-grade rifle.



The 6.5 PRC is one of the all-time great deer, antelope, and sheep cartridges. With good bullets and powder, the round is easy to tune for accuracy. The bullets shown are (left to right) Swift 130-grain Scirocco II, Swift 140-grain A-Frame, Berger 140-grain VLD Hunting, Sierra 142-grain MatchKing, and Hornady 147-grain ELD Match.



That said, as always, a serious shooter can tune and optimize performance in his or her rifle by handloading a bullet chosen for a specific task with a propellant optimized for the cartridge, bullet weight, and barrel length, and gain best-possible accuracy and downrange effectiveness.

Let's look at each cartridge in turn.

6.5 PRC

BIRTH: 2018 Type: Intermediate/short magnum

Although it's the smallest of the three PRCs, the 6.5 version is no slouch. It's a zesty modern short magnum in the finest sense of the term and just could be the best all-around deer and sheep cartridge there is.

That said, hunters who regularly use the 6.5 PRC on elk will generally tell you it works fine, but often they wish they had a bit more authority. The cartridge generates about 2,960 fps in velocity and 2,780 ft-lbs of energy at the muzzle with the 143-grain ELD-X, but elk are tough, and the larger frontal diameter and bullet weight and energy payload of the bigger PRCs are more effective.

When handloading the 6.5 PRC, look to propellants in that medium-slow to slow burn rate. Anything from Accurate 4350 up to Retumbo. According to Hodgdon's Reloading Data site, StaBALL HD, Ramshot Magnum, and Accurate MagPro provide the best velocities with that heavy-for-caliber range of 140- to 156-grain bullets that are so good in 6.5mm cartridges. Depending on the specific weight, expect from 2,850 to 3,050 fps.

If you want to run a light and steamy bullet, 120-grainers do well over Ramshot Grand and Hodgdon Retumbo. Either should get you to 3,150 fps in a 24-inch barrel.

All that said, my favorite go-to powder with all three of the PRCs is Hodgdon's H1000. Even though it doesn't always provide the highest speed, it's still darned fast. More importantly, it's incredibly consistent and easy to handload for excellent accuracy.

7mm PRC

BIRTH: 2022 Type: Standard-length magnum

The 7mm PRC is arguably the most versatile and best balanced of the three PRCs. It's not too much for whitetail deer, and it's not too little for Alaskan/Yukon moose. It's ideal for mule deer, caribou, elk, black bears, mountain sheep, and so forth.

Plus, it technically has the best wind-bucking ability of the three, as well as the best retention of muzzle velocity and energy way downrange. For example, in Hornady's Match factory ammo the 7mm PRC pushes the highest-ballistic-coefficient bullet, and it does so faster than the 6.5mm and the .30-caliber versions. You can replicate that with handloads. You just can't argue with a combination of faster and more streamlined.

Of course, we're mostly handloaders here, so you may be thinking, "Yeah, but I can actually outdo that with my handloads."

You could be right, but keep in mind that Hornady's very savvy engineers optimized each PRC with the best load they could devise for it—and they have a lot more resources than you and I have.

What propellants are best in 7mm PRC handloads? Glad you asked. I got my first one six months before the cartridge launched, and my

daughter Audrey was the first person to take a big-game animal with it—a 5.5-foot Idaho black bear shot across a canyon. She used handloaded Hornady 150-grain CX bullets (the 160-grain versions weren't out yet) over H1000 powder. As I mentioned in the section on the 6.5 PRC, H1000 is my go-to favorite with all three PRCs, and I believe it's particularly good with shorter-than-standard barrels. That 7mm PRC rifle Audrey used has a 20-inch barrel, and we get impressive speeds from it with H1000.

It's worth noting that Accurate MagPro and Ramshot Grand are particularly good if you want the most velocity possible with 160-grain and lighter bullets. Zesty charges will generate between 3,000 and 3,100 fps. However, my much-loved H1000 is nearly as good as it gets with 168-grain bullets (which is a rather magic weight in the 7mm), producing north of 3,000 fps in 24-inch barrels.

When stepping up to the heavies that the 7mm PRC is so incredible with, Ramshot Grand, Accurate MagPro, and Hodgdon Retumbo rule. And if you really want projectile weight, push Berger 195-grain EOLs over Ramshot Grand (you can achieve 2,900 fps with a 24-inch barrel).



The 7mm PRC is the most versatile of the three cartridges and very well might be the most versatile all-around Western hunting cartridge available. A few of the author's favorite component bullets for it are (left to right) Hornady 150-grain CX, Hornady 160-grain CX, Hornady 175-grain ELD-X, and Hornady 180-grain ELD Match.



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300 PRC

BORN: 2019 Type: Full-length magnum

When you want to turn a bull elk's knees to jelly or tip over a bull moose with profound effect, this is your PRC. It's the freight train of modern cartridges.

Engineered to fire bullets weighing from 190 to 250 grains, the 300 PRC is potent in all ways. It's good at extreme ranges. It absolutely wallops game, both close and far away. It kicks hard and clobbers shooters, too, thanks to the very heavy bullets it fires. Most 300 PRC shooters tame their rifles with muzzle brakes or suppressors.

Since I believe there's no such thing as overkill (you can't kill an animal too dead), I'd use the 300 PRC on pronghorn antelopes, Coues deer, and small Southern whitetails without hesitation. However, it really comes into its own on elk-size game and bigger. The 7mm PRC is good at dropping elk, but the 300 PRC is *great* at taking elk. A professional elk guide acquaintance of mine keeps a custom 300 PRC in his truck, ready to loan to clients who can't get the job done with their own rifle. His rifle has a good suppressor on the muzzle and is easy to shoot well. It's turned a lot of elk into steaks and roasts. If I were an Alaskan or Canadian resident and hunted moose and grizzlies regularly, of the three PRCs, this is by far the best choice.

Hornady's factory ammo utilizes a 190-grain CX in the Outfitter line, a 212-grain ELD-X in the



The 300 PRC is the sledgehammer of the three, just right for big-bodied big game. And as Joseph found out, it's not too much for African plains game, either.



Precision Hunter line, and a 225-grain ELD Match in the target line. All are terrific loads, but handloaders have a vast spectrum of great projectiles to choose from. A personal favorite is Barnes's 208-grain LRX, which features state-of-the-art engineering for best-in-class aerodynamics among monometal bullets. I load it over H1000 and get near-half-MOA accuracy in a 6.75-pound (with scope) Proof Research Glacier Ti rifle.

According to Hodgdon's data, 150-grain bullets, such as Swift's Scirocco II, can be driven to more than 3,400 fps using Ramshot Grand powder. That's pretty spicy and should turn out a deer's lights like flipping a switch. I've never tried light-for-caliber bullets in the 300 PRC because when I'm hunting with mine I want all the heavy magnum performance I can get—and that means picking heavy bullets.

If speed is your end goal, projectiles in the 180- to 190-grain range are best matched with slow-burning double-based propellants like Ramshot LRT, Grand, and Magnum. These should produce 3,000 to 3,150 fps.

Although you give up a bit of pure speed, Hodgdon's Extreme powders, including H1000 and Retumbo, are perhaps a bit easier to tune for accuracy—at least in my experience.

With proper heavy-for-caliber bullets ranging from 200 to 230 grains, opt for H1000, Retumbo, Grand, and Winchester StaBALL HD. They should generate 2,800 to 2,900 fps in a 24-inch barrel, depending on bullet weight.

For the extreme-weight 245- and 250-grain .30-caliber bullets, try US 869, Grand, and StaBALL HD.

You may have noted that all three PRC cartridges like the same propellants, and they are in that medium-slow to slow burn rate category that's so good at achieving excellent velocity along with first-rate accuracy in efficient magnum cartridges. This little fact makes it really easy for a handloader set up for one PRC to readily adopt another PRC.

Although each of the three PRC cartridges is distinctly different in what they're good at, they all share certain characteristics. They're well-balanced and are optimized for long range. In order to accomplish this, they're designed for fast-twist rifling and feature plentiful head height and minimum chamber tolerances. Plus, they are reasonably efficient.

Whether in long-range competition, or shooting elk across a canyon, or walloping a distant whitetail, or just ringing long-distance steel gongs, the three PRC cartridges are simply incredible.

PRC LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (F.P.S.)	E.S. (F.P.S.)	S.D. (F.P.S.)	100-YD. ACC. (IN.)
6.5 PRC, 22-in. Barrel									
Lapua	Fed. GM210M	Grand	59.0	Hornady 147-gr. ELD-M	3.020	2791	23	9	0.56
6.5 PRC, 24-in. Barrel									
Hornady	CCI LR BR-2	IMR 7828SC	55.0	Swift 130-gr. Scirocco II	2.915	3084	45	13	0.97
Hornady	CCI LR BR-2	H1000	58.3	Berger 140-gr. VLD-H	2.985	3058	54	21	0.38
Hornady	CCI LR BR-2	H1000	57.0	Swift 140-gr. A-Frame	2.780	2966	62	19	1.28
Hornady	CCI LR BR-2	H1000	56.5	Sierra 142-gr. MatchKing	2.975	3064	61	28	0.83
Hornady	CCI LR BR-2	H1000	57.5	Hornady 147-gr. ELD-M	2.985	3008	14	6	0.41
7mm PRC, 20-in. Barrel									
Hornady	Fed. GM215M	H1000	72.0	Hornady 150-gr. CX	3.210	3054	9	4	0.67
Hornady	Fed. GM215M	H1000	67.5	Hornady 175-gr. ELD-X	3.350	2794	38	14	0.74
Hornady	Fed. GM215M	H1000	70.0	Hornady 180-gr. ELD Match	3.375	2895	11	6	0.42
7mm PRC, 22-in. Barrel									
Hornady	Fed. GM215M	Grand	69.0	Barnes 168-gr. LRX	3.260	2852	28	11	0.65
Hornady	Fed. GM215M	MagPro	68.0	Nosler 175-gr. Partition	3.240	2810	29	9	0.53
Hornady	Fed. GM215M	MagPro	70.0	Nosler 175-gr. Partition	3.240	2935	38	12	0.91
Hornady	Fed. GM215M	MagPro	68.0	Berger 180-gr. VLD Hunting	3.330	2745	40	14	0.50
Hornady	Fed. GM215M	MagPro	71.0	Berger 180-gr. VLD Hunting	3.330	2920	39	14	1.19
300 PRC, 24-in. Barrel									
Hornady	Fed. GM215M	H1000	83.0	Barnes 175-gr. LRX	3.550	3212	38	13	0.69
Hornady	Fed. GM215M	H1000	79.0	Barnes 200-gr. LRX	3.550	3007	22	7	0.43
Hornady	Fed. GM215M	H1000	79.0	Federal 200-gr. Terminal Ascent	3.550	3022	16	5	0.71
Hornady	Fed. GM215M	IMR 8133	81.5	Federal 200-gr. Terminal Ascent	3.570	2971	30	13	0.75
Hornady	Fed. GM215M	H1000	78.0	Nosler 200-gr. AccuBond	3.550	2905	44	13	0.64
Lapua	Fed. GM215M	Grand	80.5	Berger 205-gr. Elite Hunter	3.550	2858	50	22	1.07
Hornady	Fed. GM215M	H1000	78.0	Barnes 208-gr. LRX	3.750	2946	35	12	0.55
Hornady	Fed. GM215M	Retumbo	82.0	Sierra 210-gr. MatchKing	3.650	3019	14	6	0.86
Hornady	Fed. GM215M	H1000	79.0	Hornady 212-gr. ELD-X	3.690	2968	17	8	1.00
Hornady	Fed. GM215M	H1000	79.0	Hornady 225-gr. ELD Match	3.690	2892	18	6	0.66

NOTES: Accuracy is the average of three, three-shot groups fired from a bipod. Velocity is the average of 10 rounds measured 12 feet from the guns' muzzles using a LabRadar. Ambient temperature: 65 to 80 degrees Fahrenheit. Elevation: 5,050 feet.

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AN IDEA THAT BECAME AN INDUSTRY



RCBS was founded in 1943 by dedicated shooter Fred T. Huntington. Frustrated with the lack of quality varmint bullets available, he began to craft his own dies to swage .22 rimfire cartridge cases to form bullet jackets. He slowly perfected the design until it evolved into a product he could stand behind: the Rock Chuck Bullet Swage die, or RCBS.

By 1958, Fred's idea was a full-time business, with operations that had grown into a 50,000-square-foot factory and expanded to include a broader product line.

More than 80 years later, the RCBS name still stands for unmatched quality and accuracy, with an expansive product line that spans from industry-leading dies and reloading presses to the world's most advanced powder dispensers.

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RELOADING DATA

Introduction

RIFLE/PISTOL

At the time of this writing, the new Hodgdon *Annual Manual* represents the most complete and up-to-date listing of loading data available. All data are arranged with bullets from lightest to heaviest and powders listed with burning rates from slowest to fastest for quick and easy use. Each cartridge is conveniently indexed for rapid location.

Primarily, the data for this edition were developed through the use of pressure barrels. All loads for standard U.S. cartridges adhere to the guidelines provided by the Sporting Arms and Ammunition Manufacturers' Institute (S.A.A.M.I.). Maximum loads for wildcat cartridges and cartridges not covered by S.A.A.M.I. were obtained by visual case-head signs, such as flat or cratered primers, difficult extraction and measured case heads.

Pressures were gauged by one of two methods: mechanically with Copper Units of Pressure (CUP) or electronically with a transducer as Pounds per Square Inch (PSI). CUP is determined by using a copper slug called a "crusher." The crusher is placed in a fixture over the chamber where a hole passes through the barrel to the chamber. When the cartridge is fired, gases swell and cause the crusher to flatten. The results are compared to a Tarage Table and converted to pressure in CUP. The electronic method utilizes a force transducer, which rests against the cartridge in the chamber. When the cartridge is fired, the gases cause the brass to expand against the force transducer, and the results are measured in pounds per square inch (PSI). The two systems do not provide the same maximum number for each cartridge, so no correlation can be made between the systems. However, each cartridge has a standard for both systems, and therefore, actual maximums are physically the same.

WHEN WORKING UP A LOAD, THE RELOADER SHOULD ALWAYS BEGIN WITH THE STARTING LOAD, ADVANCE IN SMALL INCREMENTS, WATCH FOR PRESSURE SIGNS AND BEGIN AGAIN IF CHANGING COMPONENTS. Generally, the best powder choice is the powder that most nearly fills the case for the intended velocity. Most cartridges have only a certain number of appropriate powders. Those cartridges that are more versatile can use a wider range of burning speeds. For others, lesser numbers of propellants will give optimum results.

Most often, slower-burning powders are more suitable with heavy bullets, while faster powders are better with lighter bullets. Of course, most reloaders like a powder that delivers near-maximum or maximum results throughout the range of bullets, but that is not always obtainable, since some cartridges (like the 30-06) have too wide a range of bullets for any one burning rate to be ideal.

The reloader who seriously loads for any given rifle/pistol will choose different components (primers, powders, bullets, cases) in varying combinations to obtain the best overall performance and accuracy. After all, the reloader reloads to save money, but he also reloads to improve accuracy and performance, creating special loads he cannot find on the dealers' shelves.

Powder Usage

SHOTGUN

	TARGET				LIGHT FIELD					HEAVY FIELD					
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
Hodgdon Smokeless Propellant															
Clays	•				•										
Perfect Pattern	•				•										
Titewad	•				•										
Hi-Skor 700-X	•				•	•									
International	•	•			•		•								
High Gun	•				•										
Titegroup	•				•										
Universal	•	•	•		•	•	•	•							
HS-6			•			•	•	•			•				
Longshot	•	•	•							•	•	•	•	•	
H110				•					•						•
Lil' Gun				•					•					•	•
IMR Smokeless Propellant															
IMR 4227				•					•						•
Winchester Smokeless Propellant															
WST	•				•										
Super Handicap	•				•										
WSF	•	•			•	•					•				
572		•	•		•	•	•	•			•	•	•	•	
296				•					•						•
Accurate Smokeless Propellant															
Nitro 100 NF	•														
Ramshot Smokeless Propellant															
Competition	•				•										

PISTOL

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
Hodgdon Smokeless Propellant				
Clays	•	•		
Hi-Skor 700-X	•	•		
Titegroup	•	•		
Trail Boss	•	•		
Universal	•	•	•	
HS-6		•	•	
CFE Pistol	•	•	•	•
H110			•	•
Lil' Gun			•	•
IMR Smokeless Propellant				
IMR 4227			•	•
Winchester Smokeless Propellant				
WST	•	•		
AutoComp	•	•	•	
WSF	•	•		
231	•	•	•	
244	•	•	•	
572	•	•	•	
296			•	•
Accurate Smokeless Propellant				
Accurate No. 2	•	•	•	
Accurate No. 5		•	•	
Accurate No. 7	•	•	•	
Accurate TCM		•	•	•
Accurate No. 9			•	•
Accurate No. 11 FS			•	•
Ramshot Smokeless Propellant				
Silhouette	•	•		
True Blue	•	•		
Zip	•	•	•	
Enforcer			•	•

RIFLE	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL
Hodgdon Smokeless Propellant						
Trail Boss	•		•			
Lil' Gun			•			
CFE BLK	•		•			
H4198	•		•			
H322	•	•	•	•		
Benchmark	•	•	•	•		
H335	•	•	•	•		
H4895	•	•	•	•		
Varget	•	•	•	•		
BL-(C)2	•	•	•	•		
CFE 223	•	•	•	•		
LEVERevolution	•	•	•	•		
H380		•		•		
H4350		•	•	•		
Hybrid 100V		•	•	•	•	
H4831				•	•	
H4831SC				•	•	
Superformance				•	•	
H1000				•	•	
Retumbo					•	
US869					•	•
H50BMG					•	•
IMR Smokeless Propellant						
IMR 4227			•			
IMR 4198	•		•			
IMR 3031	•	•	•	•		
IMR 8208 XBR	•	•	•	•		
IMR 4895	•	•	•	•		
IMR 4166	•	•	•	•		
IMR 4064	•	•	•	•		
IMR 4350		•		•	•	
IMR 4451		•		•	•	
IMR 4831				•	•	
IMR 4955				•	•	
IMR 7828 SSC				•	•	
IMR 7977				•	•	
IMR 8133					•	
Winchester Smokeless Propellant						
748	•	•	•	•		
StaBALL Match	•	•	•			
760		•		•	•	
StaBALL 6.5	•	•		•	•	
StaBALL HD				•	•	
Accurate Smokeless Propellant						
Accurate 5744	•		•	•		
Accurate 1680	•		•			
Accurate LT-30	•	•	•			
Accurate 2200	•		•			
Accurate LT-32	•	•	•			
Accurate 2015	•	•	•	•		
Accurate 2230	•	•	•	•		
Accurate 2460	•	•	•	•		
Accurate 2495	•	•	•	•		
Accurate 4064	•	•	•	•		
Accurate 2520	•	•	•	•		
Accurate 2700		•		•	•	
Accurate 4350		•		•	•	
Accurate MagPro				•	•	
Ramshot Smokeless Propellant						
X-Terminator	•	•	•	•		
TAC	•	•	•	•		
Big Game		•		•	•	
Hunter				•	•	
Grand				•	•	
Magnum			•	•	•	
LRT					•	•

RELATIVE BURN RATES FROM FASTEST TO SLOWEST

1 NORMA R1
2 VihtaVuori N310
3 Alliant Extra-Lite
4 Accurate Nitro 100 NF
5 Alliant E3
6 Hodgdon Perfect Pattern
7 Hodgdon Titewad
8 Ramshot Competition
9 Alliant Red Dot
10 Alliant Promo
11 Hodgdon Clays
12 Alliant Clay Dot
13 Hodgdon Hi-Skor 700-X
14 Alliant Bullseye
15 Alliant Sport Pistol
16 Hodgdon High Gun
17 Hodgdon Titegroup
18 Alliant American Select
19 Accurate Solo 1000
20 Alliant Green Dot
21 Winchester WST
22 Hodgdon Trail Boss
23 Winchester Super Handicap
24 Hodgdon INTERNATIONAL
25 VihtaVuori N320
26 Accurate No.2
27 Ramshot Zip
28 Hodgdon HP-38
29 Winchester 231
30 Alliant 20/28
31 Vihtavuori N32C - Tin Star
32 Winchester 244
33 Alliant Unique
34 Hodgdon UNIVERSAL
35 Alliant Power Pistol
36 Vihtavuori N330
37 Alliant Herco
38 Winchester WSF
39 VihtaVuori N340
40 Alliant BE-86
41 Accurate No. 5
42 Hodgdon HS-6
43 Winchester AutoComp
44 Hodgdon CFE Pistol
45 Ramshot True Blue
46 Ramshot Silhouette
47 VihtaVuori 3N37
48 VihtaVuori N350
49 VihtaVuori 3N38
50 Winchester 572
51 Alliant Blue Dot
52 Accurate No. 7
53 Alliant Pro Reach
54 Hodgdon LONGSHOT
55 Alliant 410
56 Accurate TCM
57 Alliant 2400
58 Ramshot Enforcer
59 VihtaVuori N105
60 Accurate No. 9
61 Accurate 4100
62 Alliant Steel
63 NORMA R123
64 VihtaVuori N110
65 Hodgdon LIL' GUN
66 Hodgdon H110
67 Winchester 296
68 Accurate No. 11 FS
69 IMR 4227
70 Alliant Power Pro 300-MP
71 Accurate 5744
72 Accurate 1680
73 Accurate LT-30
74 Hodgdon CFE BLK
75 NORMA 200
76 Accurate 2200
77 Alliant Reloder 7
78 Accurate LT-32
79 IMR 4198
80 Hodgdon H4198
81 VihtaVuori N120
82 NORMA 201
83 Alliant Power Pro 1200-R
84 VihtaVuori N130
85 Hodgdon H322
86 Accurate 2015BR
87 Alliant Reloder 10X
88 IMR 3031
89 VihtaVuori N133
90 Hodgdon BENCHMARK
91 Hodgdon H335
92 Ramshot X-Terminator
93 Accurate 2230
94 Accurate 2460
95 IMR 8208 XBR
96 Alliant AR Comp
97 Ramshot TAC
98 Alliant Power Pro Varmint
99 Hodgdon H4895
100 VihtaVuori N530
101 IMR 4895
102 VihtaVuori N135
103 Alliant Reloder 12
104 Accurate 2495
105 IMR 4166
106 IMR 4064
107 NORMA 202
108 Accurate 4064
109 Accurate 2520
110 Alliant Reloder 15
111 NORMA 203B
112 VihtaVuori N140
113 Hodgdon VARGET
114 Winchester 748
115 Winchester StaBALL Match
116 Hodgdon BL-C(2)
117 VihtaVuori N540
118 Hodgdon CFE 223
119 Alliant Reloder 15.5
120 Alliant Power Pro 2000-MR
121 Hodgdon LEVERevolution
122 Hodgdon H380
123 Ramshot Big Game
124 VihtaVuori N150
125 Alliant Power Pro 4000-MR
126 Winchester 760
127 Accurate 2700
128 NORMA URP
129 VihtaVuori N550
130 IMR 4350
131 IMR 4451
132 Alliant Reloder 16
133 Hodgdon H4350
134 Alliant Reloder 17
135 Accurate 4350
136 NORMA 204
137 Hodgdon HYBRID 100V
138 Winchester StaBALL 6.5
139 Hodgdon SUPERFORMANCE
140 Alliant Reloder 19
141 IMR 4831
142 Ramshot Hunter
143 VihtaVuori N160
144 VihtaVuori N555
145 NORMA 205
146 Hodgdon H4831 & H4831SC
147 VihtaVuori N560
148 IMR 4955
149 NORMA MRP
150 Alliant Reloder 22
151 NORMA MRP2
152 Alliant Reloder 23
153 VihtaVuori N165
154 IMR 7828SC
155 Alliant Reloder 25
156 VihtaVuori N565
157 VihtaVuori N170
158 Accurate Magpro
159 IMR 7977
160 Alliant Reloder 26
161 Hodgdon H1000
162 Ramshot Grand
163 Ramshot Magnum
164 NORMA 217
165 Hodgdon Retumbo
166 Winchester StaBALL HD
167 IMR 8133
168 VihtaVuori N568
169 Ramshot LRT
170 VihtaVuori N570
171 Alliant Reloder 33
172 VihtaVuori 24N41
173 Hodgdon H50BMG
174 Hodgdon US869
175 Alliant Reloder 50
176 VihtaVuori 20N29

HODGDON Smokeless Pistol and Shotgun Powders

In Order of Approximate Burn Rate



PERFECT PATTERN® is a fast-burning, flattened spherical shotshell powder designed for light and extra-light field and target loads for the 12-ga. shotgun. Its geometry and density result in excellent ignition, superb metering, and low charge weights that deliver consistent patterns with mild report and low recoil.



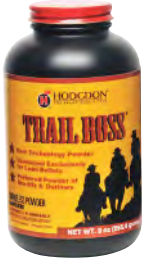
TITEWAD®, a superior flattened, spherical shotgun powder, features low charge weights, mild muzzle report, minimum recoil, and reduced residue for optimum ballistic performance. This outstanding 12-ga. propellant meters superbly and is ideal for 7/8-, 1-, and 1⅛-oz. loads. As the name implies, "a little goes a long way!"



CLAYS® Clean-burning and consistent, Clays offers 12-ga. loads in 7/8 oz., 1 oz., and 1⅛ oz. Clays produces soft, smooth recoil with a mild muzzle report and excellent patterns. These features transfer directly to handgun applications where target shooting is the main goal. In 45 ACP and 38 Special, Clays provides "tack-driving" target accuracy with flawless functioning.



Hi-Skor 700-X™ This extruded flake powder is ideally suited for shotshells in 12 and 16 ga. where clay target and light field loads are the norm. It doubles as an excellent pistol target powder for such cartridges as the 38 Special and 45 ACP and many more.



TRAIL BOSS® was designed specifically for low-velocity lead bullets suitable for Cowboy Action shooting. Based on technology that allows very high loading density, good flow through powder measures, temperature stability, and, most importantly, additional safety to the handloader.



INTERNATIONAL® is positioned in burning speed to accommodate 12-ga., 2¾" light, medium, and heavy 1⅛-oz. loads, with some very nice 1-oz. listings. Also, it works splendidly in 20-ga. 7/8-oz. target and light field loads. With International, clean burning and flawless function are the rule.



HIGH GUN™ is a flattened, spherical shotshell powder designed for light-target, handicap, and super handicap loads in 12-ga. shotgun. Able to closely duplicate Remington's Nitro 27 factory loads, High Gun's geometry results in a powder that meters consistently, has excellent ignition, and burns clean enough to throw uniform patterns clay after clay.



TITEGROUP® Designed for accuracy, Titegroup has it all: low charge weight; mild muzzle report; and superb, uniform ballistics. Titegroup provides flawless ignition with all types of primers—including lead-free versions. If you are loading for pistol, you want to load with Titegroup.



HP-38® is a spherical pistol powder that is great for low-velocity and midrange target loads in 38 Special, 44 Special, and 45 ACP. This high-energy powder provides economy in loading.



UNIVERSAL® handles the broadest spectrum of cartridges for pistols and shotguns. From the 25 ACP to the 44 Magnum, Universal provides outstanding performance. In shotgun, it produces excellent loads in 28 ga. 3/4 oz., 20 ga. 7/8 oz., 16 ga. 1 oz., and even 12 ga. 1¼ oz. Clean and uniform are part of its attributes.

HODGDON Smokeless Pistol and Shotgun Powders (Continued)

In Order of Approximate Burn Rate



CFE™ Pistol is an excellent spherical pistol propellant that utilizes our CFE (Copper Fouling Eraser) formula that virtually eliminates copper fouling. It provides top velocities while being clean burning and producing minimal muzzle flash. CFE Pistol provides optimal performance in cartridges like the 9mm Luger, 38 Super, 40 S&W, the venerable 45 ACP, and many more.



HS-6® is a spherical propellant that has wide applications in pistol and shotshell. In pistol, 9mm Luger, 38 Super, 40 S&W, and 10mm Auto are some of the cartridges where HS-6 shines. In shotshell, HS-6 offers excellent heavy field loadings in 10 ga., 12 ga., 16 ga., 20 ga., and even the efficient and effective 28 ga. HS-6 is truly an outstanding propellant.



LONGSHOT® This spherical shotshell powder is the most versatile heavy field propellant Hodgdon has ever produced. Great field loads are available in 10 ga., 12 ga., 16 ga., 20 ga., and 28 ga. Providing true magnum velocities with superb patterns, Longshot is the best choice for competitors shooting "race" games, including "Buddy" shoots, "Annie Oakleys," and more.



H110® delivers top velocities with top accuracy in the 44 Magnum, 454 Casull, and 475 Linebaugh. In addition, H110 is the choice for the miniscule 410 Bore shotgun. It handles all 2½" 1/2-oz. loads as well as all 1$^{1}/_{16}$-oz. loads for the 3" version.



LIL' GUN® was designed to fit, meter, and perform flawlessly in the 410 Bore shotgun. No more spilled shot or bulged cases. In addition, Lil' Gun has many magnum pistol applications and is superb in the 22 Hornet.

HODGDON Smokeless Rifle Powders

In Order of Approximate Burn Rate

» EXTREME POWDERS



CFE BLK™ With CFE (Copper Fouling Eraser) in its formula, CFE BLK was designed for the 300 AAC Blackout and is the powder of choice for AR-type rifles and subsonic loads. In addition to the 300 Blackout, it performs beautifully in many smaller-capacity cartridges like the 17 Hornet,17 Ackley Hornet, 218 Bee, 221 Fireball, and many more. It's also a top performer in the 6.8 Remington SPC and the 7.62x39mm Russian cartridge. With no copper residue, this powder extends range trips and makes cleanup quick and easy.



» **H4198™** An Extreme Extruded propellant, H4198 has shortened kernels for improved metering and necessary elements to make it extremely insensitive to hot/cold temperatures. H4198 is outstanding in cartridges like the 222 Remington, 444 Marlin, and 7.62x39.



» **H322®** This Extreme Extruded powder has won more benchrest matches than all other propellants combined. It provides match-grade accuracy in small- and medium-capacity cartridges like the 223 Remington, 6mm PPC, and 7mm TCU. As a fine extruded powder, it flows through powder measures with superb accuracy.



» **BENCHMARK®** As the name implies, this Extreme Extruded propellant was developed for benchrest and small varmint cartridges like the 6mm PPC, 22 PPC, 6mm BR, 22 BR, 223 Remington, and 222 Remington. It performs superbly in the 308 Winchester with match bullets in the 147-gr. to 155-gr. range. Because of its small, easy-metering granules, competitors will love how it flows through progressive presses.

HODGDON Smokeless Rifle Powders (Continued)

In Order of Approximate Burn Rate



H335® Originating as a military powder, H335 was designed for the 5.56 NATO and 223 Remington cartridges. Obviously, it sees endless use in the 222 Remington, 223 Remington, and other small cartridges. In particular, prairie dog shooters will find this a favorite, as J.B. Hodgdon has for years!



» **H4895**®, a member of the Extreme Extruded line, is a great, versatile powder for 17 Remington, 250-3000 Savage, 308 Winchester, and 458 Winchester, to name just a few. It is amazingly accurate in every cartridge where it is listed in our data. It had its origin in the 30-06 as a military powder and was the first powder Bruce Hodgdon sold to the loading public.



» **VARGET**® The first Hodgdon Extreme Powder, Varget features small, extruded grains for uniform metering, temperature stability, and high energy for improved velocities. Easy ignition and clean burning are other features that translate into superb accuracy, high scores, and more one-shot kills. Outstanding performance and velocity can be obtained in cartridges from 223 Remington all the way up through 30-06 Springfield.



BL-C(2)® is a spherical powder that began as a military powder used in the 7.62 NATO. When the powder was first introduced to the handloader, benchrest and other target shooters made it an instant success. BL-C(2) works extremely well in the 223 Remington, 17 Remington, 22 PPC, and, of course, the 308 Winchester.



CFE™ 223 is a versatile spherical rifle propellant that incorporates CFE (Copper Fouling Eraser) in its formula. Originally used in military propellant, this additive greatly reduces copper fouling and contributes to longer periods of accuracy with less barrel cleaning time. Being a spherical powder, metering is superbly accurate. CFE 223 yields top velocities in cartridges such as the 204 Ruger, 223 Remington, 22-250 Remington, and 308 Winchester.



LEVEREVOLUTION® Hodgdon® Powder Company and Hornady® Manufacturing worked together to provide the spherical propellant used in Hornady's LEVERevolution factory ammunition. This propellant meters flawlessly and makes lever-action cartridges like the 30-30 Winchester yield velocities in excess of 100 fps over any published handloads. Other cartridges include the 35 Remington, 338 Marlin Express, and 25-35 Winchester.



H380® was an unnamed spherical rifle propellant when the late Bruce Hodgdon first used it. A 38-gr. charge behind a 52-gr. bullet gave one-hole groups from his 22-caliber wildcat (now called 22-250). He appropriately named the powder H380. H380 is also a superb performer in the 220 Swift, 243 Win., 257 Roberts, and other fine varmint cartridges.



» **H4350**™ The burn speed of this Extreme Extruded propellant has been a favorite of shooters for decades. Hodgdon has modernized H4350 by shortening the grains for improved metering and made it insensitive to hot/cold temperatures. H4350 excels in the 6.5 Creedmoor and is also great in cartridges like 243 Winchester and 270 Winchester.



HYBRID 100V™ Combining the chemistry of a spherical propellant with the geometry of an extruded propellant, Hybrid 100V is a smooth-metering, short-grained, extruded-shaped propellant with high energy. With a burn speed between H4350 and H4831, Hybrid 100V performs in calibers such as 270 Winchester, 7mm Remington Magnum, and 300 Winchester Magnum.



» **H4831**® Bruce Hodgdon introduced this popular powder in 1950. Since that time, it has become a favorite for cartridges such as the 270 Winchester, 25-06 Remington, and 300 Winchester Magnum. As an Extreme Extruded propellant, it is temperature stable and has excellent lot-to-lot consistency.

HODGDON Smokeless Rifle Powders (Continued)

In Order of Approximate Burn Rate



» **H4831SC®** Ballistically an exact copy of H4831, physically, H4831SC has a shorter grain size. The short, compact kernels allow the powder to flow through powder measures more smoothly. This characteristic allows more uniform charge weights while the individual grains orient more compactly, creating better loading density.



SUPERFORMANCE™® Hodgdon® Powder Company and Hornady® teamed together to bring Superformance to the handloader. Superformance delivers excellent velocities in cartridges like the 22-250 Remington, 243 Winchester, and 300 Winchester Short Magnum. Velocities 100 fps over the best published handloads and even larger gains over factory ammunition are possible. Superformance is tailored for specific applications, but where it works, it really works!



» **H1000®** This very slow-burning Extreme Extruded powder is perfect for over-bored magnums like the 7mm Remington Magnum, 7mm STW, and the 30-378 Weatherby. In addition, H1000 gives top velocity and performance with heavy bullets in cartridges such as the 6mm-284, 257 Weatherby, 270 Winchester, and 300 Winchester Magnum.



» **RETUMBO®** This magnum powder was designed expressly for large, over-bored, magnum cartridges, such as the 7mm Remington Ultra Mag, 300 Remington Ultra Magnum, 30-378 Weatherby Magnum, etc. Retumbo adds 40 to 100 fps more velocity to these cartridges when compared with other normal magnum powders. In addition, it is an Extreme Extruded powder, making it perfect for big-game hunting under all types of conditions.



US869™ This spherical powder is superb with heavy bullets in big, over-bored, magnum rifle cartridges. Because it is very dense, it allows the shooter to use enough powder to create true magnum loads. US869 is used in the 50-caliber 50BMG, where it yields high velocities and great accuracy with 750- to 800-grain projectiles. It's a truly great 1,000-yard competition propellant.



» **H50BMG™** is a clean-burning, Extreme Extruded rifle propellant that is designed expressly for the 50-caliber 50BMG cartridge. H50BMG displays a high degree of thermal stability in temperature extremes and yields very low extreme spreads in velocity and pressure.

IMR Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate



IMR 4227™ is the magnum pistol powder in the IMR lineup. If it says magnum, IMR 4227 is the choice for true magnum velocities and performance. In rifles, this powder delivers excellent velocity and accuracy in such cartridges as the 22 Hornet and 221 Fireball.

IMR Smokeless Rifle Powders

In Order of Approximate Burning Rate



IMR 4198™ This fast-burning rifle powder gives outstanding performance in cartridges like the 222 Remington, 221 Fireball, 45-70, and 450 Marlin. Varmint shooters with smallbore cartridges love it.



IMR 3031™ A propellant with many uses, IMR 3031 has long been a favorite of 308 Match shooters using 168-grain match bullets. It is equally effective in small-capacity varmint cartridges from 223 Remington to 22-250 Remington, and it's a great 30-30 Winchester powder.



IMR 8208 XBR™ This super-short-grained extruded rifle powder meters precisely and was designed expressly for match, varmint, and MR-based cartridges. It excels in cartridges such as the 223 Remington, 308 Winchester, and 6mm PPC, and shooters will find IMR 8208 XBR insensitive to changes in temperature while yielding maximum velocities and "tack-driving" accuracy.



IMR 4895™ Originally a military powder featured in the 30-06, IMR 4895 is extremely versatile. From the 17 Remington to the 243 Winchester to the 375 H&H Magnum, accuracy and performance are excellent. In addition, it is a longtime favorite of Match shooters.



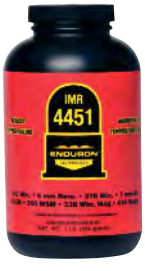
IMR 4166® is the first in the Enduron® Technology series of powders and is a fine, extruded type propellant. The Enduron® series features copper fouling eliminator, insensitivity to temperature, ideal loading density, and being environmentally friendly. IMR 4166 is the perfect burn speed for cartridges like the 308 Win., 22-250 Remington, 257 Roberts, and dozens more.



IMR 4064® is the most versatile propellant in the IMR spectrum—223 Remington, 22-250 Remington, 220 Swift, 6mm Remington, 243 Winchester Super Short Magnum, 308 Winchester, 338 Winchester Magnum, and the list goes on and on. It offers versatility with uniformity and accuracy.



IMR 4350™ is the number one choice for the short magnums—both Remington and Winchester versions. For magnums with light to medium bullet weights, IMR 4350 is the best choice.



IMR 4451® An Enduron® extruded powder, IMR 4451 gives temperature insensitivity with minimal copper fouling and top performance in the 30-06, 270 Winchester, and 300 WSM, to name just a few. It's ideally suited for midrange burn speed cartridges.

IMR Smokeless Rifle Powders (Continued)

In Order of Approximate Burning Rate



IMR 4831™ Slightly slower in burn speed than IMR 4350, IMR 4831 gives top velocities and performance with heavier bullets in medium-size magnums.



IMR 4955® This extruded Enduron® propellant features copper fouling eliminator, insensitivity to temperature change, and an ideal loading density, all while being environmentally friendly. Falling directly between IMR 4451 and IMR 7977 in burn speed, IMR 4955 provides top performance in all such cartridges used for big game.



IMR 7828 SSC™ This magnum rifle powder has the same burn rate as standard IMR 7828 and uses the same data. With super-short kernels, metering is consistent and allows up to 4 percent more powder space in the case. Many loads yield higher velocities than 7828 and are marked with an asterisk in the data to show where standard 7828 will not fit.



IMR 7977® A slower burning Enduron® powder, IMR 7977 is a true magnum cartridge propellant. It yields outstanding performance in cartridges like the 300 Winchester Magnum, 7mm Remington Magnum, 338 Lapua, and a host of others. Loading densities are ideal, filling the case at maximum charges and contributing to superb uniformity and accuracy.



IMR 8133® The slowest burning IMR Enduron® powder, IMR 8133 was designed to provide optimal performance in large, over-bored cartridges like the 300 RUM, 6.5mm-300 Weatherby Magnum, 28 Nosler, and a host of other large-capacity magnum cartridges. It provides excellent loading density, copper fouling eliminator, and insensitivity to extreme temperature changes, and it is environmentally friendly.

WINCHESTER Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate



WST® is the choice for 12-ga. AA duplicate handloads and standard-velocity handgun loads. It also is ideal for use in 45 Auto match applications. Consistency, clean burn, low flash, and less smoke are benefits to the shooter.



231® One of the most popular pistol propellants, 231 is ideally suited to the 38 Special, 45 Auto, and 9mm standard loads. Consistency, clean burn, low flash, and a broad range of applications make this a powder of choice for any pistol cartridge reloader.



SUPER HANDICAP™ Super Handicap is the same propellant used in Winchester's Super Handicap ammunition. This slow-burning, high-energy propellant gives the shooter great handicap or long-range sporting clays loads up to 1,250 fps with a 1⅛-oz. shot charge. Great velocity with excellent patterns!



244™ This Winchester powder has all the features of a great midrange burn speed propellant that works in pistol and shotgun. Winchester 244 Ball powder is a WINCLEAN® product that features reduced copper fouling that burns clean and meters precisely. The versatility of this fine powder can be seen in 9mm Luger, 45 ACP, and many 12-ga. target loads. From plinking to targets to clays, 244 is a "clean" winner!

WINCHESTER Smokeless Pistol and Shotgun Powders (Continued)

In Order of Approximate Burning Rate



AUTOCOMP™ This new Winchester powder is perfect for compensated target game semiauto pistols. In cartridges such as the 9mm, 38 Super, 40 S&W, and the ever-popular 45 ACP, maximum velocities with excellent accuracy are the norm. All this with reduced muzzle flash and less barrel fouling.



WSF® Super-Field propellant is the propellant of choice for Winchester 20-ga. AA Target loads. WSF is an ideal choice to maximize velocities in 12-ga. 1⅛-oz. and 1¼-oz. loads. Super-Field also performs well in 38 Super, 9mm, and 40 S&W pistol loads. It's an excellent propellant for action pistol applications.



572® A versatile and useful propellant, 572 has the correct burn rate to create the famous 3¼-dram equivalent, 1¼-oz., 1,330-fps 12-ga. load originated by Winchester. 572 also provides superb clay target loads in 20 ga. and 28 ga., top field loads in both, and outstanding field loads for the wonderful 16 ga. 572 has a vast number of pistol applications, from the 25 ACP to the 45 ACP and all popular calibers in between.



296® This propellant was developed for Winchester factory-loaded ammunition for 357 Magnum, 44 Magnum, and 410 Bore shotshell. Its high loading density provides optimal velocity. 296 is recommended by Winchester for 410 Bore AA loads.

WINCHESTER Smokeless Rifle Powders

In Order of Approximate Burning Rate



748® is the powder of choice for 223 Remington ammunition. The low flame temperature of 748 extends barrel life vs. other similar-speed powders. It is ideal for a wide variety of centerfire rifle loads, including 222 Rem., 30-30 Win., 308 Win., and up to 458 Win. Mag.



StaBALL™ Match is a temperature-stable, double-base, spherical powder that provides optimal loading density in cartridges ranging from 223 Remington to 30-06 Springfield. Handloaders can expect precise metering, consistent velocities, and low standard deviations—all ingredients paramount to match-grade accuracy! This REACH-compliant, "environmentally green" propellant has copper fouling reducer additives, which contribute to longer shooting sessions. The StaBALL family provides stability, precision, and speed.



760® Combine Winchester components with 760 to duplicate 30-06 Springfield factory loads. 760 has ideal flow characteristics that give it an advantage over other powders with similar burn rates and is an excellent choice for 22-250 Rem., 300 Win. Mag., and 300 WSM.



StaBALL™ 6.5 is a spherical propellant that is stable in all conditions—hot or cold! Ideal loading densities of 93 to 100 percent in all cartridges appropriate for the burn speed create the perfect condition for small velocity standard deviations. Like all spherical powders, it meters precisely. It provides speed that eclipses all powders in its burn speed class, along with a copper fouling reducing additive. The StaBALL family provides stability, precision, and speed.

WINCHESTER Smokeless Rifle Powders (Continued)

In Order of Approximate Burning Rate



StaBALL™ HD is a temperature-stable, double-base, slow-burning magnum-type spherical powder that provides optimal loading density in large-capacity, magnum cartridges, such as the 6.5 PRC, 7mm Remington Mag., 300 PRC, and many more. Precise metering means consistent charge weights and low standard deviations. This REACH-compliant, "environmentally green" propellant has copper fouling reducer additives, which contribute to longer shooting sessions. The StaBALL family provides stability, precision, and speed.

ACCURATE Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate



ACCURATE Nitro 100 NF® is a fast-burning, flattened spherical, double-base shotshell powder that is a clean-burning, cost-effective choice for all 12-ga. target applications.



ACCURATE No. 2® is an extremely fast-burning, double-base, spherical handgun powder suitable for use in a wide range of handgun calibers. This propellant is not position-sensitive and combines low recoil with low flash, making it an economical and versatile choice for high-volume handgun and subsonic rifle applications.



ACCURATE No. 5® is a fast-burning, double-base, spherical handgun propellant. Extremely versatile and able to be used in many calibers, No. 5 offers a wide performance range from target and Cowboy Action applications to full-power defense loads. No. 5 meters well and strikes a good balance between ballistics and cost efficiency. Made in the USA.



ACCURATE No. 7® is an intermediate-burning, double-base, spherical powder suitable for a wide range of handgun calibers. No. 7 is an excellent choice for high-performance semiauto handguns, such as the 357 Sig, 38 Super, and 40 S&W. No. 7 also is a cost-effective solution in large magnum handgun calibers. Made in the USA.



ACCURATE TCM® Created in 2017 in partnership with Armscor International, TCM is a canister-grade propellant designed for the 22 TCM cartridge. Accurate TCM also has a place with old favorites, with data for hunting loads in 357 Magnum, 41 Magnum, and high-pressure 45 Colt cartridges. Made in the USA.



ACCURATE No. 9® is a double-base, spherical powder that is ideal for high-power loads in traditional magnums, such as the 357, 41, and 44 Magnums. It is particularly well-suited to the 357 Sig and 10mm Auto, combining high velocities with excellent case-fill. No. 9 also can be used with large magnums, such as 460 S&W and 500 S&W, for economical target loads. Made in the USA.



ACCURATE No. 11FS® is intended for full-power loads in magnum handguns and smaller-capacity rifle cartridges with an eye towards personal-defense loads. This double-base spherical propellant incorporates a flash suppressant that substantially reduces muzzle signature in low-light conditions. In the 300 Blackout, No. 11FS is capable of extremely high velocities with lighter bullets, making it the best propellant. Made in the USA.

ACCURATE Smokeless Rifle Powders

In Order of Approximate Burning Rate



ACCURATE 5744® is an extremely fast-burning, double-base, extruded powder. Low bulk density and superior ignition characteristics make 5744 an excellent choice for reduced loads in many rifle calibers and in large-capacity black powder cartridges, such as the 45-70 through 45-120 and 50-90 through 50-120. Made in Canada.



ACCURATE 1680 is an extremely fast-burning, double-base, spherical rifle powder that is well-suited for large-capacity, high-performance handgun cartridges, such as the 454 Casull, 460 S&W, and 500 S&W. 1680 is also an excellent choice for the 22 Hornet,7.62x39, and 300 AAC Blackout. Made in the USA.



ACCURATE LT-30 is the second powder in Accurate's line of benchrest-grade Light Target powders and is optimized for use in the 30 BR cartridge. While still in development, LT-30 was used to win numerous matches—even claiming a world record along the way. With a burn rate similar to H4198, this single-base, fine-grained powder is at home in small-capacity cartridges from the 6.5 Grendel to the 223 Remington.



ACCURATE 2200, a varmint-hunting favorite, is an excellent choice for many cartridges, including the 223 Remington, 6.5 Grendel, and 6.8 SPC. Spherical granules allow precise metering and easy flow through small cartridge necks, making Accurate 2200 ideal for use in progressive loaders.



ACCURATE LT-32® Developed for 6mm PPC benchrest competitors, LT-32 is a proven match winner, offering excellent shot-to-shot consistency and low standard deviations. A small grain size allows LT-32 to flow like a spherical powder and also allows for very precise metering. Outstanding accuracy can be found in varmint and tactical cartridges from the 223 Remington to the 308 Winchester.



ACCURATE 2015® is a fast-burning, single-base, extruded rifle powder that offers excellent ignition and shot-to-shot consistency. It performs exceptionally well in small cartridges like the 204 Ruger and 223 Remington. Accurate 2015 is a popular choice for first-class performance in benchrest calibers and is also recommended for use in large-bore, straight-wall cartridges (45-70, 458 Win. Mag.).



ACCURATE 2230® is a fast-burning, double-base, spherical rifle propellant. This versatile powder was designed around the 223 Remington but can be used in many small- to medium-caliber cartridges up to the 308 Winchester. Accurate 2230 also works well in big-bore, straight-wall cartridges, such as the 458 Winchester. The excellent flow characteristics and grain size of 2230 make it ideal for progressive loading. Made in Belgium.



ACCURATE 2460 is a fast-burning, double-base, spherical rifle powder that is a slower derivative of Accurate 2230 powder. It is suitable for small- and medium-sized caliber applications but with slightly higher loading densities than Accurate 2230. It provides an additional option for shooters to fine tune and optimize loads and combinations with calibers ranging from 223 Remington to 308 Winchester and for light bullets in the 30-06 Springfield. Accurate 2460 is within the threshold limit for M14 systems. Made in the USA.

ACCURATE Smokeless Rifle Powders (Continued)

In Order of Approximate Burning Rate



ACCURATE 2495 is a single-base, extruded rifle powder that was developed for the 308 Winchester and can be used over a wide range of rifle calibers. It is a very popular powder for 308 Win. NRA High Power shooting disciplines, as well as heavy-bullet 223 Remington target applications. Accurate 2495 is a versatile powder with excellent ignition characteristics that provides excellent shot-to-shot consistency. Made in Canada.



ACCURATE 4064® is an intermediate-burning, single-base, short-cut, extruded rifle powder designed around the 30-06 Springfield. This versatile powder works extremely well in calibers such as 22-250, 220 Swift, 243 WSM, 7x57 Mauser, and 325 WSM. Accurate 4064 is the choice for High Power shooters using the M1 Garand. Made in Canada.



ACCURATE 2520 is a medium-burning, double-base, spherical rifle propellant designed around the 308 Winchester. Accurate 2520 is our "Camp Perry" powder and is extremely popular with many service shooters. It also performs extremely well in 223 Remington with heavy match bullets (62 to 80 grains). This versatile powder has superb flow characteristics and is well within the threshold limit for the M14 systems. Made in Belgium.



ACCURATE 2700 is a medium-burning, double-base, spherical rifle powder that is ideally suited for the 30-06 Springfield and other medium-capacity calibers, such as the 22-250 Remington, 220 Swift, and 243 Winchester. Made in the USA.



ACCURATE 4350® is a short-cut, single-base, extruded rifle powder in the extremely popular 4350 burn speed range. A highly versatile powder, Accurate 4350 can be used in a wide range of cartridges, from the popular 243 Winchester to the 338 Winchester Magnum with excellent results. Accurate 4350 is an exceptional choice for 6mm Remington, 270 Winchester, 280 Remington, and 300 WSM. Made in Canada.



ACCURATE MAGPRO is a slow-burning, double-base, spherical rifle powder developed specifically for the short magnums offered by both Winchester (WSM) and Remington (SAUM). This powder excels in the 6.5x284, 270 WSM, and 7mm WSM. It also is an excellent choice for belted cartridges like the 300 Win. Mag. Consistent performance can be expected from the excellent metering properties. Made in the USA.

RAMSHOT Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate



RAMSHOT COMPETITION is an extremely clean-burning powder for 12-ga. target shooters. A double-base, modified (flattened) spherical propellant, it is designed for the 12-ga. competitive clay target shooter who demands a clean-burning powder with low recoil and consistent performance. It is a low bulk density powder that is also well-suited for many low-pressure, low-velocity Cowboy Action loads. Made in the USA.



RAMSHOT SILHOUETTE is the choice for competitive shooters in IPSC, IDPA, and USPSA. A double-base, high-performance, spherical powder, it's an excellent choice for 9mm Luger, 38 Super, 40 S&W, and 45 ACP. Silhouette's low-flash, high-velocity, and clean-burning characteristics make it a perfect choice for indoor ranges and law enforcement applications. Made in the USA.



RAMSHOT TRUE BLUE® is the perfect powder for classic calibers like the 38 Special, 44 Special, and 45 Long Colt. It's a double-base, spherical powder with great metering properties that make it an ideal choice for consistent results with high-volume, progressive reloading equipment. It works well with cast and plated bullets. Made in Belgium.



RAMSHOT ZIP® is a clean-burning, double-base propellant designed for a wide range of handgun calibers. Low charge weights make it the most economical and versatile choice for high-volume shooters, with the added benefits of low recoil, low flash, and minimal residue. 9mm, 40 S&W, and 45 ACP are just a few of the cartridges that are well-matched with this powder. Made in Belgium.



RAMSHOT ENFORCER® is the best choice for high-performance, full-power loads in magnum handgun cartridges. It is ideally suited for the 44 Magnum, 454 Casull, 460 S&W, and 500 S&W. It is a double-base, spherical powder with excellent metering qualities that meets the performance expectations of serious magnum handgun shooters. Made in Belgium.

RAMSHOT Smokeless Rifle Powders

In Order of Approximate Burning Rate



X-TERMINATOR® is a double-base, spherical powder designed for the high-volume 223 varmint hunter who demands a clean-burning, accurate powder. Excellent flow characteristics and small grain size allow trouble-free loading in small-diameter case necks. It performs extremely well with light- to medium-weight bullets in the 223 Remington. It also is an excellent choice for 17 Remington, 222 Remington, and 45-70 Government. Made in Belgium.



TAC® is a double-base, spherical propellant that sets the standard for extreme accuracy and reliability with heavy bullets in the 223 Remington and Match applications in the 308 Winchester. Excellent flow characteristics ensure consistent metering and charge weights for repeatable results with progressive loading equipment. It is the choice for shooters who demand precision and accuracy. Made in Belgium.



RAMSHOT BIG GAME® is the ultimate 30-06 Springfield powder. Outstanding velocities and optimal case-fill result in excellent shot-to-shot consistency. These properties also allow it to outperform the competition in the popular 22-250 Remington and other calibers in this range. It is an extremely clean-burning, double-base, spherical powder with outstanding metering properties. Made in Belgium.



RAMSHOT HUNTER is a double-base, clean-burning, high-performance propellant that's perfect for elk cartridges from the 270 Win. up to the 338 Win. Mag. The excellent flow characteristics allow accurate metering and consistent shot-to-shot results. Made in Belgium.



RAMSHOT GRAND® is a temp-stable, double-base spherical propellant that brings the latest propellant technology to the Ramshot family of powders. With a density tuned for magnum cartridges, Ramshot Grand offers ideal case-fill, which equals low extreme spreads and standard deviations. Top performers include 6.5, 7mm, and 300 PRC, as well as the 7mm Remington Magnum and 300 Winchester Magnum.



RAMSHOT MAGNUM is the ultimate high-performance magnum rifle powder. It provides outstanding performance from the popular 7mm Remington Magnum up to 338 Lapua Magnum. It is a double-base, spherical propellant that is the number one choice for high-performance, overbored magnum cartridges. Made in Belgium.



RAMSHOT LRT® is one of the slowest spherical powders ever developed and was created for high performance at extreme ranges. Designed specifically for the 338 Lapua Magnum using heavy, high-ballistic-coefficient bullets, LRT meters easily and offers high load densities and low standard deviations for superior accuracy.

LEGEND

BRANDS

ACME	Acme	**FA**	Freedom Arms	**SIE**	Sierra
BAR	Barnes	**HDY**	Hornady	**SFT**	Swift
BTB	Beartooth Bullets	**LGH**	Lehigh Defense	**SPR**	Speer
BER	Berger	**LY**	Lyman SPM	**WDLGH**	Woodleigh
BERB	Berry's Bullets	**MEI**	Meister	**WIN**	Winchester
BLX	Bull-X	**NOS**	Nosler	**SFIRE**	SinterFire
CEB	Cutting Edge Bullets	**PLYCS**	Polycase		
CPB	Cast Performance Bullets	**REM**	Remington		

PRIMERS

LR	Large Rifle	**SRM**	Small Rifle Magnum	**SP**	Small Pistol
LRM	Large Rifle Magnum	**LP**	Large Pistol	**SPM**	Small Pistol Magnum
SR	Small Rifle	**LPM**	Large Pistol Magnum		

DATA

C	Compressed Powder Charge

BULLETS

AB	AccuBond	**HB**	Hollow Base	**SCENARL**	Lapua Hollow Point Long Range
ABLR	AccuBond Long Range	**HC**	Hollow Cavity	**SCIR**	Scirocco
AFSP	A-Frame Semi Spitzer	**HP**	Hollow Point	**SJ**	Short Jacket
A-MAX	Hornady Match	**HPBT**	Hollow Point Boat Tail	**SMP**	Semi-Pointed
ARX	Polycase Defense	**HSP**	Hollow Soft Point	**SP**	Soft Point, Spitzer, Spire Point
BK	Blitz King	**IB**	Inter Bond	**SPT**	Spitzer
BR	Bench Rest	**JFP**	Jacketed Flat Point	**SPBT**	Soft Point Boat Tail
BT	Ballistic Tip	**JHC**	Jacketed Hollow Cavity	**SSP**	Single Shot Pistol
BTLF	Ballistic Tip Lead Free	**JRN**	Jacketed Round Nose	**SST**	Super Shock Tip
BTSP	Boat Tail Spire Point	**JSWC**	Jacketed Semi-Wadcutter	**ST**	Silver Tip
CTD	Acme Coated Defense	**LBBWC**	Lead Bevel Base Wadcutter	**SX**	Super Explosive
ELD-M	Extremely Low Drag Match	**LCN**	Lead Conical Nose	**TAC X-BT**	Tactical X Bullet Boat Tail
ELD-X	Extremely Low Drag Expanding	**LF**	Lead Free	**TAC-XP**	Tactical X Pistol
E-TIP	Polymer Tipped Copper Bullet	**LFN**	Lead Flat Nose	**TMJ**	Totally Metal Jacket
FBHP	Flat Base Hollow Point	**LFNPB**	Lead Flat Nose Plain Base	**TMK**	Tipped MatchKing
FBT	Flat Base Tipped	**LFP**	Lead Flat Point	**TNT**	Varmint Bullet
FMC	Full Metal Case	**LHBWC**	Lead Hollow Base Wadcutter	**TSX**	Triple Shock X Bullet
FMJ	Full Metal Jacket	**LRN**	Lead Round Nose	**TTSX**	Tipped Triple Shock X Bullet
FMJBT	Full Metal Jacket Boat Tail	**LSWC**	Lead Semi-Wadcutter	**VG**	Varmint Grenade
FN	Flat Nose	**MK**	MatchKing	**VLD**	Very Low Drag
FP	Flat Point	**MT-SP**	Mag Tip Soft Point	**V-MAX**	Varmint Express
FPJ	Full Plated Jacket	**NTX**	Non Toxic Expanding	**WC**	Wadcutter
FS	Fail Safe	**PART**	Partition	**W/GCK**	With Gas Check
FTX	Flextip	**PSPCL**	Pointed Soft Point "Core-Lokt"	**X**	X Bullet
GC	Gas Check	**RAPTOR**	CEB All Copper	**XBT**	X Boat Tail
GDHP	Gold Dot Hollow Point	**RN**	Round Nose	**XBTC**	X Boat Tail Coated
GDSP	Gold Dot Soft Point	**RNP**	Round Nose Frangible	**XD**	Extreme Defense
GMX	Gilding Metal Expanding Bullet	**SB**	Solid Base	**XFB**	X Flat Base
GS	Grand Slam	**SBT**	Spitzer Boat Tail	**XPB**	X Pistol Bullet
HAP	Hornady Action Pistol	**SCENAR**	Lapua Hollow Point	**XTP**	Extreme Terminal Performance

WARNING

Hodgdon® Powder, IMR® Powder and Winchester® Powder, Accurate® Powder, and Ramshot® Powder expressly disclaim any and all warranties with respect to any and all products sold or distributed by them, the safety or suitability thereof, or the results obtained including, without limitation, any implied warranty of merchantability or fitness for a particular purpose and/or any other warranty. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries (including death), losses or damages to persons or property (including consequential damages), arising from the use of any product or data, whether or not occasioned by seller's negligence or based on strict liability or principles of indemnity or contribution. Hodgdon®, IMR®, Winchester®, Accurate® and Ramshot® powders neither assume nor authorize any person to assume for it any liability in connection with the use of any product or data.

For all powders, use only the components shown. If the reloader makes any changes in components or gets new lot numbers, he should begin again with the starting loads and work up to maximum cautiously. Never exceed maximum charges.

For those loads listed where a starting load is not shown, start 10 percent below the suggested maximum load and then approach maximums carefully, watching for any sign of pressure (difficult extraction, cratered and flattened or blown primers, and unusual recoil).

Never mix any two powders regardless of type, brand, or source. Never substitute any smokeless powder for Black Powder or any Black Powder substitute.

Powder left in the reloader's powder measure hoppers for extended periods, overnight or several days, should be avoided. Powder needs to be stored in original containers ONLY when not in use. Numerous modern smokeless powders are double base in construction, containing both Nitrocellulose and Nitroglycerine. Many powder measures use plastics containing polystyrene, which Nitroglycerine adversely affects when contact is made for extended periods of time, resulting in etching or misshaping the plastic. Normal usage during the reloading process does not provide adequate time for this to occur, so simply draining hoppers into the original containers when the reloading is completed for the day prevents ruining the hoppers.

Trail Boss® was designed to work in specific charge weight ranges. Do not use charges less than the starting load shown, nor greater than the maximum shown.

Do not use pointed bullets in any rifle with a tubular magazine, unless that pointed bullet was designed with a collapsible tip, made for tubular magazines.

For plated bullets, such as the fine line of Berry's Bullets, use existing lead data for the same-weight plated bullet.

***When an asterisk (*) appears in the title of the cartridge, or in the data, refer to the warning page. Those warnings are as follows:**

***40 S&W:** This data are intended for use in firearms with barrels that fully support the cartridge in the chamber. Use of this data in firearms that do not fully support the cartridge may result in bulged cases, ruptured cases, case-head separation or other condition that **may result in damage to the firearm and/or result in injury or death of the shooter and/or bystanders.**

***45 Colt:** *45 Colt data are listed in two categories. The first is intended for original Colt revolvers and their replicas. Max pressure: 14,000 CUP. The second category is *45 Colt Ruger Blackhawk, Freedom Arms and Thompson/Center Contender/Encore handguns. Max pressure: 30,000 CUP. **Do not use these data in any other make or model of firearm.**

***45-70 Government data usage:** 45-70 data are listed in the following three divisions based on pressure levels for only the firearms intended:

***45-70 Government (Trapdoor Rifle):** These data are intended for Springfield "Trapdoor," Rolling Block and Antique Replicas. Max pressure: 28,000 CUP.

***45-70 Government (Lever Actions):** These data are intended for the 1895 lever-action Marlin **ONLY**. Max pressure: 40,000 CUP. Do not use these data in any of the firearms listed in the Trapdoor section. Do not use pointed bullets in any rifle with a tubular magazine, unless that pointed bullet was designed with a collapsible tip, made for tubular magazines.

***45-70 Government (Modern Rifles):** These data are only for Ruger No. 1 and No. 3 single-shot rifles, Browning 1885 single shots and Siamese bolt-action rifles. Max pressure: 50,000 CUP. Do not use these data in either of the prior two sections of 45-70 data (Trapdoor and Lever Actions).

***26 Nosler and *6.5-300 Weatherby Magnum:** Do not reduce starting loads, as doing so can result in pressure spikes that may result in damage to the firearm or injury to the user and/or bystanders.

*Max loads listed that show an asterisk (*) following the "C" for compressed load with IMR 7828 SSC will not fit with the standard IMR 7828. Reduce by four percent.

223 REMINGTON

Barrel: 24″ Twist: 1:12″ Trim: 1.750″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 55 GR. WIN FMJ		**Dia: .224″**	
Case: Winchester	**Primer: Winchester SR, Small Rifle**		**COL: 2.195″**
No. 2	3.7	1075	13,600 PSI
Titegroup	3.6	1065	14,400 PSI
Bullet: 64 GR. SIE TGK		**Dia: .224″**	
Case: Winchester	**Primer: Winchester SR, Small Rifle**		**COL: 2.212″**
5744	4.7	1045	15,600 PSI
No. 2	4.6	1082	19,700 PSI
Titegroup	4.3	1077	20,200 PSI
Bullet: 77 GR. SIE HPBT		**Dia: .224″**	
Case: Winchester	**Primer: Winchester SR, Small Rifle**		**COL: 2.230″**
5744	5.6	1056	23,900 PSI
No. 2	5.4	1097	25,700 PSI
Titegroup	5.2	1083	26,300 PSI

300 AAC BLACKOUT

Barrel: 16″ Twist: 1:8″ Trim: 1.363″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 190 GR. HDY SUB-X		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.050″**
CFE BLK	12.3	1062	18,700 PSI
H4198	11.5	1059	22,900 PSI
IMR 4198	11.4C	1032	22,800 PSI
IMR 4227	10.4C	1056	29,100 PSI
H110	9.6	1067	22,400 PSI
296	9.6	1067	22,400 PSI
Lil'Gun	8.3	1044	23,100 PSI
Bullet: 198 GR. LD CF		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.225″**
H4198	12.6C	993	30,600 PSI
IMR 4198	12.6	1055	36,400 PSI
CFE BLK	12.5C	1050	33,500 PSI
IMR 4227	11.8C	1041	45,500 PSI
5744	11.7	1036	37,600 PSI
1680	11.5C	1000	32,300 PSI
No. 11FS	10.0	1036	40,900 PSI
H110	10.0	1036	40,900 PSI
296	10.0	1036	40,900 PSI
Lil'Gun	9.4	1044	34,600 PSI
Bullet: 205 GR. SIE GK		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.124″**
LT-30	12.4C	1065	23,700 PSI
CFE BLK	12.2C	1064	18,400 PSI
IMR 4198	11.8C	1070	25,400 PSI
H4198	11.7C	1070	23,000 PSI
IMR 4227	10.6C	1062	27,800 PSI
No. 11FS	9.4C	1065	25,100 PSI
296	9.4C	1065	25,100 PSI
H110	9.4C	1065	25,100 PSI
Lil'Gun	8.4	1075	25,800 PSI
Bullet: 208 GR. HDY ELD-M		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.260″**
CFE BLK	11.6	1041	13,400 PSI
IMR 4198	11.1	1080	22,500 PSI
H4198	11.1	1052	19,900 PSI
IMR 4227	9.8	1041	25,800 PSI
H110	9.2	1060	22,700 PSI
296	9.2	1060	22,700 PSI
Lil'Gun	8.2	1050	22,200 PSI
Bullet: 210 GR. SIE HPBT		**Dia: .308″**	
Case: Remington	**Primer: Winchester SR, Small Rifle**		**COL: 2.170″**
LT-30	12.4C	1056	27,400 PSI
5744	11.0C	1092	32,800 PSI
1680	10.8	1089	26,600 PSI
No. 11FS	9.4	1074	31,700 PSI
Bullet: 220 GR. BLUE SP		**Dia: .309″**	
Case: Remington	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.230″**
IMR 4198	11.0	1043	18,300 PSI
H4198	10.8	1046	18,800 PSI
LT-30	10.8	1039	19,500 PSI
CFE BLK	10.2	1054	17,400 PSI
1680	9.6	1070	17,900 PSI
5744	9.5	1051	21,300 PSI
IMR 4227	9.0	1064	21,300 PSI
No. 11FS	8.2	1049	21,100 PSI
296	8.2	1049	21,100 PSI
H110	8.2	1049	21,100 PSI
Lil'Gun	7.2	1046	23,000 PSI
Bullet: 220 GR. SIE HPBT		**Dia: .308″**	
Case: Remington	**Primer: Winchester SR, Small Rifle**		**COL: 2.089″**
LT-30	12.5C	1055	28,900 PSI
1680	10.9C	1085	32,300 PSI
5744	10.7C	1081	37,300 PSI
No. 11FS	9.4	1099	38,800 PSI
Bullet: 220 GR. SIE HPBT		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.260″**
CFE BLK	12.1	1060	18,200 PSI
H4198	11.2	1069	21,800 PSI
IMR 4198	10.9	1057	22,500 PSI
IMR 4227	10.1	1044	26,700 PSI
H110	9.2	1046	28,100 PSI
296	9.2	1046	28,100 PSI
Lil'Gun	8.4	1062	26,500 PSI
Bullet: 230 GR. BER TACT		**Dia: .308″**	
Case: Remington	**Primer: Winchester SR, Small Rifle**		**COL: 2.260″**
5744	11.0C	1106	37,900 PSI
1680	10.7C	1086	31,600 PSI
No. 11FS	9.7	1084	40,800 PSI
Bullet: 230 GR. BER TACT		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.260″**
CFE BLK	11.3	1045	20,000 PSI
H4198	10.8	1066	26,600 PSI
IMR 4198	10.8	1062	27,900 PSI
IMR 4227	9.6	1046	33,100 PSI
H110	9.0	1058	32,900 PSI
296	9.0	1058	32,900 PSI
Lil'Gun	8.2	1068	30,000 PSI
Bullet: 245 GR. ACME CTD		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.080″**
CFE BLK	11.3	1071	23,400 PSI
H4198	11.0C	1041	23,600 PSI
IMR 4198	11.0C	1054	23,800 PSI
1680	10.6C	1056	21,000 PSI
5744	10.1	1072	29,900 PSI
IMR 4227	10.0	1067	32,200 PSI
No. 11FS	9.0	1062	31,100 PSI
296	9.0	1062	31,100 PSI
H110	9.0	1062	31,100 PSI
Lil'Gun	8.0	1066	32,000 PSI
Bullet: 265 GR. ACME CTD		**Dia: .308″**	
Case: Hornady	**Primer: Remington 7 1/2, Small Rifle BR**		**COL: 2.120″**
IMR 4198	11.0C	1071	28,100 PSI
H4198	11.0C	1060	26,100 PSI
CFE BLK	11.0	1043	22,300 PSI
1680	10.8C	1071	23,300 PSI
IMR 4227	10.4	1072	34,100 PSI
5744	10.0	1057	29,100 PSI
No. 11FS	9.0	1064	30,700 PSI
296	9.0	1064	30,700 PSI
H110	9.0	1064	30,700 PSI
Lil'Gun	8.0	1049	30,700 PSI

NEVER EXCEED MAXIMUM LOADS

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30-30 WINCHESTER

Barrel: 24″ Twist: 1:12″ Trim: 2.030″

Bullet: 175 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.505″

Powder	Grs	Vel	Pressure
Trail Boss	11.7	1065	26,900 PSI
H4895	9.8	1063	25,400 PSI
H322	9.8	1058	28,400 PSI
Benchmark	9.7	1062	26,700 PSI
No. 2	8.1	1060	27,700 PSI
Titegroup	7.4	1071	25,400 PSI

308 WINCHESTER

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 168 GR. SIE HPBT Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.800″

Powder	Grs	Vel	Pressure
5744	10.8	1033	14,700 PSI
No. 2	8.6	1060	19,400 PSI
Titegroup	8.0	1064	20,000 PSI

Bullet: 168 GR. SIE HPBT Dia: .308″
Case: Winchester Primer: Federal 210M, LR Match COL: 2.800″

Powder	Grs	Vel	Pressure
Clays	8.0	1060	26,800 CUP
Titegroup	8.0	1080	25,000 CUP

Bullet: 175 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Federal 210M, LR Match COL: 2.495″

Powder	Grs	Vel	Pressure
H4895	12.9	1057	20,700 PSI
H322	12.8	1072	24,800 PSI
Benchmark	12.8	1066	23,400 PSI
Trail Boss	12.7	1061	27,200 PSI

Bullet: 175 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.490″

Powder	Grs	Vel	Pressure
5744	13.0	1064	20,000 PSI
No. 2	9.4	1069	25,000 PSI
Titegroup	8.5	1023	23,900 PSI

Bullet: 190 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.690″

Powder	Grs	Vel	Pressure
5744	13.2	1036	14,400 PSI
No. 2	9.8	1066	25,500 PSI
Titegroup	8.7	1004	23,600 PSI

Bullet: 190 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Federal 210M, LR Match COL: 2.690″

Powder	Grs	Vel	Pressure
Benchmark	13.4	1071	18,200 PSI
H4895	13.3	1044	16,600 PSI
H322	13.0	1058	18,100 PSI
Trail Boss	10.5	1039	30,100 PSI

Bullet: 205 GR. SIE GK Dia: .308″
Case: Winchester Primer: Federal 210M, LR Match COL: 2.750″

Powder	Grs	Vel	Pressure
Benchmark	13.8	1051	16,100 PSI
H322	13.8	1069	17,200 PSI
H4895	13.7	1059	16,800 PSI
5744	12.0	1070	15,700 PSI
Trail Boss	11.5	1062	34,000 PSI
No. 2	9.7	1056	27,000 PSI
Titegroup	9.3	1062	27,000 PSI

Bullet: 220 GR. SIE HPBT Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.795″

Powder	Grs	Vel	Pressure
5744	13.5	1086	17,600 PSI
No. 2	10.2	1011	28,200 PSI
Titegroup	9.7	1069	29,500 PSI

30-06

Barrel: 24″ Twist: 1:10″ Trim: 2.484″

Bullet: 175 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.980″

Powder	Grs	Vel	Pressure
H4895	14.0	1052	20,900 PSI
Benchmark	14.0	1072	20,400 PSI
H322	14.0	1068	20,500 PSI
Trail Boss	12.6	1053	29,300 PSI
5744	11.8	1075	25,700 PSI
No. 2	10.8	1065	23,500 PSI
Titegroup	10.3	1053	23,300 PSI

Bullet: 190 GR. HDY SUB-X Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 3.180″

Powder	Grs	Vel	Pressure
H322	14.3	1060	15,500 PSI
H4895	14.2	1059	16,100 PSI
Benchmark	14.0	1061	15,500 PSI
Trail Boss	12.7	1076	30,800 PSI
5744	10.8	1082	23,000 PSI
No. 2	10.4	1057	22,600 PSI
Titegroup	10.0	1077	23,500 PSI

Bullet: 205 GR. SIE GK Dia: .308″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 3.250″

Powder	Grs	Vel	Pressure
H4895	14.7	1060	14,700 PSI
Benchmark	14.3	1066	16,100 PSI
H322	14.2	1059	15,600 PSI
Trail Boss	12.8	1075	31,400 PSI
5744	12.0	1048	16,000 PSI
No. 2	11.0	1065	24,100 PSI
Titegroup	10.4	1060	24,600 PSI

7.62 x 39MM RUSSIAN

Barrel: 20″ Twist: 1:9.45″ Trim: 1.518″

Bullet: 123 GR. HDY SST Dia: .310″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.175″

Powder	Grs	Vel	Pressure
5744	12.4	1033	12,200 PSI
No. 2	7.0	1079	23,400 PSI
Titegroup	6.4	1052	23,900 PSI

Bullet: 150 GR. SIE SPT Dia: .310″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.175″

Powder	Grs	Vel	Pressure
5744	11.5	1030	13,000 PSI
No. 2	7.3	1075	28,000 PSI
Titegroup	6.9	1043	29,000 PSI

350 LEGEND

Barrel: 16″ Twist: 1:16″ Trim: 1.700″

Bullet: 250 GR. HDY SUB-X Dia: .357″
Case: HORNADY Primer: Winchester SR, Small Rifle COL: 2.250″

Powder	Grs	Vel	Pressure
TAC	19.5C	1078	31,300 PSI
Benchmark	19.4C	1059	24,200 PSI
IMR 3031	18.6C	1062	24,600 PSI
H322	18.0C	1062	23,900 PSI
LT-30	16.8C	1073	21,300 PSI
5744	14.0	1058	25,100 PSI

360 BUCKHAMMER

Barrel: 20″ Twist: 1:12″ Trim: 1.800″

Bullet: 200 GR. REM CORE-LOKT Dia: .358″
Case: Remington Primer: Remington 9 1/2, Large Rifle COL: 2.380″

Powder	Grs	Vel	Pressure
5744	14.0	1045	13,500 PSI
No. 2	7.8	1079	23,000 PSI
Titegroup	7.2	1075	22,900 PSI

Bullet: 223 GR. HAM SHOCK Dia: .358″
Case: Remington Primer: Remington 9 1/2, Large Rifle COL: 2.380″

Powder	Grs	Vel	Pressure
5744	16.0	1055	19,800 PSI
H4895	13.0	1040	37,500 PSI
No. 2	9.5	1066	39,200 PSI
Titegroup	9.0	1080	42,700 PSI

Bullet: 250 GR. HDY SUB-X Dia: .357″
Case: Remington Primer: Remington 9 1/2, Large Rifle COL: 2.350″

Powder	Grs	Vel	Pressure
H4895	19.7	1062	18,200 PSI
Benchmark	19.2	1041	16,900 PSI
H322	18.0	1068	18,700 PSI
LT-32	17.0	1063	18,800 PSI
LT-30	16.2	1075	18,800 PSI
H4198	16.0	1064	17,200 PSI
5744	15.0	1060	19,000 PSI

NEVER EXCEED MAXIMUM LOADS

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450 BUSHMASTER

Barrel: 24″ Twist: 1:24″ Trim: 1.690″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 395 GR. HDY SUB-X		**Dia: .452″**	
Case: Starline	**Primer: Winchester SR, Small Rifle**		**COL: 2.210″**
H4198	25.0	1047	18,500 PSI
CFE BLK	24.0	1067	19,300 PSI
5744	22.3	1061	19,900 PSI
IMR 4227	21.5	1065	21,900 PSI
1680	21.4	1053	24,000 PSI
H110	19.6	1066	23,100 PSI
Enforcer	18.5	1054	24,500 PSI
Lil'Gun	16.7	1053	23,000 PSI

45-70 GOVERNMENT (TRAPDOOR RIFLES)*

Barrel: 24″ Twist: 1:20″ Trim: 2.100″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 325 GR. LHG XD		**Dia: .458″**	
Case: Winchester	**Primer: Winchester LR, Large Rifle**		**COL: 2.538″**
IMR 4895	40.6	1077	17,300 PSI
5744	28.6	1040	19,400 PSI
Bullet: 410 GR. HDY SUB-X		**Dia: .458″**	
Case: Winchester	**Primer: Winchester LR, Large Rifle**		**COL: 2.547″**
IMR 4064	34.0	1036	15,000 PSI
IMR 4895	34.0	1015	14,900 PSI
2495	33.0	1024	17,300 PSI
IMR 4198	26.0	1055	15,900 PSI
5744	24.5	1049	17,200 PSI
Bullet: 576 GR. ACME LRNFP		**Dia: .458″**	
Case: Winchester	**Primer: Winchester LR, Large Rifle**		**COL: 2.545″**
IMR 4895	33.0	1069	21,300 PSI
IMR 4198	24.6	1038	19,200 PSI

45-70 GOVERNMENT (MODERN RIFLES)*

Barrel: 24″ Twist: 1:20″ Trim: 2.100″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 410 GR. HDY SUB-X		**Dia: .458″**	
Case: Winchester	**Primer: Winchester LR, Large Rifle**		**COL: 2.547″**
No. 2	14.4	1062	28,900 PSI
Titegroup	13.0	1005	27,900 PSI

458 SOCOM

Barrel: 16″ Twist: 1:14″ Trim: 1.575″

Powder	Grs	Recommended Load Vel	Pressure
Bullet: 300 GR. HDY HP		**Dia: .458″**	
Case: Starline	**Primer: Winchester LP, Large Pistol**		**COL: 2.015″**
5744	22.0	1046	12,500 PSI
No. 2	11.3	1073	21,900 PSI
Titegroup	10.2	1037	19,500 PSI
Bullet: 350 GR. HDY FP		**Dia: .458″**	
Case: Starline	**Primer: Winchester LP, Large Pistol**		**COL: 2.018″**
5744	22.8	1066	16,300 PSI
No. 2	12.5	1071	29,700 PSI
Titegroup	11.8	1067	29,500 PSI
Bullet: 410 GR. HDY SUB-X		**Dia: .458″**	
Case: Starline	**Primer: Winchester LP, Large Pistol**		**COL: 2.038″**
IMR 8208 XBR	31.9C	1045	23,000 PSI
2495	31.7C	1038	23,900 PSI
Benchmark	31.5C	1055	22,500 PSI
IMR 3031	30.2C	1074	23,000 PSI
2015	30.0C	1079	23,800 PSI
LT-32	28.5C	1075	19,100 PSI
LT-30	27.2C	1055	18,300 PSI
5744	22.8	1071	23,800 PSI
Bullet: 570 GR. LD CF		**Dia: .458″**	
Case: Starline	**Primer: Winchester LP, Large Pistol**		**COL: 2.780″**
1680	21.3	901	33,300 PSI
5744	19.5	823	33,100 PSI
Bullet: 576 GR. ACME RNFP		**Dia: .458″**	
Case: Starline	**Primer: Winchester LP, Large Pistol**		**COL: 2.100″**
H322	26.0C	1046	31,200 PSI
2200	25.3C	1071	29,800 PSI
LT-30	23.5C	1046	27,200 PSI
IMR 4198	22.2C	1064	28,500 PSI
5744	20.0	1034	30,700 PSI

NEVER EXCEED MAXIMUM LOADS

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243 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.035″

Bullet: 85 GR. SIE SPT Dia: .243″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.650″

Powder	Grs	Vel	Pressure
US 869	51.8	2524	35,500 PSI
LRT	44.4	2513	31,400 PSI
StaBALL HD	40.0	2508	33,900 PSI
Magnum	40.0	2475	28,700 PSI
H1000	39.6	2517	32,600 PSI
Magpro	39.4	2490	32,100 PSI
5744	22.0	2507	38,000 PSI

Bullet: 90 GR. HDY CX Dia: .243″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 2.710″

Powder	Grs	Vel	Pressure
US 869	51.6C	2513	38,300 PSI
LRT	44.6	2499	33,200 PSI
StaBALL HD	40.6	2484	35,700 PSI
Magpro	38.8	2511	35,200 PSI
5744	22.8	2484	39,900 PSI

6.5 CREEDMOOR

Barrel: 24″ Twist: 1:8″ Trim: 1.910″

Bullet: 120 GR. BAR TTSX BT Dia: .264″
Case: Hornady Primer: Federal 210M, LR Match COL: 2.720″

Powder	Grs	Vel	Pressure
StaBALL HD	47.0C	2509	44,200 PSI
Magnum	46.0C	2481	32,800 PSI
Magpro	44.4	2510	41,300 PSI
Retumbo	43.8C	2492	40,900 PSI
H1000	42.4C	2518	41,200 PSI
IMR 7828 SSC	40.6	2514	41,100 PSI
Superformance	39.2	2501	37,300 PSI
Hunter	39.0	2513	40,400 PSI
IMR 4831	38.6	2514	40,300 PSI
StaBALL 6.5	38.4	2495	37,700 PSI
Hybrid 100V	38.0	2494	40,600 PSI
5744	37.6	2516	41,200 PSI

Bullet: 120 GR. SFT AF Dia: .264″
Case: Hornady Primer: Federal 210M, LR Match COL: 2.700″

Powder	Grs	Vel	Pressure
StaBALL HD	46.4C	2488	40,100 PSI
Magnum	45.6	2517	32,400 PSI
Magpro	44.0	2489	38,400 PSI
Retumbo	43.0	2488	38,800 PSI
H1000	41.3	2489	39,400 PSI
IMR 7828 SSC	39.7	2494	39,200 PSI
Superformance	38.5	2489	34,800 PSI
IMR 4831	38.3	2516	39,000 PSI
Hunter	38.0	2500	39,200 PSI
4350	38.0	2491	38,800 PSI
StaBALL 6.5	37.8	2492	37,300 PSI
Hybrid 100V	37.6	2517	40,300 PSI
IMR 4350	37.4	2520	39,500 PSI
5744	27.0	2499	43,500 PSI

270 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.530″

Bullet: 110 GR. BAR TTSX BT Dia: .277″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 3.250″

Powder	Grs	Vel	Pressure
Retumbo	54.4	2504	30,600 PSI
StaBALL HD	53.4	2524	33,200 PSI
Magnum	53.0	2502	26,700 PSI
H1000	52.6	2492	30,000 PSI
Magpro	50.2	2512	32,200 PSI
IMR 7828 SSC	48.8	2512	30,500 PSI
4350	48.3	2501	28,800 PSI
IMR 4831	47.3	2484	29,200 PSI
IMR 4350	46.3	2490	28,200 PSI
H4350	44.4	2532	29,500 PSI
Hybrid 100V	43.5	2517	31,600 PSI
5744	29.5	2510	31,600 PSI

Bullet: 120 GR. HDY SST Dia: .277″
Case: Winchester Primer: Winchester LR, Large Rifle COL: 3.210″

Powder	Grs	Vel	Pressure
Retumbo	54.8	2503	33,800 PSI
StaBALL HD	54.0	2490	35,200 PSI
Magnum	53.6	2513	30,000 PSI
H1000	53.2	2525	34,200 PSI
Magpro	51.6	2501	34,700 PSI
IMR 7828 SSC	50.0	2517	33,800 PSI
H4831	49.8	2494	32,500 PSI
IMR 4831	47.5	2502	32,400 PSI
4350	47.2	2491	31,900 PSI
Hunter	45.0	2503	32,500 PSI
StaBALL 6.5	44.6	2501	31,600 PSI
IMR 4350	43.6	2488	31,800 PSI
Hybrid 100V	43.2	2502	34,400 PSI
H4350	42.3	2508	33,200 PSI
5744	31.0	2507	35,700 PSI

7MM-08 REMINGTON

Barrel: 24″ Twist: 1:9.5″ Trim: 2.025″

Bullet: 120 GR. BAR TTSX Dia: .284″
Case: Remington Primer: Remington 9 1/2, Large Rifle COL: 2.800″

Powder	Grs	Vel	Pressure
Magpro	48.0	2519	40,000 PSI
H4831	45.0	2511	34,600 PSI
Superformance	44.0	2507	30,500 PSI
4350	43.7	2501	31,700 PSI
IMR 7828 SSC	43.6	2510	36,200 PSI
IMR 4831	43.5	2514	33,500 PSI
Hunter	42.0	2496	32,600 PSI
IMR 4350	42.0	2508	31,900 PSI
StaBALL 6.5	41.5	2486	32,300 PSI
H4350	40.8	2496	32,600 PSI
5744	27.8	2524	37,100 PSI

Bullet: 139 GR. HDY BTSP Dia: .284″
Case: Remington Primer: Remington 9 1/2, Large Rifle COL: 2.775″

Powder	Grs	Vel	Pressure
Magpro	48.6	2512	42,800 PSI
H4831	46.0C	2492	37,300 PSI
4350	45.0C	2486	34,900 PSI
IMR 7828 SSC	44.3	2512	40,600 PSI
Superformance	44.3	2483	32,200 PSI
IMR 4831	44.2	2508	37,700 PSI
Hunter	43.0	2498	35,400 PSI
IMR 4350	42.8	2488	35,800 PSI
StaBALL 6.5	42.5	2521	36,600 PSI
H4350	41.7	2516	38,100 PSI
5744	29.0	2502	42,300 PSI

7MM REMINGTON MAGNUM

Barrel: 24″ Twist: 1:9.5″ Trim: 2.490″

Bullet: 140 GR. NOS E-TIP Dia: .284″
Case: Winchester Primer: Winchester LRM, Large Rifle Mag COL: 3.260″

Powder	Grs	Vel	Pressure
Magnum	64.0	2517	34,800 PSI
Retumbo	63.7	2509	35,400 PSI
StaBALL HD	63.0	2492	35,500 PSI
H1000	61.3	2492	34,800 PSI
Magpro	60.8	2488	35,100 PSI
IMR 7828 SSC	58.5	2515	36,500 PSI
5744	37.0	2505	40,100 PSI

Bullet: 140 GR. SIE TGK Dia: .284″
Case: Winchester Primer: Winchester LRM, Large Rifle Mag COL: 3.290″

Powder	Grs	Vel	Pressure
Magnum	63.5	2504	32,200 PSI
StaBALL HD	62.8	2483	33,000 PSI
Retumbo	62.8	2500	33,200 PSI
H1000	61.0	2519	33,100 PSI
Magpro	59.5	2519	33,600 PSI
IMR 7828 SSC	57.5	2521	33,900 PSI
5744	36.0	2510	36,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Reduced Recoil

30-30 Winchester

Barrel: 24″ Twist: 1:12″ Trim: 2.030″

Bullet: 125 GR. SIE HP/FN Dia: .308″

Case: Winchester	Primer: Winchester LR, Large Rifle		COL: 2.419″
Powder	Grs	Recommended Load Vel	Pressure
H4831	37.5C	2021	27,200 PSI
4350	37.5C	1979	21,900 PSI
Superformance	36.4	1979	24,400 PSI
IMR 4831	36.3C	1994	25,900 PSI
IMR 4350	35.2C	1998	24,200 PSI
StaBALL 6.5	34.5	2017	25,300 PSI
H4350	34.0	2011	25,700 PSI
Hunter	33.0	2019	28,800 PSI
2700	33.0	2005	22,700 PSI
Hybrid 100V	32.4	1997	28,700 PSI
Big Game	30.3	1995	24,700 PSI
5744	21.4	2009	26,800 PSI

Bullet: 150 GR. BAR TSX FNFB Dia: .308″

Case: Winchester	Primer: Winchester LR, Large Rifle		COL: 2.470″
Powder	Grs	Recommended Load Vel	Pressure
Superformance	37.0C	1991	36,300 PSI
IMR 4350	34.5C	1985	34,500 PSI
StaBALL 6.5	34.0C	2005	39,100 PSI
Hybrid 100V	34.0C	1987	39,400 PSI
H4350	33.5C	2013	36,300 PSI
Big Game	33.0C	2019	33,200 PSI
2700	32.8C	2009	34,200 PSI
LEVERevolution	28.0	2020	33,100 PSI
5744	23.0	2012	38,800 PSI

308 Winchester

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 110 GR. HDY CX Dia: .308″

Case: Winchester	Primer: Federal 210M, LR Match		COL: 2.800″
Powder	Grs	Recommended Load Vel	Pressure
IMR 4831	49.2C	2480	30,800 PSI
IMR 4350	46.8C	2509	31,200 PSI
StaBALL 6.5	46.6	2476	29,700 PSI
Hunter	46.5	2488	31,800 PSI
H4350	46.0	2487	29,700 PSI
2700	44.6	2487	28,000 PSI
760	44.6	2487	28,000 PSI
Hybrid 100V	44.0	2518	32,500 PSI
Big Game	43.2	2489	30,400 PSI

Bullet: 125 GR. NOS AB Dia: .308″

Case: Winchester	Primer: Federal 210M, LR Match		COL: 2.750″
Powder	Grs	Recommended Load Vel	Pressure
IMR 4831	48.5C	2484	33,100 PSI
Hunter	47.0	2507	33,600 PSI
IMR 4350	46.8C	2504	31,300 PSI
StaBALL 6.5	46.2	2516	33,300 PSI
H4350	45.5	2486	31,000 PSI
2700	45.0	2499	29,200 PSI
Hybrid 100V	44.7	2509	36,500 PSI
Big Game	42.6	2489	28,900 PSI
5744	30.0	2485	33,300 PSI

30-06

Barrel: 24″ Twist: 1:10″ Trim: 2.484″

Bullet: 130 GR. BAR TSX Dia: .308″

Case: Winchester	Primer: Winchester LR, Large Rifle		COL: 3.218″
Powder	Grs	Recommended Load Vel	Pressure
Grand	61.8	2495	30,900 PSI
H1000	61.0C	2520	33,900 PSI
Magpro	58.4	2493	35,200 PSI
IMR 7828 SSC	56.7	2519	32,500 PSI
H4831SC	56.5	2475	30,600 PSI
IMR 4831	54.6	2488	30,700 PSI
Hunter	50.0	2493	29,300 PSI
2700	46.2	2511	31,400 PSI
5744	33.5	2515	32,700 PSI

Bullet: 150 GR. SIE SBT Dia: .308″

Case: Winchester	Primer: Winchester LR, Large Rifle		COL: 3.225″
Powder	Grs	Recommended Load Vel	Pressure
Grand	61.0	2481	34,100 PSI
H1000	60.6	2521	37,900 PSI
Magpro	59.0	2491	38,600 PSI
IMR 7828 SSC	56.7	2523	37,800 PSI
H4831SC	56.5	2490	35,200 PSI
IMR 4831	54.5	2504	35,300 PSI
5744	34.5	2511	37,800 PSI

300 Winchester Magnum

Barrel: 24″ Twist: 1:10″ Trim: 2.610″

Bullet: 150 GR. HDY CX Dia: .308″

Case: Winchester	Primer: Winchester LRM, Large Rifle Mag		COL: 3.340″
Powder	Grs	Recommended Load Vel	Pressure
US 869	80.2	2501	37,400 PSI
H50BMG	75.6C	2510	36,500 PSI
LRT	73.0	2495	33,800 PSI
Retumbo	68.2	2478	35,200 PSI
StaBALL HD	67.7	2484	36,000 PSI
H1000	67.0	2485	35,100 PSI
Magnum	62.7	2481	34,400 PSI
IMR 7828 SSC	60.2	2504	36,200 PSI
5744	39.4	2485	37,700 PSI

Bullet: 150 GR. NOS PART Dia: .308″

Case: Winchester	Primer: Winchester LRM, Large Rifle Mag		COL: 3.340″
Powder	Grs	Recommended Load Vel	Pressure
US 869	82.4	2519	35,900 PSI
H50BMG	80.0	2505	33,700 PSI
LRT	74.0	2523	32,800 PSI
Retumbo	69.6	2492	32,500 PSI
StaBALL HD	69.5	2491	33,600 PSI
H1000	69.2	2487	32,500 PSI
Magnum	65.0	2480	30,700 PSI
IMR 7828 SSC	61.2	2517	33,700 PSI
5744	39.5	2490	35,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the “C” for compressed load will not fit with standard IMR 7828. Reduce by 4%.

17 HORNET

Barrel: 24″ Twist: 1:9″ Trim: 1.340″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 15.5 GR. HDY NTX			**Dia: .172″**			
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 1.715″**
CFE BLK	12.1	3735	39,100 PSI	13.2	4021	48,000 PSI
IMR 4227	10.3	3460	40,900 PSI	11.1C	3680	47,300 PSI
H110	9.1	3613	42,500 PSI	9.9	3797	47,800 PSI
Lil'Gun	9.1	3687	40,900 PSI	9.8	3715	47,700 PSI
Bullet: 20 GR. HDY V-MAX			**Dia: .172″**			
Case: Hornady		**Primer: Winchester SR, Small Rifle**				**Col: 1.711″**
2200	11.7	3203	44,700 PSI	13.0	3553	49,700 PSI
LT-30	10.8	3093	42,600 PSI	12.0	3404	47,300 PSI
1680	10.0	3183	44,300 PSI	11.2	3493	49,700 PSI
5744	10.1	3097	42,800 PSI	11.2	3412	47,500 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 1.715″**
CFE BLK	11.8	3399	40,300 PSI	12.8	3652	48,100 PSI
H4198	11.0	3226	32,200 PSI	11.8C	3463	39,300 PSI
IMR 4227	9.3	3204	40,700 PSI	10.1	3356	45,400 PSI
Lil'Gun	9.7	3538	44,600 PSI	10.0	3629	48,200 PSI
H110	8.0	3173	40,900 PSI	8.7	3301	45,100 PSI
296	8.0	3173	40,900 PSI	8.7	3301	45,100 PSI
Bullet: 25 GR. HDY V-MAX			**Dia: .172″**			
Case: Hornady		**Primer: Winchester SR, Small Rifle**				**Col: 1.711″**
2200	11.2	2930	44,000 PSI	12.4	3223	48,700 PSI
LT-30	10.3	2801	44,900 PSI	11.4	3093	49,900 PSI
5744	9.4	2786	44,100 PSI	10.5	3070	49,300 PSI
1680	9.0	2724	44,100 PSI	10.0	2983	49,000 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 1.715″**
H335	12.4	2984	39,200 PSI	13.2C	3145	45,900 PSI
H322	12.0	3091	30,600 PSI	12.8C	3283	36,200 PSI
CFE BLK	10.7	2996	38,700 PSI	11.6	3263	47,900 PSI
H4198	10.3	2983	34,900 PSI	11.1C	3187	42,500 PSI
IMR 4227	8.5	2856	40,900 PSI	9.3	3032	45,700 PSI
Lil'Gun	8.6	3125	45,000 PSI	8.9	3195	48,000 PSI
Bullet: 30 GR. BER HP			**Dia: .172″**			
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 1.715″**
H322	11.7	2853	40,500 PSI	12.5C	3020	48,000 PSI
H335	11.8	2718	36,700 PSI	12.5C	2866	44,000 PSI
H4198	10.0	2815	38,700 PSI	10.8C	3024	47,300 PSI
CFE BLK	9.8	2711	42,900 PSI	10.7	2851	47,800 PSI

204 RUGER

Barrel: 24″ Twist: 1:12″ Trim: 1.840″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 24 GR. HDY NTX			**Dia: .204″**			
Case: Remington		**Primer: Winchester SR, Small Rifle**				**Col: 2.245″**
2460	27.1	4051	50,600 PSI	30.1	4410	56,200 PSI
LT-32	23.1	3869	51,600 PSI	25.6	4241	57,400 PSI
5744	18.7	3455	43,100 PSI	25.0	4395	57,500 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 2.290″**
IMR 8208 XBR	27.0	3997	40,600 PSI	30.0C	4447	56,000 PSI
H4895	27.0	4061	43,400 PSI	29.5C	4423	54,900 PSI
H335	27.4	4184	47,100 PSI	29.5	4456	55,200 PSI
Benchmark	27.3	4109	45,500 PSI	29.0	4373	54,500 PSI
H322	26.3	4143	48,700 PSI	28.0	4358	56,000 PSI
IMR 4198	23.0	4166	48,200 PSI	24.5	4383	54,900 PSI
H4198	22.6	4294	54,100 PSI	24.0	4400	56,600 PSI
Bullet: 26 GR. BAR VG FB			**Dia: .204″**			
Case: Remington		**Primer: Winchester SR, Small Rifle**				**Col: 2.250″**
2520	28.8	4030	53,300 PSI	32.0	4466	59,300 PSI
TAC	27.5	3988	53,700 PSI	30.5	4415	59,600 PSI
2230	26.7	4050	53,400 PSI	29.7	4435	59,400 PSI
X-Terminator	26.7	4050	53,400 PSI	29.7	4435	59,400 PSI
2460	25.7	3917	51,700 PSI	28.6	4208	57,500 PSI
LT-32	21.9	3610	51,700 PSI	24.3	3974	57,500 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 2.250″**
CFE 223	29.5	4067	46,300 PSI	31.5	4282	52,600 PSI
BL-C(2)	28.9	4004	47,200 PSI	30.7	4173	52,700 PSI
StaBALL Match	28.0	3862	44,000 PSI	30.5C	4151	53,100 PSI
H4895	28.2	4067	48,900 PSI	30.0C	4302	57,300 PSI
Varget	27.5	3962	47,500 PSI	30.0C	4110	51,000 PSI
IMR 4895	27.7	3934	47,100 PSI	29.5C	4169	54,700 PSI
IMR 8208 XBR	27.7	4132	48,400 PSI	29.5C	4309	54,900 PSI
Benchmark	27.0	4036	47,600 PSI	28.7	4279	56,700 PSI
H335	26.8	4149	52,200 PSI	28.5	4278	54,900 PSI
H322	25.9	4055	52,200 PSI	27.5	4229	57,100 PSI
H4198	23.0	4124	54,100 PSI	24.5	4258	57,300 PSI
IMR 4198	22.7	4015	49,400 PSI	24.2	4257	56,700 PSI
Bullet: 32 GR. HDY V-MAX			**Dia: .204″**			
Case: Remington		**Primer: Winchester SR, Small Rifle**				**Col: 2.250″**
2520	26.6	3680	53,200 PSI	29.5	4089	59,000 PSI
2460	25.3	3652	51,700 PSI	28.1	3968	57,500 PSI
2495	25.2	3560	51,500 PSI	28.0	3867	57,200 PSI
2230	24.7	3564	50,600 PSI	27.5	3960	56,300 PSI
X-Terminator	24.7	3564	50,600 PSI	27.5	3960	56,300 PSI
LT-32	21.5	3532	51,600 PSI	23.9	3798	57,300 PSI
5744	17.6	3178	43,000 PSI	23.4	3978	57,300 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 2.250″**
CFE 223	29.0	3826	45,400 PSI	30.9	4091	55,000 PSI
BL-C(2)	28.5	3772	43,000 PSI	30.7	4081	55,500 PSI
StaBALL Match	27.6	3657	44,200 PSI	30.0C	3981	56,900 PSI
Varget	27.0	3557	38,300 PSI	29.0C	3798	47,400 PSI
H4895	27.0	3669	40,500 PSI	29.0C	3980	51,100 PSI
IMR 4895	27.0	3627	40,500 PSI	29.0C	3949	51,900 PSI
IMR 8208 XBR	27.5	3917	47,500 PSI	29.0	4130	56,500 PSI
H335	26.0	3703	40,600 PSI	28.3	4044	54,800 PSI
Benchmark	26.0	3770	45,500 PSI	28.0	4047	57,100 PSI
H322	25.5	3826	48,300 PSI	27.5	4030	56,400 PSI
IMR 4198	22.0	3725	42,700 PSI	23.5	4006	55,400 PSI
Bullet: 40 GR. HDY V-MAX			**Dia: .204″**			
Case: Remington		**Primer: Winchester SR, Small Rifle**				**Col: 2.260″**
2520	25.2	3386	53,900 PSI	28.0	3762	59,900 PSI
TAC	24.0	3300	49,800 PSI	27.0	3680	56,000 PSI
2230	23.4	3270	50,700 PSI	26.0	3633	56,300 PSI
X-Terminator	23.4	3270	50,700 PSI	26.0	3633	56,300 PSI
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 2.250″**
BL-C(2)	28.0	3569	47,300 PSI	30.0	3774	56,200 PSI
CFE 223	27.3	3518	46,500 PSI	29.0	3769	56,700 PSI
StaBALL Match	26.3	3374	44,600 PSI	28.6	3676	57,100 PSI
Varget	26.0	3395	44,100 PSI	28.1C	3647	55,100 PSI
IMR 4895	26.0	3415	44,700 PSI	27.8C	3695	56,000 PSI
H4895	26.0	3500	45,500 PSI	27.7C	3741	56,000 PSI
IMR 4064	25.5	3379	43,600 PSI	27.5C	3616	52,000 PSI
IMR 8208 XBR	26.0	3586	48,300 PSI	27.3	3754	56,300 PSI
H335	25.0	3508	47,300 PSI	26.8	3738	56,700 PSI
Benchmark	24.0	3419	45,200 PSI	25.7	3646	55,400 PSI
IMR 3031	24.0	3456	46,300 PSI	25.6C	3694	56,600 PSI
H322	23.0	3319	41,500 PSI	25.1	3639	55,900 PSI
Bullet: 50 GR. BER HPBT			**Dia: .204″**			
Case: Hornady		**Primer: Federal 205M, SR Match**				**Col: 2.300″**
BL-C(2)	25.0	3089	42,900 PSI	27.0	3334	54,500 PSI
CFE 223	25.2	3279	54,400 PSI	26.8	3370	55,700 PSI
StaBALL Match	24.4	3050	45,700 PSI	26.6	3297	57,000 PSI
IMR 4895	24.0	3092	45,400 PSI	26.2C	3344	56,000 PSI
Varget	24.0	3071	44,900 PSI	26.0	3287	55,200 PSI
IMR 4064	24.0	3079	44,900 PSI	25.8C	3330	55,800 PSI
H4895	24.0	3167	46,900 PSI	25.7	3352	56,000 PSI
IMR 8208 XBR	23.0	3129	47,800 PSI	24.9	3327	56,100 PSI
H335	22.5	3039	43,700 PSI	24.3	3268	54,700 PSI
Benchmark	22.5	3110	47,800 PSI	24.0	3256	54,300 PSI
IMR 3031	22.0	3046	44,500 PSI	24.0	3284	55,100 PSI
H322	22.0	3105	48,300 PSI	23.5	3252	55,100 PSI

22 HORNET

Barrel: 24″ Twist: 1:16″ Trim: 1.393″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 30 GR. BAR VG FB			**Dia: .224″**			
Case: Winchester		**Primer: Winchester SR, Small Rifle**				**Col: 1.750″**
CFE BLK	12.1	2642	22,900 PSI	13.5C	2819	26,700 PSI
Lil'Gun	11.7	2863	26,300 CUP	13.0	3055	29,700 CUP
H110	11.1	2807	33,000 CUP	12.3	3150	41,500 CUP
296	11.1	2807	33,000 CUP	12.3	3150	41,500 CUP
IMR 4227	10.0	2321	37,300 CUP	11.7C	2703	37,600 CUP

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Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 35 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.725″**
CFE BLK	12.0	2383	16,900 PSI	13.3C	2650	22,700 PSI
Lil'Gun	12.0	2694	22,000 CUP	13.0	2842	24,000 CUP
H110	11.0	2805	32,700 CUP	12.3	3060	41,400 CUP
H4227	10.5	2630	35,600 CUP	11.6C	2896	42,500 CUP
H4198	10.5	2223	23,100 CUP	11.5C	2420	26,300 CUP
Bullet: 40 GR. SPR SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.725″**
CFE BLK	12.1	2484	23,200 PSI	13.5C	2684	28,400 PSI
Lil'Gun	12.0	2667	24,900 CUP	13.0	2826	28,400 CUP
H4198	10.5	2253	26,100 CUP	11.5C	2488	32,800 CUP
H110	10.0	2569	32,400 CUP	11.2	2795	41,800 CUP
H4227	9.0	2421	39,900 CUP	10.2	2567	43,000 CUP
Bullet: 45 GR. BAR XBT			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.850″**
Lil'Gun	12.0	2641	35,700 CUP	13.0	2770	38,500 CUP
H4198	10.5	2217	31,500 CUP	11.5C	2390	36,900 CUP
H110	9.0	2323	35,200 CUP	9.9	2503	40,400 CUP
H4227	8.5	2198	37,000 CUP	9.8	2346	42,700 CUP
Bullet: 45 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.750″**
CFE BLK	11.7	2403	25,000 PSI	13.0C	2588	30,800 PSI
Lil'Gun	12.0	2622	26,500 CUP	13.0	2787	31,600 CUP
H4198	10.5	2239	28,000 CUP	11.5C	2400	32,000 CUP
IMR 4198				10.5C	2010	20,100 CUP
H110	9.0	2342	33,500 CUP	10.4	2574	43,000 CUP
IMR 4227	8.5	2312	39,900 CUP	9.8	2484	42,000 CUP
Bullet: 50 GR. HDY SPSX			**Dia: .224″**			
Case: Remington			**Primer: Remington 6 1/2, Small Rifle**			**Col: 1.780″**
1680	10.4	2105	38,200 PSI	11.5	2392	42,200 PSI
5744	8.1	1717	38,200 PSI	9.0	1951	42,400 PSI
Enforcer	7.7	2138	38,500 PSI	8.5	2375	42,500 PSI
Bullet: 50 GR. SIE SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.850″**
CFE BLK	11.7	2338	29,200 PSI	13.0C	2512	33,700 PSI
Lil'Gun	12.0	2556	31,600 CUP	13.0	2713	35,300 CUP
H4198	10.5	2102	28,200 CUP	11.5C	2296	34,100 CUP
H110	9.0	2249	37,500 CUP	10.0	2422	42,300 CUP
H4227	8.4	2131	39,700 CUP	9.4	2256	41,800 CUP
Bullet: 55 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 1.850″**
CFE BLK	11.7	2340	39,400 PSI	13.0C	2520	45,600 PSI
Lil'Gun	12.0	2551	39,400 CUP	13.0	2652	42,900 CUP
H4198	10.0	1955	30,000 CUP	11.5C	2273	41,000 CUP
H4227	8.0	1915	41,800 CUP	9.0	2095	43,000 CUP

222 REMINGTON

Barrel: 24″ Twist: 1:14″ Trim: 1.690″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 30 GR. BAR VG			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.040″**
H322	23.3	3535	40,300 PSI	25.5C	3817	49,400 PSI
Benchmark	23.2	3332	35,500 PSI	25.2C	3628	44,200 PSI
IMR 8208 XBR	23.0	3234	34,900 PSI	25.0C	3522	42,700 PSI
H4198	20.3	3500	37,400 PSI	21.9	3817	48,500 PSI
IMR 4198	19.8	3412	37,200 PSI	21.3	3755	48,900 PSI
CFE BLK	19.5	3593	40,900 PSI	21.2	3827	48,500 PSI
IMR 4227	15.7	3268	40,000 PSI	17.6	3567	48,400 PSI
Bullet: 35 GR. NOS BT LF			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.130″**
Benchmark	22.5	3316	34,600 PSI	25.0C	3665	48,600 PSI
IMR 8208 XBR	22.1	3096	32,500 PSI	24.5C	3516	42,200 PSI
H322	21.6	3290	39,700 PSI	23.2	3527	47,600 PSI
CFE BLK	18.6	3372	41,900 PSI	21.0	3633	48,200 PSI
H4198	19.3	3472	44,800 PSI	20.5	3612	47,300 PSI
IMR 4198	18.5	3220	36,800 PSI	19.9	3539	47,800 PSI
Case: Winchester			**Primer: Remington 7 1/2, Small Rifle BR**			**Col: 2.130″**
2200	21.9	3410	45,000 PSI	24.4	3739	50,000 PSI
LT-32	21.4	3237	45,000 PSI	23.8	3500	50,000 PSI
LT-30	19.9	3301	44,900 PSI	22.1	3635	49,800 PSI
5744	16.5	2921	40,000 PSI	20.7	3599	50,000 PSI
Bullet: 40 GR. NOS BT			**Dia: .224″**			
Case: Winchester			**Primer: Remington 7 1/2, Small Rifle BR**			**Col: 2.130″**
2460	22.5	3045	43,700 PSI	25.0	3425	48,500 PSI
X-Terminator	22.5	3098	40,300 PSI	25.0	3442	44,800 PSI
2230	22.2	3038	43,700 PSI	24.7	3410	48,600 PSI
2200	20.8	3220	45,000 PSI	23.1	3534	50,000 PSI
2015	20.7	3085	41,100 PSI	23.0	3422	45,700 PSI
LT-32	20.7	3161	44,900 PSI	23.0	3480	49,900 PSI
LT-30	19.4	3145	44,800 PSI	21.6	3449	49,800 PSI
5744	18.4	3125	44,700 PSI	20.4	3448	49,700 PSI
Bullet: 40 GR. SIE HP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.125″**
IMR 8208 XBR	22.5	3049	30,400 PSI	25.0C	3452	42,800 PSI
Benchmark	23.5	3110	34,800 CUP	25.0	3303	40,700 CUP
H335	22.5	3125	38,400 CUP	25.0	3371	44,600 CUP
H4895	20.0	2572	23,300 CUP	24.0C	3133	34,200 CUP
H322	20.7	2966	31,700 CUP	23.0	3313	44,000 CUP
H4198	19.5	3201	35,200 CUP	21.4	3480	45,700 CUP
IMR 4198	19.0	3226	36,300 PSI	21.2C	3583	48,700 PSI
Bullet: 45 GR. BAR TSX FB			**Dia: .224″**			
Case: Winchester			**Primer: Remington 7 1/2, Small Rifle BR**			**Col: 2.130″**
TAC	22.6	3038	45,000 PSI	25.1	3340	50,000 PSI
2230	22.2	3099	44,900 PSI	24.7	3387	49,900 PSI
X-Terminator	22.2	3099	44,900 PSI	24.7	3387	49,900 PSI
2200	20.8	3088	45,000 PSI	23.1	3395	50,000 PSI
LT-32	20.2	3002	44,900 PSI	22.4	3316	49,900 PSI
LT-30	18.9	3009	45,000 PSI	21.1	3297	50,000 PSI
5744	17.8	2987	45,000 PSI	19.8	3293	50,000 PSI
Bullet: 45 GR. SPR SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.130″**
Benchmark	23.0	3092	39,700 CUP	24.5	3290	44,900 CUP
IMR 4895	22.0	2829	33,100 PSI	24.0C	3134	42,800 PSI
H335	21.5	2962	36,500 CUP	24.0	3252	46,200 CUP
H4895	20.0	2510	25,000 CUP	23.8C	3080	35,900 CUP
IMR 8208 XBR	22.2	3121	38,700 PSI	23.6	3327	47,200 PSI
IMR 3031	20.0	2806	31,000 PSI	22.5C	3226	45,800 PSI
H322	20.5	2914	34,600 CUP	22.5	3173	43,600 CUP
H4198	18.9	3011	33,400 CUP	21.0	3315	44,800 CUP
IMR 4198	17.8	3083	40,600 PSI	19.8	3311	47,600 PSI
CFE BLK	16.4	2922	41,000 PSI	18.9	3170	48,300 PSI
H4227	11.0	2259	24,300 CUP	14.5	2863	46,100 CUP
Bullet: 50 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.130″**
CFE 223	24.1	2970	35,200 PSI	26.2	3268	47,600 PSI
Varget	23.0	2884	33,600 CUP	25.0C	3114	40,600 CUP
BL-C(2)	22.5	2693	25,500 CUP	25.0	3000	38,600 CUP
IMR 4895	22.0	2845	37,800 PSI	24.0C	3106	47,400 PSI
Benchmark	22.5	2994	39,200 CUP	24.0	3168	45,800 CUP
H4895	20.0	2466	23,900 CUP	23.8C	3022	36,500 CUP
H335	21.3	2861	37,100 CUP	23.6	3120	45,700 CUP
IMR 4064	21.0	2711	33,500 PSI	23.5C	3065	46,200 PSI
IMR 8208 XBR	21.9	3006	39,200 PSI	23.3	3201	47,100 PSI
IMR 3031	20.0	2740	32,000 PSI	22.4C	3156	47,800 PSI
H322	20.2	2810	33,300 CUP	22.2	3079	43,200 CUP
H4198	18.5	2890	34,000 CUP	20.5	3160	44,200 CUP
IMR 4198	17.0	2850	37,100 PSI	19.3	3152	49,000 PSI
CFE BLK	15.8	2744	41,500 PSI	18.7	3026	49,400 PSI
Bullet: 50 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester			**Primer: Remington 7 1/2, Small Rifle BR**			**Col: 2.130″**
2200	19.6	2935	45,000 PSI	21.8	3221	50,000 PSI
LT-32	19.4	2846	45,000 PSI	21.5	3147	50,000 PSI
LT-30	18.1	2835	45,000 PSI	20.1	3111	50,000 PSI
5744	17.1	2874	44,900 PSI	19.0	3157	49,900 PSI
Bullet: 55 GR. SIE SBT			**Dia: .224″**			
Case: Winchester			**Primer: Remington 7 1/2, Small Rifle BR**			**Col: 2.120″**
2520	21.5	2641	39,300 PSI	23.8	2985	43,500 PSI
2460	20.7	2740	42,800 PSI	23.0	3027	47,500 PSI
2230	20.5	2720	43,600 PSI	22.8	3032	48,500 PSI
2015	19.3	2770	42,400 PSI	21.5	3070	47,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Winchester	**Primer: Remington 7 1/2, Small Rifle BR**					**Col: 2.125″**
2200	19.2	2797	44,900 PSI	21.3	3071	49,800 PSI
LT-32	19.1	2741	45,000 PSI	21.2	3024	50,000 PSI
LT-30	17.8	2730	45,000 PSI	19.8	2993	50,000 PSI
5744	17.0	2775	44,900 PSI	18.8	3052	49,900 PSI
Bullet: 55 GR. SPR SP			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.130″**
CFE 223	23.9	2894	35,000 PSI	25.9	3174	47,600 PSI
Varget	23.0	2860	34,500 CUP	25.0C	3095	43,000 CUP
StaBALL Match	22.0	2686	35,500 PSI	24.4	2969	46,500 PSI
BL-C(2)	22.0	2625	28,200 CUP	24.2	2876	35,400 CUP
H4895	20.0	2569	28,900 CUP	23.5C	3023	39,900 CUP
IMR 4895	21.0	2632	32,700 PSI	23.5C	3017	47,300 PSI
IMR 8208 XBR	21.8	2905	38,400 PSI	23.2C	3120	48,500 PSI
Benchmark	21.5	2843	38,100 CUP	23.2	3052	45,100 CUP
IMR 4064	21.5	2739	36,500 PSI	23.0C	2954	44,400 PSI
H335	20.5	2776	35,300 CUP	23.0	3037	45,600 CUP
IMR 3031	19.5	2687	33,500 PSI	21.6C	3004	46,300 PSI
H322	19.0	2654	31,600 CUP	21.2	2953	45,100 CUP
H4198	17.5	2733	33,400 CUP	19.5	3017	45,300 CUP
IMR 4198	16.5	2722	35,900 PSI	18.7	3017	47,700 PSI
Bullet: 60 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.160″**
CFE 223	22.3	2652	33,300 PSI	24.3	2972	47,900 PSI
Varget	22.0	2734	36,600 CUP	23.5C	2906	42,800 CUP
BL-C(2)	22.0	2590	33,200 CUP	23.5	2803	44,000 CUP
H4895	21.7	2802	38,500 CUP	23.1C	2937	43,500 CUP
StaBALL Match	20.4	2505	35,900 PSI	22.6	2811	49,100 PSI
IMR 4895	20.0	2573	36,200 PSI	22.4C	2907	49,100 PSI
IMR 4064	20.0	2530	34,500 PSI`	22.3C	2862	47,800 PSI
IMR 8208 XBR	20.5	2737	39,200 PSI	21.8	2920	48,200 PSI
H335	20.0	2602	34,400 CUP	21.3	2759	42,900 CUP
Benchmark	19.7	2627	35,900 CUP	21.0	2805	42,800 CUP
H322	19.0	2592	34,800 CUP	20.7	2818	42,900 CUP
IMR 3031	18.5	2476	32,900 PSI	20.6C	2838	48,700 PSI
H4198	16.9	2633	36,100 CUP	18.0	2771	42,400 CUP
IMR 4198	15.5	2552	37,100 PSI	17.6	2832	48,400 PSI
Bullet: 60 GR. SIE HP			**Dia: .224″**			
Case: Winchester	**Primer: Remington 7 1/2, Small Rifle BR**					**Col: 2.120″**
2520	20.7	2562	40,300 PSI	23.0	2897	44,800 PSI
2460	20.4	2600	42,400 PSI	22.5	2910	46,800 PSI
2230	20.0	2630	43,100 PSI	22.2	2931	47,800 PSI
2015	18.5	2661	42,900 PSI	20.6	2950	47,800 PSI

223 REMINGTON

Barrel: 24″ Twist: 1:12″ Trim: 1.750″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 40 GR. NOS BT			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.260″**
CFE 223	27.5	3457	40,600 PSI	29.0	3667	48,200 PSI
BL-C(2)	26.5	3368	35,400 CUP	28.5	3612	45,400 CUP
Varget	25.0	3310	34,400 CUP	28.0C	3674	47,200 CUP
TAC	25.2	3405	49,000 PSI	28.0	3721	54,400 PSI
H335	26.0	3299	34,400 CUP	28.0	3572	44,600 CUP
2460	25.0	3406	47,200 PSI	27.8	3722	52,500 PSI
H4895	25.0	3204	32,100 CUP	27.5C	3573	44,500 CUP
Benchmark	25.3	3404	39,600 CUP	27.3	3666	51,000 CUP
X-Terminator	24.3	3435	48,400 PSI	27.0	3754	53,800 PSI
2230	24.3	3435	48,400 PSI	27.0	3754	53,800 PSI
IMR 8208 XBR	25.0	3433	41,500 PSI	26.7C	3659	50,400 PSI
IMR 4895	24.9	3164	35,200 PSI	26.5C	3390	44,200 PSI
H322	23.5	3376	34,600 CUP	25.5	3574	48,000 CUP
2200	22.9	3386	48,400 PSI	25.4	3701	53,700 PSI
IMR 3031	23.5	3291	42,600 PSI	25.2C	3498	46,200 PSI
2015	22.7	3256	49,500 PSI	25.2	3558	55,000 PSI
H4198	20.5	3147	29,400 CUP	22.5	3601	49,600 CUP
IMR 4198	19.5	3269	42,500 PSI	22.2	3652	53,400 PSI
5744	18.5	3025	49,200 PSI	20.6	3439	54,800 PSI
Bullet: 40 GR. SIE BK			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.260″**
2460	25.0	3451	49,000 PSI	27.8	3772	54,500 PSI
TAC	24.8	3399	48,500 PSI	27.6	3715	53,900 PSI
X-Terminator	24.3	3459	49,200 PSI	27.0	3780	54,600 PSI
2230	24.3	3459	49,200 PSI	27.0	3780	54,600 PSI
2200	22.9	3400	48,900 PSI	25.4	3716	54,400 PSI
2015	22.7	3261	49,000 PSI	25.2	3564	54,400 PSI
Bullet: 45 GR. SIE SPT			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.240″**
CFE 223	27.5	3358	40,800 PSI	29.0	3536	47,200 PSI
BL-C(2)	26.5	3266	36,000 CUP	28.5	3559	48,000 CUP
Varget	25.0	3071	30,200 CUP	28.0C	3477	43,700 CUP
H4895	25.0	3211	33,800 CUP	27.5C	3454	43,400 CUP
Benchmark	25.3	3327	41,100 CUP	27.3	3554	51,100 CUP
TAC	24.3	3276	49,200 PSI	27.0	3580	54,700 PSI
IMR 8208 XBR	24.5	3287	41,700 PSI	26.8	3550	52,000 PSI
2460	23.6	3260	48,900 PSI	26.2	3563	54,300 PSI
H335	24.0	3280	41,500 CUP	26.2	3456	51,000 CUP
X-Terminator	23.2	3296	49,500 PSI	25.8	3602	55,000 PSI
2230	23.2	3296	49,500 PSI	25.8	3602	55,000 PSI
IMR 3031	22.7	3065	37,700 PSI	25.2C	3374	45,800 PSI
H322	23.0	3164	36,000 CUP	25.0	3424	47,400 CUP
2200	22.0	3219	48,800 PSI	24.4	3518	54,300 PSI
2015	21.8	3088	49,500 PSI	24.2	3375	55,000 PSI
IMR 4198	19.5	3205	44,600 PSI	22.1	3495	52,000 PSI
H4198	20.0	3009	28,800 CUP	22.0	3472	49,100 CUP
Bullet: 50 GR. SIE BK			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.260″**
2520	24.8	3149	48,500 PSI	27.5	3441	53,900 PSI
TAC	23.8	3137	49,200 PSI	26.4	3428	54,700 PSI
2460	23.4	3069	49,100 PSI	26.0	3382	54,500 PSI
X-Terminator	22.9	3143	48,700 PSI	25.4	3435	54,200 PSI
2230	22.9	3143	48,700 PSI	25.4	3435	54,200 PSI
2200	22.1	3111	48,600 PSI	24.6	3400	54,000 PSI
LT-32	21.8	3112	49,400 PSI	24.2	3399	54,900 PSI
2015	21.6	2964	48,400 PSI	24.0	3239	53,800 PSI
LT-30	20.3	3053	49,400 PSI	22.6	3332	54,900 PSI
Bullet: 50 GR. SPR SP			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.210″**
CFE 223	27.0	3241	41,500 PSI	28.5	3505	53,600 PSI
BL-C(2)	26.0	3187	34,200 CUP	28.0	3428	47,100 CUP
H4895	25.0	3200	38,300 CUP	27.5C	3468	51,300 CUP
Varget	26.5	3242	40,800 CUP	27.5C	3383	44,800 CUP
IMR 4895	25.2	3118	43,300 PSI	26.7C	3211	45,200 PSI
Benchmark	24.0	3139	38,600 CUP	26.5	3396	50,400 CUP
H335	24.0	3166	43,000 CUP	26.0	3393	51,700 CUP
IMR 8208 XBR	23.5	3111	40,500 PSI	25.8	3407	53,300 PSI
IMR 3031	23.5	3169	44,600 PSI	25.0	3268	46,900 PSI
H322	22.0	3018	36,500 CUP	24.0	3301	49,300 CUP
IMR 4198	19.8	3094	42,800 PSI	21.9	3352	52,100 PSI
H4198	19.5	3023	32,400 CUP	21.5	3223	45,900 CUP
Bullet: 55 GR. BAR TSX FB			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.185″**
CFE 223	24.7	3065	44,600 PSI	27.4	3317	54,000 PSI
StaBALL Match	25.0	2985	45,800 PSI	27.0C	3207	54,500 PSI
2520	24.1	2959	48,700 PSI	26.8	3234	54,100 PSI
BL-C(2)	23.4	2888	41,900 PSI	26.0	3135	50,300 PSI
748	22.5	2862	39,200 PSI	25.0	3104	48,500 PSI
TAC	22.5	2887	48,500 PSI	25.0	3155	53,900 PSI
2460	22.0	2887	48,000 PSI	24.4	3155	53,300 PSI
X-Terminator	21.8	2914	49,500 PSI	24.2	3185	55,000 PSI
2230	21.7	2905	49,400 PSI	24.1	3195	54,900 PSI
Varget	22.8	2996	47,600 PSI	24.0C	3134	53,300 PSI
IMR 4895	21.5	2837	43,000 PSI	23.9C	3107	52,300 PSI
IMR 4064	21.2	2871	43,900 PSI	23.5C	3116	52,500 PSI
IMR 8208 XBR	21.5	2949	47,600 PSI	23.0	3105	52,900 PSI
H335	21.3	2920	48,900 PSI	22.7	3063	53,000 PSI
H4895	21.0	2910	43,700 PSI	22.6	3110	51,500 PSI
H322	21.0	2953	48,600 PSI	22.4	3083	51,300 PSI
Benchmark	20.0	2885	47,600 PSI	22.2	3066	52,200 PSI
2200	20.0	2798	48,300 PSI	22.2	3058	53,700 PSI
2015	19.8	2685	49,400 PSI	22.0	2966	54,900 PSI
IMR 3031	20.0	2878	46,800 PSI	21.3	3024	52,200 PSI
Bullet: 55 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester	**Primer: Winchester SR, Small Rifle**					**Col: 2.260″**
2520	23.0	2934	48,700 PSI	25.6	3207	54,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Rifle Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
2495	22.5	2832	47,800 PSI	25.0	3111	53,100 PSI
TAC	22.2	2909	47,400 PSI	24.7	3179	52,700 PSI
2460	21.8	2914	49,500 PSI	24.2	3185	55,000 PSI
X-Terminator	21.2	2936	48,800 PSI	23.5	3209	54,200 PSI
2230	21.2	2936	48,800 PSI	23.5	3209	54,200 PSI
LT-32	20.8	2924	49,500 PSI	23.1	3175	55,000 PSI
2015	20.3	2735	49,300 PSI	22.5	3025	54,800 PSI
LT-30	19.4	2860	49,300 PSI	21.5	3114	54,800 PSI

Bullet: 60 GR. HDY V-MAX Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.250″
Varget	25.0	2924	40,400 CUP	27.0C	3159	51,900 CUP
BL-C(2)	25.0	2948	44,900 CUP	27.0	3137	51,900 CUP
CFE 223	25.0	3007	46,000 PSI	26.7	3176	53,400 PSI
StaBALL Match	23.8	2777	40,200 PSI	26.0C	3099	54,400 PSI
H4895	24.0	2918	37,600 CUP	26.0C	3174	50,100 CUP
IMR 4895	23.7	2884	45,000 PSI	25.2C	3052	52,700 PSI
IMR 4064	23.0	2837	42,500 PSI	24.7C	3055	52,600 PSI
Benchmark	23.0	2913	42,500 CUP	24.6	3086	49,900 CUP
TAC	22.0	2810	49,500 PSI	24.4	3090	55,000 PSI
H335	22.5	2910	43,700 CUP	24.0	3075	50,600 CUP
IMR 8208 XBR	21.5	2857	43,500 PSI	23.6	3057	51,700 PSI
H322	22.0	2873	40,300 CUP	23.5	3063	49,800 CUP
X-Terminator	21.0	2795	49,500 PSI	23.3	3082	55,000 PSI
2230	21.0	2795	49,500 PSI	23.3	3082	55,000 PSI
IMR 3031	21.0	2815	42,500 PSI	22.5	3008	51,700 PSI
H4198	18.0	2747	42,500 CUP	20.0	2953	47,600 CUP
IMR 4198	18.3	2795	42,500 PSI	19.5	2945	52,000 PSI

Bullet: 60 GR. NOS PART Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.205″
2520	23.0	2856	49,100 PSI	25.6	3121	54,500 PSI
TAC	22.3	2845	49,500 PSI	24.8	3109	55,000 PSI
X-Terminator	21.2	2836	48,900 PSI	23.6	3099	54,400 PSI
2230	21.2	2836	48,900 PSI	23.6	3099	54,400 PSI
2460	21.2	2792	48,500 PSI	23.6	3051	53,900 PSI
2015	19.4	2628	48,600 PSI	21.5	2872	54,100 PSI
2200	19.3	2713	49,100 PSI	21.4	2965	54,500 PSI

Bullet: 62 GR. BAR TSX BT Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.255″
CFE 223	25.3	3059	47,900 PSI	27.0	3200	53,200 PSI
2520	24.1	2864	47,300 PSI	26.8	3140	52,600 PSI
2460	22.7	2861	49,200 PSI	25.2	3132	54,600 PSI
TAC	22.5	2804	48,900 PSI	25.0	3066	54,300 PSI
X-Terminator	22.1	2833	48,700 PSI	24.5	3100	54,000 PSI
2230	22.1	2833	48,700 PSI	24.5	3100	54,000 PSI
2015	20.5	2669	49,300 PSI	22.8	2935	54,900 PSI
2200	19.5	2741	49,500 PSI	21.6	3010	54,900 PSI
LT-32	19.1	2716	49,500 PSI	21.2	2944	55,000 PSI
LT-30	17.8	2659	49,200 PSI	19.8	2895	54,700 PSI

Bullet: 62 GR. SFT SCIR Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.260″
CFE 223	23.8	2884	44,100 PSI	25.9	3110	53,700 PSI
StaBALL Match	23.4	2736	41,800 PSI	25.5C	3004	54,400 PSI
BL-C(2)	22.5	2772	45,100 PSI	24.2	2949	52,500 PSI
Varget	22.1	2773	44,700 PSI	24.1	2974	52,600 PSI
IMR 4895	22.4	2782	46,900 PSI	24.1	2956	53,400 PSI
748	22.3	2779	44,600 PSI	24.0	2967	52,400 PSI
IMR 4064	21.9	2671	42,200 PSI	23.6	2928	53,200 PSI
IMR 8208 XBR	21.4	2787	43,400 PSI	23.2	2999	53,000 PSI
H4895	21.0	2740	42,300 PSI	23.0	3004	53,000 PSI
Benchmark	20.8	2755	45,400 PSI	22.7	2948	52,800 PSI
IMR 3031	20.3	2700	43,500 PSI	22.0	2940	53,100 PSI
H335	19.3	2678	47,500 PSI	21.4	2887	53,600 PSI
H322	19.5	2717	45,400 PSI	21.2	2904	52,300 PSI

Bullet: 68 GR. HDY BTHP-M Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.250″
2520	23.2	2762	49,200 PSI	25.8	3031	54,700 PSI
TAC	22.0	2699	48,900 PSI	24.4	2964	54,200 PSI
2460	21.6	2726	48,900 PSI	24.0	2990	54,300 PSI
X-Terminator	21.3	2721	49,100 PSI	23.7	2977	54,700 PSI
2230	21.3	2721	49,100 PSI	23.7	2977	54,700 PSI
2495	20.9	2660	49,300 PSI	23.2	2985	54,700 PSI
2015	19.5	2506	48,700 PSI	21.7	2777	54,200 PSI
LT-32	19.2	2617	49,200 PSI	21.3	2861	54,700 PSI
2200	19.0	2605	49,400 PSI	21.1	2888	54,900 PSI
LT-30	17.8	2585	49,500 PSI	19.8	2815	55,000 PSI

Bullet: 69 GR. SIE HPBT Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.245″
BL-C(2)	24.5	2833	40,600 CUP	26.5	3029	50,100 CUP
Varget	24.0	2784	39,200 CUP	26.0C	3010	50,200 CUP
H4895	24.0	2870	41,100 CUP	26.0C	3069	49,700 CUP
CFE 223	23.5	2788	43,800 PSI	25.8	3029	54,600 PSI
IMR 4895	23.3	2783	44,600 PSI	24.8C	2953	53,600 PSI
2520	22.0	2680	49,200 PSI	24.4	2931	54,600 PSI
TAC	21.9	2671	49,200 PSI	24.3	2921	54,700 PSI
IMR 4064	22.5	2690	42,200 PSI	24.0C	2872	50,900 PSI
H335	22.0	2801	42,400 CUP	24.0	2960	49,500 CUP
IMR 8208 XBR	21.0	2696	42,200 PSI	23.8	2959	52,900 PSI
Benchmark	21.5	2770	39,700 CUP	23.5	2970	49,700 CUP
2460	21.1	2671	48,900 PSI	23.4	2907	54,300 PSI
X-Terminator	20.7	2666	48,800 PSI	23.1	2895	54,400 PSI
2230	20.7	2666	48,800 PSI	23.1	2895	54,400 PSI
H322	21.0	2746	40,500 CUP	23.0	2932	49,400 CUP
2495	20.3	2664	49,100 PSI	22.5	2939	54,400 PSI
IMR 3031	21.0	2707	42,900 PSI	22.5	2906	52,800 PSI
2015	19.7	2524	49,600 PSI	21.8	2762	54,900 PSI
2200	18.5	2613	49,400 PSI	20.6	2822	55,000 PSI
IMR 4198	18.3	2706	46,300 PSI	19.5	2818	52,300 PSI

Bullet: 70 GR. SPR SP Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.140″
BL-C(2)	24.5	2774	41,700 CUP	26.5	2954	50,800 CUP
Varget	23.5	2827	41,000 CUP	26.0C	3024	48,400 CUP
StaBALL Match	23.0	2605	40,400 PSI	25.3C	2889	54,000 PSI
H4895	23.0	2782	40,400 CUP	25.0	2997	50,500 CUP
CFE 223	23.0	2719	45,600 PSI	24.7	2900	53,800 PSI
IMR 4895	20.2	2562	45,700 PSI	24.5C	2917	52,300 PSI
IMR 4064	19.5	2485	42,000 PSI	23.5C	2831	53,300 PSI
H335	21.0	2520	34,500 CUP	23.5	2867	47,900 CUP
H322	19.0	2515	37,500 CUP	23.0	2962	51,200 CUP
Benchmark	20.5	2665	45,200 CUP	22.8	2869	51,000 CUP
IMR 8208 XBR	20.0	2621	44,100 PSI	21.8	2797	52,800 PSI
IMR 3031	19.0	2582	47,200 PSI	21.2	2729	50,900 PSI

Bullet: 73 GR. HDY ELD-M Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.250″
2520	23.5	2684	39,900 PSI	26.3C	2999	54,500 PSI
CFE 223	23.8	2662	39,300 PSI	26.2C	2991	54,200 PSI
BL-C(2)	23.3	2581	39,400 PSI	25.6	2908	54,300 PSI
StaBALL Match	23.0	2585	39,800 PSI	25.4C	2855	54,300 PSI
4064	21.3	2469	40,000 PSI	24.0C	2775	54,500 PSI
TAC	21.5	2554	42,400 PSI	24.0C	2814	54,200 PSI
2230	21.6	2667	43,300 PSI	23.8	2894	54,600 PSI
IMR 4895	21.2	2534	41,700 PSI	23.7C	2816	54,400 PSI
Varget	21.4	2545	42,300 PSI	23.6C	2814	54,200 PSI
2460	21.3	2566	40,700 PSI	23.5C	2836	54,400 PSI
IMR 4064	21.2	2560	42,000 PSI	23.4C	2799	54,300 PSI
2495	21.0	2503	43,300 PSI	23.2	2755	54,200 PSI
H335	20.0	2562	44,100 PSI	23.1	2821	54,100 PSI
H4895	20.3	2541	41,100 PSI	22.6C	2810	54,600 PSI
IMR 8208 XBR	20.2	2559	39,900 PSI	22.6C	2823	54,200 PSI
IMR 3031	20.4	2587	42,800 PSI	22.4C	2825	54,200 PSI
Benchmark	20.2	2577	41,000 PSI	22.3C	2825	54,100 PSI
2015	19.8	2481	39,200 PSI	21.6C	2744	54,400 PSI
H322	19.2	2512	40,200 PSI	21.3	2776	54,600 PSI
2200	19.2	2571	42,000 PSI	21.1	2805	54,300 PSI
LT-32	19.0	2502	40,200 PSI	21.0	2747	54,200 PSI

Bullet: 77 GR. SIE HPBT Dia: .224″

Case: Winchester	Primer: Winchester SR, Small Rifle				Col: 2.260″
StaBALL 6.5	24.9	2519	45,000 PSI	26.8C	2733	53,800 PSI
BL-C(2)	23.0	2640	42,500 CUP	24.9	2804	50,700 CUP
CFE 223	22.5	2627	45,400 PSI	24.3	2811	53,500 PSI
2520	21.7	2553	49,300 PSI	24.1	2785	54,800 PSI
StaBALL Match	22.0	2497	41,200 PSI	24.0	2754	54,700 PSI
Varget	21.0	2528	42,700 CUP	23.7C	2737	50,700 CUP
TAC	21.1	2483	49,100 PSI	23.4	2759	54,500 PSI
IMR 8208 XBR	20.5	2535	41,800 PSI	23.2	2792	55,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4895	20.0	2379	41,800 PSI	23.0C	2708	53,100 PSI
Benchmark	20.5	2523	37,400 CUP	22.8	2763	50,000 CUP
IMR 4064	20.0	2397	42,200 PSI	22.7C	2698	53,000 PSI
H4895	20.0	2474	40,300 CUP	22.6C	2727	50,200 CUP
2460	20.4	2532	48,800 PSI	22.6	2743	54,100 PSI
H335	21.0	2582	44,400 CUP	22.6	2738	51,700 CUP
X-Terminator	20.2	2531	49,400 PSI	22.2	2731	54,300 PSI
2230	20.0	2531	48,900 PSI	22.2	2731	54,300 PSI
2495	19.6	2487	48,900 PSI	21.8	2741	54,400 PSI
H322	20.0	2578	44,900 CUP	21.8	2721	50,900 CUP
IMR 3031	18.5	2365	42,200 PSI	21.3C	2692	53,700 PSI
2015	18.5	2333	49,400 PSI	20.5	2553	54,700 PSI
LT-32	17.9	2417	49,400 PSI	19.9	2625	54,900 PSI
2200	17.6	2395	49,000 PSI	19.6	2618	54,600 PSI
LT-30	16.5	2342	49,400 PSI	18.3	2539	54,800 PSI

Bullet: 80 GR. SIE HPBT Dia: .224″

Case: Winchester Primer: Winchester SR, Small Rifle Col: 2.380″

StaBALL 6.5	23.9	2424	40,800 PSI	26.6	2702	53,200 PSI
BL-C(2)	23.0	2576	39,700 CUP	25.5	2768	49,400 CUP
Varget	22.0	2547	40,300 CUP	25.0C	2869	51,500 CUP
2520	22.4	2536	49,400 PSI	24.9	2792	54,900 PSI
CFE 223	23.0	2638	46,700 PSI	24.4	2785	53,600 PSI
TAC	21.9	2500	48,900 PSI	24.3	2749	54,300 PSI
H4895	21.5	2578	40,100 CUP	24.0	2825	50,000 CUP
2460	21.0	2509	48,800 PSI	23.3	2729	54,100 PSI
X-Terminator	20.8	2528	49,000 PSI	23.1	2732	54,400 PSI
2230	20.8	2528	49,000 PSI	23.1	2732	54,400 PSI
IMR 4895	20.0	2346	41,300 PSI	23.0C	2708	53,900 PSI
IMR 4064	20.0	2415	39,500 PSI	22.7C	2673	51,900 PSI
Benchmark	20.5	2525	43,900 CUP	22.5	2700	49,600 CUP
H335	20.0	2453	39,700 CUP	22.5	2744	50,000 CUP
H322	20.0	2546	40,700 CUP	22.0	2744	49,000 CUP
2015	19.5	2349	49,100 PSI	21.7	2582	54,700 PSI
2495	19.3	2467	48,800 PSI	21.5	2726	54,400 PSI
IMR 8208 XBR	19.0	2456	44,400 PSI	21.0	2628	52,900 PSI
IMR 3031	18.5	2336	42,600 PSI	21.0	2632	51,500 PSI

Bullet: 82 GR. BER BT TAR Dia: .224″

Case: Winchester Primer: Winchester SR, Small Rifle Col: 2.375″

StaBALL 6.5	24.3	2450	43,300 PSI	26.3	2675	53,900 PSI
760	23.2	2478	44,700 PSI	25.0	2667	53,700 PSI
CFE 223	21.7	2518	44,000 PSI	23.5	2724	53,300 PSI
BL-C(2)	21.1	2429	43,300 PSI	22.9	2617	52,200 PSI
IMR 4895	20.0	2380	43,100 PSI	21.7	2590	52,700 PSI
Varget	20.0	2417	44,000 PSI	21.5	2590	52,800 PSI
H4895	18.9	2448	46,500 PSI	20.4	2585	52,700 PSI
IMR 8208 XBR	18.4	2392	44,440 PSI	19.9	2554	52,100 PSI

Bullet: 90 GR. SIE HPBT Dia: .224″

Case: Winchester Primer: Winchester SR, Small Rifle Col: 2.380″

StaBALL 6.5	23.6	2374	44,200 PSI	25.7C	2561	53,400 PSI
760	22.5	2332	41,700 PSI	24.0	2482	52,100 PSI
2520	21.2	2374	48,900 PSI	23.6	2586	54,400 PSI
StaBALL Match	21.3	2322	41,700 PSI	23.2	2574	54,700 PSI
CFE 223	21.0	2391	45,900 PSI	22.8	2554	53,500 PSI
TAC	20.5	2313	49,200 PSI	22.8	2546	54,700 PSI
IMR 4895	21.0	2356	46,200 PSI	22.5C	2527	53,000 PSI
BL-C(2)	21.0	2291	41,400 PSI	22.5	2491	52,300 PSI
Varget	21.0	2332	46,700 PSI	22.3C	2447	52,100 PSI
2460	19.7	2363	48,700 PSI	21.9	2537	54,100 PSI
X-Terminator	19.6	2393	49,200 PSI	21.8	2542	54,700 PSI
2230	19.6	2393	49,200 PSI	21.8	2542	54,700 PSI
H4895	20.0	2352	47,500 PSI	21.5	2481	53,500 PSI
2015	19.0	2198	49,100 PSI	21.1	2400	54,500 PSI
2495	18.6	2315	49,100 PSI	20.6	2545	54,400 PSI
IMR 8208 XBR	18.0	2270	45,600 PSI	19.6	2419	52,800 PSI

224 VALKYRIE

Barrel: 24″ Twist: 1:7″ Trim: 1.590″

Bullet: 50 GR. SIE BK Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.110″

CFE 223	28.8	3285	40,800 PSI	31.1C	3533	49,900 PSI
BL-C(2)	28.0	3152	39,000 PSI	30.3	3419	50,000 PSI
StaBALL Match	26.5	3070	37,600 PSI	28.9	3336	49,100 PSI
Varget	26.2	3092	38,300 PSI	28.2C	3359	48,800 PSI
H335	25.9	3213	41,900 PSI	28.2	3480	53,400 PSI
IMR 8208 XBR	25.7	3165	38,000 PSI	27.9	3511	53,000 PSI
IMR 4895	25.5	3074	38,400 PSI	27.7C	3379	51,200 PSI
H4895	25.2	3190	39,500 PSI	27.3C	3489	51,700 PSI
Benchmark	25.2	3223	40,700 PSI	27.1	3500	52,900 PSI

Bullet: 55 GR. NOS BT Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.180″

CFE 223	28.1	3169	40,600 PSI	30.5C	3459	53,800 PSI
BL-C(2)	27.4	3069	40,700 PSI	29.8	3327	53,400 PSI
StaBALL Match	25.7	2977	40,200 PSI	28.2	3263	53,100 PSI
Varget	25.7	3069	41,500 PSI	28.0C	3324	52,500 PSI
IMR 4895	25.4	3048	41,900 PSI	27.7C	3324	53,600 PSI
IMR 8208 XBR	25.1	3116	41,700 PSI	27.3	3363	53,100 PSI
H335	25.0	3059	44,400 PSI	27.2	3287	53,800 PSI
H4895	24.9	3129	42,300 PSI	27.1C	3374	53,700 PSI
Benchmark	24.1	3084	42,800 PSI	26.2	3295	53,600 PSI

Bullet: 62 GR. SFT SCIR Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.180″

CFE 223	26.0	2951	39,800 PSI	29.2	3285	53,500 PSI
BL-C(2)	26.0	2926	43,100 PSI	28.3	3166	53,700 PSI
StaBALL Match	24.5	2798	43,000 PSI	26.8	3039	53,700 PSI
Varget	24.1	2886	43,400 PSI	26.2	3108	53,800 PSI
IMR 4064	23.9	2845	43,500 PSI	26.0C	3083	53,300 PSI
IMR 4895	23.5	2820	41,300 PSI	25.4	3086	53,800 PSI
H4895	22.8	2875	42,500 PSI	24.8	3100	53,100 PSI
IMR 8208 XBR	22.7	2873	42,100 PSI	24.7	3102	53,500 PSI
Benchmark	22.5	2897	44,600 PSI	24.5	3098	53,700 PSI
H335	22.5	2810	44,900 PSI	24.4	3014	53,700 PSI

Bullet: 69 GR. SIE TMK Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.215″

Superformance	28.0	2719	41,100 PSI	31.2C	3024	53,900 PSI
H4350	27.8C	2800	43,000 PSI	29.3C	2935	49,400 PSI
CFE 223	26.3	2891	40,400 PSI	28.8	3177	54,000 PSI
BL-C(2)	26.0	2837	42,300 PSI	28.3	3077	53,600 PSI
StaBALL Match	24.5	2730	41,200 PSI	26.7	2974	53,000 PSI
Varget	23.7	2802	41,400 PSI	25.8	3033	53,100 PSI
IMR 4064	23.6	2771	41,400 PSI	25.7	3021	53,300 PSI
IMR 4895	23.5	2791	41,600 PSI	25.4	3017	53,100 PSI
IMR 8208 XBR	23.1	2824	42,600 PSI	25.1	3031	53,400 PSI
H335	22.9	2799	44,300 PSI	25.0	2996	53,600 PSI
H4895	22.7	2806	42,000 PSI	24.6	3026	53,600 PSI
Benchmark	22.5	2830	43,100 PSI	24.5	3029	53,500 PSI

Bullet: 70 GR. NOS RDF Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.200″

Big Game	26.9	2805	49,000 PSI	29.9	3088	54,500 PSI
2520	24.2	2745	48,500 PSI	26.9	3034	53,800 PSI
4064	24.0	2655	48,900 PSI	26.7	2945	54,400 PSI
2495	23.3	2618	48,700 PSI	25.8	2905	54,100 PSI
2460	22.9	2731	49,000 PSI	25.5	3002	54,400 PSI
2015	21.1	2596	49,000 PSI	23.4	2849	54,500 PSI

Bullet: 72 GR. LD CC Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.260″

Big Game	25.5	2662	48,900 PSI	28.3	2913	54,400 PSI
2700	24.5	2559	44,800 PSI	27.2	2783	49,800 PSI
2520	21.9	2618	49,000 PSI	24.3	2819	54,500 PSI
4064	20.5	2442	48,600 PSI	22.8	2675	54,000 PSI
2495	19.8	2396	48,700 PSI	22.0	2625	54,100 PSI

Bullet: 75 GR. HDY BTHP Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.160″

Big Game	25.4	2649	48,200 PSI	28.3	2913	53,600 PSI
2700	25.1	2573	45,300 PSI	27.9	2834	50,400 PSI
4064	22.3	2543	49,000 PSI	24.8	2787	54,400 PSI
2495	21.4	2487	48,600 PSI	23.7	2729	54,000 PSI
2015	20.2	2452	48,500 PSI	22.5	2694	53,900 PSI

Bullet: 75 GR. HDY ELD-M Dia: .224″

Case: Federal Primer: Fed 205M, Small Rifle Match Col: 2.260″

Superformance	27.2	2589	42,500 PSI	29.6C	2828	53,500 PSI
StaBALL 6.5	26.2	2596	39,400 PSI	28.8C	2875	53,100 PSI
H4350	26.8	2656	40,800 PSI	28.5C	2805	47,800 PSI
CFE 223	25.4	2760	40,800 PSI	27.6C	3013	53,200 PSI
BL-C(2)	24.6	2659	40,300 PSI	27.0	2916	53,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
StaBALL Match	24.0	2631	40,700 PSI	26.2	2868	53,300 PSI
LEVERevolution	23.9	2667	41,400 PSI	26.0C	2899	52,400 PSI
Varget	23.7	2696	43,200 PSI	25.5C	2853	53,200 PSI
IMR 4895	23.0	2631	42,000 PSI	25.1	2878	53,600 PSI
H335	22.4	2611	43,000 PSI	24.6	2828	53,300 PSI
H4895	22.5	2698	42,400 PSI	24.5C	2902	53,100 PSI
IMR 8208 XBR	22.5	2695	43,600 PSI	24.5	2880	53,700 PSI
Benchmark	21.6	2648	43,200 PSI	23.5	2828	52,900 PSI

Bullet: 77 GR. SIE TMK **Dia: .224″**

Case: Federal		Primer: Fed 205M, Small Rifle Match			Col: 2.260″	
Big Game	25.3	2627	48,900 PSI	28.2	2878	54,300 PSI
2700	24.9	2534	45,000 PSI	27.6	2779	50,000 PSI
2520	22.8	2567	48,500 PSI	25.3	2837	53,800 PSI
4064	21.9	2496	48,800 PSI	24.3	2726	54,300 PSI
2495	21.0	2455	48,900 PSI	23.4	2690	54,400 PSI

Bullet: 80 GR. SIE HPBT **Dia: .224″**

Case: Federal		Primer: Fed 205M, Small Rifle Match			Col: 2.260″	
Superformance	26.9	2549	41,500 PSI	29.3C	2811	53,900 PSI
StaBALL 6.5	26.0	2569	40,100 PSI	28.6C	2838	52,800 PSI
H4350	25.8	2534	41,900 PSI	28.4C	2766	52,400 PSI
CFE 223	24.3	2607	42,100 PSI	26.7	2851	53,600 PSI
BL-C(2)	23.7	2538	42,200 PSI	26.1	2774	52,900 PSI
LEVERevolution	23.5	2595	44,100 PSI	25.8	2807	53,700 PSI
StaBALL Match	23.5	2543	41,600 PSI	25.8	2775	53,300 PSI
Varget	22.2	2511	41,600 PSI	24.4	2744	53,500 PSI
IMR 4895	21.9	2467	40,800 PSI	24.1	2725	53,400 PSI
IMR 8208 XBR	22.1	2571	45,200 PSI	23.8	2735	53,600 PSI

Bullet: 82 GR. BER BTT **Dia: .224″**

Case: Federal		Primer: Fed 205M, Small Rifle Match			Col: 2.260″	
2700	24.8	2505	46,100 PSI	27.5	2755	51,200 PSI
Big Game	24.6	2548	48,700 PSI	27.4	2786	54,200 PSI
4064	21.6	2416	48,900 PSI	24.0	2648	54,300 PSI

Bullet: 90 GR. FED FUS **Dia: .224″**

Case: Federal		Primer: Fed 205M, Small Rifle Match			Col: 2.260″	
Superformance	26.1	2442	43,000 PSI	28.4C	2654	53,100 PSI
StaBALL 6.5	25.0	2426	40,700 PSI	27.5	2676	53,600 PSI
IMR 4350	24.8	2396	43,300 PSI	27.2C	2620	53,200 PSI
H4350	24.4	2376	42,600 PSI	26.9C	2591	53,400 PSI
CFE 223	22.9	2431	43,400 PSI	25.0	2617	52,700 PSI
StaBALL Match	22.3	2354	43,900 PSI	24.6	2550	52,900 PSI
LEVERevolution	22.2	2415	44,300 PSI	24.5	2599	53,400 PSI
BL-C(2)	21.9	2380	48,900 PSI	24.1	2525	53,600 PSI
Varget	21.6	2404	45,300 PSI	23.6	2573	53,600 PSI
IMR 4895	20.9	2341	43,300 PSI	23.0	2534	53,000 PSI
IMR 8208 XBR	20.3	2330	42,600 PSI	22.2	2525	53,200 PSI

Bullet: 90 GR. SIE HPBT **Dia: .224″**

Case: Federal		Primer: Fed 205M, Small Rifle Match			Col: 2.260″	
Big Game	24.5	2403	48,800 PSI	27.2	2651	54,200 PSI
2700	24.0	2349	46,900 PSI	26.6	2598	52,100 PSI
4064	21.6	2283	48,100 PSI	24.0	2526	53,500 PSI
2495	20.9	2244	48,000 PSI	23.2	2483	53,300 PSI

22 ARC

Barrel: 24″ Twist: 1:9″ Trim: 1.510″

Bullet: 62 GR. HDY ELD-VT **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.250″	
CFE 223	28.2	3099	40,800 PSI	32.0	3417	51,400 PSI
BL-C(2)	29.5	3150	40,600 PSI	31.8C	3407	51,300 PSI
LEVERevolution	29.4	3176	42,100 PSI	31.4	3397	51,400 PSI
2520	29.4	3197	42,100 PSI	31.2	3418	51,200 PSI
748	29.0	3161	42,500 PSI	30.8C	3361	51,500 PSI
StaBALL Match	28.7	3127	43,000 PSI	30.6	3320	51,300 PSI
Varget	27.5	3050	41,600 PSI	29.3	3265	51,400 PSI
TAC	26.5	3047	42,500 PSI	28.8	3285	51,500 PSI
2495	26.0	2986	42,600 PSI	28.5	3216	51,500 PSI

Bullet: 62 GR. SFT SCIR **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.180″	
Big Game	30.2	3006	39,400 PSI	33.2C	3288	51,200 PSI
H4350	29.2	2910	39,100 PSI	32.1C	3192	51,400 PSI
H380	29.3	2963	40,100 PSI	32.0C	3230	51,200 PSI
760	29.3	2997	41,200 PSI	32.0	3230	51,300 PSI
2700	29.3	2997	41,200 PSI	32.0	3230	51,300 PSI
CFE 223	28.4	3020	40,300 PSI	31.6	3309	51,000 PSI
BL-C(2)	27.8	3050	43,000 PSI	30.7	3280	51,200 PSI
LEVERevolution	26.5	2978	41,400 PSI	30.4	3282	51,100 PSI
2520	26.7	3036	42,800 PSI	30.0	3262	51,200 PSI
748	26.8	2998	41,900 PSI	29.8	3228	51,100 PSI
StaBALL Match	26.3	2948	41,800 PSI	29.5	3196	51,200 PSI
Varget	26.3	2886	39,100 PSI	28.9	3163	51,200 PSI

Bullet: 69 GR. SIE TMK **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.200″	
H4350	29.6	2835	39,100 PSI	31.8C	3102	51,200 PSI
760	28.3	2854	39,200 PSI	31.8	3160	51,100 PSI
2700	28.3	2854	39,200 PSI	31.8	3160	51,100 PSI
H380	29.4	2876	39,300 PSI	31.7C	3151	51,200 PSI
Big Game	29.8	2902	39,100 PSI	31.4C	3165	51,100 PSI
CFE 223	27.7	2940	41,100 PSI	31.0	3204	51,200 PSI
BL-C(2)	27.0	2927	42,200 PSI	30.2	3173	51,100 PSI
2520	27.5	2932	41,000 PSI	30.0	3187	51,200 PSI
LEVERevolution	25.8	2919	42,900 PSI	30.0	3168	51,200 PSI
748	26.5	2885	41,000 PSI	29.4	3139	51,100 PSI
StaBALL Match	26.4	2839	40,600 PSI	29.3	3089	51,200 PSI
Varget	26.5	2815	40,200 PSI	28.7	3061	51,400 PSI

Bullet: 75 GR. HDY ELD-M **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.250″	
StaBALL 6.5	29.8	2714	39,300 PSI	32.0C	2962	51,200 PSI
H4350	29.3	2742	39,400 PSI	31.5C	2986	51,400 PSI
Big Game	29.4	2847	41,600 PSI	31.5	3049	51,000 PSI
760	29.2	2840	42,400 PSI	31.2	3017	51,200 PSI
2700	29.2	2840	42,400 PSI	31.2	3017	51,200 PSI
H380	29.0	2803	40,800 PSI	30.8C	3021	51,200 PSI
CFE 223	28.0	2845	41,000 PSI	30.2	3074	51,200 PSI
BL-C(2)	27.6	2830	40,600 PSI	29.6	3058	51,100 PSI
LEVERevolution	25.7	2799	42,300 PSI	29.4	3047	51,500 PSI
2520	27.2	2837	41,300 PSI	29.3	3061	51,200 PSI
748	27.0	2838	42,800 PSI	29.0	3030	51,300 PSI
StaBALL Match	26.5	2746	40,100 PSI	28.6	2970	51,100 PSI
Varget	26.3	2755	41,600 PSI	28.2	2939	51,100 PSI

Bullet: 77 GR. NOS RDF **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.250″	
StaBALL 6.5	28.6	2688	39,000 PSI	31.5	2956	51,300 PSI
Big Game	27.6	2697	39,400 PSI	30.7	2976	51,200 PSI
H4350	26.8	2638	39,200 PSI	29.8	2914	51,100 PSI
760	26.7	2718	41,900 PSI	29.7	2949	51,200 PSI
2700	26.7	2718	41,900 PSI	29.7	2949	51,200 PSI
H380	26.7	2666	40,300 PSI	29.7	2932	51,200 PSI
CFE 223	26.0	2759	41,900 PSI	29.0	2978	51,200 PSI
BL-C(2)	26.0	2761	42,900 PSI	28.7	2965	51,200 PSI
2520	25.2	2742	43,000 PSI	28.0	2947	51,400 PSI
LEVERevolution	24.5	2694	42,700 PSI	27.7	2935	51,100 PSI
StaBALL Match	23.8	2637	42,400 PSI	27.7	2892	51,100 PSI
Varget	24.4	2622	39,200 PSI	27.2	2882	51,200 PSI

Bullet: 80 GR. SIE HPBT **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.250″	
StaBALL 6.5	29.0	2666	39,400 PSI	31.7	2939	51,400 PSI
760	27.4	2687	40,600 PSI	30.5	2930	51,100 PSI
2700	27.4	2687	40,600 PSI	30.5	2930	51,100 PSI
Big Game	27.4	2659	39,300 PSI	30.4	2932	51,200 PSI
H4350	27.8	2693	40,500 PSI	30.3C	2908	51,200 PSI
H380	27.0	2641	40,200 PSI	30.0	2902	51,200 PSI
CFE 223	26.3	2705	42,600 PSI	29.3	2941	51,300 PSI
BL-C(2)	26.0	2710	41,900 PSI	28.7	2938	51,200 PSI
2520	26.0	2738	42,100 PSI	28.5	2944	51,200 PSI
LEVERevolution	24.5	2699	44,800 PSI	28.3	2896	51,200 PSI
StaBALL Match	25.0	2630	42,200 PSI	27.8	2857	51,200 PSI
Varget	24.5	2620	39,900 PSI	27.0	2854	51,500 PSI

Bullet: 85.5 GR. BER HYBRID **Dia: .224″**

Case: Hornady		Primer: Federal 205, Small Rifle			Col: 2.250″	
StaBALL 6.5	29.2	2627	40,900 PSI	31.0	2831	51,200 PSI
Big Game	28.2	2661	41,300 PSI	30.6	2865	51,400 PSI
2700	27.2	2635	41,600 PSI	29.6	2837	51,200 PSI
760	27.2	2635	41,600 PSI	29.6	2837	51,200 PSI
H4350	27.3	2592	40,000 PSI	29.5C	2806	51,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H380	26.7	2575	40,100 PSI	29.3C	2798	51,200 PSI
CFE 223	24.8	2577	42,100 PSI	28.8	2854	51,200 PSI
BL-C(2)	25.0	2571	39,300 PSI	28.4	2849	51,500 PSI
2520	25.0	2569	39,200 PSI	28.0	2845	51,200 PSI
LEVERevolution	24.0	2538	41,300 PSI	27.8	2813	51,100 PSI
StaBALL Match	25.2	2575	42,100 PSI	27.6	2777	51,200 PSI
Bullet: 90 GR. HDY A-TIP			**Dia: .224″**			
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.250″**
StaBALL 6.5	28.0	2544	40,200 PSI	30.2C	2765	51,400 PSI
Big Game	26.6	2525	39,900 PSI	29.0	2756	51,200 PSI
H4350	26.2	2473	39,300 PSI	28.8C	2728	51,200 PSI
760	26.5	2543	41,100 PSI	28.8	2749	51,200 PSI
2700	26.5	2543	41,100 PSI	28.8	2749	51,200 PSI
H380	26.2	2476	39,300 PSI	28.7	2724	51,100 PSI
CFE 223	25.8	2546	41,200 PSI	28.0	2753	51,500 PSI
BL-C(2)	25.0	2521	41,600 PSI	27.4	2741	51,200 PSI
LEVERevolution	22.7	2397	40,900 PSI	27.3	2701	51,200 PSI
2520	25.0	2536	41,100 PSI	27.2	2743	51,200 PSI
StaBALL Match	24.3	2449	39,900 PSI	26.5	2669	51,300 PSI
Bullet: 95 GR. SIE HPBT			**Dia: .224″**			
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.250″**
StaBALL 6.5	27.5	2463	39,500 PSI	29.6C	2681	51,100 PSI
Big Game	25.7	2421	40,000 PSI	28.6	2654	51,400 PSI
760	25.6	2448	42,300 PSI	28.5C	2665	51,200 PSI
2700	25.6	2448	42,300 PSI	28.5C	2665	51,200 PSI
H4350	25.2	2383	39,000 PSI	28.0C	2633	51,000 PSI
H380	24.0	2322	40,500 PSI	27.8C	2605	51,200 PSI
BL-C(2)	24.0	2398	41,700 PSI	27.0C	2650	51,300 PSI
CFE 223	22.5	2318	41,800 PSI	27.0	2623	51,200 PSI
2520	23.5	2402	39,700 PSI	26.6	2637	51,100 PSI
StaBALL Match	21.3	2282	43,000 PSI	25.8	2547	51,300 PSI

22-250 REMINGTON

Barrel: 24″ Twist: 1:14″ Trim: 1.902″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 40 GR. NOS BT			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
StaBALL 6.5	41.0	3826	45,000 PSI	44.8C	4155	56,600 PSI
CFE 223	40.0	4036	47,600 PSI	43.0C	4328	58,300 PSI
H380	38.0	3647	34,500 CUP	41.0	3855	39,200 CUP
760	38.0	3644	39,600 CUP	41.0	3933	47,100 CUP
StaBALL Match	36.6	3924	47,100 PSI	40.3	4306	62,900 PSI
Varget	37.5	3936	43,400 CUP	39.5	4135	51,100 CUP
IMR 4895	36.0	3807	45,500 PSI	39.0C	4189	60,200 PSI
IMR 8208 XBR	35.0	3944	47,000 PSI	39.0	4336	63,500 PSI
IMR 4064	36.0	3877	47,700 PSI	38.5C	4187	60,500 PSI
H4895	34.0	3750	43,800 CUP	37.0	4060	48,700 CUP
Benchmark	34.0	3837	41,600 CUP	36.5	4114	50,100 CUP
IMR 3031	34.0	3941	50,200 PSI	36.3	4224	62,100 PSI
Bullet: 45 GR. BAR XBT			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.340″**
H380	38.0	3612	37,900 CUP	41.0	3839	43,500 CUP
760	38.0	3537	40,200 CUP	41.0	3899	47,600 CUP
StaBALL Match	36.0	3784	48,700 PSI	39.5	4103	62,200 PSI
IMR 4064	35.0	3708	48,700 PSI	38.0C	4042	63,000 PSI
Varget	35.0	3652	46,000 CUP	38.0	3921	49,200 CUP
IMR 4895	35.0	3666	47,400 PSI	38.0	4007	61,700 PSI
H4895	34.0	3660	47,300 CUP	37.0	3918	49,100 CUP
Benchmark	33.5	3786	45,300 CUP	36.0	3979	51,000 CUP
IMR 3031	33.0	3704	47,600 PSI	35.2	4015	62,300 PSI
BL-C(2)	32.0	3612	42,600 CUP	35.0	3928	49,100 CUP
H335	31.5	3593	41,400 CUP	34.5	3908	48,500 CUP
H322	31.0	3490	44,600 CUP	32.5	3720	48,500 CUP
Bullet: 50 GR. SIE SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
StaBALL 6.5	39.5	3690	49,100 PSI	43.0	4001	62,400 PSI
H4350	39.0	3410	43,600 CUP	42.0	3579	48,900 CUP
H380	38.0	3562	41,700 CUP	41.0	3742	45,300 CUP
760	37.0	3494	41,400 CUP	40.0	3765	48,600 CUP
CFE 223	37.0	3702	51,100 PSI	39.8	3968	62,600 PSI
StaBALL Match	35.0	3576	46,300 PSI	38.3	3925	62,700 PSI
IMR 4895	35.0	3587	49,100 PSI	37.6	3862	61,500 PSI
Varget	34.5	3596	43,600 CUP	37.5	3834	50,400 CUP
IMR 4064	34.5	3560	47,900 PSI	37.0	3866	61,900 PSI
H4895	33.5	3530	43,800 CUP	36.5	3827	50,200 CUP
Benchmark	33.5	3718	45,900 CUP	36.0	3903	51,400 CUP
IMR 8208 XBR	33.0	3728	55,200 PSI	36.0	3925	62,900 PSI
IMR 3031	33.0	3601	49,500 PSI	35.0	3862	62,600 PSI
BL-C(2)	31.5	3506	43,600 CUP	34.5	3740	48,400 CUP
H335	31.5	3519	44,400 CUP	34.5	3753	48,700 CUP
H322	30.0	3441	46,200 CUP	32.0	3628	50,300 CUP
Bullet: 52 GR. HDY ELD-M			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
StaBALL 6.5	39.0	3619	48,600 PSI	42.4	3939	62,200 PSI
H380	38.0	3509	41,900 CUP	41.0	3717	46,600 CUP
H4350	39.0	3402	43,800 CUP	41.0	3557	49,400 CUP
760	37.0	3461	42,000 CUP	40.0	3692	48,900 CUP
CFE 223	36.0	3596	47,600 PSI	39.3	3932	63,100 PSI
StaBALL Match	34.4	3584	50,200 PSI	37.7	3873	63,000 PSI
IMR 4895	34.5	3509	48,200 PSI	37.0	3808	62,000 PSI
Varget	34.0	3630	45,500 CUP	36.0	3784	50,000 CUP
H4895	32.5	3467	44,400 CUP	35.5	3729	49,600 CUP
IMR 8208 XBR	32.5	3612	52,200 PSI	35.5	3837	60,100 PSI
Benchmark	32.5	3602	45,800 CUP	34.6	3755	49,800 CUP
BL-C(2)	31.0	3461	44,600 CUP	34.0	3702	49,700 CUP
IMR 3031	32.0	3474	48,000 PSI	34.0	3768	62,500 PSI
H335	31.0	3417	43,200 CUP	33.5	3657	49,200 CUP
H322	29.0	3379	45,500 CUP	31.0	3498	48,000 CUP
Bullet: 55 GR. SPR SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
StaBALL 6.5	39.0	3559	47,700 PSI	42.5	3887	62,700 PSI
H380	38.0	3507	45,400 CUP	41.0	3713	50,700 CUP
CFE 223	36.0	3557	49,300 PSI	39.2	3855	63,500 PSI
H4350	37.0	3296	46,400 CUP	39.0	3490	47,800 CUP
760	36.0	3324	40,200 CUP	39.0	3582	46,700 CUP
StaBALL Match	34.3	3459	48,300 PSI	37.5	3764	62,700 PSI
Varget	34.0	3490	46,100 CUP	36.5	3664	50,400 CUP
IMR 4895	34.0	3486	50,900 PSI	36.5	3725	62,400 PSI
IMR 4064	34.0	3461	50,000 PSI	36.3	3713	62,000 PSI
IMR 8208 XBR	32.0	3514	52,300 PSI	35.8	3768	62,700 PSI
H4895	32.5	3446	45,000 CUP	35.5	3670	49,300 CUP
IMR 3031	32.0	3474	51,300 PSI	34.1	3691	62,500 PSI
BL-C(2)	31.0	3410	43,800 CUP	34.0	3606	49,600 CUP
Benchmark	31.6	3532	46,200 CUP	33.6	3674	50,200 CUP
H335	30.5	3400	44,400 CUP	33.0	3589	51,100 CUP
H322	28.0	3339	46,200 CUP	30.0	3480	49,800 CUP
Bullet: 60 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
Superformance	39.0	3390	45,500 PSI	43.0C	3738	60,000 PSI
H4350	39.0	3374	51,600 PSI	41.5C	3570	60,500 PSI
StaBALL 6.5	37.3	3391	47,300 PSI	40.6	3715	62,400 PSI
H380	37.5	3335	51,000 PSI	40.5	3580	62,000 PSI
760	37.0	3273	47,600 PSI	40.0	3548	60,300 PSI
2700	36.1	3269	58,000 PSI	38.0	3478	61,100 PSI
CFE 223	35.0	3441	51,900 PSI	37.6	3688	63,800 PSI
BL-C(2)	34.0	3276	47,100 PSI	37.0	3560	61,000 PSI
StaBALL Match	32.9	3303	48,400 PSI	36.1	3604	63,300 PSI
Varget	33.0	3318	52,200 PSI	35.8	3503	60,400 PSI
H4895	32.0	3340	51,700 PSI	35.0	3551	61,300 PSI
H335	31.5	3272	50,800 PSI	34.0	3494	61,400 PSI
IMR 8208 XBR	31.5	3412	55,600 PSI	34.0	3550	61,000 PSI
Benchmark	29.0	3183	49,000 PSI	32.0	3406	59,900 PSI
H322	29.0	3222	50,900 PSI	31.5	3434	62,000 PSI
Bullet: 63 GR. SIE SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.350″**
Superformance	38.0	3294	44,600 PSI	42.7C	3674	61,400 PSI
StaBALL 6.5	37.0	3330	46,700 PSI	40.6	3669	62,300 PSI
IMR 4350	38.0	3308	52,900 PSI	40.0C	3467	60,300 PSI
H380	36.0	3266	46,600 CUP	38.5	3419	51,200 CUP
H4350	36.0	3210	45,400 CUP	38.0	3391	48,000 CUP
760	35.0	3262	43,200 CUP	38.0	3432	47,100 CUP
2700	35.6	3199	57,800 PSI	37.5	3408	60,900 PSI
CFE 223	35.0	3400	53,900 PSI	37.3	3597	64,000 PSI
IMR 4895	33.0	3287	51,500 PSI	35.5	3502	62,700 PSI
StaBALL Match	32.3	3217	48,200 PSI	35.4	3500	61,900 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4064	33.0	3269	50,800 PSI	35.3	3499	62,900 PSI
4064	31.0	2983	53,000 PSI	34.5	3390	59,000 PSI
H4895	31.5	3317	47,300 CUP	34.0	3486	50,400 CUP
Varget	29.5	3039	39,500 CUP	34.0	3426	50,400 CUP
IMR 3031	31.0	3284	53,300 PSI	33.1	3457	62,700 PSI
IMR 8208 XBR	30.0	3256	52,400 PSI	33.0	3459	62,100 PSI
Bullet: 70 GR. SPR SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.330″**
Superformance	37.0	3206	50,500 PSI	40.8C	3499	63,700 PSI
StaBALL 6.5	35.0	3168	48,700 PSI	38.6	3460	62,400 PSI
IMR 4350	36.0	3162	54,500 PSI	38.2C	3324	62,500 PSI
H1000	36.0	3042	41,100 CUP	38.0	3187	47,500 CUP
H4831	35.0	2976	42,000 CUP	38.0	3189	50,300 CUP
H4350	34.0	3007	44,800 CUP	36.0	3129	49,600 CUP
CFE 223	33.0	3147	52,600 PSI	35.8	3373	63,200 PSI
H380	33.0	3006	45,200 CUP	35.0	3161	51,500 CUP
760	31.0	2860	42,000 CUP	34.0	3117	49,400 CUP
StaBALL Match	30.8	3057	51,300 PSI	33.6	3270	62,300 PSI
IMR 4064	31.0	3106	53,200 PSI	33.5	3298	62,600 PSI
IMR 4895	31.0	3111	53,500 PSI	33.3	3278	62,300 PSI
Varget	29.5	3006	44,700 CUP	32.0	3196	50,300 CUP
H4895	28.0	2933	43,000 CUP	31.5	3196	50,700 CUP
IMR 3031	29.0	3068	53,600 PSI	31.5	3248	63,600 PSI
IMR 8208 XBR	28.0	3015	49,800 PSI	31.0	3246	61,600 PSI

220 SWIFT

Barrel: 24″ Twist: 1:14″ Trim: 2.195″

Bullet: 35 GR. NOS LF			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
760	41.4	4011	43,600 CUP	45.0	4304	51,800 CUP
H380	41.2	3988	41,200 CUP	44.8	4226	47,700 CUP
CFE 223	39.4	4178	44,900 CUP	42.8	4462	53,500 CUP
Varget	38.5	4035	43,500 CUP	41.0	4251	51,100 CUP
IMR 4895	38.3	3987	47,000 CUP	40.7	4222	52,100 CUP
IMR 4064	37.8	3955	42,800 CUP	40.2	4238	51,300 CUP
H4895	37.6	4171	47,400 CUP	40.0	4401	52,300 CUP
IMR 3031	36.2	4019	45,200 CUP	38.5	4248	51,300 CUP
Bullet: 40 GR. SIE HP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
760	42.5	3928	45,500 CUP	46.0	4213	51,600 CUP
H380	40.5	3867	44,400 CUP	44.0	4124	50,000 CUP
CFE 223	38.6	3954	44,900 CUP	41.9	4274	53,000 CUP
StaBALL Match	37.5	3803	43,000 CUP	40.8	4126	53,700 CUP
Varget	38.0	4007	49,800 CUP	40.5	4113	49,800 CUP
IMR 4895	36.0	3743	42,500 CUP	40.5	4093	51,300 CUP
H335	37.0	3923	44,400 CUP	40.0	4158	53,100 CUP
H4895	37.0	3768	41,400 CUP	40.0	4126	52,000 CUP
IMR 4064	36.0	3777	44,700 CUP	40.0	4110	51,400 CUP
IMR 3031	35.0	3904	48,100 CUP	38.5	4189	52,000 CUP
Bullet: 45 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
760	41.5	3849	48,700 CUP	45.0	4100	51,700 CUP
H380	40.5	3784	42,000 CUP	44.0	4041	52,400 CUP
Varget	36.0	3777	47,100 CUP	40.2	4002	52,100 CUP
H4895	36.5	3676	38,400 CUP	39.5	3996	52,100 CUP
StaBALL Match	35.0	3551	42,100 CUP	38.2	3915	53,300 CUP
Bullet: 50 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
760	40.5	3663	45,900 CUP	44.0	3826	49,600 CUP
H380	40.0	3668	41,400 CUP	43.5	3947	53,800 CUP
IMR 4895	35.0	3661	48,700 CUP	38.7	3868	52,900 CUP
IMR 4064	35.0	3640	46,900 CUP	38.4	3905	53,000 CUP
CFE 223	35.6	3629	45,400 CUP	38.3	3850	53,500 CUP
BL-C(2)	35.0	3431	40,200 CUP	38.0	3888	51,000 CUP
H4895	35.0	3460	39,000 CUP	38.0	3840	51,200 CUP
StaBALL Match	34.4	3485	44,300 CUP	37.4C	3728	53,300 CUP
IMR 3031	33.0	3681	48,600 CUP	36.5	3877	53,100 CUP
Varget	34.5	3616	47,200 CUP	36.0	3770	50,200 CUP
Bullet: 52 GR. SIE HPBT			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
760	39.5	3596	43,100 CUP	42.0	3792	49,900 CUP
H380	39.0	3632	47,100 CUP	41.5	3792	51,400 CUP
BL-C(2)	35.7	3546	44,200 CUP	38.0	3801	51,200 CUP
StaBALL Match	34.4	3391	42,700 CUP	37.4	3713	53,200 CUP
CFE 223	34.2	3513	44,200 CUP	37.2	3733	52,800 CUP
Varget	34.0	3516	42,700 CUP	36.5	3687	50,300 CUP
H4895	33.8	3588	45,100 CUP	36.0	3736	50,000 CUP
Bullet: 55 GR. HDY SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
H4831	41.5	3194	36,600 CUP	46.0	3616	46,600 CUP
760	40.5	3536	47,300 CUP	44.0	3833	53,700 CUP
H380	39.0	3580	45,900 CUP	42.5	3839	53,300 CUP
StaBALL 6.5	38.5	3492	44,000 CUP	42.3	3716	52,900 CUP
H4350	39.0	3225	42,000 CUP	42.0	3619	50,800 CUP
IMR 4895	34.0	3546	48,500 CUP	38.0	3739	53,000 CUP
IMR 4064	34.0	3498	46,100 CUP	37.5	3742	52,500 CUP
StaBALL Match	34.4	3379	43,800 CUP	37.4	3657	53,600 CUP
H4895	34.0	3481	45,900 CUP	37.0	3698	52,000 CUP
BL-C(2)	34.0	3426	44,400 CUP	36.0	3682	49,900 CUP
Varget	34.0	3516	47,000 CUP	36.0	3645	51,900 CUP
IMR 3031	32.0	3490	47,300 CUP	35.2	3687	52,700 CUP
Bullet: 60 GR. HDY V-MAX			**Dia: .224″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.680″**
2700	39.9	3391	56,700 PSI	42.0	3607	59,700 PSI
Hunter	36.9	3150	55,200 PSI	41.0	3495	61,400 PSI
Big Game	34.0	3200	54,600 PSI	38.0	3450	61,000 PSI
Bullet: 60 GR. NOS PART			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
H4831	41.5	3252	41,600 CUP	46.0C	3556	51,800 CUP
760	38.5	3425	43,900 CUP	41.7	3647	51,400 CUP
StaBALL 6.5	37.7	3366	45,500 CUP	41.5	3602	52,900 CUP
H4350	37.0	3230	39,800 CUP	41.0	3527	50,600 CUP
H380	35.0	3188	44,400 CUP	38.0	3413	51,900 CUP
StaBALL Match	33.8	3268	46,500 CUP	36.8	3501	53,800 CUP
CFE 223	33.2	3346	47,800 CUP	36.1	3505	53,800 CUP
Varget	33.0	3242	40,000 CUP	36.0	3473	49,000 CUP
IMR 4064	33.0	3322	46,600 CUP	36.0	3539	51,800 CUP
IMR 4895	33.0	3270	44,100 CUP	36.0	3520	53,100 CUP
H4895	30.5	3165	39,200 CUP	33.5	3401	49,600 CUP
Bullet: 62 GR. BAR TAC-X BT			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
StaBALL 6.5	38.0	3322	45,400 CUP	41.8	3609	53,000 CUP
H4350	37.2	3177	43,500 CUP	40.5C	3389	52,400 CUP
760	37.2	3181	42,900 CUP	40.4	3394	51,200 CUP
H380	36.7	3160	45,900 CUP	39.0	3338	51,700 CUP
StaBALL Match	33.7	3216	45,600 CUP	36.7	3460	53,700 CUP
IMR 4895	33.4	3217	46,300 CUP	35.5	3360	50,600 CUP
IMR 4064	33.2	3236	45,300 CUP	35.3	3369	50,000 CUP
Varget	32.3	3161	44,100 CUP	34.3	3315	50,400 CUP
H4895	31.7	3121	45,700 CUP	33.7	3364	51,400 CUP
Bullet: 63 GR. SIE SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
H4831	41.5	3180	37,200 CUP	46.0	3586	52,000 CUP
760	38.5	3339	44,400 CUP	42.0	3595	52,100 CUP
StaBALL 6.5	38.2	3305	43,400 CUP	42.0	3611	53,200 CUP
Superformance	38.4	3360	45,300 CUP	42.0	3583	52,500 CUP
H380	38.0	3405	45,900 CUP	41.0	3580	51,900 CUP
H4350	37.0	3181	46,000 CUP	39.0	3474	52,000 CUP
StaBALL Match	33.4	3197	45,800 CUP	36.3	3386	53,500 CUP
H4895	32.5	3218	40,800 CUP	35.5	3484	51,000 CUP
Varget	32.0	3181	42,200 CUP	34.0	3407	49,300 CUP
Bullet: 70 GR. SPR SP			**Dia: .224″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.680″**
H1000	42.0	3149	43,800 CUP	44.0	3317	50,200 CUP
H4831	37.0	2991	45,800 CUP	42.0	3359	52,600 CUP
Superformance	37.3	3209	45,400 CUP	40.8	3428	52,700 CUP
StaBALL 6.5	35.9	3088	44,200 CUP	39.3	3359	52,400 CUP
H4350	36.0	3027	45,200 CUP	38.0	3313	51,200 CUP
760	34.0	2955	44,200 CUP	37.0	3148	50,300 CUP
Varget	31.0	3103	46,500 CUP	33.0	3247	49,900 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

22 GT

Barrel: 24″ Twist: 1:7″ Trim: 1.720″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 40 GR. NOS B-TIP			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.185″**
H380	39.4	3798	45,300 PSI	43.8	4184	57,000 PSI
Big Game	39.4	3837	45,100 PSI	43.8	4272	59,400 PSI
Varget	36.6	3778	45,100 PSI	40.7	4242	60,100 PSI
2495	35.9	3693	46,000 PSI	39.9	4142	61,400 PSI
IMR 4064	35.9	3740	45,200 PSI	39.8	4233	61,200 PSI
IMR 8208 XBR	34.7	3820	45,200 PSI	38.5	4264	61,000 PSI
5744	28.1	3775	43,500 PSI	33.0	4303	62,000 PSI
Bullet: 50 GR. BAR VG			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.325″**
Big Game	36.5	3504	51,200 PSI	40.6	3791	61,900 PSI
2700	36.5	3538	52,800 PSI	40.5	3781	60,500 PSI
H380	36.2	3521	52,000 PSI	40.2	3801	61,200 PSI
2495	32.1	3447	54,800 PSI	35.7	3693	61,800 PSI
4064	31.8	3453	56,200 PSI	35.3	3661	61,000 PSI
IMR 4064	31.3	3467	53,300 PSI	34.8	3732	61,500 PSI
Bullet: 53 GR. HDY V-MAX			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.320″**
2700	38.5	3528	48,300 PSI	42.7	3864	61,900 PSI
H4350	37.7	3500	50,800 PSI	41.9	3765	61,000 PSI
H380	37.0	3453	46,500 PSI	41.2	3812	60,200 PSI
Big Game	36.8	3436	47,000 PSI	40.9	3815	61,000 PSI
CFE 223	35.7	3560	52,500 PSI	39.7	3824	61,800 PSI
4064	34.0	3402	49,800 PSI	37.8	3712	61,200 PSI
2495	33.7	3380	48,800 PSI	37.4	3718	61,300 PSI
Varget	33.4	3464	49,000 PSI	37.1	3767	61,400 PSI
IMR 4064	33.0	3378	46,200 PSI	36.7	3743	60,900 PSI
Bullet: 55 GR. SIE BK			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.320″**
2700	37.5	3507	51,600 PSI	41.6	3751	60,500 PSI
H4350	37.1	3373	48,800 PSI	41.2	3716	61,800 PSI
H380	36.2	3393	47,000 PSI	40.2	3727	60,500 PSI
Big Game	35.8	3366	47,200 PSI	39.7	3695	59,800 PSI
CFE 223	33.9	3415	50,300 PSI	37.7	3673	60,100 PSI
4064	33.4	3371	51,400 PSI	37.1	3660	61,800 PSI
2495	33.0	3354	50,600 PSI	36.6	3651	61,700 PSI
Varget	32.7	3425	50,400 PSI	36.3	3701	61,700 PSI
IMR 4064	32.6	3382	49,000 PSI	36.2	3701	60,900 PSI
Bullet: 60 GR. BER FBV			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.300″**
StaBALL 6.5	38.5	3333	48,200 PSI	42.8	3665	61,100 PSI
2700	36.7	3370	50,900 PSI	40.8	3645	61,900 PSI
H4350	36.1	3262	48,500 PSI	40.2	3597	61,500 PSI
Big Game	34.8	3245	47,800 PSI	38.6	3559	61,400 PSI
4064	32.1	3234	51,000 PSI	35.6	3524	61,700 PSI
2495	32.0	3246	51,000 PSI	35.6	3527	61,800 PSI
IMR 4064	31.1	3232	48,600 PSI	34.6	3546	60,900 PSI
Varget	30.5	3231	49,400 PSI	33.9	3491	61,200 PSI
Bullet: 60 GR. NOS PART			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.260″**
StaBALL 6.5	38.3	3372	48,400 PSI	42.5	3675	61,500 PSI
2700	36.7	3427	52,400 PSI	40.8	3659	61,800 PSI
Big Game	34.8	3289	49,600 PSI	38.6	3587	61,700 PSI
H4350	34.2	3282	52,300 PSI	38.0	3536	61,800 PSI
2495	29.8	3232	54,800 PSI	33.1	3444	61,800 PSI
IMR 4064	27.9	3130	48,400 PSI	31.0	3399	61,100 PSI
Bullet: 62 GR. BAR TTSX			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.330″**
StaBALL 6.5	36.8	3265	48,100 PSI	40.9	3573	61,900 PSI
H4350	35.8	3142	46,100 PSI	39.8	3504	61,900 PSI
2700	35.8	3336	52,700 PSI	39.8	3580	61,800 PSI
Big Game	34.0	3174	48,600 PSI	37.7	3466	61,500 PSI
4064	30.5	3106	50,600 PSI	33.9	3368	61,900 PSI
2495	29.4	3082	50,100 PSI	32.7	3326	60,600 PSI
IMR 4064	28.4	3134	51,700 PSI	31.6	3366	61,200 PSI
5744	22.7	2947	41,800 PSI	28.4	3484	62,000 PSI
Bullet: 65 GR. SIE SBT GK			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.250″**
StaBALL 6.5	38.1	3193	46,300 PSI	42.3	3572	61,900 PSI
IMR 4350	36.2	3170	47,900 PSI	40.2	3506	61,400 PSI
H4350	36.1	3129	45,900 PSI	40.1	3496	61,200 PSI
4064	32.3	3102	48,100 PSI	35.9	3411	61,400 PSI
Varget	30.9	3177	49,900 PSI	34.4	3440	61,800 PSI
Bullet: 69 GR. SIE TMK			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.400″**
Hunter	37.0	3066	46,800 PSI	41.1	3419	61,700 PSI
StaBALL 6.5	36.7	3106	45,500 PSI	40.8	3435	61,900 PSI
H4350	35.2	3057	46,300 PSI	39.1	3393	61,900 PSI
IMR 4350	34.7	3046	45,900 PSI	38.6	3381	61,000 PSI
4064	31.6	3001	46,900 PSI	35.1	3300	61,100 PSI
Bullet: 75 GR. SFT SCIR II			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.424″**
Superformance	36.3	2977	51,300 PSI	40.4	3227	61,700 PSI
H4831SC	36.1	2873	50,500 PSI	40.1	3120	61,100 PSI
Hunter	35.1	2869	49,200 PSI	39.0	3136	61,700 PSI
StaBALL 6.5	34.5	2927	51,300 PSI	38.4	3184	61,900 PSI
4350	31.4	2810	53,400 PSI	34.9	3017	61,000 PSI
IMR 4350	31.3	2822	51,000 PSI	34.8	3076	61,500 PSI
H4350	31.3	2852	52,300 PSI	34.8	3075	61,900 PSI
Bullet: 80 GR. SIE HPBT M			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.468″**
Superformance	36.9	3049	52,400 PSI	41.1	3271	61,800 PSI
H4831SC	36.7	2881	48,300 PSI	40.7	3179	60,900 PSI
Hunter	36.3	2850	45,800 PSI	40.3	3173	61,600 PSI
StaBALL 6.5	35.9	3003	52,000 PSI	39.9	3247	62,000 PSI
4350	35.7	3014	54,700 PSI	39.7	3197	59,900 PSI
IMR 4350	33.2	2907	49,600 PSI	36.9	3171	61,000 PSI
H4350	32.6	2878	49,500 PSI	36.2	3146	61,900 PSI
Bullet: 85.5 GR. BER HYBRID			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.540″**
Hunter	34.7	2748	44,800 PSI	38.5	3049	61,200 PSI
H4831SC	34.4	2817	51,500 PSI	38.2	3051	61,800 PSI
StaBALL 6.5	33.5	2854	51,000 PSI	37.3	3085	62,000 PSI
Superformance	33.1	2879	53,300 PSI	36.7	3078	61,900 PSI
4350	31.1	2759	50,000 PSI	34.5	2991	61,000 PSI
H4350	30.3	2750	49,900 PSI	33.6	2992	61,700 PSI
IMR 4350	29.8	2747	49,200 PSI	33.1	2981	61,200 PSI
5744	21.0	2526	42,800 PSI	26.2	2983	62,000 PSI
Bullet: 88 GR. HDY ELD-M			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.550″**
Superformance	34.5	2867	51,900 PSI	38.3	3094	61,700 PSI
H4831SC	34.4	2769	49,200 PSI	38.3	3038	61,900 PSI
Hunter	34.1	2686	43,200 PSI	37.9	2980	60,000 PSI
StaBALL 6.5	33.9	2831	49,800 PSI	37.7	3086	61,900 PSI
4350	32.8	2761	48,300 PSI	36.4	3017	60,500 PSI
IMR 4350	30.8	2751	48,500 PSI	34.2	2998	60,900 PSI
H4350	30.2	2730	49,200 PSI	33.6	2979	62,000 PSI
Bullet: 95 GR. SIE HPBT M			**Dia: 0.224″**			
Case: ALPHA			**Primer: CCI 450, Small Rifle Mag**			**Col: 2.555″**
H4831SC	33.5	2659	51,700 PSI	37.2	2896	61,800 PSI
Superformance	32.6	2716	53,800 PSI	36.2	2914	61,900 PSI
IMR 4831	31.1	2594	49,000 PSI	34.6	2832	60,900 PSI

22 CREEDMOOR

Barrel: 24″ Twist: 1:7″ Trim: 1.910″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 62 GR. SFT SCIR			**Dia: .224″**			
Case: Alpha			**Primer: Winchester LR, Large Rifle**			**Col: 2.570″**
Magpro	44.5	3238	47,900 PSI	48.4	3543	60,500 PSI
H4831	41.0	3315	50,100 PSI	44.6C	3551	60,500 PSI
IMR 7828 SSC	40.7	3246	48,100 PSI	44.3	3552	61,700 PSI
Superformance	40.5	3350	47,600 PSI	44.2	3656	60,900 PSI
Hunter	40.0	3291	51,600 PSI	43.6	3545	61,100 PSI
IMR 4831	39.0	3267	49,800 PSI	42.6	3553	60,900 PSI
Bullet: 69 GR. NOS HPBT			**Dia: .224″**			
Case: Alpha			**Primer: Winchester LR, Large Rifle**			**Col: 2.570″**
Magpro	44.5	3149	47,100 PSI	48.4	3441	61,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Rifle Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 7828 SSC	41.0	3159	47,500 PSI	44.6	3445	61,100 PSI
H4831	41.0	3211	48,700 PSI	44.6	3444	60,700 PSI
Superformance	40.4	3269	48,200 PSI	44.0	3540	61,000 PSI
IMR 4831	39.3	3155	47,700 PSI	42.8	3421	60,500 PSI
Hunter	38.4	3132	47,200 PSI	41.8	3406	60,800 PSI

Bullet: 70 GR. BAR TAC-X BT Dia: .224″
Case: Alpha Primer: Winchester LR, Large Rifle Col: 2.590″

Magnum	44.1	3187	47,600 PSI	48.0C	3435	58,300 PSI
Magpro	43.0	3116	48,700 PSI	46.8	3411	61,900 PSI
H1000	41.2	3130	48,700 PSI	44.8C	3395	60,800 PSI
H4831	39.0	3130	49,900 PSI	42.6	3375	60,600 PSI
IMR 7828 SSC	39.1	3134	50,200 PSI	42.5	3361	60,800 PSI
Superformance	39.0	3232	51,700 PSI	42.4	3451	61,300 PSI
Hunter	38.5	3174	50,700 PSI	41.8	3398	61,500 PSI
IMR 4831	37.5	3118	50,000 PSI	40.8	3369	60,800 PSI

Bullet: 73 GR. HDY ELD-M Dia: .224″
Case: Alpha Primer: Winchester LR, Large Rifle Col: 2.600″

Magnum	44.2	3061	40,300 PSI	48.0C	3348	53,200 PSI
StaBALL HD	43.5	2933	42,700 PSI	47.9C	3309	57,900 PSI
Magpro	43.6	3091	45,800 PSI	47.4	3385	61,000 PSI
H1000	41.8	3049	42,100 PSI	45.5C	3332	56,000 PSI
IMR 7828 SSC	40.5	3105	46,200 PSI	44.0	3389	60,100 PSI
H4831	40.1	3145	47,600 PSI	43.6	3398	61,200 PSI
Superformance	40.0	3225	48,300 PSI	43.5	3484	61,300 PSI
Hunter	39.0	3133	47,300 PSI	42.4	3409	61,800 PSI
IMR 4831	38.8	3106	48,000 PSI	42.2	3382	62,300 PSI

Bullet: 77 GR. SIE TMK Dia: .224″
Case: Alpha Primer: Winchester LR, Large Rifle Col: 2.560″

StaBALL HD	43.2	2972	47,300 PSI	47.3C	3282	60,800 PSI
Magnum	42.6	2970	44,600 PSI	46.4	3219	54,600 PSI
Magpro	42.5	2979	47,400 PSI	46.2	3264	59,900 PSI
Retumbo	42.3	2956	45,900 PSI	46.0	3260	60,800 PSI
H1000	41.0	2998	47,800 PSI	44.6	3271	60,900 PSI
IMR 7828 SSC	38.6	2990	49,400 PSI	42.0	3215	60,800 PSI
Superformance	38.3	3100	51,100 PSI	41.7	3320	61,000 PSI
H4831	37.9	3011	49,200 PSI	41.2	3230	60,600 PSI
Hunter	37.1	2997	49,700 PSI	40.4	3225	61,900 PSI
IMR 4831	36.8	2991	50,400 PSI	40.0	3226	60,600 PSI

Bullet: 85.5 GR. BER LR-H/T Dia: .224″
Case: Alpha Primer: Winchester LR, Large Rifle Col: 2.700″

StaBALL HD	42.8	2840	45,600 PSI	46.8C	3160	60,700 PSI
Magnum	41.9	2901	48,300 PSI	45.6	3174	60,600 PSI
Retumbo	40.7	2810	45,800 PSI	44.3C	3110	60,200 PSI
Magpro	40.1	2856	48,100 PSI	43.6	3101	59,100 PSI
H1000	39.0	2900	51,900 PSI	42.5	3117	61,800 PSI
IMR 7828 SSC	36.9	2872	51,100 PSI	40.2	3103	61,800 PSI
H4831	36.6	2924	52,600 PSI	39.8	3118	61,600 PSI
Superformance	36.0	2940	52,300 PSI	39.3	3134	60,700 PSI
IMR 4831	35.2	2896	52,600 PSI	38.4	3087	60,600 PSI
Hunter	35.2	2834	50,400 PSI	38.3	3046	60,800 PSI

Bullet: 90 GR. HDY A-TIP Dia: .224″
Case: Alpha Primer: Winchester LR, Large Rifle Col: 2.700″

Magnum	42.5	2833	48,000 PSI	46.2	3107	59,900 PSI
StaBALL HD	42.0	2819	46,700 PSI	46.0	3116	61,400 PSI
Retumbo	42.1	2840	49,600 PSI	45.0C	3058	60,300 PSI
Magpro	40.3	2759	47,300 PSI	43.9	3041	60,000 PSI
H1000	39.5	2804	48,800 PSI	43.0	3049	60,400 PSI
IMR 7828 SSC	37.5	2818	48,900 PSI	40.8	3071	61,600 PSI
H4831	36.8	2840	51,100 PSI	40.0	3048	61,500 PSI
Superformance	35.8	2789	48,000 PSI	39.0	3042	60,500 PSI
Hunter	34.9	2712	48,400 PSI	38.0	2961	60,600 PSI
IMR 4831	34.7	2774	50,400 PSI	37.8	2987	60,000 PSI

6MM ARC

Barrel: 24″ Twist: 1:7.5″ Trim: 1.480″

Bullet: 70 GR. SPR HP Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.090″

LEVERevolution	30.0	2975	34,800 PSI	33.3	3303	47,100 PSI
BL-C(2)	29.8	2879	35,700 PSI	33.1	3198	49,500 PSI
CFE 223	29.7	2888	33,700 PSI	33.0	3246	47,800 PSI
748	28.5	2859	35,300 PSI	31.7	3214	50,900 PSI
StaBALL Match	28.5	2809	35,600 PSI	31.0	3047	45,500 PSI
H335	27.8	2939	37,000 PSI	30.9	3264	51,100 PSI
IMR 8208 XBR	27.4	2949	35,800 PSI	30.4	3301	51,500 PSI
IMR 4895	27.0	2794	34,300 PSI	30.0C	3142	47,300 PSI
H4895	26.6	2885	34,600 PSI	29.6C	3238	49,500 PSI
Benchmark	25.6	2879	38,200 PSI	28.5	3190	51,600 PSI

Bullet: 80 GR. HDY GMX Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.100″

StaBALL Match	26.4	2548	40,600 PSI	28.8C	2800	51,900 PSI
Varget	25.1	2503	39,400 PSI	27.9C	2796	51,000 PSI
IMR 4895	25.0	2503	41,000 PSI	27.8C	2800	51,500 PSI
IMR 4064	24.8	2476	40,800 PSI	27.6C	2765	50,700 PSI
H4895	24.5	2571	40,300 PSI	27.3C	2860	51,600 PSI
LEVERevolution	27.3	2613	38,300 PSI	30.3	2968	51,300 PSI
CFE 223	27.2	2627	38,900 PSI	30.2	2916	51,300 PSI
BL-C(2)	26.8	2580	42,200 PSI	29.8	2825	51,300 PSI
748	25.7	2560	40,300 PSI	28.6	2845	51,300 PSI
IMR 8208 XBR	24.4	2536	39,100 PSI	27.2	2856	51,600 PSI

Bullet: 95 GR. BAR BT LRX Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.260″

LEVERevolution	25.0	2443	40,300 PSI	29.0C	2759	51,300 PSI
760	28.0	2468	40,600 PSI	30.7	2700	50,500 PSI
2700	28.0	2468	40,600 PSI	30.7	2700	50,500 PSI
CFE 223	28.0	2551	40,100 PSI	30.0	2773	50,100 PSI
2520	26.5	2485	38,300 PSI	29.0	2730	48,500 PSI
BL-C(2)	25.5	2396	41,000 PSI	29.0	2700	51,600 PSI
748	25.5	2413	38,000 PSI	28.5	2706	51,200 PSI
StaBALL Match	26.0	2468	41,900 PSI	28.3	2689	51,700 PSI
TAC	24.8	2441	40,200 PSI	27.5	2672	50,600 PSI
2495	23.5	2239	38,400 PSI	26.8	2555	51,700 PSI
2460	24.0	2382	39,200 PSI	26.7	2645	51,200 PSI

Bullet: 95 GR. SIE TMK Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.260″

760	27.5	2467	35,800 PSI	30.7C	2770	51,000 PSI
2700	27.5	2467	35,800 PSI	30.7C	2770	51,000 PSI
StaBALL Match	26.7	2553	40,300 PSI	29.0C	2771	51,800 PSI
CFE 223	27.3	2591	35,900 PSI	30.4	2912	51,700 PSI
BL-C(2)	27.1	2567	39,100 PSI	30.2	2839	51,800 PSI
LEVERevolution	26.8	2606	37,400 PSI	29.8	2900	51,700 PSI

Bullet: 100 GR. NOS PART Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.150″

760	26.5	2414	39,600 PSI	29.5C	2657	51,200 PSI
2700	26.5	2414	39,600 PSI	29.5C	2657	51,200 PSI
CFE 223	25.7	2498	39,400 PSI	28.6	2758	51,600 PSI
LEVERevolution	25.5	2535	41,600 PSI	28.4C	2750	51,700 PSI
BL-C(2)	25.3	2423	40,100 PSI	28.2	2671	51,600 PSI
StaBALL Match	25.3	2438	41,600 PSI	27.6	2637	51,800 PSI
748	24.7	2475	40,800 PSI	27.5	2698	51,700 PSI

Bullet: 103 GR. VPR VTAC Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.260″

StaBALL 6.5	27.6	2324	36,300 PSI	30.7C	2611	49,800 PSI
760	26.6	2387	36,800 PSI	29.5C	2656	50,100 PSI
2700	26.6	2387	36,800 PSI	29.5C	2656	50,100 PSI
2520	27.0	2548	41,300 PSI	29.0	2731	51,000 PSI
CFE 223	26.0	2465	37,600 PSI	28.9	2727	50,600 PSI
LEVERevolution	25.6	2471	38,800 PSI	28.5	2712	51,100 PSI
BL-C(2)	25.5	2395	37,600 PSI	28.4	2654	50,900 PSI
748	25.1	2422	37,900 PSI	27.9	2674	50,500 PSI
StaBALL Match	25.3	2400	39,500 PSI	27.6	2609	51,500 PSI
TAC	24.0	2348	38,400 PSI	26.8	2618	51,500 PSI
2460	23.6	2369	39,100 PSI	26.4	2599	50,700 PSI
2495	24.0	2294	39,400 PSI	26.3	2504	50,800 PSI
Varget	23.5	2369	39,700 PSI	26.2	2608	51,800 PSI

Bullet: 110 GR. HDY A-TIP Dia: .243″
Case: Hornady Primer: Federal 205M, SR Match Col: 2.260″

StaBALL 6.5	27.0	2238	34,900 PSI	30.0C	2555	50,400 PSI
760	26.4	2336	37,900 PSI	29.3C	2590	50,400 PSI
2700	26.4	2336	37,900 PSI	29.3C	2590	50,400 PSI
2520	26.5	2449	40,100 PSI	28.4	2656	51,400 PSI
LEVERevolution	25.4	2410	38,600 PSI	28.2C	2660	51,200 PSI
CFE 223	25.3	2397	38,200 PSI	28.2	2649	50,500 PSI
StaBALL Match	25.7	2396	42,300 PSI	28.0	2564	51,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
BL-C(2)	24.8	2329	38,800 PSI	27.5	2568	50,300 PSI
748	24.4	2357	37,800 PSI	27.1	2604	50,000 PSI
TAC	24.0	2323	41,300 PSI	26.4	2522	51,000 PSI
2495	23.8	2252	41,300 PSI	26.0C	2451	51,100 PSI
2460	24.0	2342	41,100 PSI	26.0	2530	51,400 PSI
Varget	23.0	2296	38,600 PSI	25.7C	2541	51,900 PSI

6MM DASHER

Barrel: 30″ Twist: 1:8″ Trim: 1.540″

Bullet: 58 GR. HDY V-MAX Dia: .243″

Case: Lapua (ref) Primer: CCI BR4, Small Rifle Match Col: 2.180″

CFE 223	38.3	3673	44,000 CUP	40.7	3897	51,300 CUP
Varget	36.4	3668	45,000 CUP	38.7C	3844	51,000 CUP
IMR 4895	34.5	3434	41,400 CUP	37.5C	3785	51,800 CUP
H4895	35.1	3682	42,700 CUP	37.0C	3866	48,000 CUP
Benchmark	33.0	3546	43,300 CUP	36.3	3847	52,000 CUP
IMR 8208 XBR	33.5	3508	41,200 CUP	36.3	3819	50,800 CUP

Bullet: 70 GR. NOS BT Dia: .243″

Case: Lapua (ref) Primer: CCI BR4, Small Rifle Match Col: 2.180″

CFE 223	36.0	3333	40,900 CUP	38.8	3633	51,200 CUP
Varget	35.1	3449	43,500 CUP	37.4	3646	51,500 CUP
IMR 4895	33.8	3334	43,300 CUP	36.4C	3611	52,400 CUP
H4895	33.7	3457	44,300 CUP	36.3C	3693	51,800 CUP
IMR 8208 XBR	33.6	3430	44,200 CUP	35.8C	3643	51,400 CUP

Bullet: 90 GR. SFT SCIR Dia: .243″

Case: Lapua (ref) Primer: CCI BR4, Small Rifle Match Col: 2.280″

H4350	35.2	2990	42,200 CUP	38.3C	3220	51,600 CUP
CFE 223	31.6	2931	43,200 CUP	35.6	3209	51,500 CUP
IMR 4064	31.0	2933	42,500 CUP	34.1	3199	52,100 CUP
IMR 4895	31.3	2991	42,800 CUP	34.0C	3229	52,300 CUP
Varget	30.7	2943	43,900 CUP	33.8	3208	52,200 CUP
H4895	30.3	2971	42,300 CUP	32.9C	3182	51,800 CUP
IMR 8208 XBR	29.9	2933	43,100 CUP	32.5	3149	52,400 CUP

Bullet: 100 GR. SPR BTSP Dia: .243″

Case: Lapua (ref) Primer: CCI BR4, Small Rifle Match Col: 2.360″

StaBALL 6.5	33.3	2724	40,800 CUP	37.0	3004	51,600 CUP
H4350	33.4	2836	41,600 CUP	36.8C	3086	51,700 CUP
IMR 4064	30.5	2852	43,100 CUP	33.6	3088	52,600 CUP
CFE 223	30.7	2860	44,800 CUP	33.4	3011	51,900 CUP
Varget	29.5	2820	43,300 CUP	32.5	3023	52,000 CUP
IMR 8208 XBR	27.9	2756	42,000 CUP	30.4	2928	51,400 CUP

Bullet: 107 GR. SIE HPBT Dia: .243″

Case: Lapua (ref) Primer: CCI BR4, Small Rifle Match Col: 2.360″

StaBALL 6.5	33.2	2644	40,600 CUP	36.9	2943	52,300 CUP
H4350	33.4	2792	44,600 CUP	35.2C	2917	48,800 CUP
CFE 223	29.4	2706	43,700 CUP	33.1	2926	51,400 CUP
IMR 4064	29.8	2746	42,300 CUP	32.8C	2978	52,200 CUP
Varget	29.2	2726	42,900 CUP	31.8	2916	51,900 CUP
IMR 8208 XBR	27.4	2647	41,700 CUP	30.2	2836	51,500 CUP

6 GT

Barrel: 24″ Twist: 1:7.5″ Trim: 1.720″

Bullet: 55 GR. NOS B-TIP Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.300″

CFE 223	41.9	3725	46,300 PSI	46.5	4140	61,500 PSI
2520	40.2	3733	47,600 PSI	44.7	4140	62,500 PSI
StaBALL Match	39.8	3585	45,500 PSI	44.3	3959	59,000 PSI
Varget	38.2	3520	44,800 PSI	42.5	3957	60,000 PSI
2495	37.1	3434	45,700 PSI	41.3	3822	59,100 PSI
IMR 8208 XBR	37.0	3603	46,600 PSI	41.1	3997	62,500 PSI

Bullet: 65 GR. HDY V-MAX Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.320″

2520	37.6	3440	47,200 PSI	41.7	3798	62,500 PSI
StaBALL Match	37.2	3355	47,200 PSI	41.3	3680	62,400 PSI
Varget	36.1	3305	46,300 PSI	40.1	3687	62,500 PSI
2495	35.2	3217	48,300 PSI	39.1	3562	62,400 PSI
IMR 8208 XBR	34.8	3349	48,100 PSI	38.7	3680	62,500 PSI

Bullet: 70 GR. SIE BK Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.320″

StaBALL Match	36.9	3263	48,400 PSI	41.0	3589	62,200 PSI
2520	36.6	3302	46,100 PSI	40.6	3661	62,200 PSI
Varget	35.9	3221	46,400 PSI	39.9	3588	61,600 PSI
IMR 8208 XBR	34.6	3263	47,800 PSI	38.5	3602	62,300 PSI

Bullet: 80 GR. BAR TTSX Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.390″

StaBALL 6.5	37.8	3002	47,400 PSI	42.0	3345	62,000 PSI
2700	37.3	3089	48,800 PSI	41.5	3388	60,900 PSI
Big Game	36.6	3012	48,200 PSI	40.6	3348	61,200 PSI
4064	32.5	2947	50,100 PSI	36.1	3243	61,900 PSI
Varget	32.1	2978	50,200 PSI	35.7	3250	61,900 PSI

Bullet: 95 GR. SIE TMK Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.480″

Superformance	38.6	2874	43,800 PSI	42.9	3248	62,000 PSI
Hunter	37.9	2887	46,500 PSI	42.1	3205	62,000 PSI
StaBALL 6.5	37.6	2811	41,100 PSI	41.8	3240	62,300 PSI
2700	37.6	2901	46,400 PSI	41.8	3217	62,100 PSI
Big Game	35.6	2872	49,100 PSI	39.5	3158	62,500 PSI
StaBALL Match	31.0	2773	47,000 PSI	37.5	3143	62,200 PSI
2520	33.4	2869	46,600 PSI	37.1	3154	62,000 PSI
4064	33.3	2766	46,200 PSI	37.0	3071	62,400 PSI
2495	32.7	2793	48,500 PSI	36.3	3091	62,500 PSI

Bullet: 100 GR. SIE SBT Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.390″

Superformance	37.6	2838	45,900 PSI	41.8	3165	61,800 PSI
StaBALL 6.5	36.2	2740	42,100 PSI	40.9	3125	61,800 PSI
Hunter	36.8	2790	47,600 PSI	40.9	3095	62,000 PSI
2700	36.3	2856	48,500 PSI	40.4	3118	60,800 PSI
H4350	34.8	2726	45,100 PSI	38.7	3044	61,800 PSI
Big Game	34.1	2735	48,900 PSI	37.9	3004	62,100 PSI
CFE 223	32.3	2658	43,200 PSI	35.9	3010	61,200 PSI
2520	32.0	2765	48,800 PSI	35.6	3030	62,500 PSI
StaBALL Match	29.8	2626	45,500 PSI	35.4	2988	62,400 PSI
4064	31.6	2678	47,100 PSI	35.1	2954	62,200 PSI
IMR 4064	31.4	2722	46,100 PSI	34.9	3019	61,800 PSI
2495	31.4	2687	49,200 PSI	34.9	2958	62,000 PSI
Varget	30.9	2753	49,900 PSI	34.3	2992	62,500 PSI

Bullet: 103 GR. VPR VTAC Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.500″

Superformance	39.2	2883	44,300 PSI	43.6	3213	61,400 PSI
StaBALL 6.5	39.0	2889	43,300 PSI	42.8	3223	62,000 PSI
H4350	37.0	2830	43,600 PSI	41.2C	3153	62,000 PSI
CFE 223	34.0	2875	51,500 PSI	38.5	3130	62,500 PSI
Varget	32.7	2816	47,000 PSI	36.6	3081	62,500 PSI
IMR 4064	32.6	2765	43,400 PSI	36.5C	3100	62,200 PSI
StaBALL Match	30.0	2604	45,100 PSI	35.5	2948	62,300 PSI

Bullet: 108 GR. SIE HPBT Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.530″

Superformance	37.1	2765	45,400 PSI	41.2	3078	61,700 PSI
StaBALL 6.5	36.4	2728	44,500 PSI	40.5	3062	62,200 PSI
Hunter	35.4	2691	47,600 PSI	39.3	2957	62,500 PSI
2700	34.7	2751	50,700 PSI	38.6	2970	62,500 PSI
H4350	34.1	2668	45,400 PSI	38.1	2966	61,500 PSI
Big Game	33.3	2642	47,400 PSI	37.0	2904	62,100 PSI
CFE 223	31.6	2691	50,100 PSI	35.5	2949	62,300 PSI
2520	31.3	2662	48,000 PSI	34.7	2910	62,000 PSI
StaBALL Match	29.8	2618	49,800 PSI	34.4	2843	62,300 PSI
IMR 4064	30.8	2664	46,800 PSI	34.2	2927	61,400 PSI
4064	30.8	2598	48,600 PSI	34.2	2850	62,500 PSI
Varget	30.6	2679	48,200 PSI	34.0	2909	61,800 PSI
2495	30.3	2590	48,700 PSI	33.6	2838	62,500 PSI

Bullet: 110 GR. HDY A-TIP Dia: .243″

Case: Alpha Primer: Winchester SR, Small Rifle Col: 2.600″

Superformance	37.1	2725	43,100 PSI	41.3	3075	62,100 PSI
StaBALL 6.5	36.4	2686	42,400 PSI	40.5	3040	61,900 PSI
Hunter	35.5	2664	49,800 PSI	39.5	2925	62,200 PSI
H4350	34.5	2654	43,500 PSI	38.5	2958	62,200 PSI
2700	33.9	2699	52,600 PSI	37.7	2908	62,700 PSI
Big Game	32.9	2612	50,300 PSI	36.6	2850	62,000 PSI
CFE 223	31.7	2537	41,000 PSI	35.6	2911	62,400 PSI
StaBALL Match	30.0	2553	48,100 PSI	35.0	2850	62,400 PSI
2520	30.9	2632	49,400 PSI	34.3	2857	61,900 PSI
Varget	30.8	2634	47,000 PSI	34.2	2880	62,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4064	30.6	2631	45,600 PSI	34.0	2895	61,600 PSI
4064	30.4	2553	49,700 PSI	33.8	2803	62,500 PSI
2495	30.2	2562	50,500 PSI	33.6	2794	62,500 PSI

6X47MM LAPUA

Barrel: 30″ Twist: 1:8″ Trim: 1.840″

Bullet: 70 GR. NOS BT Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.540″

H4350	40.0	3274	43,300 CUP	43.7C	3583	51,100 CUP
CFE 223	37.0	3372	42,700 CUP	41.1	3684	51,900 CUP
Varget	35.8	3345	43,700 CUP	39.4	3639	52,000 CUP
IMR 4064	35.3	3442	44,600 CUP	38.9	3591	52,300 CUP
H4895	35.0	3400	45,100 CUP	38.5	3684	52,300 CUP
IMR 4895	34.8	3272	45,000 CUP	38.3	3584	52,500 CUP
IMR 8208 XBR	34.1	3283	44,600 CUP	37.5	3600	51,900 CUP

Bullet: 75 GR. HDY V-MAX Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.505″

H4350	38.5	3186	43,200 CUP	42.4	3468	52,300 CUP
CFE 223	36.3	3337	45,900 CUP	40.0	3612	51,800 CUP
Varget	34.5	3246	43,500 CUP	38.0	3510	52,100 CUP
IMR 4064	34.0	3169	44,600 CUP	37.5	3458	52,300 CUP
H4895	33.6	3265	45,100 CUP	37.0	3531	52,400 CUP
IMR 4895	33.2	3158	44,200 CUP	36.5	3427	52,500 CUP
IMR 8208 XBR	33.4	3266	44,200 CUP	36.3	3502	52,000 CUP

Bullet: 80 GR. BAR TTSX BT Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.530″

H4350	38.2	3111	42,900 CUP	41.9C	3389	51,700 CUP
CFE 223	35.0	3186	46,000 CUP	38.8	3461	52,500 CUP
Varget	33.0	3117	43,300 CUP	36.3	3342	52,300 CUP
IMR 4064	32.5	3022	44,600 CUP	36.1	3307	52,200 CUP
H4895	32.3	3132	44,800 CUP	35.8	3401	52,600 CUP
IMR 4895	32.1	3034	45,300 CUP	35.3	3279	52,100 CUP
IMR 8208 XBR	32.3	3118	45,500 CUP	35.1	3341	52,000 CUP

Bullet: 90 GR. NOS E-TIP Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.515″

H4350	36.8	2978	45,900 CUP	40.5	3225	52,200 CUP
StaBALL 6.5	36.7	2826	44,800 CUP	40.4	3124	52,300 CUP
CFE 223	34.3	3023	46,100 CUP	38.4	3300	52,500 CUP
Varget	32.5	2957	44,200 CUP	35.9	3195	52,300 CUP
IMR 4064	31.9	2878	43,900 CUP	35.1	3126	51,800 CUP
H4895	31.3	2931	45,300 CUP	34.4	3136	51,900 CUP

Bullet: 100 GR. SIE SBT Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.500″

H4831	38.7	2828	47,200 CUP	42.6C	3042	52,400 CUP
H4350	36.0	2876	45,300 CUP	39.5	3102	52,500 CUP
StaBALL 6.5	35.9	2798	43,000 CUP	39.5	3019	51,400 CUP
CFE 223	32.8	2860	44,200 CUP	36.5	3139	52,200 CUP
Varget	31.2	2786	46,200 CUP	34.3	2996	52,300 CUP
IMR 4064	30.8	2761	46,000 CUP	33.9	2960	51,200 CUP

Bullet: 105 GR. LAP SCENAR Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.635″

H4831	37.3	2717	46,100 CUP	41.0	2959	52,300 CUP
StaBALL 6.5	36.2	2806	46,000 CUP	39.8	3016	52,400 CUP
H4350	34.9	2789	44,200 CUP	38.4	3034	52,700 CUP
CFE 223	32.5	2770	46,000 CUP	35.2	2979	51,900 CUP
IMR 4064	30.5	2697	46,800 CUP	33.7	2908	51,900 CUP
Varget	29.9	2646	46,600 CUP	33.2	2882	51,900 CUP

Bullet: 108 GR. BER TGT BT Dia: .243″

Case: Lapua (ref) Primer: Federal 205M, SR Match Col: 2.635″

H4831	37.5	2676	46,200 CUP	41.3	2933	52,300 CUP
StaBALL 6.5	35.8	2728	44,000 CUP	39.8	2996	52,000 CUP
H4350	35.1	2772	48,000 CUP	38.6	2970	51,500 CUP
CFE 223	31.4	2663	45,900 CUP	34.5	2891	51,900 CUP
IMR 4064	30.7	2662	47,400 CUP	33.7	2874	52,500 CUP
Varget	30.1	2661	48,000 CUP	33.1	2856	52,200 CUP

6MM CREEDMOOR

Barrel: 24″ Twist: 1:8″ Trim: 1.910″

Bullet: 55 GR. NOS BT Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.490″

StaBALL 6.5	48.8	3734	46,500 PSI	53.0C	4088	60,000 PSI
CFE 223	44.6	3766	45,200 PSI	48.5	4122	59,100 PSI
BL-C(2)	44.0	3662	44,600 PSI	47.8	4037	58,900 PSI
Varget	42.0	3730	46,800 PSI	45.7	4057	60,000 PSI
StaBALL Match	41.5	3636	46,100 PSI	45.3	3997	60,100 PSI
IMR 4895	41.2	3704	46,800 PSI	44.8	4066	60,200 PSI
IMR 4064	41.2	3661	45,100 PSI	44.7	4036	59,100 PSI
H335	41.1	3702	47,100 PSI	44.4	4023	60,200 PSI
IMR 8208 XBR	40.0	3739	46,900 PSI	43.5	4065	60,400 PSI
H4895	39.9	3736	46,200 PSI	43.4	4074	60,400 PSI
Benchmark	39.3	3742	46,600 PSI	42.8	4055	59,300 PSI
IMR 3031	39.1	3700	47,200 PSI	42.5	4034	60,200 PSI

Bullet: 60 GR. SIE HP Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.410″

StaBALL 6.5	47.3	3605	46,800 PSI	51.5C	3947	60,100 PSI
CFE 223	43.1	3630	46,400 PSI	46.8	3965	60,200 PSI
BL-C(2)	42.7	3540	45,400 PSI	46.4	3885	59,600 PSI
Varget	40.7	3631	49,200 PSI	44.2	3886	59,600 PSI
IMR 4064	40.2	3518	46,100 PSI	43.6	3875	60,000 PSI
IMR 4895	40.1	3550	46,200 PSI	43.5	3913	60,600 PSI
StaBALL Match	39.5	3482	46,900 PSI	43.1	3787	60,200 PSI
H335	39.8	3524	48,700 PSI	43.1	3825	59,800 PSI
IMR 8208 XBR	38.9	3611	48,100 PSI	42.3	3885	60,000 PSI
H4895	38.8	3634	48,500 PSI	42.2	3909	60,200 PSI
Benchmark	38.3	3665	52,200 PSI	41.7	3852	59,400 PSI
IMR 3031	38.1	3584	49,500 PSI	41.5	3867	60,600 PSI

Bullet: 70 GR. NOS BT Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.550″

2700	42.4	3264	55,300 PSI	47.1	3610	61,400 PSI
Big Game	40.7	3241	55,200 PSI	45.2	3561	61,300 PSI
4064	38.4	3171	54,900 PSI	42.7	3505	61,000 PSI

Bullet: 70 GR. SPR HP Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.490″

StaBALL 6.5	46.0	3456	46,400 PSI	50.0	3763	59,700 PSI
H4350	44.2	3303	44,700 PSI	48.0C	3590	56,900 PSI
H380	43.8	3413	49,000 PSI	47.5	3673	60,300 PSI
BL-C(2)	42.1	3386	47,800 PSI	45.7	3675	60,500 PSI
CFE 223	42.0	3432	48,500 PSI	45.6	3710	60,500 PSI
Varget	39.7	3437	49,400 PSI	43.2	3680	60,500 PSI
IMR 4895	39.5	3411	48,400 PSI	42.9	3666	60,000 PSI
IMR 4064	39.4	3328	44,900 PSI	42.8	3670	60,300 PSI
StaBALL Match	39.0	3286	47,000 PSI	42.6	3594	60,600 PSI
H4895	38.0	3429	49,600 PSI	41.3	3652	60,200 PSI
IMR 8208 XBR	37.9	3450	51,700 PSI	41.0	3628	59,100 PSI

Bullet: 80 GR. HDY GMX Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.540″

H4831	44.0	3106	50,300 PSI	47.2C	3285	58,300 PSI
StaBALL 6.5	42.9	3199	46,800 PSI	46.7	3516	60,200 PSI
IMR 4831	42.5	3112	48,900 PSI	46.0C	3342	58,100 PSI
IMR 4350	41.0	3123	48,700 PSI	44.9C	3396	59,700 PSI
H4350	40.3	3097	47,800 PSI	44.4	3374	60,000 PSI
H380	39.6	3125	50,500 PSI	42.7	3353	60,300 PSI
CFE 223	37.4	3114	49,400 PSI	40.7	3345	59,900 PSI
BL-C(2)	37.5	3093	50,500 PSI	40.5	3320	59,700 PSI
StaBALL Match	36.0	3018	49,700 PSI	39.4	3286	60,800 PSI
IMR 4895	36.2	3134	51,300 PSI	39.3	3341	60,200 PSI
IMR 4064	36.0	3113	50,200 PSI	39.1	3325	59,700 PSI
Varget	35.7	3104	50,300 PSI	38.7	3308	59,700 PSI
H4895	34.2	3097	52,100 PSI	37.1	3281	60,200 PSI
IMR 8208 XBR	34.0	3106	52,300 PSI	36.7	3264	59,200 PSI

Bullet: 85 GR. NOS PART Dia: .243″

Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.580″

StaBALL 6.5	44.0	3194	46,100 PSI	47.9	3511	60,300 PSI
IMR 4831	43.2	3029	43,900 PSI	47.0C	3352	58,000 PSI
H4350	41.1	3061	45,300 PSI	45.7	3390	60,500 PSI
IMR 4350	41.3	3031	44,800 PSI	45.4	3373	59,500 PSI
H380	40.4	3106	49,600 PSI	43.2	3297	59,000 PSI
BL-C(2)	38.1	3113	51,700 PSI	41.4	3302	59,700 PSI
CFE 223	38.0	3124	51,500 PSI	41.3	3310	59,600 PSI
IMR 4064	37.5	3147	50,900 PSI	40.7	3350	60,100 PSI
StaBALL Match	35.4	2988	47,800 PSI	40.4	3279	60,600 PSI
IMR 4895	37.0	3150	50,800 PSI	40.4	3350	59,700 PSI
Varget	36.8	3128	51,100 PSI	39.9	3316	59,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4895	35.2	3093	49,900 PSI	38.3	3301	60,200 PSI
IMR 8208 XBR	34.8	3092	50,800 PSI	37.7	3274	59,500 PSI
Bullet: 90 GR. SFT SCIR			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.725″**
H4831	42.9	3001	50,700 PSI	46.6	3208	60,100 PSI
IMR 4831	41.7	2992	48,000 PSI	45.5	3262	59,300 PSI
StaBALL 6.5	41.7	3050	46,000 PSI	45.3	3365	60,000 PSI
IMR 4350	40.2	3029	48,800 PSI	43.7	3280	59,500 PSI
H4350	40.2	3039	50,300 PSI	43.7	3261	60,100 PSI
H380	38.5	2987	50,500 PSI	41.4	3175	59,100 PSI
BL-C(2)	36.2	3006	53,600 PSI	39.3	3161	60,400 PSI
CFE 223	36.1	2965	50,900 PSI	39.3	3158	59,000 PSI
IMR 4064	35.7	2997	50,000 PSI	38.9	3210	59,700 PSI
StaBALL Match	35.4	2871	48,800 PSI	38.5	3114	59,700 PSI
IMR 4895	34.9	2979	49,900 PSI	37.9	3181	59,500 PSI
Varget	34.8	2969	51,100 PSI	37.6	3170	60,500 PSI
H4895	33.3	2925	50,200 PSI	36.0	3107	59,800 PSI
IMR 8208 XBR	32.9	2922	50,900 PSI	35.5	3105	60,100 PSI
Bullet: 95 GR. BAR LRX BT			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.750″**
Magpro	44.3	2764	55,300 PSI	49.2	3052	61,400 PSI
4350	39.7	2812	54,800 PSI	44.1	3078	60,800 PSI
Hunter	38.7	2812	55,100 PSI	43.0	3073	61,300 PSI
Bullet: 95 GR. BER VLD			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.650″**
H4831	42.8	2921	47,000 PSI	47.0C	3158	59,700 PSI
Superformance	42.1	3021	45,700 PSI	46.3	3314	60,900 PSI
StaBALL 6.5	42.3	3061	45,800 PSI	45.7	3342	59,500 PSI
IMR 4831	41.4	2877	43,500 PSI	45.5	3222	60,000 PSI
IMR 4350	40.4	2946	45,500 PSI	44.4	3255	60,400 PSI
H4350	39.5	2932	45,700 PSI	44.0	3211	59,300 PSI
H380	39.4	2958	49,700 PSI	42.0	3150	59,700 PSI
CFE 223	37.5	2964	49,800 PSI	40.8	3174	60,000 PSI
BL-C(2)	37.2	2953	51,600 PSI	40.4	3139	59,800 PSI
IMR 4064	35.9	2984	50,100 PSI	39.0	3179	60,300 PSI
IMR 4895	35.9	3010	51,000 PSI	38.9	3192	60,200 PSI
StaBALL Match	35.6	2842	46,900 PSI	38.8	3116	61,100 PSI
Varget	34.8	2950	49,500 PSI	37.9	3135	59,500 PSI
H4895	33.9	2941	49,400 PSI	36.7	3128	60,200 PSI
IMR 8208 XBR	33.8	2952	51,000 PSI	36.6	3117	59,500 PSI
Case: Hornady		**Primer: Federal 210M, LR Match**				**Col: 2.650″**
Magpro	44.7	2796	55,300 PSI	49.7	3102	61,500 PSI
4350	41.5	2860	55,200 PSI	46.1	3192	61,300 PSI
Hunter	39.6	2871	55,100 PSI	44.0	3136	61,300 PSI
2700	38.6	2876	55,200 PSI	42.9	3146	61,300 PSI
Bullet: 100 GR. HDY BTSP			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.625″**
H1000	44.6	2784	41,900 PSI	49.0C	3050	55,300 PSI
IMR 4831	40.6	2823	45,600 PSI	44.7C	3127	60,700 PSI
H4831	42.0	2853	48,400 PSI	46.2	3070	60,000 PSI
Superformance	41.4	2922	46,200 PSI	45.5	3200	60,600 PSI
StaBALL 6.5	41.0	2910	43,800 PSI	44.6	3217	59,400 PSI
IMR 4350	39.3	2858	47,200 PSI	43.2	3111	59,700 PSI
H4350	38.8	2879	48,200 PSI	42.7	3113	59,800 PSI
H380	37.8	2804	46,200 PSI	40.9	3050	59,600 PSI
BL-C(2)	37.1	2880	51,700 PSI	40.3	3062	60,200 PSI
CFE 223	36.8	2867	49,800 PSI	40.0	3068	59,800 PSI
IMR 4064	36.0	2894	49,400 PSI	39.0	3085	59,400 PSI
StaBALL Match	35.3	2774	48,500 PSI	38.4	3026	60,400 PSI
IMR 4895	35.0	2880	49,500 PSI	37.9	3069	59,000 PSI
Varget	34.7	2871	50,100 PSI	37.6	3047	59,900 PSI
H4895	33.5	2842	50,300 PSI	36.3	3020	60,600 PSI
IMR 8208 XBR	33.0	2828	50,200 PSI	35.7	3000	60,000 PSI
Bullet: 100 GR. NOS PART			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.625″**
Magpro	44.1	2757	54,900 PSI	49.0	3032	61,000 PSI
4350	38.8	2772	55,200 PSI	43.1	3045	61,300 PSI
Hunter	38.4	2779	55,200 PSI	42.7	3024	61,400 PSI
Bullet: 105 GR. HDY BTHP			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.730″**
H4831	42.5	2831	48,600 PSI	46.4	3053	60,400 PSI
Superformance	41.6	2874	46,600 PSI	45.7	3151	60,100 PSI
IMR 4831	41.2	2818	46,400 PSI	45.0	3086	59,700 PSI
StaBALL 6.5	40.2	2840	44,200 PSI	43.7	3156	60,200 PSI
IMR 4350	39.6	2866	48,700 PSI	43.0	3088	60,100 PSI
H4350	39.0	2867	49,800 PSI	42.4	3071	60,400 PSI
StaBALL Match	34.3	2714	50,700 PSI	37.3	2924	60,400 PSI
Bullet: 107 GR. SIE HPBT			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.775″**
H1000	43.8	2778	45,700 PSI	48.2C	3024	59,200 PSI
H4831	40.3	2750	47,400 PSI	44.4	2997	60,800 PSI
Superformance	40.1	2850	47,400 PSI	44.2	3089	60,100 PSI
StaBALL 6.5	39.8	2836	46,300 PSI	43.3	3096	59,500 PSI
IMR 4831	38.8	2744	46,200 PSI	42.6	3006	59,600 PSI
IMR 4350	37.5	2776	47,200 PSI	41.3	3008	59,500 PSI
H4350	37.5	2801	49,200 PSI	41.3	3009	60,300 PSI
Case: Hornady		**Primer: Federal 210M, LR Match**				**Col: 2.775″**
Magnum	44.9	2787	54,900 PSI	49.9	3049	61,000 PSI
Magpro	42.5	2701	54,900 PSI	47.2	2957	61,000 PSI
4350	36.9	2670	55,000 PSI	41.0	2912	61,200 PSI
Bullet: 108 GR. HDY ELD-M			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.770″**
H1000	43.8	2786	46,600 PSI	48.2C	3042	59,700 PSI
Superformance	40.2	2813	46,300 PSI	44.2	3078	60,200 PSI
H4831	40.8	2766	48,400 PSI	44.1	2972	60,200 PSI
IMR 4831	39.6	2768	47,100 PSI	43.0	3012	59,800 PSI
StaBALL 6.5	39.5	2814	45,800 PSI	43.0	3088	59,500 PSI
H4350	37.8	2802	49,800 PSI	41.6	3006	60,100 PSI
IMR 4350	37.7	2771	47,300 PSI	41.4	3004	59,200 PSI
Bullet: 110 GR. HDY A-TIP			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.780″**
H1000	44.5	2796	49,300 PSI	47.5C	2956	57,500 PSI
H4831	40.5	2738	48,300 PSI	44.1C	2970	60,200 PSI
Superformance	39.3	2800	47,500 PSI	42.8	3037	60,300 PSI
IMR 4831	39.2	2731	48,400 PSI	42.8	2975	60,500 PSI
StaBALL 6.5	39.3	2787	46,900 PSI	42.7	3046	60,000 PSI
IMR 4350	38.2	2792	51,400 PSI	41.5	2983	60,000 PSI
H4350	37.2	2741	48,100 PSI	41.4	2987	60,700 PSI
Bullet: 112 GR. BAR BT-MB			**Dia: .243″**			
Case: Hornady		**Primer: Federal 210M, LR Match**				**Col: 2.780″**
Magnum	45.7	2755	55,200 PSI	50.8	3026	61,400 PSI
Magpro	42.7	2638	55,200 PSI	47.5	2924	61,300 PSI
4350	38.0	2626	55,200 PSI	42.2	2896	61,300 PSI
Bullet: 115 GR. BER VLD TGT			**Dia: .243″**			
Case: Hornady		**Primer: Winchester LR, Large Rifle**				**Col: 2.790″**
H1000	43.2	2687	46,100 PSI	48.0C	2944	59,500 PSI
H4831	39.6	2658	47,200 PSI	43.6	2889	59,500 PSI
Superformance	39.6	2732	46,300 PSI	43.4	2984	59,900 PSI
StaBALL 6.5	39.3	2714	44,100 PSI	43.2	3026	60,000 PSI
IMR 4831	38.4	2663	46,900 PSI	42.2	2918	60,500 PSI
IMR 4350	36.9	2690	48,600 PSI	40.6	2904	59,400 PSI
H4350	36.8	2718	50,500 PSI	40.5	2895	58,900 PSI
Case: Hornady		**Primer: Federal 210M, LR Match**				**Col: 2.790″**
Magnum	44.4	2696	55,100 PSI	49.3	2959	61,200 PSI
Magpro	41.6	2595	55,100 PSI	46.3	2860	61,300 PSI
4350	36.8	2583	55,100 PSI	40.9	2823	61,200 PSI

243 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.035″

Bullet: 55 GR. NOS BT			**Dia: .243″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 2.650″**
H380	46.0	3704	40,600 CUP	51.0	4010	48,700 CUP
760	45.0	3611	37,400 CUP	50.0	3950	51,600 CUP
BL-C(2)	43.0	3779	42,600 CUP	47.0	4025	49,400 CUP
StaBALL Match	41.5	3548	44,600 PSI	46.1	3939	59,600 PSI
CFE 223	41.0	3684	49,500 PSI	45.3	3941	58,700 PSI
Varget	41.0	3776	42,000 CUP	45.0	4000	50,000 CUP
H4895	40.0	3638	35,100 CUP	44.5	4058	49,300 CUP
IMR 4064	39.5	3554	41,300 CUP	44.0	3875	51,200 CUP
IMR 4895	40.0	3599	42,100 CUP	44.0	3877	50,200 CUP
IMR 8208 XBR	40.0	3687	47,700 PSI	43.0	3931	58,600 PSI
Benchmark	39.0	3575	42,600 CUP	41.5	3815	50,100 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 3031	37.0	3520	38,300 CUP	40.5	3864	50,900 CUP
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.650″**
Hunter	49.4	3771	53,400 PSI	54.9	4086	59,400 PSI
2700	44.7	3617	53,700 PSI	49.7	3991	59,700 PSI
Big Game	44.1	3651	53,900 PSI	49.0	3998	59,900 PSI
4064	41.3	3581	53,800 PSI	45.9	3941	59,700 PSI
Bullet: 58 GR. HDY V-MAX			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.600″**
H380	46.0	3721	47,500 CUP	49.5	3874	51,000 CUP
760	46.0	3633	43,600 CUP	49.0	3806	49,000 CUP
CFE 223	41.0	3634	50,200 PSI	44.9	3850	57,800 PSI
IMR 4895	40.5	3551	42,300 CUP	44.7	3819	50,000 CUP
StaBALL Match	40.0	3506	47,100 PSI	44.1	3805	59,000 PSI
Varget	41.0	3617	44,800 CUP	44.0	3790	49,800 CUP
IMR 4064	39.6	3388	39,400 CUP	44.0	3780	50,200 CUP
H4895	40.0	3643	43,300 CUP	43.0	3851	49,900 CUP
IMR 8208 XBR	39.0	3581	47,300 PSI	42.3	3825	58,300 PSI
H335	39.5	3714	47,800 CUP	41.5	3812	50,600 CUP
IMR 3031	36.5	3467	40,700 CUP	41.0	3815	50,500 CUP
Benchmark	35.0	3417	41,800 CUP	37.5	3607	50,000 CUP
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.600″**
Hunter	46.9	3591	53,200 PSI	52.1	3958	59,100 PSI
2700	44.3	3500	53,800 PSI	49.2	3893	59,700 PSI
Big Game	43.5	3559	53,700 PSI	48.4	3923	59,800 PSI
4064	40.5	3464	53,500 PSI	45.0	3843	59,500 PSI
Bullet: 60 GR. SIE HP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.600″**
H380	43.0	3514	38,900 CUP	48.0	3781	47,400 CUP
760	43.0	3423	38,600 CUP	47.5	3724	49,600 CUP
CFE 223	41.0	3541	49,400 PSI	45.0	3785	58,600 PSI
IMR 4064	40.0	3476	43,600 CUP	43.8	3766	50,400 CUP
StaBALL Match	39.5	3509	51,500 PSI	43.5	3730	59,700 PSI
IMR 4895	39.6	3464	43,500 CUP	43.3	3785	50,800 CUP
Varget	40.0	3671	45,400 CUP	42.7	3816	50,400 CUP
H4895	38.0	3521	40,500 CUP	42.0	3812	50,600 CUP
Benchmark	38.5	3587	47,000 CUP	41.2	3713	50,700 CUP
IMR 3031	36.8	3448	43,000 CUP	40.5	3714	50,500 CUP
IMR 8208 XBR	37.0	3505	50,000 PSI	40.2	3702	58,500 PSI
H335	35.0	3445	41,400 CUP	39.0	3717	50,300 CUP
Bullet: 62 GR. BAR VG FB			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.645″**
Hunter	45.6	3499	53,500 PSI	50.7	3825	59,500 PSI
4350	43.7	3282	50,400 PSI	48.6	3648	56,000 PSI
2700	43.7	3609	53,700 PSI	48.6	3854	59,800 PSI
Big Game	40.8	3515	53,500 PSI	45.3	3779	59,400 PSI
Bullet: 62 GR. BAR VG FB			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.620″**
760	43.5	3427	50,600 PSI	46.3	3631	58,600 PSI
H380	41.9	3450	50,100 PSI	44.5	3625	57,900 PSI
StaBALL Match	38.3	3383	50,600 PSI	42.1	3630	59,300 PSI
Varget	39.3	3476	50,900 PSI	41.4	3620	57,100 PSI
IMR 4064	38.1	3480	51,400 PSI	40.5	3652	58,000 PSI
IMR 4895	38.1	3460	50,600 PSI	40.5	3658	58,300 PSI
H4895	36.7	3478	51,200 PSI	39.0	3622	57,400 PSI
IMR 8208 XBR	35.0	3321	46,500 PSI	39.0	3598	58,800 PSI
Benchmark	36.1	3442	52,000 PSI	38.0	3586	58,600 PSI
CFE 223	34.0	3328	54,200 PSI	38.0	3517	59,300 PSI
IMR 3031	34.8	3392	49,600 PSI	37.0	3573	58,100 PSI
Bullet: 65 GR. HDY V-MAX			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.600″**
Superformance	49.0	3530	52,100 PSI	51.9C	3773	57,300 PSI
760	45.0	3521	41,400 CUP	48.0	3746	49,400 CUP
H380	42.0	3448	45,200 CUP	45.0	3627	50,000 CUP
IMR 4064	40.0	3415	43,000 CUP	43.4	3698	50,000 CUP
CFE 223	38.0	3360	47,400 PSI	43.0	3632	57,300 PSI
IMR 4895	38.5	3392	42,300 CUP	42.7	3664	50,600 CUP
StaBALL Match	38.4	3342	47,700 PSI	42.3	3614	59,100 PSI
BL-C(2)	39.0	3493	47,300 CUP	42.0	3612	49,500 CUP
IMR 8208 XBR	37.0	3363	45,800 PSI	41.0	3666	58,500 PSI
H4895	38.0	3522	44,500 CUP	41.0	3677	49,200 CUP
Varget	38.0	3494	43,100 CUP	41.0	3682	49,600 CUP
Benchmark	37.0	3417	44,300 CUP	40.0	3598	50,600 CUP

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 3031	36.5	3397	43,800 CUP	39.8	3624	50,200 CUP
Bullet: 70 GR. SPR HP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.625″**
Superformance	46.0	3332	43,600 PSI	51.0C	3661	57,900 PSI
StaBALL 6.5	46.0	3417	45,800 PSI	49.8	3724	58,400 PSI
760	42.0	3314	41,600 CUP	46.0	3568	49,800 CUP
H380	42.0	3349	42,900 CUP	46.0	3567	48,900 CUP
StaBALL Match	38.7	3223	46,600 PSI	42.6	3512	59,400 PSI
IMR 4895	38.5	3349	44,300 CUP	42.6	3558	50,000 CUP
IMR 4064	38.5	3316	43,700 CUP	42.5	3541	50,000 CUP
CFE 223	36.0	3266	51,800 PSI	41.5	3487	57,400 PSI
Varget	38.0	3433	45,500 CUP	40.5	3574	50,100 CUP
H4895	36.0	3286	42,700 CUP	39.5	3477	49,200 CUP
Benchmark	36.5	3128	45,100 CUP	39.3	3491	50,300 CUP
BL-C(2)	35.0	3228	47,900 CUP	39.0	3384	50,400 CUP
IMR 3031	35.5	3218	41,500 CUP	39.0	3485	51,100 CUP
IMR 8208 XBR	35.0	3232	47,600 PSI	38.6	3461	58,100 PSI
Bullet: 75 GR. HDY HP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.640″**
Superformance	45.0	3280	47,400 PSI	49.0	3510	57,900 PSI
StaBALL 6.5	43.5	3305	47,000 PSI	48.6	3614	58,600 PSI
760	42.0	3203	41,100 CUP	46.0	3447	50,100 CUP
H380	40.0	3127	42,700 CUP	44.5	3393	48,600 CUP
IMR 4895	37.5	3198	44,200 CUP	41.7	3423	50,400 CUP
IMR 4064	37.5	3183	43,300 CUP	41.2	3419	50,300 CUP
StaBALL Match	37.4	3196	53,700 PSI	41.1	3373	59,700 PSI
Varget	36.0	3246	45,000 CUP	38.5	3408	50,500 CUP
H4895	34.0	3101	40,900 CUP	38.0	3354	49,400 CUP
IMR 8208 XBR	34.5	3114	48,200 PSI	37.8	3316	57,900 PSI
CFE 223	34.0	3080	50,600 PSI	37.7	3274	57,600 PSI
BL-C(2)	34.0	3041	45,100 CUP	37.5	3185	49,200 CUP
IMR 3031	33.2	3061	41,800 CUP	36.7	3298	49,800 CUP
Bullet: 80 GR. HDY GMX			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.610″**
StaBALL 6.5	41.0	3149	48,100 PSI	45.0	3423	58,500 PSI
760	38.9	3022	48,400 PSI	42.3	3231	57,300 PSI
H4350	38.3	3045	52,600 PSI	40.7	3183	58,500 PSI
H380	36.9	3022	54,600 PSI	39.3	3135	57,300 PSI
BL-C(2)	36.5	3057	49,600 PSI	39.2	3220	57,000 PSI
StaBALL Match	34.5	2910	49,600 PSI	38.1	3174	59,700 PSI
IMR 4895	35.3	3032	51,500 PSI	37.5	3165	58,100 PSI
IMR 4064	34.0	2966	49,500 PSI	36.3	3134	57,600 PSI
Varget	34.1	2986	51,200 PSI	36.3	3137	58,700 PSI
IMR 8208 XBR	33.0	2961	51,400 PSI	35.1	3109	58,800 PSI
H4895	32.7	2982	51,900 PSI	34.8	3123	58,100 PSI
Bullet: 80 GR. NOS BT			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.695″**
Magnum	48.8	3044	53,300 PSI	54.2	3373	59,200 PSI
Magpro	48.1	3060	53,400 PSI	53.5	3391	59,400 PSI
Hunter	43.0	3133	53,800 PSI	47.8	3447	59,800 PSI
4350	42.6	3140	53,800 PSI	47.3	3436	59,800 PSI
2700	40.4	3149	53,800 PSI	44.9	3399	59,800 PSI
Bullet: 80 GR. SIE BTSP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.635″**
Superformance	44.0	3236	49,300 PSI	48.7	3460	58,400 PSI
StaBALL 6.5	42.9	3266	47,800 PSI	46.7	3517	58,700 PSI
760	42.0	3249	46,300 CUP	45.0	3404	50,100 CUP
H380	38.0	3047	44,700 CUP	41.2	3223	50,300 CUP
IMR 4064	37.5	3141	45,000 CUP	41.0	3320	50,800 CUP
StaBALL Match	36.5	3038	48,900 PSI	40.2	3274	59,400 PSI
IMR 4895	36.5	3094	43,300 CUP	40.2	3290	50,300 CUP
BL-C(2)	35.0	3083	47,100 CUP	38.5	3242	50,600 CUP
Varget	36.0	3193	45,400 CUP	38.5	3355	50,300 CUP
IMR 8208 XBR	34.0	3013	45,400 PSI	38.0	3269	57,500 PSI
H4895	35.0	3123	45,800 CUP	38.0	3307	50,100 CUP
Bullet: 85 GR. BAR TSX-BT			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.620″**
StaBALL 6.5	41.9	3105	46,500 PSI	45.6	3404	58,900 PSI
IMR 4831	38.3	3014	49,900 PSI	42.6C	3233	58,500 PSI
760	38.4	2981	50,300 PSI	41.7	3165	57,300 PSI
IMR 4350	37.4	2980	48,900 PSI	40.7	3176	57,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4350	37.3	2972	49,600 PSI	40.5	3141	57,300 PSI
StaBALL Match	35.5	2894	48,500 PSI	39.1	3159	59,700 PSI
H380	36.4	2987	55,700 PSI	38.7	3074	57,300 PSI
IMR 4895	34.6	3010	50,700 PSI	36.8	3146	58,000 PSI
Varget	34.3	2997	52,200 PSI	36.5	3121	58,000 PSI
IMR 4064	33.8	2964	49,200 PSI	36.0	3112	56,700 PSI
H4895	32.6	2955	51,800 PSI	34.7	3089	57,500 PSI
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.620″**
Magnum	47.7	2998	53,400 PSI	52.9	3269	59,300 PSI
Magpro	46.9	2993	53,700 PSI	52.1	3306	59,700 PSI
Hunter	41.3	3046	53,800 PSI	45.9	3347	59,800 PSI
2700	38.7	3046	53,600 PSI	42.9	3270	59,500 PSI
4350	37.3	2990	53,300 PSI	41.5	3221	59,300 PSI
Bullet: 87 GR. HDY V-MAX			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.640″**
Magnum	47.5	2959	53,700 PSI	52.8	3266	59,600 PSI
Magpro	47.2	2991	53,700 PSI	52.5	3293	59,700 PSI
Hunter	41.8	3036	54,000 PSI	46.4	3336	59,900 PSI
4350	41.8	3078	53,200 PSI	46.4	3313	59,100 PSI
2700	39.1	3033	53,600 PSI	43.5	3261	59,600 PSI
Bullet: 90 GR. SPR SP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.625″**
IMR 7828	45.0	2950	46,100 CUP	48.0C*	3130	50,600 CUP
H4831	45.0	3010	43,700 CUP	48.0C	3203	50,800 CUP
StaBALL 6.5	40.0	3025	48,900 PSI	45.0	3273	58,000 PSI
H4350	42.0	3039	44,400 CUP	44.5	3185	50,600 CUP
IMR 4831	40.5	2858	43,700 CUP	43.9	3050	50,700 CUP
760	41.0	3024	43,600 CUP	43.5	3185	49,600 CUP
IMR 4350	39.5	2856	42,700 CUP	43.0	3096	50,800 CUP
H380	38.0	2892	43,100 CUP	40.5	3060	49,500 CUP
StaBALL Match	34.5	2856	53,100 PSI	38.5	3059	59,800 PSI
IMR 4064	33.5	2796	41,600 CUP	37.0	3020	50,200 CUP
IMR 4895	33.5	2815	41,800 CUP	36.9	3033	50,200 CUP
H4895	34.0	2967	44,900 CUP	36.5	3114	50,800 CUP
Varget	34.0	2964	44,800 CUP	36.5	3106	50,400 CUP
Bullet: 95 GR. NOS BT			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.700″**
Magnum	46.1	2822	53,800 PSI	51.2	3137	59,700 PSI
Magpro	45.3	2859	53,700 PSI	50.4	3145	59,700 PSI
Hunter	39.2	2857	53,800 PSI	43.6	3126	59,800 PSI
4350	38.0	2863	53,300 PSI	42.2	3075	59,200 PSI
2700	36.8	2847	53,900 PSI	40.9	3059	59,900 PSI
Bullet: 95 GR. NOS PART			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.650″**
H1000	45.0	2946	44,900 CUP	48.0C	3077	50,000 CUP
IMR 7828	41.5	2780	42,300 CUP	45.8C*	3030	50,600 CUP
H4831	42.0	2930	47,000 CUP	44.5C	3052	50,700 CUP
StaBALL 6.5	39.0	2988	51,400 PSI	42.8	3171	58,400 PSI
IMR 4831	39.5	2793	43,900 CUP	42.8	2985	50,200 CUP
760	39.0	2933	43,800 CUP	42.0	3138	50,700 CUP
H4350	39.0	2917	45,800 CUP	42.0	3087	50,500 CUP
IMR 4350	38.0	2792	43,200 CUP	41.8	2993	50,200 CUP
H380	36.0	2779	43,000 CUP	38.0	2922	49,100 CUP
StaBALL Match	34.4	2770	52,200 PSI	37.9	2953	59,600 PSI
IMR 4064	33.0	2745	43,500 CUP	36.5	2967	51,100 CUP
IMR 4895	32.0	2687	41,800 CUP	35.5	2908	50,400 CUP
H4895	33.0	2865	45,000 CUP	35.0	2990	50,700 CUP
Varget	33.0	2870	45,000 CUP	35.0	2996	50,200 CUP
Bullet: 100 GR. SPR BTSP			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.650″**
H1000	44.0	2876	45,700 CUP	47.0C	3000	49,800 CUP
IMR 7828	42.5	2796	43,700 CUP	46.0C*	3009	51,100 CUP
IMR 4831	39.2	2733	43,500 CUP	43.0	2947	50,800 CUP
StaBALL 6.5	38.5	2893	50,400 PSI	42.0	3085	58,200 PSI
H4831	39.0	2761	44,400 CUP	42.0	2924	50,100 CUP
IMR 4350	38.5	2760	43,000 CUP	42.0	2958	50,100 CUP
760	37.0	2800	44,500 CUP	40.0	2963	50,600 CUP
H4350	37.0	2806	45,100 CUP	40.0	2973	51,000 CUP
IMR 4064	33.0	2672	42,200 CUP	36.5	2902	51,100 CUP
H380	34.0	2639	43,600 CUP	36.0	2770	50,100 CUP
IMR 4895	32.8	2683	42,300 CUP	35.7	2862	50,100 CUP
StaBALL Match	32.0	2666	52,300 PSI	35.6	2843	59,800 PSI
Varget	31.0	2674	42,700 CUP	33.7	2838	50,400 CUP
H4895	31.0	2683	44,900 CUP	33.0	2818	50,100 CUP
Bullet: 108 GR. HDY ELD-M			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.700″**
StaBALL HD	45.3	2687	46,100 PSI	49.8C	2954	59,200 PSI
H1000	44.2	2782	45,300 PSI	49.2C	3051	58,200 PSI
Retumbo	45.1	2773	43,900 PSI	49.0C	3039	57,500 PSI
H4831	39.9	2699	45,000 PSI	44.7C	3014	59,400 PSI
IMR 7828	39.2	2716	44,600 PSI	44.5	3051	59,000 PSI
IMR 4831	38.7	2745	45,800 PSI	44.0C	3053	59,300 PSI
StaBALL 6.5	39.6	2799	46,700 PSI	43.1	3044	59,400 PSI
IMR 4350	36.4	2702	45,000 PSI	41.2	3023	59,200 PSI
H4350	34.1	2601	41,600 PSI	41.1	3015	59,300 PSI
Bullet: 115 GR. BER VLD-TGT			**Dia: .243″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.850″**
StaBALL HD	44.5	2633	46,800 PSI	48.8C	2895	59,600 PSI
Retumbo	40.7	2632	43,400 PSI	46.3C	2947	59,000 PSI
H1000	39.8	2620	43,800 PSI	45.5C	2934	59,300 PSI
IMR 7828	37.2	2604	43,900 PSI	42.6C	2942	59,500 PSI
H4831	37.1	2601	45,500 PSI	42.5	2885	59,500 PSI
IMR 4831	36.8	2641	46,400 PSI	41.4	2926	59,400 PSI
IMR 4350	34.8	2594	45,600 PSI	39.6	2886	59,400 PSI
H4350	34.2	2616	46,900 PSI	38.4	2850	58,700 PSI
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.850″**
Magpro	44.5	2734	52,400 PSI	49.4	2955	58,200 PSI
Magnum	44.4	2721	53,800 PSI	49.3	2962	59,800 PSI
Hunter	35.9	2609	53,900 PSI	39.9	2828	59,900 PSI

6MM REMINGTON

Barrel: 24″ Twist: 1:9″ Trim: 2.223″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 55 GR. NOS BT LF			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
H380	48.0	3770	50,900 PSI	53.0	4018	59,100 PSI
BL-C(2)	44.0	3686	46,400 PSI	48.8	4041	59,300 PSI
748	43.0	3645	46,100 PSI	48.0	4036	60,500 PSI
IMR 4895	43.0	3695	47,800 PSI	47.0	4061	61,100 PSI
Varget	43.0	3679	46,900 PSI	47.0	4027	60,700 PSI
H4895	41.0	3598	43,200 PSI	46.0	4071	61,800 PSI
IMR 8208 XBR	40.0	3540	42,200 PSI	44.6	4013	60,800 PSI
Benchmark	40.0	3584	44,900 PSI	44.0	4005	61,700 PSI
IMR 3031	39.0	3609	45,200 PSI	43.7	4043	61,100 PSI
Bullet: 58 GR. HDY V-MAX			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.775″**
H380	46.0	3627	47,300 PSI	50.0	3898	56,700 PSI
760	45.0	3534	43,200 PSI	49.7	3925	59,100 PSI
Varget	42.0	3571	44,600 PSI	46.7	3953	59,600 PSI
IMR 4895	42.0	3597	44,900 PSI	46.7	4029	62,100 PSI
BL-C(2)	42.0	3502	41,800 PSI	46.5	3939	60,000 PSI
IMR 4064	42.0	3599	44,500 PSI	46.3C	3970	58,400 PSI
H4895	41.0	3590	44,500 PSI	46.0	3972	58,900 PSI
IMR 8208 XBR	40.0	3537	42,700 PSI	44.5	3939	58,600 PSI
IMR 3031	40.0	3642	46,900 PSI	44.2	3981	61,100 PSI
Benchmark	39.0	3500	42,200 PSI	43.0	3896	59,000 PSI
Bullet: 60 GR. SIE HP			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.700″**
H380	45.0	3546	47,400 PSI	50.0	3874	59,700 PSI
760	45.0	3435	37,100 PSI	50.0	3877	60,300 PSI
BL-C(2)	41.0	3454	42,600 PSI	46.7	3870	59,200 PSI
Varget	42.0	3565	47,200 PSI	46.5	3900	60,200 PSI
748	41.0	3532	47,500 PSI	46.5	3870	61,100 PSI
IMR 4895	42.0	3609	49,100 PSI	46.5	3955	62,500 PSI
IMR 4064	42.0	3570	46,400 PSI	46.2C	3930	60,400 PSI
H4895	41.0	3544	45,300 PSI	46.0	3934	61,400 PSI
IMR 8208 XBR	40.0	3488	43,000 PSI	44.5	3907	60,500 PSI
IMR 3031	40.0	3584	47,800 PSI	44.3	3925	62,200 PSI
Benchmark	39.0	3478	44,400 PSI	43.0	3826	59,000 PSI
Bullet: 65 GR. HDY V-MAX			**Dia: .243″**			
Case: Winchester	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.825″**
Superformance	49.0	3495	44,700 PSI	54.5	3927	62,700 PSI
H4350	48.0	3564	50,900 PSI	51.5C	3763	58,900 PSI
760	44.0	3388	44,900 PSI	49.2	3777	60,700 PSI
H380	44.0	3438	47,800 PSI	49.0	3763	60,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Rifle Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Varget	41.0	3468	47,600 PSI	45.5	3775	60,200 PSI
IMR 4895	40.0	3457	46,900 PSI	45.3	3856	63,100 PSI
IMR 4064	40.0	3450	46,500 PSI	45.0	3839	61,800 PSI
BL-C(2)	40.0	3379	45,000 PSI	44.7	3723	60,000 PSI
748	40.0	3465	50,300 PSI	44.5	3739	61,000 PSI
H4895	39.0	3460	47,100 PSI	44.0	3797	60,600 PSI
IMR 8208 XBR	39.0	3412	45,000 PSI	43.5	3777	60,900 PSI
IMR 3031	38.0	3426	46,700 PSI	42.2	3765	61,600 PSI
Benchmark	39.0	3472	49,000 PSI	41.3	3694	60,200 PSI
Bullet: 70 GR. SIE HPBT			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.810″**
H4350	46.0	3360	46,700 PSI	50.8C	3671	59,800 PSI
Superformance	50.0	3509	48,600 PSI	54.0	3812	61,000 PSI
760	44.0	3305	44,600 PSI	49.0	3693	60,900 PSI
H380	43.0	3334	47,900 PSI	48.0	3653	61,000 PSI
748	40.0	3324	46,300 PSI	45.0	3691	63,400 PSI
IMR 4895	40.0	3364	46.500 PSI	44.6	3735	63,200 PSI
Varget	40.0	3355	47,800 PSI	44.5	3639	59,500 PSI
IMR 4064	40.0	3355	45,600 PSI	44.5	3710	61,200 PSI
StaBALL Match	39.2	3351	52,200 PSI	43.2	3609	63,100 PSI
H4895	39.0	3435	51,200 PSI	43.0	3653	60,100 PSI
IMR 8208 XBR	38.0	3236	43,000 PSI	42.7	3616	59,500 PSI
IMR 3031	38.0	3335	46,500 PSI	42.0	3673	62,400 PSI
Benchmark	38.0	3315	46,800 PSI	41.0	3579	59,300 PSI
Bullet: 75 GR. HDY HP			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.825″**
Superformance	47.0	3297	47,500 PSI	52.0	3637	60,700 PSI
H4350	44.0	3262	48,600 PSI	49.0	3563	61,200 PSI
IMR 4350	44.0	3206	47,300 PSI	48.5C	3509	58,600 PSI
760	42.0	3151	44,400 PSI	47.0	3513	58,800 PSI
H380	41.0	3154	47,200 PSI	45.5	3465	59,800 PSI
StaBALL Match	38.7	3230	51,200 PSI	43.0	3498	62,900 PSI
748	39.0	3244	50,600 PSI	43.0	3502	61,900 PSI
IMR 4895	38.0	3255	50,600 PSI	43.0	3558	63,100 PSI
IMR 4064	39.0	3275	50,600 PSI	43.0	3553	62,100 PSI
Varget	38.0	3207	48,500 PSI	42.6	3480	59,500 PSI
H4895	37.0	3230	49,900 PSI	41.5	3482	60,500 PSI
IMR 8208 XBR	37.0	3184	48,100 PSI	41.5	3470	59,700 PSI
IMR 3031	36.0	3217	50,500 PSI	40.0	3494	63,200 PSI
Bullet: 80 GR. BAR TTSX BT			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.810″**
Superformance	46.0	3202	45,000 PSI	51.0C	3581	59,600 PSI
IMR 4350	43.0	3086	43,300 PSI	48.0C	3484	58,800 PSI
H4350	42.0	3065	43,900 PSI	47.5	3427	58,800 PSI
760	42.0	3134	46,400 PSI	47.0	3471	60,700 PSI
H380	41.0	3115	47,100 PSI	45.5	3411	59,500 PSI
748	38.0	3075	45,800 PSI	43.0	3431	61,300 PSI
Varget	38.0	3140	47,900 PSI	42.5	3416	59,800 PSI
IMR 4895	38.0	3129	47,500 PSI	42.3	3418	59,400 PSI
IMR 4064	38.0	3094	44,700 PSI	42.0	3415	58,700 PSI
StaBALL Match	38.2	3144	52,400 PSI	41.9	3398	63,300 PSI
H4895	37.0	3169	49,500 PSI	41.3	3419	60,500 PSI
IMR 8208 XBR	36.0	3068	46,400 PSI	40.3	3363	60,100 PSI
IMR 3031	35.0	3039	45,100 PSI	39.2	3356	59,300 PSI
Bullet: 80 GR. SPR SP			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.775″**
Superformance	46.0	3207	49,100 PSI	51.4	3536	61,000 PSI
H4350	42.0	3123	46,700 PSI	47.0	3430	59,400 PSI
760	42.0	3134	47,400 PSI	46.7	3439	59,600 PSI
IMR 4350	41.0	3108	52,000 PSI	46.5	3410	62,800 PSI
H380	40.0	3068	47,800 PSI	44.5	3358	58,900 PSI
Varget	38.0	3148	49,400 PSI	41.8	3376	59,400 PSI
StaBALL Match	38.0	3129	50,700 PSI	41.6	3366	62,800 PSI
IMR 8208 XBR	37.0	3156	51,600 PSI	40.7	3353	59,800 PSI
H4895	37.0	3167	50,900 PSI	40.5	3377	59,900 PSI
IMR 4064	35.0	3066	51,600 PSI	39.6	3346	61,800 PSI
IMR 4895	35.0	3067	50,800 PSI	39.4	3337	61,800 PSI
748	35.0	3132	58,800 PSI	39.2	3297	61,800 PSI
IMR 3031	33.0	3006	48,900 PSI	37.2	3296	61,600 PSI
Bullet: 85 GR. NOS PART			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.825″**
IMR 4831	44.0	3058	49,300 PSI	48.5C	3379	62,400 PSI
StaBALL 6.5	44.0	3154	48,200 PSI	48.0	3429	60,900 PSI
H4350	42.0	3075	48,200 PSI	46.5	3350	59,300 PSI
760	41.0	3007	45,900 PSI	45.8	3329	59,500 PSI
H380	39.0	2937	46,800 PSI	43.5	3243	59,000 PSI
Varget	37.0	3020	49,200 PSI	41.0	3270	59,100 PSI
IMR 4064	37.0	3006	49,700 PSI	41.0	3277	61,700 PSI
StaBALL Match	36.5	3032	51,800 PSI	40.7	3276	62,800 PSI
IMR 4895	36.5	2998	50,500 PSI	40.7	3261	61,800 PSI
748	36.0	3020	54,800 PSI	40.2	3235	61,200 PSI
H4895	35.5	3003	48,400 PSI	39.5	3253	59,200 PSI
Bullet: 87 GR. HDY BTHP			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.825″**
IMR 7828 SSC	45.0	2941	48,700 PSI	50.0C*	3250	61,900 PSI
H4831	44.0	2871	41,900 PSI	49.5C	3164	53,200 PSI
IMR 4831	43.0	2985	47,400 PSI	48.0C	3327	61,300 PSI
StaBALL 6.5	43.0	3045	45,800 PSI	47.5	3382	62,100 PSI
H4350	42.0	3051	48,100 PSI	46.7	3317	59,500 PSI
IMR 4350	42.0	2990	49,000 PSI	46.5C	3306	62,500 PSI
760	41.0	3000	47,200 PSI	45.2	3291	59,900 PSI
H380	39.0	2940	47,300 PSI	43.0	3206	59,200 PSI
Varget	37.0	3011	49,100 PSI	41.0	3243	59,300 PSI
IMR 4064	36.0	2945	48,900 PSI	40.3	3217	61,200 PSI
StaBALL Match	36.3	2986	51,600 PSI	40.2	3222	63,400 PSI
IMR 4895	36.0	2982	51,200 PSI	40.2	3236	62,800 PSI
748	36.0	2944	52,000 PSI	39.8	3174	62,100 PSI
H4895	35.5	2986	49,100 PSI	39.5	3214	60,300 PSI
Case: Remington			**Primer: Federal 210M, LR Match**			**Col: 2.825″**
Magnum	48.0	2862	53,600 PSI	53.3	3180	59,500 PSI
Big Game	39.2	2952	56,300 PSI	43.5	3280	62,500 PSI
Bullet: 95 GR. NOS BT			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.825″**
H1000	47.0	2835	43,000 PSI	50.5C	3056	52,900 PSI
H4831	44.0	2798	43,700 PSI	49.5C	3125	57,600 PSI
IMR 7828 SSC	44.0	2818	48,400 PSI	48.7C	3130	61,800 PSI
IMR 4831	42.0	2887	49,000 PSI	47.0C	3218	63,000 PSI
IMR 4350	41.0	2867	49,900 PSI	45.5C	3153	61,500 PSI
H4350	41.0	2909	48,100 PSI	45.5	3167	59,200 PSI
StaBALL 6.5	41.0	2826	45,600 PSI	45.2	3128	60,300 PSI
760	40.0	2847	45,900 PSI	44.5	3164	60,100 PSI
Varget	36.0	2843	47,800 PSI	40.0	3091	58,900 PSI
IMR 4895	36.0	2835	51,300 PSI	40.0	3095	63,300 PSI
748	36.0	2750	48,600 PSI	39.7	3042	62,200 PSI
StaBALL Match	35.5	2808	50,500 PSI	39.5	3074	63,400 PSI
IMR 4064	35.5	2828	51,000 PSI	39.5	3069	62,000 PSI
H4895	35.0	2855	50,100 PSI	38.7	3076	60,100 PSI
Bullet: 100 GR. NOS PART			**Dia: .243″**			
Case: Remington			**Primer: Federal 210M, LR Match**			**Col: 2.825″**
Magnum	47.7	2754	55,300 PSI	53.0	3060	61,500 PSI
2700	41.0	2692	55,300 PSI	45.5	3059	61,400 PSI
Big Game	37.4	2696	55,700 PSI	41.5	2996	61,800 PSI
Bullet: 100 GR. SPR BT			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.775″**
H1000	47.0	2779	41,500 PSI	50.0C	2955	48,900 PSI
H4831	45.0	2794	43,900 PSI	49.0C	3064	56,100 PSI
IMR 7828 SSC	43.0	2778	49,500 PSI	47.5C*	3048	60,900 PSI
StaBALL 6.5	42.0	2875	46,700 PSI	46.3	3190	62,200 PSI
IMR 4831	42.0	2889	50,500 PSI	46.2C	3149	62,100 PSI
H4350	41.0	2879	47,900 PSI	45.5	3137	59,800 PSI
IMR 4350	40.0	2842	50,200 PSI	44.6C	3126	62,600 PSI
760	39.0	2774	44,400 PSI	43.5	3093	58,500 PSI
Varget	36.0	2843	49,800 PSI	40.2	3055	59,200 PSI
StaBALL Match	35.2	2772	51,100 PSI	39.0	3008	63,000 PSI
H4895	34.0	2749	45,900 PSI	38.5	3035	59,900 PSI
IMR 4895	34.0	2737	48,800 PSI	38.5	3016	62,400 PSI
748	34.5	2766	55,300 PSI	38.5	2964	61,500 PSI
IMR 4064	34.0	2765	50,000 PSI	38.0	2982	61,000 PSI
Bullet: 107 GR. SIE HPBT			**Dia: .243″**			
Case: Winchester			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.950″**
H1000	47.0	2818	47,400 PSI	50.0C	2980	55,100 PSI
Retumbo	47.0	2836	44,900 PSI	50.0C	3033	55,200 PSI
H4831	43.0	2779	48,300 PSI	48.0C	3042	59,600 PSI
IMR 7828 SSC	42.0	2739	50,300 PSI	47.0C*	3023	63,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4831	40.0	2772	48,800 PSI	44.5	3080	63,600 PSI
StaBALL 6.5	41.0	2815	49,800 PSI	44.2	3044	61,600 PSI
H4350	39.0	2779	48,800 PSI	43.5	3016	59,600 PSI
IMR 4350	39.0	2750	49,300 PSI	43.5	3044	63,800 PSI
760	39.0	2757	49,800 PSI	43.0	3001	60,400 PSI
Varget	34.0	2652	46,300 PSI	38.5	2930	60,200 PSI
StaBALL Match	34.3	2683	53,300 PSI	37.7	2884	63,400 PSI
IMR 4064	33.0	2650	48,900 PSI	37.0	2869	60,800 PSI

Bullet: 108 GR. HDY ELD-M Dia: .243″

Case: Winchester	Primer: Remington 9 1/2, Large Rifle				Col: 2.825″
H1000	47.0	2817	45,800 PSI	50.0C	2980	53,300 PSI
H4831	44.0	2839	49,400 PSI	47.5C	3028	57,900 PSI
IMR 4831	41.0	2785	48,800 PSI	45.7C	3075	62,100 PSI
StaBALL 6.5	41.0	2794	46,800 PSI	44.7	3086	61,800 PSI
IMR 4350	39.0	2713	48,200 PSI	43.8	3027	62,600 PSI
H4350	40.0	2838	49,700 PSI	43.5	3029	58,800 PSI
760	40.0	2826	50,700 PSI	43.0	3009	58,600 PSI
StaBALL Match	34.5	2672	49,700 PSI	38.1	2918	62,600 PSI
Varget	34.0	2711	47,400 PSI	38.0	2946	58,800 PSI
IMR 4064	33.0	2659	49,200 PSI	37.2	2894	60,700 PSI

257 ROBERTS

Barrel: 24″ Twist: 1:10″ Trim: 2.223″

Bullet: 75 GR. SIE HP Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.745″
Hunter	44.0	3000	45,200 PSI	49.0	3320	50,300 PSI
4350	44.1	2966	42,500 PSI	49.0	3370	47,200 PSI
Big Game	42.5	3140	47,000 PSI	47.5	3450	52,500 PSI
2700	44.7	3119	46,200 PSI	47.0	3318	48,600 PSI
4064	39.0	2966	45,900 PSI	43.3	3370	51,000 PSI
2520	36.9	2912	43,300 PSI	41.0	3309	48,100 PSI

Bullet: 80 GR. BAR TTSX BT Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.780″
Superformance	49.4	3274	43,200 PSI	52.5C	3529	53,100 PSI
IMR 4350	46.0	3172	45,500 PSI	49.0C	3385	52,900 PSI
Hunter	47.5	3247	46,600 PSI	51.6	3429	52,900 PSI
StaBALL 6.5	46.0	3192	44,400 PSI	49.6	3442	53,100 PSI
2700	45.4	3199	45,000 PSI	48.3	3423	53,100 PSI
760	45.4	3199	45,000 PSI	48.3	3423	53,100 PSI
H4350	45.0	3159	44,200 PSI	48.3	3371	53,000 PSI
Big Game	45.1	3234	46,500 PSI	48.0	3397	52,800 PSI

Bullet: 85 GR. BAR X Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.770″
4350	42.3	2802	44,000 PSI	47.0	3184	48,900 PSI
2700	42.8	2959	46,300 PSI	45.0	3148	48,700 PSI
4064	37.3	2750	44,000 PSI	41.5	3125	49,000 PSI
2520	35.1	2709	43,800 PSI	39.0	3078	48,700 PSI

Bullet: 85 GR. NOS BTV Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.750″
H4831	50.0	3113	45,800 PSI	52.0C	3221	49,500 PSI
IMR 7828 SSC	47.5	3029	43,700 PSI	50.6C	3261	53,000 PSI
IMR 4831	47.3	3057	44,900 PSI	50.0C	3254	52,200 PSI
IMR 4350	45.7	3126	45,100 PSI	48.8C	3342	53,300 PSI
H4350	45.0	3118	45,100 PSI	47.6C	3316	53,200 PSI
Superformance	48.2	3218	44,800 PSI	51.2	3425	53,100 PSI
Hunter	47.5	3159	45,800 PSI	51.0	3352	53,100 PSI
StaBALL 6.5	45.3	3147	45,600 PSI	49.2	3338	53,300 PSI
2700	44.8	3126	43,100 PSI	47.7	3352	53,100 PSI
760	44.8	3126	43,100 PSI	47.7	3352	53,100 PSI

Bullet: 90 GR. HDY CX Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.780″
H4831	46.0	2896	45,800 PSI	49.8C	3092	53,100 PSI
IMR 4831	44.8	2881	45,000 PSI	48.0C	3093	52,800 PSI
IMR 7828 SSC	45.2	2872	45,400 PSI	48.0C	3084	53,100 PSI
Superformance	47.5	3027	44,500 PSI	50.5	3241	52,900 PSI
Hunter	45.3	2893	43,100 PSI	48.7	3166	53,300 PSI
StaBALL 6.5	43.0	2964	46,400 PSI	46.2	3158	53,100 PSI
2700	42.6	2887	43,900 PSI	45.4	3119	53,000 PSI
760	42.6	2887	43,900 PSI	45.4	3119	53,000 PSI
H4350	41.4	2943	46,600 PSI	44.2	3095	52,700 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure

Bullet: 90 GR. SIE BK Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.750″
H4831	47.2	2959	43,100 PSI	51.7C	3198	52,700 PSI
IMR 7828 SSC	46.3	2953	43,100 PSI	48.8C	3180	52,900 PSI
IMR 4350	44.0	3000	43,600 PSI	47.6C	3233	53,100 PSI
Superformance	47.5	3170	45,700 PSI	50.4	3364	53,100 PSI
Hunter	46.8	3125	46,400 PSI	49.8	3274	52,800 PSI
IMR 4831	45.5	2974	43,800 PSI	48.5	3197	52,900 PSI
StaBALL 6.5	44.5	3072	44,200 PSI	47.3	3284	52,800 PSI
2700	43.8	3063	44,000 PSI	46.4	3244	52,900 PSI
760	43.8	3063	44,000 PSI	46.4	3244	52,900 PSI
H4350	42.8	3021	44,000 PSI	45.8	3226	52,800 PSI

Bullet: 90 GR. SIE HPBT Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.735″
4350	42.3	2786	44,900 PSI	47.0	3166	49,900 PSI
2700	41.8	2954	47,800 PSI	44.0	3143	50,300 PSI
4064	37.3	2755	44,400 PSI	41.5	3131	49,400 PSI
2520	34.7	2692	43,400 PSI	38.5	3059	48,200 PSI

Bullet: 100 GR. BAR TSX BT Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.760″
4350	39.6	2570	45,300 PSI	44.0	2920	50,300 PSI
2700	39.0	2640	45,500 PSI	41.0	2808	47,800 PSI
4064	35.1	2533	44,600 PSI	39.0	2879	49,600 PSI
2520	33.3	2475	44,900 PSI	37.0	2813	49,900 PSI

Bullet: 100 GR. NOS BT Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.775″
4350	41.9	2682	45,800 PSI	46.5	3048	50,800 PSI
Hunter	40.0	2690	46,400 PSI	45.0	3000	52,200 PSI
2700	40.9	2761	46,800 PSI	43.0	2937	49,200 PSI
Big Game	37.5	2750	47,200 PSI	42.0	3020	52,900 PSI
4064	36.0	2594	45,700 PSI	40.0	2948	50,800 PSI
2520	33.8	2525	43,900 PSI	37.5	2869	48,700 PSI

Bullet: 100 GR. SFT AFSP Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.780″
Magnum	52.0	2964	42,900 PSI	53.0C	3043	46,300 PSI
H1000	48.6	2827	43,600 PSI	51.0C	2973	49,600 PSI
H4831	47.0	2876	45,200 PSI	50.3C	3049	53,000 PSI
IMR 7828 SSC	45.0	2792	43,200 PSI	48.4	3026	52,900 PSI
4350	45.0	2884	44,900 PSI	48.2C	3050	51,300 PSI
IMR 4831	45.3	2876	44,500 PSI	47.8	3082	53,100 PSI
Hunter	44.5	2838	44,700 PSI	47.7	3070	53,300 PSI
StaBALL 6.5	41.5	2891	45,200 PSI	46.0	3096	52,900 PSI

Bullet: 110 GR. SIE TGK Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.780″
H1000	46.8	2758	45,600 PSI	50.3C	2934	53,100 PSI
H4831	44.5	2780	46,400 PSI	47.7C	2938	53,200 PSI
Superformance	44.6	2824	44,900 PSI	47.5	3015	53,200 PSI
IMR 4831	43.7	2755	44,000 PSI	46.5C	2965	52,800 PSI
Hunter	43.2	2763	44,200 PSI	46.2	2954	52,900 PSI
IMR 7828 SSC	43.2	2738	45,700 PSI	46.0C	2907	53,100 PSI
4350	42.7	2792	46,100 PSI	45.8C	2961	53,100 PSI
StaBALL 6.5	41.5	2784	45,200 PSI	44.2	2959	53,200 PSI

Bullet: 117 GR. SIE SBT Dia: .257″

Case: Remington	Primer: Federal 210, Large Rifle				Col: 2.775″
4350	39.6	2410	43,600 PSI	44.0	2739	48,400 PSI
Hunter	39.0	2560	48,000 PSI	43.5	2840	53,500 PSI
2700	39.0	2532	45,700 PSI	41.0	2694	48,000 PSI
Big Game	35.5	2530	46,800 PSI	39.5	2770	52,100 PSI
4064	33.7	2347	44,300 PSI	37.5	2668	49,300 PSI
2520	32.9	2357	44,400 PSI	36.5	2678	49,300 PSI

Bullet: 117 GR. SIE SPBT Dia: .257″

Case: Remington	Primer: Federal 210M, LR Match				Col: 2.775″
Magnum	50.0	2801	43,700 PSI	53.0C	2929	48,800 PSI
H1000	47.0	2702	45,200 PSI	50.0C	2891	53,200 PSI
H4831	44.2	2704	44,900 PSI	48.0C	2913	54,100 PSI
IMR 7828 SSC	42.0	2621	43,000 PSI	45.7	2854	53,100 PSI
IMR 4831	41.5	2661	43,300 PSI	44.8	2895	53,900 PSI
4350	40.3	2676	44,300 PSI	44.6	2909	54,100 PSI
Hunter	40.0	2633	43,400 PSI	43.6	2866	54,300 PSI
StaBALL 6.5	38.2	2667	45,100 PSI	43.0	2884	53,900 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

257 ROBERTS +P

Barrel: 24″ Twist: 1:10″ Trim: 2.223″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 80 GR. BAR TTSX BT				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.780″**
Superformance				54.0C	3610	57,200 PSI
Hunter				53.8C	3536	56,900 PSI
IMR 4350				50.0C	3471	56,900 PSI
StaBALL 6.5				50.2	3518	57,000 PSI
Big Game				49.8	3500	57,100 PSI
2700				49.5	3532	57,200 PSI
760				49.5	3532	57,200 PSI
H4350				48.8	3479	57,100 PSI
Bullet: 85 GR. NOS BTV				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.750″**
Superformance				52.7	3523	57,200 PSI
IMR 7828 SSC				51.8C	3361	57,100 PSI
IMR 4350				49.8C	3427	56,900 PSI
H4350				48.5C	3396	56,900 PSI
Hunter				51.8	3401	56,800 PSI
StaBALL 6.5				49.0	3400	56,900 PSI
2700				48.2	3432	57,200 PSI
760				48.2	3432	57,200 PSI
Bullet: 90 GR. HDY CX				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.780″**
Superformance				51.6C	3343	57,000 PSI
H4831				51.0C	3151	55,000 PSI
Hunter				50.5C	3257	56,900 PSI
IMR 7828 SSC				49.0C	3156	57,100 PSI
StaBALL 6.5				47.5	3264	56,900 PSI
2700				46.7	3206	56,900 PSI
760				46.7	3206	56,900 PSI
H4350				45.5	3214	57,200 PSI
Bullet: 90 GR. SIE BK				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.750″**
Superformance				51.3	3437	57,200 PSI
Hunter				51.0	3379	57,200 PSI
IMR 4831				50.0C	3300	55,800 PSI
IMR 7828 SSC				50.0C	3272	56,800 PSI
IMR 4350				49.2C	3356	57,000 PSI
H4350				47.0C	3318	56,900 PSI
StaBALL 6.5				48.0	3363	56,800 PSI
2700				47.6	3342	57,200 PSI
760				47.6	3342	57,200 PSI
Bullet: 100 GR. SFT AFSP				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.780″**
H4831				51.3C	3116	56,700 PSI
IMR 4831				49.0C	3165	57,200 PSI
IMR 7828 SSC				49.2	3102	57,100 PSI
Hunter				49.0	3144	56,900 PSI
StaBALL 6.5				46.8	3169	57,100 PSI
Bullet: 110 GR. SIE TGK				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.780″**
H4831				49.4C	3025	56,800 PSI
IMR 4831				48.0C	3056	57,000 PSI
IMR 7828 SSC				47.2C	2992	56,800 PSI
4350				46.7C	3050	57,100 PSI
Superformance				48.3	3091	57,100 PSI
Hunter				47.6	3062	57,200 PSI
StaBALL 6.5				45.3	3047	57,000 PSI
Bullet: 117 GR. SIE SPBT				**Dia: .257″**		
Case: Remington	**Primer: Federal 210M, LR Match**					**Col: 2.775″**
H4831				48.8C	2974	57,200 PSI
IMR 7828 SSC				46.8	2941	57,000 PSI
4350				45.8C	2971	56,800 PSI
IMR 4831				45.4C	2941	57,400 PSI
Hunter				45.2	2946	56,900 PSI
StaBALL 6.5				43.6	2944	57,400 PSI

25-06 REMINGTON

Barrel: 24″ Twist: 1:10″ Trim: 2.484″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 75 GR. HDY V-MAX				**Dia: .257″**		
Case: Remington	**Primer: Winchester LR, Large Rifle**					**Col: 3.140″**
Magnum	57.2	3137	48,500 PSI	63.6	3485	54,000 PSI
Hunter	53.8	3355	54,700 PSI	59.8	3766	60,800 PSI
4350	53.1	3326	55,300 PSI	59.0	3780	61,400 PSI
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 3.100″**
H1000	58.0	3135	35,300 CUP	62.0C	3339	40,000 CUP
H4831	58.0	3393	41,800 CUP	62.0C	3599	49,300 CUP
IMR 7828 SSC	56.0	3252	44,300 CUP	59.7C*	3486	50,600 CUP
IMR 4831	53.0	3197	43,200 CUP	58.0C	3540	51,600 CUP
H4350	54.0	3460	43,300 CUP	58.5	3700	50,900 CUP
Superformance	51.7	3447	47,600 PSI	55.8	3728	60,400 PSI
760	51.0	3471	44,500 CUP	55.0	3626	50,100 CUP
IMR 4350	50.0	3195	41,800 CUP	55.0	3493	51,000 CUP
H380	47.0	3331	45,000 CUP	51.0	3494	49,900 CUP
Varget	46.0	3454	43,400 CUP	49.7	3660	51,200 CUP
H4895	45.0	3474	45,000 CUP	48.5	3642	50,800 CUP
IMR 4064	44.0	3322	43,600 CUP	48.5	3566	51,200 CUP
IMR 4895	43.0	3250	44,100 CUP	48.0	3529	50,900 CUP
StaBALL Match	43.2	3338	49,700 PSI	47.6	3608	61,000 PSI
Bullet: 80 GR. BAR TTSX BT				**Dia: .257″**		
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 3.075″**
IMR 7828 SSC	57.0	3350	49,900 PSI	61.0C*	3582	58,500 PSI
Superformance	54.5	3476	51,100 PSI	58.9	3723	60,700 PSI
IMR 4831	52.0	3301	45,600 PSI	56.0C	3569	55,200 PSI
IMR 4350	51.0	3372	49,300 PSI	55.0C	3600	57,300 PSI
H4350	51.0	3347	48,500 PSI	55.0C	3560	56,900 PSI
760	48.0	3379	52,800 PSI	53.0	3586	60,300 PSI
H380	49.0	3394	52,800 PSI	52.5	3597	60,800 PSI
IMR 4895	45.0	3385	50,500 PSI	49.5	3661	61,900 PSI
IMR 4064	45.0	3377	49,500 PSI	49.5	3645	61,400 PSI
Varget	45.0	3389	51,800 PSI	49.0	3613	60,900 PSI
StaBALL Match	43.5	3276	52,400 PSI	48.0	3513	61,100 PSI
H4895	43.0	3408	52,100 PSI	47.5	3630	61,500 PSI
Bullet: 85 GR. NOS BT				**Dia: .257″**		
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 3.230″**
H1000	58.0	3218	41,000 CUP	62.0C	3442	48,100 CUP
IMR 7828 SSC	55.0	3186	46,200 CUP	59.2C*	3417	51,900 CUP
H4831	54.0	3302	46,000 CUP	58.0	3473	51,700 CUP
Superformance	53.2	3367	51,400 PSI	57.2	3597	61,000 PSI
IMR 4831	49.0	3021	42,400 CUP	55.0	3417	51,600 CUP
H4350	49.0	3255	44,400 CUP	53.0	3445	50,700 CUP
IMR 4350	48.0	3107	43,700 CUP	53.0	3398	50,800 CUP
760	48.0	3248	45,000 CUP	52.0	3443	50,600 CUP
H380	45.0	3130	43,700 CUP	49.0	3321	51,200 CUP
StaBALL Match	42.5	3121	49,500 PSI	46.7	3396	60,600 PSI
Varget	43.0	3271	45,000 CUP	46.5	3449	50,900 CUP
IMR 4064	42.0	3149	45,700 CUP	45.7	3353	50,200 CUP
IMR 4895	41.0	3063	43,300 CUP	45.5	3297	50,100 CUP
H4895	41.0	3176	44,600 CUP	44.5	3369	51,600 CUP
Bullet: 87 GR. SPR HP				**Dia: .257″**		
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 3.115″**
H1000	58.0	3176	36,200 CUP	62.0C	3296	43,700 CUP
H4831	56.0	3232	43,500 CUP	60.0	3421	50,500 CUP
IMR 7828 SSC	55.0	3133	43,600 CUP	59.5C*	3398	51,600 CUP
IMR 4831	52.0	3099	41,900 CUP	56.5	3398	50,600 CUP
Superformance	51.0	3212	47,200 PSI	55.0	3522	61,900 PSI
IMR 4350	50.0	3086	41,800 CUP	54.8	3378	50,900 CUP
H4350	50.0	3234	45,600 CUP	54.5	3409	50,800 CUP
760	47.0	3138	43,800 CUP	50.5	3327	51,100 CUP
IMR 4064	42.0	3091	42,000 CUP	46.5	3344	50,600 CUP
Varget	43.0	3231	44,900 CUP	46.0	3382	50,500 CUP
H4895	43.0	3243	47,700 CUP	45.5	3364	51,600 CUP
StaBALL Match	40.5	3104	52,900 PSI	44.8	3310	60,400 PSI
Bullet: 90 GR. HDY GMX				**Dia: .257″**		
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 3.115″**
StaBALL HD	56.0	3063	47,300 PSI	61.5C	3363	57,500 PSI
H1000	56.0	3248	54,900 PSI	60.0C	3377	59,300 PSI
Retumbo	56.0	3250	51,000 PSI	60.0C	3432	58,700 PSI
IMR 7828 SSC	52.0	3198	52,300 PSI	57.0C	3437	61,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4831	50.0	3205	56,200 PSI	54.5C	3363	61,000 PSI
IMR 4831	48.0	3219	53,400 PSI	52.8	3437	60,400 PSI
IMR 4350	47.0	3223	54,800 PSI	52.0	3437	61,800 PSI
StaBALL 6.5	47.5	3226	53,000 PSI	51.7	3451	60,800 PSI
H4350	45.0	3117	51,300 PSI	49.5	3344	60,600 PSI
IMR 4895	41.0	3070	49,200 PSI	46.0	3351	59,900 PSI
StaBALL Match	40.7	2987	53,900 PSI	44.7	3198	61,000 PSI
IMR 4064	40.0	3043	48,900 PSI	44.0	3253	57,300 PSI
Varget	41.0	3098	51,600 PSI	44.0	3261	58,800 PSI
H4895	39.0	3053	50,800 PSI	43.0	3281	60,200 PSI
Bullet: 90 GR. SIE HPBT			**Dia: .257″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.100″**
StaBALL HD	56.7	3089	45,700 PSI	62.2C	3392	56,500 PSI
H1000	58.0	3142	40,300 CUP	62.0C	3330	47,500 CUP
IMR 7828 SSC	55.0	3145	46,400 CUP	59.5C*	3374	52,900 CUP
H4831	54.0	3213	46,000 CUP	58.0	3481	50,400 CUP
IMR 4831	51.0	3095	42,900 CUP	55.5	3374	51,100 CUP
IMR 4350	49.0	3088	42,800 CUP	53.5	3348	51,400 CUP
H4350	49.0	3191	44,000 CUP	53.0	3370	50,700 CUP
760	47.0	3135	44,300 CUP	51.0	3315	50,200 CUP
StaBALL Match	43.2	3118	51,600 PSI	47.5	3341	60,000 PSI
IMR 4895	42.0	3106	46,000 CUP	45.9	3269	49,200 CUP
IMR 4064	42.0	3117	45,100 CUP	45.8	3298	51,100 CUP
Varget	42.0	3165	45,000 CUP	45.0	3312	50,400 CUP
H4895	41.0	3128	44,100 CUP	44.0	3257	51,000 CUP
Bullet: 100 GR. NOS PART			**Dia: .257″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.250″**
Magnum	55.6	2937	52,200 PSI	61.8	3263	58,000 PSI
Magpro	54.6	3019	55,900 PSI	60.7	3296	62,200 PSI
4350	47.7	2969	56,000 PSI	53.0	3245	62,200 PSI
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.200″**
StaBALL HD	55.4	3028	48,200 PSI	60.8	3324	60,200 PSI
H1000	56.0	3055	44,600 CUP	59.7C	3212	50,700 CUP
IMR 7828 SSC	53.0	2940	40,700 CUP	57.2C	3203	51,300 CUP
H4831	51.0	3025	46,800 CUP	54.3	3172	51,400 CUP
IMR 4831	49.0	2981	41,700 CUP	54.0	3233	51,400 CUP
Superformance	49.8	3113	51,300 PSI	53.6	3312	60,700 PSI
IMR 4350	48.0	2975	43,200 CUP	52.8	3257	51,200 CUP
StaBALL 6.5	46.7	3149	53,800 PSI	50.8	3346	60,900 PSI
H4350	47.0	3038	47,800 CUP	50.0	3155	51,500 CUP
760	42.0	2843	44,600 CUP	47.0	3059	50,700 CUP
IMR 4895	42.0	3009	46,000 CUP	45.3	3155	50,400 CUP
Varget	41.0	2974	45,600 CUP	44.0	3125	51,400 CUP
IMR 4064	40.0	2904	40,400 CUP	44.0	3122	50,800 CUP
StaBALL Match	39.5	2863	49,800 PSI	43.6	3099	60,800 PSI
H4895	40.0	2921	44,200 CUP	43.0	3072	51,000 CUP
Bullet: 117 GR. HDY SPBT			**Dia: .257″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.165″**
Magnum	54.5	2811	55,200 PSI	60.5	3123	61,300 PSI
Magpro	51.3	2807	55,800 PSI	57.0	3068	62,000 PSI
Hunter	46.9	2717	55,300 PSI	52.1	3019	61,400 PSI
4350	45.9	2784	56,400 PSI	51.0	3043	62,700 PSI
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.165″**
Retumbo	56.0	2876	44,600 CUP	60.5C	3079	50,700 CUP
H1000	55.0	2936	47,200 CUP	58.5C	3046	51,000 CUP
StaBALL HD	53.3	2889	49,600 PSI	58.3	3152	60,900 PSI
IMR 7828 SSC	51.0	2879	46,600 CUP	55.0	3037	51,200 CUP
IMR 4831	48.0	2839	42,600 CUP	53.0	3137	51,400 CUP
H4831	48.0	2748	43,000 CUP	52.0	2937	50,900 CUP
IMR 4350	47.0	2851	42,700 CUP	52.0	3106	51,300 CUP
Superformance	47.3	2865	50,900 PSI	50.9	3071	60,900 PSI
StaBALL 6.5	44.5	2906	53,100 PSI	48.5	3112	61,800 PSI
H4350	44.0	2737	44,300 CUP	47.7	2923	50,800 CUP
StaBALL Match	37.0	2652	51,200 PSI	41.0	2849	60,500 PSI
Varget	37.0	2637	42,900 CUP	41.0	2838	50,100 CUP
H4895	37.0	2641	44,500 CUP	40.0	2797	50,600 CUP
Bullet: 120 GR. SFT SP			**Dia: .257″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.150″**
Retumbo	56.0	2806	43,700 CUP	60.0C	2991	50,300 CUP
StaBALL HD	53.8	2862	51,700 PSI	57.9	3067	61,300 PSI
H1000	52.0	2772	44,900 CUP	55.5	2902	50,600 CUP
IMR 7828 SSC	50.0	2752	44,400 CUP	54.0	2923	50,300 CUP
IMR 4831	48.0	2787	42,200 CUP	53.0C	3065	50,900 CUP
IMR 4350	48.0	2831	43,500 CUP	52.0C	3049	50,800 CUP
H4831	48.0	2705	45,800 CUP	51.5	2856	51,200 CUP
Superformance	46.7	2762	49,600 PSI	50.3	2990	60,900 PSI
H4350	44.0	2643	42,900 CUP	47.5	2816	50,900 CUP
StaBALL 6.5	43.5	2788	54,600 PSI	47.0	2959	61,200 PSI
Varget	38.0	2584	45,100 CUP	41.0	2755	51,900 CUP
StaBALL Match	37.2	2568	53,500 PSI	40.5	2747	61,700 PSI
H4895	37.0	2541	45,400 CUP	40.0	2694	51,700 CUP

257 WEATHERBY MAGNUM

Barrel: 26″ Twist: 1:10″ Trim: 2.535″

Bullet: 75 GR. HDY HP			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.140″**
Magpro	70.5	3320	56,100 PSI	78.3	3736	62,300 PSI
Magnum	70.0	3282	55,400 PSI	77.8	3691	61,600 PSI
4350	64.1	3318	55,700 PSI	71.2	3741	61,900 PSI
Bullet: 75 GR. HDY V-MAX			**Dia: .257″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.250″**
H1000	76.0	3517	37,700 CUP	80.0C	3649	42,000 CUP
H4831	71.0	3652	45,200 CUP	75.0	3841	51,900 CUP
H4350	65.0	3715	43,100 CUP	70.0	3905	51,800 CUP
Bullet: 85 GR. NOS BT			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.250″**
LRT	76.5	3222	54,900 PSI	84.9	3638	61,000 PSI
Magnum	69.4	3244	55,800 PSI	77.1	3623	62,000 PSI
Magpro	69.0	3232	55,400 PSI	76.6	3629	61,600 PSI
4350	60.6	3246	55,400 PSI	67.3	3597	61,500 PSI
Case: Weatherby			**Primer: Federal 215, LR Magnum**			**Col: 3.250″**
H1000	76.0	3548	44,600 CUP	80.0C	3665	47,900 CUP
H4831	68.0	3498	45,000 CUP	72.0	3664	52,200 CUP
H4350	63.0	3544	44,400 CUP	67.0	3739	51,600 CUP
Bullet: 90 GR. HDY GMX			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.180″**
LRT	74.4	3195	54,100 PSI	82.7	3594	60,100 PSI
Magnum	68.1	3231	55,300 PSI	75.7	3591	61,500 PSI
Magpro	67.5	3228	56,200 PSI	75.0	3624	62,500 PSI
4350	59.9	3213	55,900 PSI	66.6	3554	62,100 PSI
Bullet: 90 GR. SIE BK			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.150″**
LRT	75.7	3266	56,000 PSI	84.1	3668	62,200 PSI
Magpro	67.4	3252	55,300 PSI	74.9	3613	61,500 PSI
Magnum	67.2	3221	56,100 PSI	74.6	3604	62,300 PSI
4350	60.4	3190	55,300 PSI	67.1	3586	61,500 PSI
5744	34.5	2823	44,400 PSI	46.0	3458	59,200 PSI
Bullet: 90 GR. SIE HPBT			**Dia: .257″**			
Case: Weatherby			**Primer: Federal 215, LR Magnum**			**Col: 3.150″**
H1000	76.0	3494	43,800 CUP	80.0C	3671	50,000 CUP
H4831	67.0	3420	44,400 CUP	71.0	3611	52,500 CUP
H4350	62.5	3524	46,600 CUP	66.5	3685	52,400 CUP
Bullet: 100 GR. BAR TSX BT			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.160″**
LRT	72.1	3089	55,800 PSI	80.2	3482	62,000 PSI
Magnum	65.9	3091	56,100 PSI	73.3	3461	62,400 PSI
Magpro	64.1	3059	54,000 PSI	71.2	3404	60,000 PSI
Bullet: 100 GR. SFT AF			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.160″**
LRT	71.8	3064	55,200 PSI	79.8	3466	61,300 PSI
Magnum	65.3	3060	55,100 PSI	72.6	3428	61,300 PSI
Magpro	65.4	3087	55,100 PSI	72.6	3451	61,100 PSI
4350	58.2	3053	55,100 PSI	64.6	3503	61,300 PSI
Bullet: 100 GR. SPR SPBT			**Dia: .257″**			
Case: Weatherby			**Primer: Federal 215, LR Magnum**			**Col: 3.200″**
H1000	73.0	3410	45,800 CUP	78.0	3575	52,400 CUP
IMR 7828				73.0	3655	53,100 CUP
H4831	64.0	3312	45,800 CUP	68.0	3462	52,500 CUP
H4350	59.0	3312	44,900 CUP	63.0	3500	52,400 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 115 GR. BER VLD			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.240″**
LRT	69.2	2929	55,300 PSI	76.9	3290	61,400 PSI
Magnum	62.6	2898	56,000 PSI	69.6	3257	62,200 PSI
Magpro	61.9	2877	54,800 PSI	68.8	3240	60,900 PSI
Bullet: 117 GR. HDY SPBT			**Dia: .257″**			
Case: Weatherby			**Primer: Federal 215, LR Magnum**			**Col: 3.220″**
H1000	70.0	3169	45,200 CUP	74.0	3321	51,800 CUP
IMR 7828				70.0	3390	52,600 CUP
H4831	62.0	3099	44,800 CUP	66.0	3252	52,300 CUP
H4350	57.0	3112	46,000 CUP	60.5	3266	52,000 CUP
Bullet: 117 GR. SIE SBT			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.250″**
LRT	68.7	2898	56,100 PSI	76.4	3249	62,300 PSI
Magnum	62.0	2856	55,400 PSI	68.9	3207	61,600 PSI
Magpro	61.9	2852	54,700 PSI	68.8	3190	60,700 PSI
Bullet: 120 GR. NOS PART			**Dia: .257″**			
Case: Weatherby			**Primer: Winchester LR, Large Rifle**			**Col: 3.240″**
LRT	69.1	2882	55,800 PSI	76.8	3218	62,000 PSI
Magnum	61.2	2800	55,700 PSI	68.0	3141	61,800 PSI
Magpro	60.3	2801	55,500 PSI	67.0	3138	61,700 PSI
5744	31.4	2404	45,700 PSI	40.7	2914	59,200 PSI
Bullet: 120 GR. SFT SP			**Dia: .257″**			
Case: Weatherby			**Primer: Federal 215, LR Magnum**			**Col: 3.220″**
H1000	69.0	3103	45,700 CUP	73.0	3256	51,800 CUP
IMR 7828				69.0	3325	53,000 CUP
H4831	61.0	3013	44,600 CUP	65.0	3184	51,800 CUP
H4350	56.0	3000	44,400 CUP	60.0	3189	51,800 CUP
6.5MM GRENDEL						
Barrel: 24″ Twist: 1:9″ Trim: 1.515″						
Bullet: 85 GR. SIE HP			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.130″**
2520	30.5	2724	46,300 PSI	33.9	2996	51,500 PSI
TAC	28.9	2638	46,500 PSI	32.2	2904	51,700 PSI
2230	27.5	2629	46,700 PSI	30.6	2889	51,900 PSI
X-Terminator	27.5	2629	46,700 PSI	30.6	2889	51,900 PSI
2460	27.4	2600	46,700 PSI	30.5	2887	51,900 PSI
2200	26.6	2705	46,000 PSI	29.6	2944	51,100 PSI
LT-32	25.4	2503	46,700 PSI	28.2	2772	51,900 PSI
LT-30	24.3	2513	46,600 PSI	27.0	2754	51,700 PSI
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.240″**
IMR 8208 XBR	27.4	2622	39,200 PSI	30.4	3022	50,500 PSI
H335	26.7	2711	44,000 PSI	29.5	2913	50,600 PSI
Benchmark	26.5	2725	39,900 PSI	29.4	2997	50,200 PSI
H322	24.8	2697	41,300 PSI	27.7	2942	50,500 PSI
H4198	22.5	2662	41,000 PSI	24.9	2882	50,600 PSI
IMR 4198	22.3	2634	40,500 PSI	24.8	2872	50,200 PSI
Bullet: 90 GR. SPR TNT HP			**Dia: .264″**			
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.200″**
LEVERevolution	31.4	2788	37,000 PSI	34.0C	2990	43,800 PSI
IMR 8208 XBR	28.2	2701	39,000 PSI	31.1	2992	50,400 PSI
H335	28.0	2688	41,000 PSI	30.9	2923	50,100 PSI
Benchmark	27.2	2677	38,100 PSI	30.0	2967	50,300 PSI
H322	25.7	2607	37,700 PSI	28.6	2911	49,700 PSI
H4198	23.5	2646	39,700 PSI	26.1	2892	50,100 PSI
IMR 4198	23.0	2601	38,200 PSI	25.6	2862	50,000 PSI
Bullet: 95 GR. HDY V-MAX			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.200″**
2520	29.3	2591	46,700 PSI	32.5	2858	51,900 PSI
TAC	27.7	2509	46,400 PSI	30.7	2761	51,600 PSI
2460	26.5	2495	46,500 PSI	29.4	2768	51,700 PSI
2230	26.4	2509	46,200 PSI	29.4	2766	51,400 PSI
X-Terminator	26.4	2509	46,200 PSI	29.4	2766	51,400 PSI
2200	25.1	2541	46,500 PSI	27.9	2756	51,700 PSI
LT-32	24.3	2410	46,700 PSI	27.0	2641	51,800 PSI
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.230″**
CFE 223	30.2	2579	34,000 PSI	33.5C	2882	46,200 PSI
LEVERevolution	30.0	2678	35,900 PSI	33.2C	2982	47,600 PSI
IMR 8208 XBR	26.8	2560	36,300 PSI	30.1C	2910	50,600 PSI
H335	27.0	2589	39,900 PSI	29.8	2819	49,600 PSI
Benchmark	26.0	2575	37,600 PSI	29.2	2896	50,500 PSI
H322	24.7	2560	39,300 PSI	27.6	2825	50,000 PSI
H4198	22.5	2561	40,200 PSI	25.0	2781	49,800 PSI
IMR 4198	22.2	2524	39,200 PSI	24.6	2770	49,900 PSI
Bullet: 100 GR. BAR TTSX BT			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.260″**
2520	28.8	2476	46,200 PSI	32.0	2737	51,400 PSI
TAC	27.0	2360	46,300 PSI	30.0	2625	51,500 PSI
2460	25.9	2358	46,100 PSI	28.8	2616	51,200 PSI
2230	25.8	2346	46,100 PSI	28.7	2610	51,200 PSI
X-Terminator	25.8	2346	46,100 PSI	28.7	2610	51,200 PSI
2200	24.0	2398	46,100 PSI	26.7	2603	51,300 PSI
LT-32	22.8	2198	46,200 PSI	25.3	2421	51,300 PSI
LT-30	21.3	2179	46,100 PSI	23.6	2366	51,300 PSI
Bullet: 100 GR. HDY SP			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.215″**
2520	29.4	2556	46,400 PSI	32.6	2806	51,600 PSI
TAC	28.0	2473	46,700 PSI	31.1	2724	51,900 PSI
2230	26.5	2468	46,500 PSI	29.4	2695	51,600 PSI
X-Terminator	26.5	2468	46,500 PSI	29.4	2695	51,600 PSI
2460	26.4	2438	46,300 PSI	29.3	2691	51,500 PSI
2200	25.0	2472	46,600 PSI	27.8	2703	51,700 PSI
Bullet: 100 GR. NOS BT			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.230″**
2520	28.6	2512	46,700 PSI	31.8	2767	51,800 PSI
TAC	27.7	2447	46,300 PSI	30.8	2696	51,400 PSI
2460	26.1	2411	46,700 PSI	29.1	2670	51,900 PSI
2230	26.1	2430	46,300 PSI	29.0	2674	51,500 PSI
X-Terminator	26.1	2430	46,300 PSI	29.0	2674	51,500 PSI
2200	24.5	2451	46,500 PSI	27.3	2673	51,700 PSI
LT-32	24.0	2321	46,800 PSI	26.6	2538	52,000 PSI
LT-30	22.6	2288	46,600 PSI	25.1	2495	51,800 PSI
Bullet: 107 GR. SIE HPBT			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.260″**
2520	28.1	2413	45,400 PSI	31.2	2682	50,400 PSI
TAC	26.9	2348	46,600 PSI	29.9	2606	51,800 PSI
2230	25.6	2374	46,600 PSI	28.5	2606	51,700 PSI
X-Terminator	25.6	2374	46,600 PSI	28.5	2606	51,700 PSI
2460	25.5	2344	46,500 PSI	28.3	2600	51,600 PSI
2200	24.4	2390	46,700 PSI	27.2	2639	51,900 PSI
LT-32	23.8	2278	46,600 PSI	26.4	2492	51,700 PSI
LT-30	22.3	2228	46,300 PSI	24.7	2440	51,500 PSI
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.250″**
CFE 223	29.3	2489	37,200 PSI	32.2C	2740	47,500 PSI
LEVERevolution	28.8	2525	35,900 PSI	31.7C	2753	44,300 PSI
IMR 8208 XBR	26.0	2485	39,400 PSI	28.7C	2740	50,600 PSI
H335	25.8	2421	39,600 PSI	28.5	2666	50,400 PSI
Benchmark	25.2	2444	37,800 PSI	27.9	2718	50,300 PSI
H322	23.7	2427	40,900 PSI	26.2	2646	49,800 PSI
H4198	21.4	2411	41,100 PSI	23.8	2602	50,000 PSI
IMR 4198	21.0	2355	39,000 PSI	23.3	2582	50,100 PSI
Bullet: 120 GR. BAR TSX			**Dia: .264″**			
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.200″**
CFE 223	28.5	2330	39,200 PSI	31.2C	2553	47,800 PSI
LEVERevolution	27.5	2337	40,500 PSI	30.8C	2579	48,500 PSI
StaBALL Match	26.7	2247	40,400 PSI	29.6C	2460	49,600 PSI
Varget	24.8	2198	41,100 PSI	27.6C	2436	50,000 PSI
IMR 8208 XBR	24.0	2213	40,400 PSI	26.8	2452	50,100 PSI
H335	23.7	2144	43,600 PSI	26.6	2386	50,300 PSI
Benchmark	23.4	2194	40,900 PSI	26.2	2440	50,600 PSI
H322	22.0	2160	41,700 PSI	24.4	2349	49,900 PSI
Bullet: 123 GR. SIE HPBT			**Dia: .264″**			
Case: Alexander			**Primer: Winchester SR, Small Rifle**			**Col: 2.260″**
2520	26.7	2259	46,600 PSI	29.6	2491	51,700 PSI
TAC	25.4	2206	46,500 PSI	28.2	2424	51,600 PSI
2230	24.7	2233	46,300 PSI	27.4	2424	51,400 PSI
X-Terminator	24.7	2233	46,300 PSI	27.4	2424	51,400 PSI
2460	24.4	2208	46,500 PSI	27.1	2420	51,700 PSI
2200	22.7	2176	45,800 PSI	25.3	2382	50,900 PSI
Case: Hornady			**Primer: Federal 205, Small Rifle**			**Col: 2.260″**
CFE 223	28.4	2352	36,800 PSI	31.2	2602	48,700 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
LEVERevolution	28.2	2420	40,200 PSI	31.0	2649	50,300 PSI
StaBALL Match	27.0	2319	40,900 PSI	29.7	2492	49,100 PSI
Varget	25.2	2242	37,800 PSI	28.0	2501	49,900 PSI
IMR 8208 XBR	24.4	2246	36,900 PSI	27.0	2504	49,900 PSI
H335	24.4	2244	41,100 PSI	26.9	2446	50,100 PSI
IMR 4198	20.0	2213	42,900 PSI	22.2	2369	50,400 PSI
H4198	19.8	2184	41,200 PSI	22.0	2365	50,200 PSI
Bullet: 129 GR. HDY SP			**Dia: .264″**			
Case: Hornady		**Primer: Federal 205, Small Rifle**				**Col: 2.245″**
CFE 223	27.4	2263	39,900 PSI	30.3	2495	49,600 PSI
LEVERevolution	26.0	2268	42,500 PSI	29.0	2468	50,000 PSI
StaBALL Match	26.0	2185	40,300 PSI	28.6	2391	50,400 PSI
Varget	24.3	2158	41,100 PSI	26.9	2360	50,100 PSI
Benchmark	24.0	2220	41,500 PSI	26.6	2415	50,400 PSI
IMR 8208 XBR	23.0	2168	42,000 PSI	25.5	2353	50,500 PSI
H335	22.3	2059	43,700 PSI	24.8	2230	50,200 PSI
H322	21.5	2109	42,400 PSI	23.8	2281	50,100 PSI

6.5 x 55MM SWEDISH MAUSER

Barrel: 24″ Twist: 1:7.87″ Trim: 2.155″

Bullet: 107 GR. SIE HPBT			**Dia: .264″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.050″**
H4831	46.0	2590	34,500 CUP	51.0C	2911	42,700 CUP
IMR 7828 SSC	46.5	2721	39,700 CUP	50.5C*	2915	45,300 CUP
IMR 4831	46.0	2795	38,900 CUP	49.0C	2997	44,800 CUP
H4350	43.0	2706	36,000 CUP	48.0C	3035	45,600 CUP
IMR 4350	44.0	2773	39,400 CUP	47.8	2994	45,600 CUP
760	43.0	2743	36,100 CUP	47.5	3036	45,900 CUP
StaBALL 6.5	43.2	2790	36,600 CUP	47.2	3039	45,500 CUP
CFE 223	41.0	2836	40,700 CUP	45.6	3004	45,900 CUP
H380	41.0	2749	39,200 CUP	45.0	2941	45,800 CUP
BL-C(2)	41.0	2784	37,300 CUP	44.5	3050	45,600 CUP
StaBALL Match	38.4	2673	36,100 CUP	42.2	2989	45,700 CUP
Varget	38.0	2742	39,800 CUP	42.0	2952	45,600 CUP
IMR 4064	38.0	2791	39,500 CUP	41.5	2982	45,200 CUP
IMR 4895	37.5	2776	40,600 CUP	40.8	2955	45,500 CUP
H335	36.0	2660	37,800 CUP	40.0	2948	45,800 CUP
H4895	37.0	2777	39,600 CUP	39.7	2943	45,900 CUP
Bullet: 120 GR. NOS BT			**Dia: .264″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.000″**
H4831	44.5	2528	36,200 CUP	49.5C	2802	45,900 CUP
IMR 7828 SSC	45.5	2590	40,200 CUP	49.5C	2802	45,600 CUP
IMR 4831	44.5	2674	38,400 CUP	48.5C	2913	46,200 CUP
IMR 4350	43.0	2631	39,500 CUP	46.8C	2863	46,000 CUP
H4350	41.5	2545	36,800 CUP	46.0	2792	45,800 CUP
StaBALL 6.5	41.4	2612	36,400 CUP	46.0	2938	45,700 CUP
760	40.0	2528	37,000 CUP	44.5	2783	46,000 CUP
H380	40.0	2555	38,200 CUP	44.3	2784	46,000 CUP
StaBALL Match	36.7	2539	36,900 CUP	40.5	2782	45,600 CUP
IMR 4064	37.0	2625	41,300 CUP	40.0	2764	45,100 CUP
IMR 4895	36.0	2569	39,200 CUP	39.6	2767	45,900 CUP
Varget	35.0	2579	36,800 CUP	39.0	2812	45,300 CUP
H4895	34.0	2571	43,000 CUP	37.8	2715	46,000 CUP
Bullet: 120 GR. SIE SPT			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 3.000″**
Magnum	47.5	2567	49,200 PSI	52.8	2822	54,700 PSI
Magpro	46.6	2544	49,500 PSI	51.8	2836	55,000 PSI
Hunter	41.1	2589	49,400 PSI	45.7	2839	54,900 PSI
4350	40.6	2565	49,400 PSI	45.1	2802	54,900 PSI
2700	37.6	2572	49,200 PSI	41.8	2750	54,700 PSI
Bullet: 129 GR. HDY SP			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 2.925″**
Magnum	46.2	2435	49,500 PSI	51.3	2690	55,000 PSI
Magpro	45.8	2433	49,500 PSI	50.9	2720	55,000 PSI
4350	41.1	2459	49,500 PSI	45.7	2724	55,000 PSI
Hunter	40.9	2522	49,600 PSI	45.4	2762	55,100 PSI
2700	38.0	2425	49,200 PSI	42.3	2672	54,700 PSI
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 2.935″**
IMR 7828 SSC	45.0	2537	38,900 CUP	49.0C*	2734	45,000 CUP
H4831	44.0	2449	35,600 CUP	48.5C	2689	45,000 CUP
IMR 4831	43.0	2549	37,200 CUP	47.0C	2792	45,100 CUP
IMR 4350	42.0	2584	40,000 CUP	46.0	2793	45,800 CUP
H4350	40.0	2430	35,100 CUP	45.5	2703	45,500 CUP
StaBALL 6.5	41.5	2597	39,400 CUP	45.5	2841	45,700 CUP
760	39.5	2460	37,900 CUP	43.5	2677	45,700 CUP
H380	38.5	2440	38,400 CUP	42.5	2654	45,500 CUP
StaBALL Match	36.2	2471	37,300 CUP	39.7	2691	45,400 CUP
IMR 4064	36.0	2534	39,800 CUP	39.2	2704	45,800 CUP
IMR 4895	35.0	2488	38,400 CUP	39.0	2703	45,600 CUP
Varget	34.0	2472	36,900 CUP	37.5	2664	46,000 CUP
H4895	33.0	2373	38,200 CUP	36.3	2561	45,600 CUP
Bullet: 130 GR. BAR TSX FB			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 2.950″**
Magnum	44.9	2343	49,300 PSI	49.9	2604	54,800 PSI
Magpro	44.4	2392	49,400 PSI	49.3	2626	54,900 PSI
Hunter	38.2	2360	49,000 PSI	42.5	2588	54,500 PSI
Bullet: 130 GR. BER VLD			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 3.140″**
Magnum	45.8	2487	49,500 PSI	50.9	2735	55,000 PSI
Magpro	44.9	2489	49,500 PSI	49.9	2762	55,000 PSI
Hunter	39.4	2513	49,500 PSI	43.8	2760	55,000 PSI
4350	39.3	2474	49,300 PSI	43.7	2713	54,800 PSI
Bullet: 140 GR. BER VLD			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 3.140″**
Magnum	44.4	2381	49,300 PSI	49.4	2632	54,800 PSI
Magpro	44.4	2435	49,400 PSI	49.4	2676	54,900 PSI
4350	37.9	2391	49,300 PSI	42.1	2601	54,800 PSI
Hunter	37.7	2396	49,500 PSI	41.9	2622	55,000 PSI
Bullet: 140 GR. SIE SBT			**Dia: .264″**			
Case: Norma		**Primer: Winchester LR, Large Rifle**				**Col: 2.900″**
Magnum	45.7	2392	49,200 PSI	50.7	2639	54,700 PSI
Magpro	44.4	2374	49,500 PSI	49.4	2657	55,000 PSI
Hunter	38.5	2394	49,200 PSI	42.8	2629	54,700 PSI
4350	38.4	2383	49,300 PSI	42.7	2594	54,700 PSI
2700	35.9	2360	49,400 PSI	39.9	2564	54,900 PSI
Bullet: 140 GR. SPR SP			**Dia: .264″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.030″**
Grand	48.0	2511	37,900 CUP	51.8C	2707	45,800 CUP
H1000	46.5	2423	37,600 CUP	51.5C	2651	46,000 CUP
IMR 7828 SSC	44.0	2460	38,300 CUP	48.2	2678	45,800 CUP
H4831	42.5	2382	38,100 CUP	47.0	2586	45,700 CUP
IMR 4831	43.0	2507	39,100 CUP	46.3	2700	45,400 CUP
IMR 4350	41.0	2486	39,300 CUP	45.0	2677	46,000 CUP
StaBALL 6.5	40.0	2463	37,700 CUP	45.0	2722	45,600 CUP
H4350	39.5	2418	38,600 CUP	44.0	2617	45,700 CUP
760	37.5	2393	40,000 CUP	41.5	2565	45,600 CUP
H380	36.5	2316	37,600 CUP	40.5	2520	45,100 CUP
StaBALL Match	35.0	2334	37,800 CUP	38.4	2523	45,700 CUP
IMR 4064	35.0	2394	39,500 CUP	38.0	2563	45,800 CUP
IMR 4895	34.5	2364	38,900 CUP	37.8	2550	45,500 CUP
Varget	32.5	2312	37,500 CUP	36.0	2528	46,000 CUP
H4895	32.5	2305	38,100 CUP	35.8	2493	45,700 CUP

260 REMINGTON

Barrel: 24″ Twist: 1:9″ Trim: 2.025″

Bullet: 120 GR. SPR SP			**Dia: .264″**			
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.780″**
H1000	49.0	2710	44,600 PSI	51.0C	2810	49,300 PSI
H4831	47.0	2812	52,100 PSI	50.0C	2954	59,200 PSI
H4350	43.5	2814	51,400 PSI	46.5	2960	58,200 PSI
760	42.5	2802	51,000 PSI	45.5	2968	58,600 PSI
H380	40.0	2686	51,500 PSI	43.0	2844	58,100 PSI
Benchmark	37.0	2768	51,200 PSI	40.0	2935	59,500 PSI
BL-C(2)	37.0	2686	52,800 PSI	40.0	2840	58,900 PSI
Varget	36.0	2716	50,300 PSI	39.0	2877	58,300 PSI
StaBALL Match	35.7	2652	49,200 PSI	38.8	2837	59,800 PSI
H4895	35.0	2664	51,900 PSI	38.0	2813	58,900 PSI
H335	34.0	2613	51,600 PSI	36.7	2755	58,600 PSI
Bullet: 125 GR. NOS PART			**Dia: .264″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 2.780″**
4350	40.5	2584	54,000 PSI	45.0	2937	60,000 PSI
2700	37.8	2439	51,000 PSI	42.0	2772	56,700 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.780″**
H1000	48.0	2685	46,300 PSI	51.0C	2821	53,300 PSI
H4831	45.0	2725	51,600 PSI	48.0C	2862	58,000 PSI
H4350	41.0	2714	50,900 PSI	44.3	2867	57,900 PSI
760	40.0	2691	50,500 PSI	43.0	2852	58,100 PSI
H380	39.0	2641	50,300 PSI	42.0	2806	58,900 PSI
BL-C(2)	36.5	2623	51,600 PSI	38.5	2746	58,200 PSI
StaBALL Match	35.2	2600	49,400 PSI	38.2	2779	59,700 PSI
Varget	34.5	2624	51,200 PSI	37.5	2785	58,400 PSI
H4895	34.0	2623	54,300 PSI	37.0	2743	58,900 PSI
Bullet: 127 GR. BAR LRX BT			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
Hunter	41.7	2603	50,600 PSI	45.6	2817	59,100 PSI
Superformance	40.5	2666	49,600 PSI	43.8	2873	59,500 PSI
H4831	40.3	2583	49,600 PSI	43.8C	2776	59,200 PSI
IMR 4831	39.6	2575	51,700 PSI	43.3C	2768	59,600 PSI
StaBALL 6.5	39.4	2629	51,800 PSI	42.5	2797	59,900 PSI
H4350	38.2	2603	51,200 PSI	41.1	2776	59,600 PSI
IMR 4350	38.0	2556	52,300 PSI	41.0	2735	59,900 PSI
760	36.4	2566	51,900 PSI	39.4	2748	59,500 PSI
Bullet: 129 GR. HDY SP			**Dia: .264″**			
Case: Remington	**Primer: Winchester LR, Large Rifle**					**Col: 2.780″**
4350	39.6	2493	52,600 PSI	44.0	2833	58,400 PSI
Hunter	39.2	2422	48,100 PSI	43.5	2691	53,400 PSI
2700	36.9	2366	51,400 PSI	41.0	2689	57,100 PSI
Big Game	36.9	2458	52,100 PSI	41.0	2731	57,900 PSI
Bullet: 130 GR. NOS AB			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.780″**
H1000	46.9	2658	46,000 PSI	50.0C	2814	54,000 PSI
H4831	43.2	2682	51,700 PSI	46.6C	2845	59,400 PSI
H4350	39.7	2646	50,600 PSI	42.7	2816	59,000 PSI
760	38.7	2640	49,800 PSI	41.6	2816	58,800 PSI
H380	37.8	2572	50,800 PSI	40.7	2738	58,900 PSI
BL-C(2)	35.0	2527	51,700 PSI	37.7	2676	59,500 PSI
StaBALL Match	34.6	2508	48,900 PSI	37.5	2694	59,900 PSI
Varget	34.6	2563	50,500 PSI	37.2	2719	58,800 PSI
H4895	33.0	2504	50,700 PSI	36.0	2677	59,500 PSI
Bullet: 140 GR. NOS PART			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.780″**
H1000	48.0	2619	51,200 PSI	50.5	2730	57,000 PSI
H4831	43.0	2568	53,000 PSI	45.7	2686	59,000 PSI
H4350	39.0	2530	51,900 PSI	42.0	2677	58,800 PSI
StaBALL 6.5	36.9	2441	47,700 PSI	41.1	2689	59,700 PSI
760	38.0	2496	50,700 PSI	41.0	2656	58,800 PSI
H380	37.0	2434	51,200 PSI	40.0	2594	58,900 PSI
BL-C(2)	34.0	2412	52,800 PSI	36.6	2557	59,000 PSI
Varget	34.0	2469	53,300 PSI	36.0	2578	59,400 PSI
StaBALL Match	33.0	2421	50,700 PSI	35.8	2581	59,800 PSI
H4895	32.0	2367	50,500 PSI	34.3	2517	58,400 PSI
Bullet: 142 GR. SIE HPBT			**Dia: .264″**			
Case: Remington	**Primer: Winchester LR, Large Rifle**					**Col: 2.800″**
4350	38.7	2414	51,800 PSI	43.0	2744	57,500 PSI
2700	36.9	2323	52,900 PSI	41.0	2640	58,800 PSI
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.780″**
H4831	45.0	2601	50,900 PSI	48.0C	2747	58,700 PSI
H4350	41.5	2590	50,100 PSI	44.5	2735	58,000 PSI
760	41.0	2588	50,400 PSI	43.5	2734	58,800 PSI
StaBALL 6.5	38.8	2521	48,300 PSI	43.1	2745	59,800 PSI
H380	39.0	2490	50,100 PSI	41.5	2636	58,300 PSI
StaBALL Match	35.0	2447	48,800 PSI	38.0	2633	59,400 PSI
Varget	35.0	2541	54,000 PSI	37.5	2645	59,100 PSI
H4895	34.0	2486	52,000 PSI	36.2	2597	58,200 PSI
Bullet: 143 GR. HDY ELD-X			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
H1000	43.2	2453	42,000 PSI	48.0C	2668	52,500 PSI
H4831	41.6	2543	49,200 PSI	46.2C	2739	59,500 PSI
Superformance	40.7	2564	50,200 PSI	45.3	2791	59,500 PSI
IMR 4831	40.6	2546	47,800 PSI	45.0C	2771	59,700 PSI
StaBALL 6.5	40.7	2562	48,100 PSI	44.0	2765	59,900 PSI
H4350	38.6	2551	48,800 PSI	42.9	2759	59,900 PSI
IMR 4350	38.3	2514	46,400 PSI	42.6C	2748	59,300 PSI
Bullet: 147 GR. HDY ELD-M			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
H4831	41.5	2487	48,500 PSI	46.2C	2693	59,400 PSI
IMR 4831	40.6	2459	46,500 PSI	45.2C	2709	59,500 PSI
Superformance	40.1	2481	50,100 PSI	44.5	2698	59,800 PSI
StaBALL 6.5	40.4	2525	48,900 PSI	43.7	2718	59,900 PSI
IMR 4350	38.5	2438	46,800 PSI	42.8C	2691	59,900 PSI
H4350	38.5	2471	48,600 PSI	42.8	2678	59,900 PSI
Bullet: 150 GR. SIE BTHP			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
H4831	41.6	2449	47,600 PSI	45.2C	2633	58,500 PSI
IMR 4831	40.5	2475	48,000 PSI	44.0C	2656	59,100 PSI
Superformance	39.1	2421	50,900 PSI	44.0	2667	59,600 PSI
StaBALL 6.5	40.3	2500	48,300 PSI	43.6	2697	59,900 PSI
IMR 4350	38.6	2459	48,800 PSI	42.0C	2623	59,100 PSI
H4350	38.6	2467	49,300 PSI	42.0C	2635	59,500 PSI
Bullet: 153 GR. HDY A-TIP			**Dia: .264″**			
Case: Remington	**Primer: Remington 9 1/2, Large Rifle**					**Col: 2.800″**
H4831	40.6	2391	47,300 PSI	45.4C	2609	59,700 PSI
IMR 4831	40.2	2428	48,200 PSI	43.8C	2639	59,600 PSI
StaBALL 6.5	39.3	2442	47,200 PSI	43.2	2663	59,700 PSI
H4350	38.2	2441	50,500 PSI	41.5	2606	59,900 PSI

6.5 CREEDMOOR

Barrel: 24″ Twist: 1:8″ Trim: 1.910″

Powder	Grs	Vel	Pressure	Grs	Vel	Pressure
Bullet: 95 GR. HDY V-MAX			**Dia: .264″**			
Case: Hornady	**Primer: Federal 210M, LR Match**					**Col: 2.670″**
StaBALL 6.5	45.5	3079	45,400 PSI	49.3	3371	60,100 PSI
H4350	43.0	2972	45,000 PSI	47.0C	3224	56,100 PSI
760	42.0	2991	46,100 PSI	46.5	3243	57,100 PSI
StaBALL Match	41.2	3063	43,600 PSI	45.3	3367	60,100 PSI
BL-C(2)	40.0	3082	49,800 PSI	44.0	3313	60,300 PSI
748	39.0	3050	50,200 PSI	43.0	3259	59,000 PSI
Varget	39.0	3051	49,000 PSI	43.0	3286	60,100 PSI
CFE 223	40.4	3152	54,500 PSI	43.0	3274	60,000 PSI
IMR 4895	38.0	3006	46,600 PSI	42.2	3295	60,400 PSI
IMR 4064	38.0	3009	45,800 PSI	41.6	3281	58,700 PSI
H4895	37.0	3059	50,400 PSI	41.0	3276	60,300 PSI
IMR 8208 XBR	36.0	3041	50,800 PSI	40.0	3228	58,900 PSI
Bullet: 100 GR. BAR TTSX BT			**Dia: .264″**			
Case: Hornady	**Primer: Federal 210M, LR Match**					**Col: 2.655″**
StaBALL 6.5	44.1	2981	46,700 PSI	48.0	3256	60,300 PSI
H4350	39.9	2895	49,200 PSI	44.7	3133	60,300 PSI
760	39.7	2893	47,100 PSI	44.5	3163	60,400 PSI
StaBALL Match	39.7	2969	46,400 PSI	43.8	3244	60,800 PSI
IMR 4895	35.4	2819	46,600 PSI	39.8	3103	59,800 PSI
IMR 4064	35.1	2847	47,300 PSI	39.5	3116	60,400 PSI
Varget	34.8	2867	50,700 PSI	39.0	3101	62,100 PSI
IMR 8208 XBR	33.2	2812	49,300 PSI	37.4	3056	60,900 PSI
H4895	33.1	2819	49,100 PSI	37.3	3063	61,000 PSI
Bullet: 100 GR. NOS BT			**Dia: .264″**			
Case: Hornady	**Primer: Federal 210M, LR Match**					**Col: 2.760″**
StaBALL 6.5	45.0	3015	46,100 PSI	48.8	3297	60,000 PSI
H4350	40.5	2905	48,500 PSI	45.0C	3156	59,800 PSI
760	40.0	2923	48,700 PSI	43.8	3143	58,700 PSI
StaBALL Match	39.6	2981	47,600 PSI	43.7	3240	61,500 PSI
CFE 223	41.0	3074	56,000 PSI	43.4	3200	60,700 PSI
BL-C(2)	37.5	2912	48,800 PSI	41.8	3163	60,100 PSI
IMR 4895	36.5	2899	48,400 PSI	40.5	3151	60,300 PSI
Varget	36.5	2888	48,900 PSI	40.5	3122	60,300 PSI
IMR 4064	36.0	2873	46,500 PSI	40.0	3135	59,400 PSI
H4895	35.0	2878	49,400 PSI	38.5	3097	59,300 PSI
IMR 8208 XBR	34.0	2850	48,700 PSI	38.0	3087	60,000 PSI
Bullet: 107 GR. SIE HPBT			**Dia: .264″**			
Case: Hornady	**Primer: Federal 210M, LR Match**					**Col: 2.780″**
StaBALL 6.5	43.4	2919	46,200 PSI	47.2	3208	60,400 PSI
H4350	41.0	2829	45,300 PSI	46.0C	3139	60,900 PSI
760	40.0	2832	45,300 PSI	45.0	3127	58,800 PSI
StaBALL Match	38.8	2895	46,200 PSI	42.8	3149	60,100 PSI
BL-C(2)	38.0	2912	50,300 PSI	42.0	3103	59,000 PSI
CFE 223	39.0	2960	53,600 PSI	41.5	3076	59,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
748	37.0	2848	49,000 PSI	41.3	3086	59,300 PSI
Varget	37.0	2863	48,600 PSI	41.0	3093	60,200 PSI
IMR 4895	36.0	2816	45,800 PSI	40.0	3083	59,700 PSI
IMR 4064	36.0	2799	44,100 PSI	39.7	3081	58,500 PSI
H4895	35.0	2846	49,400 PSI	39.0	3073	60,900 PSI
IMR 8208 XBR	34.0	2812	48,900 PSI	37.8	3027	59,700 PSI
Bullet: 120 GR. HDY ELD-M			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.670″**
StaBALL 6.5	41.7	2735	45,200 PSI	45.3	3004	60,500 PSI
H4350	40.5	2709	47,700 PSI	45.0C	2965	60,800 PSI
760	40.0	2684	47,100 PSI	44.5	2960	61,500 PSI
BL-C(2)	37.0	2678	46,600PSI	41.3	2941	60,500 PSI
StaBALL Match	36.8	2665	44,800 PSI	40.6	2944	61,000 PSI
748	36.0	2650	56,900 PSI	40.4	2899	59,900 PSI
Varget	36.0	2668	49,600 PSI	40.2	2891	60,400 PSI
IMR 4895	35.0	2670	48,600 PSI	39.0	2895	59,300 PSI
IMR 4064	35.0	2666	47,200 PSI	38.9	2903	59,800 PSI
H4895	34.0	2672	50,500 PSI	37.4	2858	60,400 PSI
IMR 8208 XBR	32.0	2564	45,800 PSI	36.0	2818	60,300 PSI
Bullet: 120 GR. NOS BT			**Dia: .264″**			
Case: Hornady			**Primer: Winchester LR, Large Rifle**			**Col: 2.710″**
Hunter	42.8	2697	52,500 PSI	47.5	2997	58,300 PSI
2700	39.6	2629	52,600 PSI	44.0	2921	58,400 PSI
Big Game	39.2	2655	53,100 PSI	43.5	2950	59,000 PSI
4064	36.0	2549	53,300 PSI	40.0	2832	59,200 PSI
Bullet: 123 GR. SIE HPBT			**Dia: .264″**			
Case: Hornady			**Primer: Winchester LR, Large Rifle**			**Col: 2.780″**
Hunter	42.3	2683	53,000 PSI	47.0	2981	58,800 PSI
2700	39.9	2655	52,600 PSI	44.3	2950	58,500 PSI
Big Game	38.7	2636	52,600 PSI	43.0	2929	58,500 PSI
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.670″**
StaBALL 6.5	40.5	2656	43,600 PSI	44.9	2980	60,900 PSI
H4350	40.0	2680	45,500 PSI	44.8	2951	59,700 PSI
760	40.0	2670	45,200 PSI	44.2	2938	58,900 PSI
BL-C(2)	37.0	2640	43,800 PSI	41.3	2916	58,600 PSI
748	37.0	2650	45,600 PSI	40.8	2900	58,900 PSI
StaBALL Match	37.0	2676	45,100 PSI	40.7	2937	60,600 PSI
Varget	36.0	2712	51,100 PSI	39.8	2887	59,200 PSI
IMR 4895	35.0	2663	47,700 PSI	39.2	2896	59,900 PSI
IMR 4064	35.0	2673	48,300 PSI	38.8	2882	58,300 PSI
IMR 8208 XBR	32.0	2570	46,100 PSI	36.0	2806	59,000 PSI
Bullet: 127 GR. BAR LRX BT			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.750″**
StaBALL 6.5	40.3	2602	44,200 PSI	44.8	2891	60,300 PSI
4350	38.3	2563	51,300 PSI	43.0C	2769	58,600 PSI
760	38.2	2574	46,600 PSI	42.4	2824	59,300 PSI
2700	38.2	2574	46,600 PSI	42.4	2824	59,300 PSI
H4350	38.0	2574	49,000 PSI	42.3	2800	60,400 PSI
IMR 4350	37.8	2543	48,100 PSI	42.2	2779	59,700 PSI
Big Game	37.4	2531	48,300 PSI	41.5	2769	59,900 PSI
BL-C(2)	35.1	2511	53,700 PSI	39.1	2724	60,700 PSI
StaBALL Match	35.3	2546	49,700 PSI	38.9	2763	59,900 PSI
748	34.8	2505	47,500 PSI	38.7	2749	60,200 PSI
2520	34.8	2527	50,800 PSI	38.5	2749	60,300 PSI
4064	34.5	2473	48,100 PSI	38.4	2710	60,500 PSI
IMR 4064	33.4	2462	46,800 PSI	37.2	2697	60,100 PSI
Varget	33.3	2475	49,100 PSI	37.1	2691	60,300 PSI
IMR 4895	33.3	2494	48,800 PSI	36.9	2709	60,600 PSI
H4895	31.8	2464	50,600 PSI	35.2	2670	60,700 PSI
IMR 8208 XBR	31.4	2437	49,400 PSI	34.3	2619	59,900 PSI
Bullet: 130 GR. NOS AB			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.750″**
StaBALL 6.5	39.9	2582	44,300 PSI	44.3	2889	61,300 PSI
760	35.4	2490	50,500 PSI	39.3	2693	60,000 PSI
H4350	35.2	2464	49,300 PSI	39.2	2687	60,400 PSI
StaBALL Match	35.2	2522	47,300 PSI	38.8	2753	60,000 PSI
IMR 4895	32.9	2435	49,600 PSI	37.0	2668	61,000 PSI
Varget	31.4	2414	51,500 PSI	34.9	2610	61,400 PSI
IMR 4064	31.0	2352	47,600 PSi	34.9	2585	59,600 PSI
BL-C(2)	31.2	2358	52,600 PSI	34.9	2529	60,400 PSI
748	33.0	2494	56,200 PSI	34.8	2586	60,500 PSI
IMR 8208 XBR	30.5	2378	49,700 PSI	34.0	2589	61,200 PSI
H4895	30.1	2361	48,500 PSI	33.8	2583	61,200 PSI
Bullet: 130 GR. SIE TMK			**Dia: .264″**			
Case: Hornady			**Primer: Winchester LR, Large Rifle**			**Col: 2.800″**
4350	40.4	2582	54,600 PSI	44.9	2849	60,600 PSI
Hunter	39.7	2616	55,300 PSI	44.1	2846	61,400 PSI
2700	37.9	2591	54,600 PSI	42.1	2823	60,700 PSI
Big Game	36.5	2553	54,300 PSI	40.5	2778	60,400 PSI
4064	33.7	2507	54,500 PSI	37.5	2722	60,500 PSI
Bullet: 135 GR. HDY A-TIP			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
StaBALL 6.5	41.4	2633	46,600 PSI	45.0	2870	60,800 PSI
IMR 4350	40.0	2596	48,900 PSI	43.5C	2812	60,800 PSI
H4350	38.4	2498	43,300 PSI	43.2	2807	61,200 PSI
760	39.0	2556	45,900 PSI	42.4	2803	60,900 PSI
StaBALL Match	36.0	2528	44,500 PSI	39.8	2783	60,300 PSI
IMR 4895	35.1	2568	49,300 PSI	38.2	2750	60,800 PSI
Varget	34.6	2553	51,500 PSI	37.7	2724	61,400 PSI
IMR 4064	34.5	2497	47,700 PSI	37.4	2702	61,100 PSI
H4895	34.0	2544	50,500 PSI	37.0	2703	60,700 PSI
IMR 8208 XBR	33.9	2562	52,100 PSI	36.8	2710	60,600 PSI
Bullet: 140 GR. SFT A-FRAME			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.700″**
Superformance	39.5	2573	46,400 PSI	43.8	2819	60,500 PSI
H4831	39.6	2485	48,000 PSI	43.5	2684	59,900 PSI
StaBALL 6.5	38.7	2468	46,100 PSI	43.0	2711	60,100 PSI
IMR 4831	38.8	2492	47,800 PSI	42.4	2720	60,100 PSI
760	37.4	2534	50,100 PSI	40.7	2717	60,500 PSI
H4350	37.2	2528	49,900 PSI	40.4	2707	60,300 PSI
IMR 4350	37.1	2491	46,600 PSI	40.3	2710	60,500 PSI
H380	35.7	2445	49,600 PSI	38.8	2632	59,900 PSI
StaBALL Match	34.0	2410	47,700 PSI	37.5	2620	60,300 PSI
Bullet: 142 GR. SIE HPBT			**Dia: .264″**			
Case: Hornady			**Primer: Winchester LR, Large Rifle**			**Col: 2.800″**
Hunter	41.1	2485	52,700 PSI	45.7	2761	58,500 PSI
2700	37.8	2433	52,600 PSI	42.0	2703	58,500 PSI
Big Game	36.5	2420	53,000 PSI	40.6	2689	58,800 PSI
4064	34.2	2335	52,800 PSI	38.0	2594	58,700 PSI
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.780″**
StaBALL 6.5	40.5	2533	45,100 PSI	44.4	2814	61,300 PSI
IMR 4350	39.2	2511	48,300 PSI	41.7C	2687	58,600 PSI
H4350	38.8	2573	52,300 PSI	41.5	2694	59,800 PSI
760	36.5	2470	50,900 PSI	40.2	2634	58,300 PSI
H380	35.5	2399	47,000 PSI	39.2	2618	59,100 PSI
StaBALL Match	34.8	2441	45,300 PSI	38.5	2682	59,900 PSI
IMR 4064	34.6	2503	52,400 PSI	36.8	2614	59,500 PSI
Varget	34.5	2489	52,600 PSI	36.3	2598	60,100 PSI
IMR 4895	33.8	2479	51,200 PSI	36.0	2599	59,500 PSI
H4895	32.4	2426	49,800 PSI	34.5	2551	58,000 PSI
IMR 8208 XBR	32.2	2431	51,500 PSI	33.5	2518	58,000 PSI
Bullet: 143 GR. HDY ELD-X			**Dia: .264″**			
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
H4831	39.4	2414	45,800 PSI	46.3C	2735	61,500 PSI
Superformance	40.7	2515	48,100 PSI	45.8	2795	60,300 PSI
IMR 4831	38.2	2396	44,200 PSI	45.0C	2760	61,400 PSI
StaBALL 6.5	39.5	2485	43,700 PSI	43.5	2772	60,800 PSI
IMR 4350	36.4	2374	43,200 PSI	42.8C	2749	61,300 PSI
H4350	35.9	2407	44,700 PSI	41.8	2719	61,200 PSI
Bullet: 147 GR. HDY ELD-M			**Dia: .264″**			
Case: Hornady			**Primer: Winchester LR, Large Rifle**			**Col: 2.800″**
Hunter	37.8	2418	55,300 PSI	42.0	2626	61,400 PSI
4350	37.3	2385	54,900 PSI	41.4	2590	60,900 PSI
Case: Hornady			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
H4831	40.4	2432	47,700 PSI	46.0C	2695	61,400 PSI
Superformance	39.7	2456	48,100 PSI	45.2	2746	61,100 PSI
IMR 4831	38.9	2394	45,300 PSI	44.3C	2705	60,700 PSI
StaBALL 6.5	39.0	2429	43,200 PSI	43.3	2725	60,000 PSI
IMR 4350	37.3	2385	44,300 PSI	42.4	2697	60,500 PSI
H4350	36.7	2389	44,700 PSI	41.8	2680	60,800 PSI
H380	36.6	2396	48,400 PSI	40.7	2635	61,400 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 150 GR. SIE BTHP Dia: .264″

Case: Hornady	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 210M, LR Match			Col: 2.800″
H4831	41.1	2467	50,200 PSI	45.7C	2664	61,200 PSI
Superformance	40.9	2519	52,000 PSI	44.5	2710	60,500 PSI
IMR 4831	39.6	2426	46,800 PSI	44.0C	2666	60,200 PSI
StaBALL 6.5	39.0	2469	47,300 PSI	42.3	2693	60,800 PSI
IMR 4350	37.8	2433	47,900 PSI	42.0C	2668	60,700 PSI
H4350	37.2	2419	47,500 PSI	41.2	2638	60,400 PSI

Bullet: 153 GR. HDY A-TIP Dia: .264″

Case: Hornady	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 210M, LR Match			Col: 2.800″
H4831	41.2	2503	50,600 PSI	44.8C	2674	61,100 PSI
4350	40.4	2481	50,400 PSI	44.0C	2655	61,500 PSI
Superformance	40.3	2472	44,400 PSI	43.9	2721	61,000 PSI
StaBALL 6.5	39.4	2460	47,000 PSI	42.9	2684	61,100 PSI
Hunter	39.3	2434	47,800 PSI	42.8	2643	61,100 PSI
IMR 4831	38.6	2412	48,000 PSI	42.0C	2620	61,400 PSI
IMR 4350	38.4	2471	49,600 PSI	41.8C	2651	61,400 PSI
H4350	37.7	2438	48,600 PSI	41.0	2631	61,200 PSI

6.5X47MM LAPUA

Barrel: 30″ Twist: 1:8″ Trim: 1.840″

Bullet: 95 GR. HDY V-MAX Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.525″
CFE 223	39.7	3119	45,300 CUP	43.2	3388	51,800 CUP
Varget	36.9	3019	44,600 CUP	40.2	3290	52,100 CUP
StaBALL Match	36.5	2981	44,500 CUP	40.0	3230	52,600 CUP
IMR 4064	36.4	2984	43,100 CUP	40.0	3252	52,000 CUP
IMR 8208 XBR	36.2	3050	43,700 CUP	39.0	3265	51,800 CUP
Benchmark	34.9	3014	44,200 CUP	38.3	3264	52,000 CUP

Bullet: 100 GR. NOS BT Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.600″
CFE 223	37.9	3045	46,100 CUP	42.4	3283	51,700 CUP
Varget	36.5	2976	44,600 CUP	40.2	3243	52,200 CUP
StaBALL Match	36.0	2893	43,800 CUP	39.7	3156	52,300 CUP
IMR 4064	35.2	2844	43,500 CUP	38.9	3135	51,900 CUP
IMR 8208 XBR	34.6	2961	44,900 CUP	38.0	3207	51,900 CUP
Benchmark	34.5	2973	44,600 CUP	37.9	3194	52,000 CUP

Bullet: 107 GR. SIE HPBT Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Winchester SR, Small Rifle			Col: 2.645″
Big Game	39.6	2827	50,800 PSI	44.0	3141	56,500 PSI
4064	36.0	2787	54,000 PSI	40.0	3097	60,000 PSI
2520	35.1	2806	55,100 PSI	39.0	3118	61,300 PSI
			Primer: Federal 205M, SR Match			Col: 2.665″
CFE 223	38.6	3077	47,000 CUP	42.5	3276	52,000 CUP
IMR 4064	35.5	2860	44,400 CUP	39.0	3117	51,900 CUP
Varget	35.9	2916	45,300 CUP	39.0	3123	51,800 CUP
StaBALL Match	34.8	2798	43,500 CUP	38.5	3065	52,700 CUP
IMR 8208 XBR	34.0	2862	45,000 CUP	37.0	3083	51,700 CUP
Benchmark	33.9	2873	43,900 CUP	36.8	3078	52,000 CUP

Bullet: 123 GR. HDY ELD-M Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.685″
H4831	40.9	2649	44,400 CUP	43.6C	2832	49,400 CUP
H4350	37.8	2682	44,800 CUP	42.0	2945	51,900 CUP
StaBALL 6.5	37.3	2623	43,500 CUP	41.4	2882	52,400 CUP
IMR 4350	37.1	2591	43,300 CUP	41.2	2882	51,600 CUP
StaBALL Match	33.4	2636	44,300 CUP	37.0	2859	52,100 CUP
CFE 223	33.3	2571	45,300 CUP	37.0	2849	51,700 CUP
IMR 4064	33.1	2631	47,900 CUP	36.4	2841	51,600 CUP
Varget	32.6	2601	42,700 CUP	36.2	2845	51,400 CUP
IMR 8208 XBR	32.1	2634	45,100 CUP	34.9	2816	52,000 CUP
Benchmark	31.0	2563	44,400 CUP	34.1	2785	51,800 CUP

Bullet: 123 GR. SIE HPBT Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Winchester SR, Small Rifle			Col: 2.635″
Big Game	38.3	2655	52,400 PSI	42.5	2950	58,300 PSI
2700	37.8	2606	49,300 PSI	42.0	2896	54,800 PSI
4064	34.5	2579	53,600 PSI	38.3	2866	59,600 PSI
2520	33.3	2582	54,500 PSI	37.0	2869	60,600 PSI

Bullet: 130 GR. SIE TMK Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.700″
H4831	38.9	2450	44,200 CUP	43.3C	2723	51,500 CUP
StaBALL 6.5	36.9	2568	42,600 CUP	41.0	2814	52,300 CUP
IMR 4350	36.8	2524	43,900 CUP	40.5C	2786	51,900 CUP
H4350	36.8	2549	44,800 CUP	40.5C	2822	51,900 CUP
StaBALL Match	33.2	2568	46,000 CUP	37.0	2809	52,600 CUP
CFE 223	33.1	2552	44,800 CUP	36.8	2823	52,100 CUP
Varget	32.5	2569	46,400 CUP	36.1	2799	52,100 CUP
IMR 8208 XBR	31.9	2583	45,500 CUP	35.1	2794	51,400 CUP

Bullet: 136 GR. LAP SCNR-L Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.695″
H4831	38.7	2494	43,900 CUP	42.6C	2727	51,800 CUP
H4350	36.2	2522	45,500 CUP	40.3C	2774	51,900 CUP
StaBALL 6.5	35.8	2493	43,500 CUP	39.8	2726	52,200 CUP
IMR 4350	35.4	2453	45,300 CUP	39.4C	2735	52,100 CUP
StaBALL Match	32.5	2482	46,900 CUP	36.3	2759	52,800 CUP
CFE 223	31.8	2455	44,900 CUP	35.8	2718	52,200 CUP
Varget	30.8	2473	45,700 CUP	34.8	2733	52,600 CUP
IMR 8208 XBR	31.0	2480	47,700 CUP	33.7	2668	51,700 CUP

Bullet: 140 GR. BER VLD Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.740″
H4831	38.2	2478	43,700 CUP	42.5C	2714	51,400 CUP
H4350	36.0	2491	45,000 CUP	40.1C	2770	52,500 CUP
StaBALL 6.5	35.5	2443	43,600 CUP	39.5	2705	52,400 CUP
IMR 4350	35.2	2459	45,100 CUP	39.2C	2711	52,400 CUP
CFE 223	32.4	2438	45,700 CUP	36.2	2693	51,400 CUP
StaBALL Match	32.3	2545	45,600 CUP	36.0	2773	52,300 CUP
Varget	30.9	2450	45,000 CUP	34.9	2696	51,900 CUP

Bullet: 142 GR. SIE HPBT Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Winchester SR, Small Rifle			Col: 2.695″
2700	37.4	2502	54,900 PSI	41.5	2780	61,100 PSI
Big Game	36.5	2475	55,700 PSI	40.5	2750	61,900 PSI
4064	33.0	2384	55,600 PSI	36.7	2649	61,800 PSI

Bullet: 143 GR. HDY ELD-X Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.740″
H4831	38.2	2484	43,900 CUP	41.5C	2632	48,500 CUP
H4350	35.6	2489	42,900 CUP	40.0C	2770	51,300 CUP
IMR 4831	37.2	2462	45,400 CUP	40.0C	2653	48,700 CUP
StaBALL 6.5	36.7	2517	44,400 CUP	39.9	2718	52,400 CUP
IMR 4350	35.5	2477	45,100 CUP	39.5C	2717	52,000 CUP
CFE 223	32.6	2496	46,500 CUP	36.3	2702	52,400 CUP
StaBALL Match	32.0	2453	45,200 CUP	35.9	2675	52,500 CUP
Varget	31.5	2441	45,200 CUP	35.0	2673	52,700 CUP

Bullet: 147 GR. HDY ELD-M Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.740″
H4831	38.0	2454	43,600 CUP	41.5C	2628	47,600 CUP
IMR 4831	37.2	2440	45,100 CUP	40.0C	2625	49,800 CUP
H4350	35.8	2496	43,100 CUP	39.8C	2732	52,600 CUP
StaBALL 6.5	36.5	2487	45,600 CUP	39.7	2711	52,600 CUP
IMR 4350	35.3	2444	43,700 CUP	39.2C	2711	52,500 CUP
CFE 223	32.7	2443	44,600 CUP	36.3	2650	52,700 CUP
Varget	31.3	2420	44,200 CUP	34.8	2629	52,900 CUP

Bullet: 150 GR. SIE HPBT Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.740″
StaBALL 6.5	36.6	2462	44,600 CUP	39.8	2659	52,400 CUP
H4350	35.9	2540	44,700 CUP	39.5C	2722	52,100 CUP
IMR 4350	35.4	2465	46,700 CUP	38.5C	2631	51,800 CUP
CFE 223	31.7	2428	44,700 CUP	34.1	2572	51,300 CUP

Bullet: 153 GR. HDY A-TIP Dia: .264″

Case: Lapua (ref)	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: Federal 205M, SR Match			Col: 2.740″
H4350	36.2	2494	45,600 PSI	39.4C	2682	52,700 PSI
StaBALL 6.5	35.8	2402	45,500 PSI	39.0	2619	52,600 PSI
IMR 4350	35.1	2393	46,000 PSI	38.3C	2621	52,200 PSI
CFE 223	31.6	2384	45,500 PSI	34.5	2554	52,100 PSI

6.5-284 NORMA

Barrel: 26″ Twist: 1:9″ Trim: 2.160″

Bullet: 85 GR. SIE HP Dia: .264″

Case: Lapua	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
			Primer: CCI 200, Large Rifle			Col: 2.750″
Magnum	59.6	3120	53,500 PSI	66.3	3477	59,400 PSI
Magpro	57.6	3078	53,400 PSI	64.0	3459	59,400 PSI
4350	53.1	3177	48,600 PSI	59.0	3523	54,000 PSI
5744	29.7	2772	43,300 PSI	39.6	3492	57,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 100 GR. BAR TTSX-BT Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 2.950″						
Magnum	56.9	2975	53,400 PSI	63.2	3297	59,400 PSI
Magpro	56.3	3026	53,500 PSI	62.6	3318	59,500 PSI
4350	48.9	3107	53,500 PSI	54.3	3322	59,500 PSI
Bullet: 120 GR. HDY GMX Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 2.970″						
Magnum	55.0	2758	53,500 PSI	61.1	3073	59,500 PSI
Magpro	54.3	2786	53,500 PSI	60.4	3080	59,400 PSI
4350	44.6	2772	53,300 PSI	49.5	2965	59,300 PSI
Bullet: 130 GR. BER VLD Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 3.100″						
Magnum	53.3	2726	53,500 PSI	59.2	3005	59,500 PSI
Magpro	51.9	2729	53,500 PSI	57.7	2991	59,500 PSI
Bullet: 139 GR. LAP SCENAR Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 3.035″						
LRT	58.1	2736	51,300 PSI	64.5	2988	57,000 PSI
Magnum	51.1	2626	53,600 PSI	56.7	2878	59,500 PSI
Magpro	49.5	2643	53,400 PSI	55.0	2873	59,300 PSI
Bullet: 140 GR. BER BTTLR Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 3.150″						
LRT	59.7	2768	53,000 PSI	66.3	3064	58,900 PSI
Magpro	51.5	2667	53,500 PSI	57.2	2918	59,400 PSI
Magnum	50.8	2636	53,400 PSI	56.4	2904	59,400 PSI
Bullet: 142 GR. SIE HPBT Dia: .264″						
Case: Lapua Primer: CCI 200, Large Rifle Col: 3.085″						
Magnum	51.6	2603	53,500 PSI	57.3	2877	59,500 PSI
Magpro	50.7	2642	53,500 PSI	56.3	2880	59,500 PSI
5744	24.8	2115	43,800 PSI	32.6	2591	57,600 PSI

6.5MM-06

Barrel: 24″ Twist: 1:9″ Trim: 2.484″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 85 GR. SIE HP Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.140″						
IMR 7828 SSC	54.0	3114	47,400 PSI	60.5	3455	61,900 PSI
H4350	53.0	3336	52,300 PSI	57.5	3574	62,300 PSI
IMR 4831	51.0	3145	45,900 PSI	57.0	3526	62,400 PSI
IMR 4350	50.0	3176	48,000 PSI	56.0	3542	63,800 PSI
H380	50.0	3333	53,700 PSI	55.0	3552	63,000 PSI
Varget	48.0	3453	58,400 PSI	52.0	3588	62,500 PSI
IMR 4064	45.0	3334	56,100 PSI	49.0	3515	63,900 PSI
H4895	43.0	3245	49,900 PSI	46.5	3442	60,600 PSI
Bullet: 95 GR. HDY V-MAX Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.200″						
IMR 7828 SSC	53.0	3056	50,100 PSI	59.0	3368	63,500 PSI
IMR 4831	50.0	3094	48,800 PSI	56.0	3442	63,600 PSI
StaBALL 6.5	51.0	3101	47,100 PSI	55.9	3419	63,500 PSI
H4350	50.0	3204	52,100 PSI	54.5	3436	63,300 PSI
IMR 4350	49.0	3116	50,200 PSI	54.0	3410	63,300 PSI
H380	47.0	3182	55,400 PSI	50.5	3347	62,900 PSI
StaBALL Match	45.5	3042	50,700 PSI	49.9	3295	63,800 PSI
Varget	44.0	3167	51,600 PSI	49.0	3414	63,100 PSI
IMR 4064	42.0	3090	52,000 PSI	47.0	3342	63,800 PSI
H4895	43.0	3209	55,400 PSI	46.0	3359	63,000 PSI
Bullet: 100 GR. NOS BT Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.200″						
H4831	53.0	3085	53,200 PSI	57.7	3304	63,400 PSI
IMR 7828 SSC	51.0	2960	50,300 PSI	56.7	3257	62,800 PSI
StaBALL 6.5	50.5	3046	50,900 PSI	55.3	3338	63,100 PSI
IMR 4831	49.0	3068	51,400 PSI	54.0	3338	63,400 PSI
H4350	49.0	3119	53,800 PSI	53.0	3315	63,300 PSI
IMR 4350	47.0	3000	49,700 PSI	52.5	3293	62,400 PSI
H380	44.0	2963	51,300 PSI	47.8	3172	62,500 PSI
Varget	43.0	3070	53,000 PSI	47.0	3268	63,300 PSI
IMR 4064	41.0	2962	51,000 PSI	45.4	3198	62,100 PSI
H4895	42.0	3083	56,400 PSI	44.0	3205	62,900 PSI
Bullet: 107 GR. SIE HPBT Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.300″						
Grand	57.5	2958	45,800 PSI	61.9C	3198	56,600 PSI
H1000	56.0	2945	49,300 PSI	60.0C	3141	58,700 PSI
H4831	51.0	2985	51,800 PSI	55.5	3200	62,500 PSI
IMR 7828 SSC	50.0	2909	50,800 PSI	55.3	3172	62,400 PSI
StaBALL 6.5	49.7	2987	49,200 PSI	54.3	3248	62,800 PSI
IMR 4831	48.0	2985	51,200 PSI	53.0	3246	62,900 PSI
H4350	47.0	3022	52,600 PSI	51.5	3234	62,700 PSI
IMR 4350	46.0	2921	49,400 PSI	51.5	3209	63,000 PSI
H380	43.0	2891	50,000 PSI	47.5	3132	62,700 PSI
Varget	42.0	2993	52,700 PSI	45.8	3185	62,700 PSI
Bullet: 120 GR. SFT SP Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.150″						
H1000	55.0	2837	53,900 PSI	58.5C	2986	62,700 PSI
H4831	48.0	2765	51,400 PSI	52.5	2970	62,300 PSI
IMR 7828 SSC	47.0	2676	50,800 PSI	52.0	2931	62,600 PSI
StaBALL 6.5	46.8	2732	51,500 PSI	51.2	2963	63,100 PSI
H4350	45.0	2823	54,300 PSI	49.0	2996	63,300 PSI
IMR 4831	44.0	2716	51,500 PSI	48.7	2941	62,600 PSI
IMR 4350	42.5	2683	51,400 PSI	47.2	2913	62,900 PSI
H380	39.0	2604	49,900 PSI	42.5	2812	62,000 PSI
Bullet: 129 GR. HDY SP Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.245″						
Grand	55.2	2742	48,700 PSI	59.6	2983	62,900 PSI
H1000	51.0	2683	53,800 PSI	55.5C	2885	62,700 PSI
H4831	47.0	2721	54,100 PSI	51.0	2889	62,900 PSI
IMR 7828 SSC	45.0	2603	50,800 PSI	50.5	2879	63,700 PSI
StaBALL 6.5	44.4	2642	51,500 PSI	48.5	2856	62,900 PSI
H4350	43.0	2676	51,400 PSI	47.0	2876	62,500 PSI
IMR 4831	42.0	2611	51,000 PSI	47.0	2857	62,700 PSI
IMR 4350	41.0	2609	52,400 PSI	45.9	2834	62,900 PSI
Bullet: 130 GR. NOS AB Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.265″						
Grand	55.3	2781	51,000 PSI	60.5C	3035	62,500 PSI
H1000	47.7	2670	51,400 PSI	53.0	2880	61,600 PSI
IMR 7828 SSC	47.0	2637	49,300 PSI	52.2	2904	61,700 PSI
H4831	44.0	2638	54,700 PSI	48.8	2824	62,300 PSI
StaBALL 6.5	44.5	2618	52,400 PSI	48.4	2818	62,900 PSI
IMR 4831	43.5	2609	50,800 PSI	48.3	2845	61,900 PSI
IMR 4350	43.4	2607	49,700 PSI	48.2	2867	62,300 PSI
H4350	42.1	2615	51,300 PSI	46.7	2821	61,500 PSI
Bullet: 140 GR. SPR GS-SP Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.200″						
Grand	54.8	2677	49,300 PSI	59.7	2912	63,000 PSI
H1000	49.0	2570	52,900 PSI	53.5C	2761	62,600 PSI
IMR 7828 SSC	45.0	2482	48,600 PSI	50.5	2766	62,000 PSI
H4831	45.0	2542	52,300 PSI	49.5	2731	62,300 PSI
IMR 4831	43.0	2532	49,500 PSI	47.8	2772	62,300 PSI
StaBALL 6.5	43.5	2484	51,200 PSI	47.6	2691	63,500 PSI
IMR 4350	42.0	2521	51,000 PSI	46.8	2742	62,300 PSI
H4350	42.0	2558	52,400 PSI	45.5	2737	62,700 PSI
Bullet: 142 GR. SIE HPBT Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.300″						
Grand	54.5	2685	48,500 PSI	59.5	2936	62,900 PSI
H1000	49.0	2555	49,800 PSI	55.0C	2816	63,300 PSI
H4831	45.0	2559	50,000 PSI	50.3	2795	62,900 PSI
IMR 7828 SSC	45.0	2530	51,100 PSI	50.0	2761	62,800 PSI
StaBALL 6.5	43.8	2503	50,100 PSI	47.9	2714	62,800 PSI
IMR 4831	41.0	2449	49,300 PSI	46.2	2702	63,000 PSI
H4350	42.0	2572	51,300 PSI	46.0	2768	62,900 PSI
Bullet: 143 GR. HDY ELD-X Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.340″						
Grand	53.5	2652	49,000 PSI	57.9	2887	62,800 PSI
H1000	47.6	2595	51,600 PSI	52.9	2800	62,400 PSI
IMR 7828	46.3	2587	51,900 PSI	51.5	2826	63,300 PSI
IMR 4831	43.5	2534	51,800 PSI	50.1	2761	62,800 PSI
H4831	44.2	2520	51,000 PSI	50.0	2767	63,600 PSI
StaBALL 6.5	43.0	2498	51,500 PSI	47.1	2695	63,000 PSI
IMR 4350	41.9	2508	50,300 PSI	47.1	2766	63,100 PSI
H4350	41.1	2535	52,700 PSI	46.2	2752	63,400 PSI
Bullet: 150 GR. SIE BTHP Dia: .264″						
Case: Winchester (REF) Primer: Federal 210M, LR Match Col: 3.340″						
Grand	53.0	2597	48,700 PSI	58.1	2829	63,000 PSI
H1000	47.5	2477	47,900 PSI	54.6	2761	62,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 7828	46.7	2544	51,100 PSI	51.9	2787	63,500 PSI
H4831	45.5	2511	50,900 PSI	51.2	2756	63,800 PSI
IMR 4831	44.1	2491	50,600 PSI	49.5	2729	63,000 PSI
IMR 4350	42.7	2492	50,900 PSI	48.0	2726	63,200 PSI
StaBALL 6.5	43.0	2435	51,300 PSI	47.1	2639	63,100 PSI
H4350	41.9	2504	52,000 PSI	46.6	2714	63,000 PSI

6.5-300 Weatherby Magnum

Barrel: 24″ Twist: 1:8″ Trim: 2.820″

Bullet: 127 GR. BAR LRX BT Dia: .264″

Case: Weatherby		Primer: Winchester LRM				Col: 3.590″
US 869	86.0	3191	52,200 PSI	91.5	3388	60,800 PSI
H50BMG	82.5	3127	55,900 PSI	89.0C	3280	62,600 PSI
LRT	79.0	2987	49,000 PSI	86.7	3309	62,700 PSI
StaBALL HD	75.0	3137	56,300 PSI	79.0	3278	62,600 PSI
Retumbo	74.0	3160	53,900 PSI	78.8	3343	62,500 PSI
Magnum	71.0	2995	52,800 PSI	77.8	3217	62,600 PSI
H1000	71.9	3106	54,400 PSI	76.5	3266	62,400 PSI
Magpro	70.0	3002	51,100 PSI	76.4	3278	62,600 PSI

Bullet: 130 GR. SFT SCIR Dia: .264″

Case: Weatherby		Primer: Winchester LRM				Col: 3.590″
US 869	86.0	3136	53,200 PSI	91.7	3371	62,700 PSI
H50BMG	84.5	3085	54,400 PSI	90.0C	3261	62,500 PSI
LRT	78.0	2912	47,600 PSI	85.8	3273	62,500 PSI
Retumbo	75.0	3114	53,200 PSI	79.9	3323	62,600 PSI
StaBALL HD	73.5	3037	53,100 PSI	78.5	3248	62,700 PSI
H1000	73.0	3089	54,900 PSI	77.6	3262	62,300 PSI
Grand	71.0	3001	53,700 PSI	77.4	3233	63,300 PSI
Magnum	70.0	2944	52,900 PSI	76.8	3182	62,500 PSI
Magpro	70.0	2998	51,300 PSI	76.3	3249	62,700 PSI

Bullet: 140 GR. SFT AF Dia: .264″

Case: Weatherby		Primer: Winchester LRM				Col: 3.590″
US 869	83.0	3044	52,900 PSI	88.5	3267	62,600 PSI
H50BMG	79.5	2987	57,300 PSI	85.0	3133	62,700 PSI
LRT	76.2	2862	51,400 PSI	83.6	3137	62,600 PSI
Retumbo	72.7	2993	54,200 PSI	77.3	3161	62,300 PSI
StaBALL HD	70.8	2919	55,600 PSI	75.2	3076	62,700 PSI
Magpro	67.2	2847	52,000 PSI	73.8	3096	62,600 PSI

Bullet: 142 GR. NOS AB LR Dia: .264″

Case: Weatherby		Primer: Winchester LRM				Col: 3.590″
US 869	85.5	3088	52,000 PSI	91.0	3308	62,000 PSI
H50BMG	84.5	3013	53,200 PSI	90.0C	3193	62,400 PSI
LRT	77.2	2816	47,600 PSI	84.8	3142	62,400 PSI
Retumbo	74.0	3017	52,600 PSI	78.6	3213	62,100 PSI
StaBALL HD	72.5	2916	52,700 PSI	77.3	3126	62,700 PSI

Bullet: 143 GR. HDY ELD Dia: .264″

Case: Weatherby		Primer: Winchester LRM				Col: 3.590″
H50BMG	84.0	2994	52,700 PSI	89.5C	3166	61,300 PSI
US 869	83.5	3030	53,200 PSI	89.0	3248	62,600 PSI
LRT	76.5	2851	48,700 PSI	84.0	3147	62,600 PSI
Retumbo	73.5	3008	52,500 PSI	78.2	3200	62,300 PSI
StaBALL HD	71.8	2885	53,600 PSI	76.8	3070	62,800 PSI

6.5 PRC

Barrel: 24″ Twist: 1:8″ Trim: 2.015″

Bullet: 130 GR. SFT SCIR Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.930″
StaBALL HD	54.5	2752	46,200 PSI	61.0	3049	60,700 PSI
Retumbo	52.1	2730	42,900 PSI	60.5C	3090	61,200 PSI
H1000	51.2	2747	48,000 PSI	58.9C	3041	61,300 PSI

Bullet: 130 GR. SIE TGK Dia: .264″

Case: Hornady		Primer: Remington 9 1/2, Large Rifle				Col: 2.890″
Magnum	57.9	2867	57,800 PSI	64.3	3158	64,200 PSI
Magpro	54.7	2765	57,500 PSI	60.8	3065	63,900 PSI
4350	48.9	2743	57,500 PSI	54.4	3023	63,900 PSI

Bullet: 135 GR. HDY A-TIP Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.945″
US 869	61.2	2602	44,200 PSI	68.0C	2969	60,300 PSI
StaBALL HD	55.8	2670	45,300 PSI	62.2C	3032	59,200 PSI
Retumbo	54.0	2753	47,300 PSI	60.0C	3035	60,700 PSI
H1000	53.1	2726	48,000 PSI	59.0	3003	61,100 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure

Bullet: 140 GR. NOS BT Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.880″
US 869	61.5	2631	40,300 PSI	68.5C	2995	58,900 PSI
StaBALL HD	53.0	2665	47,400 PSI	59.6	2952	60,800 PSI
Retumbo	51.2	2640	45,300 PSI	59.5C	2949	60,300 PSI
H1000	47.9	2567	45,400 PSI	57.7C	2902	61,000 PSI

Bullet: 143 GR. HDY ELD-X Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.945″
US 869	61.2	2643	40,200 PSI	68.0C	2982	58,200 PSI
StaBALL HD	53.5	2652	46,400 PSI	60.1	2945	60,700 PSI
Retumbo	50.7	2647	44,700 PSI	59.0C	2953	59,600 PSI
H1000	51.1	2708	51,100 PSI	58.1C	2917	60,200 PSI

Bullet: 147 GR. HDY ELD-M Dia: .264″

Case: Hornady		Primer: Remington 9 1/2, Large Rifle				Col: 2.930″
LRT	57.2	2551	47,700 PSI	63.5	2834	53,000 PSI
Magnum	55.2	2690	56,700 PSI	61.3	2937	63,000 PSI
Magpro	52.6	2616	56,900 PSI	58.5	2897	63,200 PSI
5744	30.2	2386	55,000 PSI	34.5	2621	62,900 PSI
Case: Hornady		**Primer: Federal 210M, LR Match**				**Col: 2.945″**
US 869	59.3	2533	44,100 PSI	66.3	2872	59,900 PSI
StaBALL HD	53.0	2597	45,300 PSI	59.5	2919	61,400 PSI
Retumbo	51.7	2561	43,400 PSI	58.8	2896	59,900 PSI
H1000	49.1	2505	44,500 PSI	56.5	2828	60,400 PSI

Bullet: 150 GR. SIE BTHP Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.945″
US 869	57.8	2452	41,100 PSI	66.7	2852	58,800 PSI
LRT	60.2	2635	42,700 PSI	65.2	2842	51,700 PSI
Magnum	56.0	2692	48,700 PSI	62.2C	2942	61,400 PSI
StaBALL HD	53.0	2546	42,500 PSI	59.8	2903	60,400 PSI
Magpro	54.0	2667	48,300 PSI	59.5C	2934	61,200 PSI
Retumbo	49.2	2544	46,100 PSI	58.6C	2878	60,700 PSI
H1000	49.3	2498	44,600 PSI	57.0C	2818	60,300 PSI

Bullet: 153 GR. HDY A-TIP Dia: .264″

Case: Hornady		Primer: Federal 210M, LR Match				Col: 2.945″
US 869	59.0	2538	46,800 PSI	65.5C	2835	60,000 PSI
LRT	60.0	2642	44,400 PSI	65.0C	2850	54,400 PSI
Magnum	55.5	2647	48,600 PSI	61.0C	2893	61,000 PSI
StaBALL HD	52.5	2529	43,300 PSI	59.5	2872	60,700 PSI
Magpro	54.0	2641	47,500 PSI	59.0C	2890	61,000 PSI
Retumbo	50.0	2647	55,500 PSI	56.0	2822	60,900 PSI
H1000	49.5	2560	49,600 PSI	55.0	2801	61,100 PSI

264 Winchester Magnum

Barrel: 26″ Twist: 1:8″ Trim: 2.490″

Bullet: 120 GR. BAR TSX BT Dia: .264″

Case: Winchester		Primer: Winchester LRM				Col: 3.170″
Magpro	60.6	2876	54,600 PSI	70.4	3260	63,500 PSI
Magnum	63.1	2991	57,300 PSI	70.1	3253	63,600 PSI

Bullet: 120 GR. NOS BT Dia: .264″

Case: Winchester		Primer: Winchester LRM				Col: 3.220″
Magpro	63.9	3022	57,000 PSI	71.0	3307	63,400 PSI
Magnum	63.4	2968	57,000 PSI	70.5	3274	63,400 PSI

Bullet: 120 GR. SIE SPT Dia: .264″

Case: Winchester		Primer: Winchester LRM				Col: 3.200″
Magpro	64.1	2995	57,400 PSI	71.2	3260	63,800 PSI
Magnum	62.5	2890	56,900 PSI	69.4	3200	63,200 PSI

Bullet: 120 GR. SPR SP Dia: .264″

Case: Winchester		Primer: Winchester LRM				Col: 3.250″
Retumbo	66.3	3091	50,400 PSI	70.5	3299	61,700 PSI
H1000	65.5	3050	49,100 PSI	69.7	3267	62,100 PSI
StaBALL HD	64.5	3049	55,900 PSI	69.0	3225	63,300 PSI
H4831	60.6	3027	49,100 PSI	64.5	3254	62,000 PSI
IMR 4831	58.0	3105	56,400 PSI	60.7	3212	61,600 PSI
IMR 4350	56.5	3075	54,700 PSI	60.0	3226	61,900 PSI
H4350	54.5	3045	53,000 PSI	58.0	3185	61.200 PSI

Bullet: 125 GR. NOS PART Dia: .264″

Case: Winchester		Primer: Winchester LRM				Col: 3.225″
Magpro	62.2	2966	57,200 PSI	69.1	3230	63,600 PSI
Magnum	60.6	2867	56,700 PSI	67.3	3173	63,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 129 GR. HDY SP			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.250″**
Magnum	63.1	2887	57,300 PSI	70.1	3168	63,600 PSI
Magpro	62.1	2896	56,800 PSI	69.0	3163	63,100 PSI
StaBALL HD	63.3	2962	55,000 PSI	67.8	3139	63,400 PSI
Retumbo	63.5	3005	51,900 PSI	67.5	3171	61,500 PSI
H1000	60.2	2942	54,500 PSI	64.0	3064	60,700 PSI
IMR 7828 SSC	58.7	2925	52,100 PSI	62.4	3109	60,800 PSI
H4831	58.3	2927	52,500 PSI	62.0	3101	61,400 PSI
IMR 4831	55.5	2931	52,300 PSI	59.0	3090	60,700 PSI
IMR 4350	54.4	2913	51,800 PSI	57.8	3081	61,000 PSI
H4350	53.6	2929	53,500 PSI	57.0	3067	60,900 PSI
Bullet: 130 GR. NOS AB			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.280″**
StaBALL HD	62.2	2925	54,400 PSI	66.6	3108	63,400 PSI
Retumbo	59.9	2932	54,300 PSI	64.1	3090	60,800 PSI
H1000	56.1	2835	54,600 PSI	60.4	3005	62,100 PSI
IMR 7828 SSC	55.8	2863	55,600 PSI	60.1	3053	63,200 PSI
H4831	55.3	2864	56,100 PSI	59.2	2984	60,500 PSI
IMR 4831	53.5	2788	52,800 PSI	57.8	2989	61,400 PSI
IMR 4350	52.2	2792	52,500 PSI	56.4	3007	62,400 PSI
H4350	50.7	2786	54,600 PSI	55.0	2956	62,000 PSI
Bullet: 140 GR. BER VLD			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.325″**
Magnum	59.7	2765	57,000 PSI	66.4	3027	63,400 PSI
Magpro	59.4	2803	56,700 PSI	66.1	3040	63,100 PSI
Bullet: 140 GR. NOS PART			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.265″**
Magpro	59.3	2798	57,000 PSI	65.8	3054	63,200 PSI
Magnum	58.8	2740	57,500 PSI	65.3	3020	63,900 PSI
StaBALL HD	60.0	2823	56,200 PSI	64.4	2984	63,200 PSI
Retumbo	59.7	2904	57,000 PSI	63.5	3026	63,000 PSI
H1000	55.0	2810	58,600 PSI	58.5	2900	61,800 PSI
IMR 7828 SSC	54.5	2769	54,000 PSI	58.0	2927	60,700 PSI
IMR 4831	51.9	2755	54,700 PSI	55.2	2907	61,700 PSI
H4831	51.7	2753	55,600 PSI	55.0	2853	59,400 PSi
IMR 4350	51.2	2752	53,500 PSI	54.5	2903	61.400 PSI
H4350	48.9	2713	55,300 PSI	52.0	2829	60,800 PSI
Bullet: 147 GR. HDY ELD-M			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.320″**
StaBALL HD	59.3	2810	56,500 PSI	63.7	2970	63,100 PSI
Magpro	57.5	2803	54,100 PSI	62.0	2981	62,300 PSI
Retumbo	57.5	2816	55,300 PSI	61.7	2971	63,000 PSI
Magnum	51.0	2668	56,000 PSI	60.6	2899	62,800 PSI
H1000	54.5	2771	55,000 PSI	58.3	2914	62,300 PSI
IMR 7828 SSC	51.7	2743	55,600 PSI	55.1	2880	62,600 PSI
H4831	48.7	2714	56,900 PSI	53.2	2850	62,200 PSI
IMR 4831	48.4	2710	57,000 PSI	52.8	2868	62,700 PSI
Bullet: 153 GR. HDY A-TIP			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.340″**
LRT	70.0	2861	55,400 PSI	75.5	3014	61,800 PSI
US 869	68.3	2806	51,900 PSI	73.5	3015	62,300 PSI
H50BMG	61.5	2721	56,400 PSI	66.0	2850	62,500 PSI
StaBALL HD	60.5	2749	54,200 PSI	65.6	2880	62,700 PSI
Magpro	57.8	2751	54,100 PSI	62.5	2928	62,500 PSI
Magnum	57.0	2727	57,300 PSI	62.4	2877	62,900 PSI
Retumbo	56.8	2760	54,300 PSI	61.3	2923	62,800 PSI
H1000	53.2	2701	54,900 PSI	58.0	2872	62,800 PSI
IMR 7828 SSC	51.3	2682	55,000 PSI	54.6	2823	62,900 PSI
H4831	49.5	2668	54,900 PSI	53.2	2798	62,500 PSI
IMR 4831	48.2	2635	55,300 PSI	52.1	2780	62,400 PSI
Bullet: 156 GR. BER EOL			**Dia: .264″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.335″**
StaBALL HD	57.5	2714	55,000 PSI	61.9	2875	63,400 PSI
Retumbo	56.8	2745	54,300 PSI	61.0	2905	62,900 PSI

26 NOSLER

Barrel: 24″ Twist: 1:8″ Trim: 2.575″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 100 GR. NOS BT			**Dia: .264″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.300″**
US 869	90.4	3427	53,200 PSI	96.2	3698	63,000 PSI
H50BMG	89.0	3387	54,600 PSI	93.7	3548	61,300 PSI
Retumbo	81.2	3493	56,200 PSI	85.5	3675	62,400 PSI
H1000	77.9	3484	57,000 PSI	82.0	3628	63,100 PSI
StaBALL HD	76.0	3400	54,300 PSI	81.6	3619	63,600 PSI
IMR 7828	74.8	3500	56,400 PSI	78.8	3662	63,000 PSI
Bullet: 120 GR. BAR TTSX-BT			**Dia: .264″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.300″**
US 869	84.6	3184	54,200 PSI	90.0	3409	63,800 PSI
H50BMG	74.0	3143	59,000 PSI	78.0	3245	62,600 PSI
StaBALL HD	70.0	3145	56,200 PSI	75.4	3330	63,700 PSI
Retumbo	68.5	3127	56,000 PSI	74.0	3299	62,800 PSI
H1000	65.8	3122	56,700 PSI	71.0	3269	62,300 PSI
IMR 7828	63.5	3094	55,800 PSI	68.5	3266	62,100 PSI
Bullet: 129 GR. NOS ABLR			**Dia: .264″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.300″**
US 869	84.8	3136	51,400 PSI	90.3	3377	62,000 PSI
H50BMG	82.0	3075	54,700 PSI	86.5	3267	62,800 PSI
StaBALL HD	72.0	3084	55,200 PSI	77.0	3267	63,100 PSI
Retumbo	70.5	3185	58,400 PSI	74.0	3301	64,300 PSI
Bullet: 140 GR. SFT SP			**Dia: .264″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.300″**
US 869	78.0	2983	54,200 PSI	84.5	3188	63,000 PSI
H50BMG	66.0	2899	59,200 PSI	72.5	3026	63,000 PSI
StaBALL HD	66.5	2907	56,200 PSI	70.5	3047	62,300 PSI
Retumbo	62.0	2847	54,500 PSI	67.5	3010	61,700 PSI
Bullet: 153 GR. HDY A-TIP			**Dia: .264″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.330″**
US 869	78.0	2987	55,700 PSI	83.0	3160	62,300 PSI
H50BMG	74.5	2881	54,500 PSI	80.0	3056	62,800 PSI
StaBALL HD	67.2	2859	53,600 PSI	72.7	3057	62,600 PSI
Retumbo	65.5	2890	54,300 PSI	69.6	3057	63,100 PSI

6.8 MM REMINGTON SPC

Barrel: 24″ Twist: 1:10″ Trim: 1.676″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 95 GR. BAR TTSX-BT			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2200	27.1	2626	52,000 PSI	30.2	2915	58,000 PSI
2230	27.0	2419	43,000 PSI	30.0	2659	47,800 PSI
X-Terminator	27.0	2419	43,000 PSI	30.0	2659	47,800 PSI
LT-30	24.8	2428	46,000 PSI	27.6	2723	51,100 PSI
2015	23.7	2149	37,200 PSI	26.3	2406	41,300 PSI
1680	23.0	2408	52,100 PSI	25.6	2668	58,000 PSI
5744	22.6	2514	52,600 PSI	25.1	2805	58,400 PSI
Bullet: 100 GR. BAR X			**Dia: .277″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.260″**
Benchmark	28.0	2588	42,000 PSI	30.0C	2755	51,200 PSI
H322	27.0	2502	37,700 PSI	30.0C	2803	52,300 PSI
H4198	24.0	2542	40,500 PSI	26.5	2791	52,900 PSI
IMR 4198	23.0	2525	40,500 PSI	25.3C	2755	52,400 PSI
IMR 4227	20.0	2431	46,800 PSI	22.9	2643	53,000 PSI
Bullet: 110 GR. HDY V-MAX			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2230	27.0	2398	47,900 PSI	30.0	2618	53,200 PSI
X-Terminator	27.0	2398	47,900 PSI	30.0	2618	53,200 PSI
2200	25.7	2439	52,100 PSI	28.6	2711	58,000 PSI
LT-30	24.6	2376	52,400 PSI	27.3	2639	58,200 PSI
2015	23.7	2172	43,300 PSI	26.3	2406	48,000 PSI
1680	22.4	2278	52,200 PSI	24.9	2454	58,000 PSI
5744	21.9	2401	52,500 PSI	24.3	2670	58,200 PSI
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.260″**
IMR 8208 XBR	28.0	2496	38,500 PSI	30.0C	2690	48,600 PSI
H335	27.0	2487	41,700 PSI	29.5	2694	53,600 PSI
H4895	27.0	2335	33,900 PSI	29.0C	2550	42,400 PSI
H322	27.0	2571	47,600 PSI	29.0C	2697	53,600 PSI
Benchmark	27.0	2518	44,000 PSI	28.8C	2665	52,000 PSI
IMR 3031	26.0	2450	42,100 PSI	28.0C	2605	48,700 PSI
CFE BLK	23.5	2408	39,200 PSI	26.0	2658	53,400 PSI
H4198	23.0	2431	40,600 PSI	25.3C	2651	52,000 PSI
IMR 4198	22.0	2422	41,700 PSI	24.2C	2619	51,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 115 GR. SIE HPBT			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2230	27.5	2414	52,300 PSI	30.5	2638	58,000 PSI
X-Terminator	27.5	2414	52,300 PSI	30.5	2638	58,000 PSI
2200	25.2	2372	52,400 PSI	28.0	2614	58,200 PSI
2015	24.2	2178	48,300 PSI	26.9	2397	53,700 PSI
5744	22.1	2358	52,600 PSI	24.5	2607	58,300 PSI
1680	20.7	2117	51,300 PSI	23.0	2256	57,000 PSI
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.260″**
IMR 8208 XBR	28.0	2483	41,800 PSI	30.0C	2647	51,400 PSI
H4895	27.0	2302	34,300 PSI	29.0C	2495	42,800 PSI
H335	27.0	2415	40,800 PSI	29.0	2569	48,500 PSI
Benchmark	26.0	2400	42,400 PSI	28.5C	2581	51,800 PSI
H322	26.0	2421	43,500 PSI	28.2C	2608	53,300 PSI
CFE BLK	22.4	2304	41,800 PSI	24.9	2520	53,600 PSI
H4198	22.0	2413	47,800 PSI	24.0C	2534	52,300 PSI
IMR 4198	22.0	2386	43,100 PSI	23.5C	2515	50,000 PSI
Bullet: 120 GR. HDY SST			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2230	26.5	2275	52,900 PSI	28.5	2457	56,900 PSI
X-Terminator	26.5	2275	52,900 PSI	28.5	2457	56,900 PSI
2200	24.5	2289	52,700 PSI	27.2	2543	58,500 PSI
LT-30	23.6	2246	51,400 PSI	26.2	2492	57,100 PSI
2015	22.9	1884	38,300 PSI	25.5	2124	42,600 PSI
1680	21.6	2055	48,900 PSI	24.0	2283	54,400 PSI
5744	20.5	2171	52,500 PSI	22.8	2402	58,300 PSI
Bullet: 130 GR. NOS BT			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2200	24.2	2205	48,900 PSI	26.9	2434	54,300 PSI
2230	24.1	2092	43,800 PSI	26.8	2269	48,700 PSI
X-Terminator	24.1	2092	43,800 PSI	26.8	2269	48,700 PSI
2015	21.0	1868	37,000 PSI	23.3	2016	41,000 PSI
1680	20.8	2003	51,300 PSI	23.1	2196	57,000 PSI
5744	20.2	2139	52,300 PSI	22.4	2345	58,000 PSI
Bullet: 140 GR. SIE HPBT			**Dia: .277″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.260″**
2230	24.8	2120	49,100 PSI	27.5	2303	54,400 PSI
X-Terminator	24.8	2120	49,100 PSI	27.5	2303	54,400 PSI
2200	23.4	2128	52,500 PSI	26.0	2342	58,300 PSI
2015	21.7	1879	42,300 PSI	24.1	2050	47,000 PSI
1680	20.0	1964	52,500 PSI	22.2	2125	58,200 PSI
5744	19.7	2078	52,800 PSI	21.8	2307	58,400 PSI

270 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.530″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 90 GR. SIE HP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.200″**
Hunter	57.0	3426	57,600 PSI	63.4	3700	64,000 PSI
4350	56.3	3192	52,400 PSI	62.5	3566	58,300 PSI
H4350	58.0	3401	43,700 CUP	62.0C	3603	49,800 CUP
IMR 4350	56.0	3251	41,900 CUP	60.3	3516	50,800 CUP
StaBALL 6.5	55.0	3380	49,500 PSI	59.8	3671	62,600 PSI
2700	53.3	3311	58,000 PSI	59.3	3621	64,500 PSI
760	55.0	3361	42,200 CUP	59.0	3585	50,700 CUP
Big Game	52.5	3311	58,200 PSI	58.3	3632	64,700 PSI
H380	53.0	3344	45,600 CUP	56.3	3462	50,900 CUP
CFE 223	52.6	3408	54,200 PSI	56.0	3579	62,200 PSI
Varget	51.0	3409	46,000 CUP	55.0	3596	51,400 CUP
4064	49.8	3375	53,200 PSI	54.5	3605	62,200 PSI
IMR 4064	49.6	3295	44,400 CUP	54.0	3538	50,500 CUP
IMR 4895	49.0	3268	43,700 CUP	53.3	3507	50,300 CUP
H4895	50.0	3482	48,100 CUP	53.0	3595	50,400 CUP
BL-C(2)	49.0	3328	45,400 CUP	52.0	3475	50,100 CUP
IMR 3031	46.0	3299	45,000 CUP	50.2	3487	50,600 CUP
H335	46.0	3313	46,100 CUP	49.0	3459	50,900 CUP
IMR 8208 XBR	45.6	3380	57,900 PSI	48.0	3476	61,900 PSI
Bullet: 100 GR. SPR SP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.145″**
StaBALL 6.5	55.0	3212	47,200 PSI	59.8	3511	61,400 PSI
IMR 4350	54.0	3072	40,100 CUP	59.5	3383	50,200 CUP
H4350	56.0	3258	44,000 CUP	59.4	3401	50,200 CUP
760	53.0	3262	46,000 CUP	56.0	3383	50,700 CUP
CFE 223	53.0	3356	54,900 PSI	55.8	3514	62,900 PSI
4064	49.3	3191	49,600 PSI	53.7	3471	62,500 PSI
H380	50.0	3160	46,200 CUP	53.7	3274	50,300 CUP
IMR 4064	48.0	3116	40,800 CUP	52.7	3380	50,100 CUP
IMR 4895	48.0	3180	47,900 CUP	52.2	3367	51,500 CUP
Varget	48.0	3232	44,400 CUP	52.0	3397	50,200 CUP
H4895	47.0	3298	47,000 CUP	50.0	3401	50,200 CUP
IMR 3031	45.5	3139	44,700 CUP	49.0	3339	50,400 CUP
BL-C(2)	45.0	3144	47,300 CUP	47.3	3243	50,500 CUP
H335	41.0	3058	45,300 CUP	43.5	3185	50,200 CUP
Bullet: 110 GR. HDY HP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.250″**
H4831	58.0	3057	42,600 CUP	62.0C	3214	48,200 CUP
StaBALL 6.5	53.7	3108	47,400 PSI	58.4	3396	61,900 PSI
IMR 4350	52.5	2997	43,000 CUP	57.8	3308	50,900 CUP
H4350	54.0	3164	46,900 CUP	57.0	3267	50,100 CUP
760	51.0	3058	43,500 CUP	55.0	3241	50,700 CUP
CFE 223	50.4	3142	53,500 PSI	53.6	3304	61,700 PSI
4064	48.0	3140	53,100 PSI	52.2	3342	61,700 PSI
H380	48.0	2976	46,000 CUP	52.0	3124	50,500 CUP
IMR 4064	46.0	3036	45,800 CUP	50.7	3223	50,300 CUP
IMR 4895	46.0	3045	43,400 CUP	50.2	3269	51,100 CUP
Varget	43.0	3072	44,100 CUP	48.7	3248	50,800 CUP
BL-C(2)	45.0	2971	47,300 CUP	47.5	3089	50,200 CUP
H4895	45.0	3113	46,700 CUP	47.5	3215	50,800 CUP
IMR 3031	44.0	3024	46,000 CUP	47.2	3159	49,500 CUP
IMR 8208 XBR	44.1	3064	56,400 PSI	46.4	3146	59,500 PSI
H335	42.0	2958	46,800 CUP	45.0	3081	50,800 CUP
Bullet: 110 GR. HDY V-MAX			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.100″**
Magnum	59.6	2935	55,000 PSI	66.2	3223	61,100 PSI
Magpro	59.2	2933	56,400 PSI	65.8	3253	62,700 PSI
4350	53.8	2971	53,800 PSI	59.8	3350	59,800 PSI
Hunter	53.5	3139	58,200 PSI	59.4	3419	64,700 PSI
2700	50.8	3041	58,200 PSI	56.4	3343	64,600 PSI
Big Game	49.9	3108	58,400 PSI	55.5	3381	64,900 PSI
Bullet: 120 GR. BAR XFB			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.270″**
H4831	58.0	2918	45,800 CUP	62.0C	3112	51,200 CUP
IMR 4831	51.5	2793	40,600 CUP	56.7	3112	50,100 CUP
IMR 4350	50.5	2836	42,300 CUP	56.0	3131	50,500 CUP
H4350	51.0	2886	44,700 CUP	55.0	3069	51,200 CUP
760	49.0	2814	43,100 CUP	53.0	3017	51,100 CUP
H380	46.0	2698	43,200 CUP	49.5	2980	51,000 CUP
IMR 4064	45.5	2937	45,600 CUP	49.2	3096	51,000 CUP
IMR 4895	44.0	2883	44,900 CUP	48.2	3057	50,600 CUP
Varget	44.0	2858	46,300 CUP	47.0	3010	51,000 CUP
H4895	42.0	2799	45,000 CUP	45.0	2950	50,400 CUP
IMR 3031	42.5	2864	48,000 CUP	45.0	2976	49,300 CUP
Bullet: 130 GR. HDY SP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.180″**
H1000	61.0	2900	42,900 CUP	64.0C	3025	48,100 CUP
H4831	56.0	2843	44,400 CUP	60.0C	3019	51,000 CUP
IMR 7828	56.0	2862	43,800 CUP	60.2	3085	50,300 CUP
IMR 4831	51.0	2759	42,900 CUP	55.8	3002	50,300 CUP
StaBALL 6.5	51.0	2901	50,400 PSI	55.5	3121	61,900 PSI
IMR 4350	50.2	2806	43,700 CUP	55.0	3028	49,900 CUP
H4350	51.0	2865	45,200 CUP	54.3	3012	50,500 CUP
760	50.0	2843	44,700 CUP	53.5	3003	50,800 CUP
H380	47.0	2744	46,400 CUP	49.8	2884	51,000 CUP
4064	45.3	2862	53,000 PSI	49.3	3045	62,000 PSI
IMR 4064	43.0	2745	43,100 CUP	47.5	2932	50,000 CUP
IMR 4895	43.0	2768	43,000 CUP	46.9	2957	50,600 CUP
Varget	43.0	2797	43,900 CUP	46.0	2931	49,600 CUP
IMR 8208 XBR	42.8	2840	57,600 PSI	45.0	2934	62,800 PSI
H4895	42.0	2782	44,700 CUP	45.0	2922	51,000 CUP
Bullet: 130 GR. HDY SST			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.235″**
Magnum	59.1	2845	57,600 PSI	65.7	3127	64,000 PSI
Magpro	59.0	2860	58,000 PSI	65.5	3136	64,400 PSI
4350	51.0	2814	57,700 PSI	56.7	3132	64,100 PSI
Hunter	50.9	2895	57,900 PSI	56.5	3153	64,400 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
2700	48.1	2807	58,300 PSI	53.5	3099	64,800 PSI
Big Game	47.8	2821	57,900 PSI	53.1	3095	64,400 PSI
Bullet: 135 GR. SIE BT			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.340″**
H1000	61.0	2915	43,100 CUP	63.0C	3011	47,600 CUP
IMR 7828	54.0	2696	40,200 CUP	60.0	3046	50,000 CUP
H4831	55.0	2812	43,600 CUP	59.5C	3010	51,000 CUP
IMR 4831	51.0	2774	40,400 CUP	55.8	2990	51,100 CUP
StaBALL 6.5	50.9	2876	48,100 PSI	55.4	3119	61,500 PSI
IMR 4350	50.0	2772	41,700 CUP	54.9	3007	50,000 CUP
H4350	50.0	2834	44,400 CUP	53.5	2994	50,700 CUP
760	47.0	2785	45,400 CUP	50.0	2910	50,500 CUP
StaBALL Match	45.6	2744	50,100 PSI	49.6	2955	62,900 PSI
4064	44.4	2820	51,700 PSI	48.3	3015	62,500 PSI
IMR 4895	43.0	2755	43,400 CUP	47.7	2972	51,100 CUP
IMR 4064	43.5	2775	44,500 CUP	47.3	2934	50,700 CUP
H380	44.0	2667	43,600 CUP	47.0	2803	50,500 CUP
Varget	41.0	2701	40,800 CUP	45.0	2902	50,200 CUP
H4895	41.0	2735	44,300 CUP	44.0	2879	50,600 CUP
Bullet: 140 GR. SFT SP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.280″**
H1000	59.0	2771	41,800 CUP	63.0C	2979	50,800 CUP
H4831	54.0	2716	43,900 CUP	58.0C	2888	50,100 CUP
IMR 7828	52.0	2628	40,500 CUP	57.2	2939	50,600 CUP
StaBALL 6.5	50.3	2809	50,200 PSI	54.7	3033	62,300 PSI
IMR 4831	50.6	2738	44,400 CUP	54.0	2896	50,700 CUP
IMR 4350	49.0	2712	43,800 CUP	53.2	2916	51,000 CUP
H4350	49.0	2737	44,500 CUP	52.0	2870	50,400 CUP
760	46.0	2644	42,900 CUP	48.9	2788	49,800 CUP
IMR 4064	42.0	2608	43,300 CUP	46.1	2828	50,800 CUP
IMR 4895	42.0	2650	44,600 CUP	45.6	2828	50,100 CUP
Varget	41.0	2623	44,300 CUP	43.7	2772	50,500 CUP
H4895	40.0	2627	45,300 CUP	42.6	2768	50,600 CUP
Bullet: 140 GR. SIE SBT			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.250″**
Magpro	56.5	2819	58,000 PSI	62.8	3051	64,400 PSI
Magnum	56.0	2721	57,800 PSI	62.2	3014	64,200 PSI
4350	49.2	2757	58,100 PSI	54.6	3021	64,500 PSI
Hunter	48.4	2762	58,200 PSI	53.8	3031	64,600 PSI
Bullet: 150 GR. HDY SP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.205″**
Magnum	55.8	2656	58,200 PSI	62.0	2903	64,600 PSI
Magpro	54.5	2657	58,000 PSI	60.6	2909	64,500 PSI
4350	48.1	2621	58,100 PSI	53.5	2896	64,600 PSI
Hunter	46.7	2609	57,800 PSI	51.9	2863	64,200 PSI
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.285″**
H1000	55.0	2689	44,900 CUP	59.0C	2831	51,000 CUP
IMR 7828	51.2	2536	39,800 CUP	56.8	2850	50,400 CUP
H4831	52.0	2651	46,300 CUP	55.7	2804	51,200 CUP
IMR 4831	46.3	2498	40,500 CUP	53.0	2815	50,900 CUP
StaBALL 6.5	48.2	2671	51,800 PSI	52.4	2879	63,300 PSI
IMR 4350	48.0	2642	44,600 CUP	51.6	2809	50,900 CUP
H4350	46.0	2575	43,400 CUP	49.0	2724	51,000 CUP
4064	43.0	2613	52,800 PSI	46.7	2780	61,500 PSI
IMR 4064	42.0	2584	44,000 CUP	45.0	2719	50,700 CUP
IMR 4895	41.5	2560	44,500 CUP	44.5	2704	50,600 CUP
Bullet: 150 GR. SIE SBT			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.250″**
Magpro	54.9	2722	58,200 PSI	61.1	2974	64,700 PSI
Magnum	54.6	2646	58,100 PSI	60.7	2922	64,600 PSI
4350	47.3	2656	58,200 PSI	52.6	2912	64,700 PSI
Hunter	47.0	2658	58,400 PSI	52.2	2925	64,900 PSI
2700	46.0	2574	57,300 PSI	51.0	2840	63,500 PSI
Bullet: 160 GR. NOS PART			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.340″**
Magpro	53.4	2630	58,300 PSI	59.3	2868	64,800 PSI
Magnum	53.2	2559	58,000 PSI	59.1	2822	64,500 PSI
H1000	55.0	2614	44,200 CUP	59.0C	2765	50,900 CUP
IMR 7828	50.5	2450	38,900 CUP	56.0	2758	50,300 CUP
H4831	50.0	2510	43,000 CUP	54.0	2673	50,500 CUP
IMR 4831	48.5	2481	41,800 CUP	52.9	2680	50,300 CUP
IMR 4350	46.5	2483	42,100 CUP	51.0	2706	50,500 CUP
Hunter	45.3	2550	58,400 PSI	50.4	2781	64,900 PSI
4350	45.4	2559	57,800 PSI	50.4	2769	64,200 PSI
2700	45.0	2450	57,200 PSI	50.0	2750	63,500 PSI
H4350	46.0	2501	43,600 CUP	49.0	2646	51,100 CUP
IMR 4064	40.0	2401	42,200 CUP	43.3	2580	50,400 CUP
IMR 4895	40.0	2334	44,100 CUP	43.2	2573	50,100 CUP

270 WINCHESTER SHORT MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.090″

Bullet: 100 GR. SPR HP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.700″**
H4831	67.0	3352	52,900 PSI	71.0C	3542	62,700 PSI
H4350	62.0	3458	55,000 PSI	65.5	3585	62,900 PSI
760	62.0	3451	54,600 PSI	65.0	3613	63,000 PSI
H380	60.0	3361	54,300 PSI	63.5	3518	62,600 PSI
StaBALL Match	58.0	3335	51,300 PSI	62.6	3587	62,800 PSI
Varget	55.0	3416	55,700 PSI	58.5	3573	63,300 PSI
H4895	51.0	3338	53,200 PSI	54.5	3505	62,500 PSI
Bullet: 110 GR. HDY HP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.800″**
H1000	71.0	3279	55,400 PSI	73.0C	3360	60,400 PSI
H4831	64.0	3265	56,300 PSI	67.5	3404	63,000 PSI
H4350	59.0	3287	55,900 PSI	63.0	3436	63,200 PSI
760	59.0	3283	55,600 PSI	62.5	3435	62,800 PSI
StaBALL Match	56.5	3261	53,600 PSI	60.2	3438	62,000 PSI
H380	55.0	3173	56,300 PSI	59.0	3327	62,900 PSI
Varget	53.0	3276	57,000 PSI	56.0	3406	63,200 PSI
Bullet: 130 GR. BAR TSX			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.800″**
H1000	69.0	3066	55,100 PSI	73.0C	3196	61,100 PSI
IMR 7828	63.0	2938	49,200 PSI	67.5C	3160	58,700 PSI
H4831	63.0	3002	53,200 PSI	67.0C	3160	60,700 PSI
StaBALL 6.5	62.3	3131	52,600 PSI	66.0	3322	62,500 PSI
IMR 4831	60.0	2966	51,800 PSI	65.5C	3232	63,700 PSI
IMR 4350	57.0	2966	51,200 PSI	63.0	3222	62,900 PSI
H4350	57.0	3041	55,700 PSI	61.5	3191	62,900 PSI
H380	55.0	2996	56,900 PSI	59.0	3122	62,800 PSI
StaBALL Match	54.0	3000	53,300 PSI	57.8	3188	62,100 PSI
IMR 4895	49.0	2940	53,100 PSI	53.8	3136	62,900 PSI
IMR 4064	49.0	2952	53,900 PSI	53.5	3128	63,000 PSI
Varget	48.0	2900	51,600 PSI	52.5	3106	62,500 PSI
Bullet: 130 GR. BAR TSX BT			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.792″**
Magpro	65.3	2925	56,100 PSI	72.5	3250	62,300 PSI
Hunter	56.9	2811	52,200 PSI	63.2	3123	57,900 PSI
4350	53.0	2888	57,100 PSI	59.0	3192	63,600 PSI
Bullet: 130 GR. HDY SP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.730″**
H1000	71.0	3100	55,400 PSI	73.0C	3168	58,700 PSI
H4831	63.0	3085	56,300 PSI	67.0	3228	63,400 PSI
IMR 7828	63.0	3031	55,000 PSI	67.0	3201	63,000 PSI
StaBALL 6.5	64.0	3120	54,700 PSI	67.0	3286	62,100 PSI
IMR 4831	59.0	3022	54,800 PSI	63.5	3208	63,300 PSI
IMR 4350	58.0	3022	53,200 PSI	62.5	3230	63,000 PSI
760	57.0	3065	53,800 PSI	61.0	3235	62,700 PSI
H4350	57.0	3093	56,600 PSI	60.5	3226	63,500 PSI
H380	56.0	3032	56,100 PSI	59.5	3174	63,200 PSI
StaBALL Match	53.5	2988	55,300 PSI	57.1	3160	63,300 PSI
IMR 4064	51.0	3005	56,400 PSI	54.3	3140	63,800 PSI
Varget	51.0	3040	56,400 PSI	54.0	3169	63,200 PSI
IMR 4895	50.0	2953	53,500 PSI	54.0	3120	62,500 PSI
Bullet: 130 GR. NOS E-TIP			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.820″**
Magnum	65.3	2913	56,900 PSI	72.5	3201	63,300 PSI
Magpro	64.5	2943	58,100 PSI	71.6	3229	64,600 PSI
Hunter	56.6	2957	58,400 PSI	62.9	3204	64,900 PSI
4350	54.6	2927	58,400 PSI	60.7	3175	64,900 PSI
Bullet: 135 GR. SIE HPBT			**Dia: .277″**			
Case: Winchester		**Primer: Winchester LRM**				**Col: 2.840″**
StaBALL HD	69.0	2994	50,000 PSI	74.0C	3259	62,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H1000	69.0	3056	54,400 PSI	73.0C	3205	62,600 PSI
IMR 7828	62.0	2986	52,000 PSI	67.0C	3211	62,900 PSI
StaBALL 6.5	63.0	3038	51,600 PSI	66.5	3243	62,200 PSI
H4831	62.0	3056	55,400 PSI	65.5	3192	62,900 PSI
IMR 4831	60.0	3032	54,700 PSI	64.0C	3198	62,700 PSI
IMR 4350	58.0	3003	51,800 PSI	62.5	3210	61,600 PSI
H4350	58.0	3093	57,000 PSI	61.5	3211	63,100 PSI
760	57.0	3041	54,000 PSI	61.0	3208	63,200 PSI
H380	55.0	2943	52,800 PSI	58.0	3116	63,000 PSI
StaBALL Match	53.0	2952	53,500 PSI	56.8	3140	63,000 PSI
IMR 4064	50.0	2947	54,500 PSI	54.3	3108	62,800 PSI
Varget	51.0	3000	54,800 PSI	54.0	3134	63,000 PSI
IMR 4895	50.0	2933	53,600 PSI	54.0	3093	62,100 PSI
Bullet: 140 GR. HDY BTSP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.760″**
Magpro	66.8	2985	58,100 PSI	74.2	3275	64,500 PSI
4350	54.4	2865	57,000 PSI	60.4	3137	63,300 PSI
Bullet: 140 GR. NOS BT			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.815″**
Magnum	66.6	2877	57,500 PSI	74.0	3197	63,900 PSI
Hunter	54.6	2700	51,900 PSI	60.7	3000	57,700 PSI
Bullet: 140 GR. SFT SP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.800″**
StaBALL HD	68.5	2938	50,000 PSI	73.5C	3179	61,300 PSI
Retumbo	68.0	3016	53,200 PSI	71.0C	3165	61,300 PSI
H1000	66.0	2984	55,700 PSI	70.0C	3137	63,500 PSI
StaBALL 6.5	62.0	2947	52,600 PSI	66.2	3144	62,700 PSI
IMR 7828	61.0	2922	54,100 PSI	64.5	3081	61,900 PSI
H4831	59.0	2974	57,000 PSI	62.5	3085	63,000 PSI
IMR 4831	57.0	2860	53,100 PSI	61.5	3059	62,600 PSI
IMR 4350	56.0	2876	52,300 PSI	60.5	3081	62,200 PSI
H4350	54.0	2928	54,500 PSI	58.0	3087	63,100 PSI
760	55.0	2932	53,700 PSI	58.0	3068	62,600 PSI
H380	53.0	2865	55,500 PSI	56.5	3005	62,700 PSI
Bullet: 150 GR. BAR TSX FB			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.750″**
Magnum	61.4	2743	57,800 PSI	68.3	3006	64,200 PSI
Magpro	60.2	2748	58,500 PSI	66.9	3019	65,000 PSI
Hunter	51.8	2681	57,800 PSI	57.5	2961	64,200 PSI
4350	51.7	2645	58,300 PSI	57.5	2924	64,700 PSI
Bullet: 150 GR. HDY SP			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.740″**
StaBALL HD	68.0	2897	52,200 PSI	73.0C	3124	63,100 PSI
Magnum	64.7	2726	57,400 PSI	71.9	3029	63,800 PSI
Retumbo	66.0	2908	53,300 PSI	70.0C	3071	63,000 PSI
H1000	64.0	2864	54,600 PSI	67.5C	3001	62,800 PSI
StaBALL 6.5	60.0	2839	53,700 PSI	63.8	3017	62,400 PSI
IMR 7828	59.0	2785	55,400 PSI	63.1	2952	63,200 PSI
H4831	56.0	2804	54,500 PSI	60.0	2962	63,100 PSI
IMR 4831	55.0	2739	54,400 PSI	59.3	2916	63,000 PSI
IMR 4350	54.0	2754	52,900 PSI	58.5	2934	62,200 PSI
760	54.0	2845	55,400 PSI	57.5	2991	63,200 PSI
H4350	53.0	2846	55,600 PSI	56.5	2978	63,000 PSI
H380	51.0	2749	56,700 PSI	54.5	2885	63,100 PSI
Bullet: 150 GR. SIE SBT			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.760″**
Magpro	63.0	2864	58,200 PSI	70.0	3136	64,700 PSI
Hunter	53.9	2642	53,400 PSI	59.9	2935	59,400 PSI
4350	52.6	2774	58,000 PSI	58.4	2992	64,400 PSI
Bullet: 160 GR. NOS PART			**Dia: .277″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.830″**
StaBALL HD	67.5	2806	50,400 PSI	72.5C	3050	62,300 PSI
Magnum	64.0	2688	56,000 PSI	71.1	2987	62,300 PSI
Magpro	61.8	2737	58,200 PSI	68.7	2994	64,700 PSI
Retumbo	65.0	2826	53,400 PSI	68.5	2989	62,600 PSI
H1000	63.0	2802	57,400 PSI	66.5	2913	63,200 PSI
StaBALL 6.5	60.0	2714	50,200 PSI	63.4	2939	62,400 PSI
IMR 7828	57.0	2663	52,700 PSI	61.5	2858	62,600 PSI
H4831	57.0	2784	58,400 PSI	60.0	2877	63,300 PSI
IMR 4831	54.0	2650	53,000 PSI	58.2	2829	62,500 PSI
IMR 4350	54.0	2692	53,900 PSI	57.5	2850	63,000 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
760	52.0	2718	56,100 PSI	55.5	2844	63,100 PSI
H4350	52.0	2735	56,100 PSI	55.0	2834	62,600 PSI
5744	32.8	2381	52,900 PSI	40.0	2729	64,500 PSI

6.8 WESTERN

Barrel: 24″ Twist: 1:8″ Trim: 2.010″

Bullet: 110 GR. HDY V-MAX			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.690″**
Magpro	67.7	3158	48,300 PSI	74.7	3474	62,900 PSI
4350	61.7	3123	45,300 PSI	68.0C	3443	58,000 PSI
H4831	61.5	3229	51,400 PSI	67.8	3478	62,800 PSI
IMR 7828 SSC	61.5	3175	50,700 PSI	67.6	3461	63,300 PSI
Superformance	60.7	3284	49,700 PSI	66.7	3582	63,100 PSI
Hunter	60.5	3225	50,100 PSI	66.3	3497	63,200 PSI
StaBALL 6.5	60.5	3270	50,200 PSI	66.3	3564	63,100 PSI
IMR 4831	59.4	3237	52,000 PSI	65.6	3522	63,600 PSI
IMR 4350	59.0	3163	47,500 PSI	64.8	3524	63,300 PSI
H4350	58.4	3218	50,000 PSI	64.4	3503	63,400 PSI
Big Game	57.7	3231	51,200 PSI	62.5	3468	63,200 PSI
760	56.8	3223	50,500 PSI	62.2	3488	63,000 PSI
2700	56.8	3223	50,500 PSI	62.2	3488	63,000 PSI
H380	55.8	3156	50,000 PSI	60.8	3434	63,100 PSI
Varget	53.4	3297	55,600 PSI	57.7	3468	63,500 PSI
IMR 4064	52.9	3207	50,400 PSI	57.6	3468	63,400 PSI
Bullet: 129 GR. BAR LRX BT			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.885″**
Magnum	64.8	2949	46,200 PSI	71.2	3196	55,500 PSI
Magpro	64.5	2990	49,400 PSI	71.1	3294	63,400 PSI
StaBALL HD	62.2	2819	46,700 PSI	68.8C	3139	59,800 PSI
Retumbo	63.2	2918	46,900 PSI	68.7C	3179	57,900 PSI
H1000	62.2	3022	51,800 PSI	67.8C	3258	63,100 PSI
IMR 7828 SSC	57.4	2964	52,300 PSI	63.3	3216	63,000 PSI
H4831	57.9	3015	54,300 PSI	63.2	3230	63,400 PSI
4350	55.4	2966	52,500 PSI	63.1	3243	63,300 PSI
Hunter	56.8	2960	51,100 PSI	62.4	3221	63,300 PSI
Superformance	56.4	3003	51,100 PSI	62.0	3255	62,900 PSI
StaBALL 6.5	56.7	3044	53,500 PSI	61.7	3258	63,200 PSI
IMR 4831	54.7	2977	52,400 PSI	61.0	3244	63,600 PSI
H4350	54.3	2988	53,000 PSI	59.4	3208	63,500 PSI
IMR 4350	54.0	2986	52,000 PSI	59.4	3232	63,500 PSI
Big Game	53.0	2946	52,800 PSI	56.9	3141	62,900 PSI
760	52.5	2986	54,100 PSI	56.2	3159	62,700 PSI
2700	52.5	2986	54,100 PSI	56.2	3159	62,700 PSI
Bullet: 130 GR. SFT SCIR			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.900″**
Magpro	65.0	3010	51,300 PSI	70.7	3264	63,100 PSI
StaBALL HD	62.0	2816	47,700 PSI	68.5C	3144	60,800 PSI
Retumbo	62.5	2850	44,700 PSI	68.2	3157	58,200 PSI
H1000	62.5	3008	52,100 PSI	67.1C	3243	63,400 PSI
H4831	57.4	2982	53,400 PSI	62.8	3205	63,300 PSI
IMR 7828 SSC	57.0	2937	51,900 PSI	62.3	3196	63,300 PSI
4350	56.0	2965	52,700 PSI	62.1	3211	63,400 PSI
Superformance	56.5	2998	51,100 PSI	61.6	3249	63,100 PSI
Hunter	56.5	2967	52,800 PSI	61.5	3198	63,500 PSI
StaBALL 6.5	56.1	2995	51,000 PSI	61.2	3256	63,300 PSI
IMR 4831	55.3	2962	52,500 PSI	60.4	3202	63,300 PSI
IMR 4350	54.2	2952	52,800 PSI	59.1	3191	63,500 PSI
H4350	54.1	2960	54,000 PSI	59.0	3171	63,300 PSI
Big Game	52.4	2930	53,900 PSI	56.3	3117	62,900 PSI
760	52.5	2966	54,800 PSI	56.1	3137	62,900 PSI
2700	52.5	2966	54,800 PSI	56.1	3137	62,900 PSI
Bullet: 136 GR. FED TLR			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.900″**
Magnum	65.0	2926	48,500 PSI	71.0	3168	59,400 PSI
Magpro	63.5	2937	49,900 PSI	69.4	3213	63,600 PSI
StaBALL HD	61.8	2858	50,800 PSI	68.7C	3129	61,800 PSI
Retumbo	62.0	2929	50,000 PSI	67.5C	3174	61,400 PSI
H1000	60.5	2962	51,300 PSI	66.0	3215	63,300 PSI
H4831	57.2	2967	53,600 PSI	62.4	3177	63,200 PSI
IMR 7828 SSC	56.8	2940	52,500 PSI	62.0	3167	63,400 PSI
4350	55.3	2931	53,700 PSI	61.0	3134	63,500 PSI
Hunter	55.3	2866	50,200 PSI	61.0	3117	62,900 PSI
Superformance	55.6	2968	51,400 PSI	60.7	3201	63,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4831	55.0	2931	51,700 PSI	60.1	3162	63,500 PSI
StaBALL 6.5	54.8	2966	51,900 PSI	59.8	3187	63,300 PSI
H4350	53.9	2955	52,500 PSI	58.9	3172	63,500 PSI
IMR 4350	53.7	2937	51,900 PSI	58.7	3171	63,400 PSI
Bullet: 140 GR. SIE TGK			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.900″**
Magnum	64.8	2863	47,100 PSI	71.0	3121	57,900 PSI
Magpro	63.0	2891	49,800 PSI	69.2	3176	63,300 PSI
StaBALL HD	61.6	2788	48,700 PSI	68.5C	3099	62,100 PSI
Retumbo	61.7	2851	47,800 PSI	67.3C	3129	61,200 PSI
H1000	59.4	2931	52,500 PSI	64.8	3149	63,200 PSI
4350	57.0	2894	52,300 PSI	62.7	3141	63,200 PSI
H4831	55.5	2901	52,700 PSI	60.7	3117	63,500 PSI
Hunter	55.2	2837	50,600 PSI	60.4	3082	62,300 PSI
IMR 7828 SSC	55.3	2867	52,000 PSI	60.3	3104	63,600 PSI
Superformance	55.0	2936	53,100 PSI	60.0	3145	63,100 PSI
StaBALL 6.5	54.0	2913	52,900 PSI	59.0	3126	63,100 PSI
IMR 4831	53.0	2860	52,400 PSI	57.9	3089	63,400 PSI
H4350	51.8	2903	53,400 PSI	56.8	3096	63,700 PSI
IMR 4350	51.2	2848	51,600 PSI	56.7	3098	63,500 PSI
Bullet: 145 GR. HDY ELD-X			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.900″**
StaBALL HD	63.0	2822	49,200 PSI	69.3C	3108	63,600 PSI
Retumbo	61.5	2830	49,000 PSI	67.0C	3098	61,900 PSI
H1000	58.5	2836	50,200 PSI	63.9	3092	63,100 PSI
H4831	55.0	2857	52,800 PSI	60.1	3061	63,300 PSI
IMR 7828 SSC	54.9	2815	51,500 PSI	59.9	3042	63,000 PSI
Superformance	54.4	2869	51,400 PSI	59.3	3090	63,500 PSI
StaBALL 6.5	53.5	2844	51,100 PSI	58.4	3076	63,400 PSI
IMR 4831	53.3	2830	51,900 PSI	58.2	3050	63,400 PSI
IMR 4350	51.7	2822	51,800 PSI	56.5	3052	63,500 PSI
H4350	51.5	2850	53,200 PSI	56.2	3036	63,300 PSI
Bullet: 150 GR. HDY IB			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.840″**
Magnum	65.0	2850	51,100 PSI	71.0	3098	62,900 PSI
StaBALL HD	62.9	2777	48,200 PSI	69.2C	3066	63,500 PSI
Magpro	61.5	2810	50,400 PSI	67.6	3088	63,600 PSI
Retumbo	60.5	2805	50,600 PSI	66.2C	3048	62,600 PSI
H1000	58.2	2809	51,500 PSI	63.4	3029	63,200 PSI
IMR 7828 SSC	54.0	2756	51,700 PSI	58.9	2990	63,300 PSI
H4831	54.0	2783	52,100 PSI	58.9	2993	63,100 PSI
4350	52.8	2746	52,700 PSI	58.9	2979	63,000 PSI
Superformance	53.3	2795	50,200 PSI	58.2	3017	62,800 PSI
Hunter	53.2	2739	51,600 PSI	58.2	2964	63,100 PSI
IMR 4831	52.5	2768	51,700 PSI	57.4	2978	63,000 PSI
StaBALL 6.5	52.5	2780	50,900 PSI	57.1	2991	63,300 PSI
IMR 4350	51.2	2774	52,800 PSI	55.8	2989	63,400 PSI
H4350	50.2	2774	53,600 PSI	54.8	2960	63,600 PSI
Bullet: 165 GR. NOS ABLR			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.900″**
Magnum	62.5	2717	51,800 PSI	68.5	2956	63,300 PSI
StaBALL HD	60.0	2681	49,400 PSI	65.5	2940	63,100 PSI
Magpro	59.4	2676	50,300 PSI	65.3	2943	63,000 PSI
Retumbo	58.5	2662	51,000 PSI	63.7	2897	63,300 PSI
H1000	55.8	2661	52,500 PSI	60.9	2870	63,300 PSI
4350	52.8	2622	52,200 PSI	58.1	2838	63,000 PSI
IMR 7828 SSC	51.5	2603	52,100 PSI	56.1	2797	62,800 PSI
H4831	51.2	2616	52,600 PSI	55.8	2813	63,600 PSI
Superformance	51.0	2631	51,100 PSI	55.6	2843	63,300 PSI
IMR 4831	50.7	2622	52,900 PSI	55.2	2823	63,400 PSI
StaBALL 6.5	49.8	2625	53,600 PSI	54.6	2813	62,900 PSI
IMR 4350	48.4	2603	53,300 PSI	52.5	2788	63,100 PSI
H4350	47.7	2605	54,200 PSI	52.0	2778	63,400 PSI
Bullet: 170 GR. BER EOL			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.940″**
Magnum	63.5	2716	52,000 PSI	69.1	2938	63,300 PSI
StaBALL HD	60.7	2656	48,700 PSI	66.8C	2933	63,400 PSI
Retumbo	60.2	2651	49,500 PSI	65.5C	2903	62,700 PSI
Magpro	60.0	2682	50,700 PSI	65.4	2921	63,000 PSI
H1000	57.0	2659	51,300 PSI	62.0	2881	63,200 PSI
4350	52.0	2592	53,400 PSI	58.2	2806	63,000 PSI
H4831	52.7	2637	52,900 PSI	57.3	2829	63,300 PSI
IMR 7828 SSC	52.5	2608	52,300 PSI	57.3	2815	63,000 PSI
Superformance	52.5	2646	52,100 PSI	57.0	2845	62,400 PSI
IMR 4831	52.2	2643	52,900 PSI	56.8	2835	63,000 PSI
StaBALL 6.5	51.4	2643	53,300 PSI	55.9	2818	63,100 PSI
IMR 4350	49.5	2618	52,100 PSI	53.9	2807	63,000 PSI
H4350	49.3	2614	53,500 PSI	53.6	2793	63,300 PSI
Bullet: 175 GR. SIE TGK			**Dia: .277″**			
Case: Browning			**Primer: Winchester LRM**			**Col: 2.940″**
Magnum	60.0	2660	51,700 PSI	66.0C	2883	63,600 PSI
StaBALL HD	57.5	2559	48,700 PSI	63.2	2810	63,500 PSI
Magpro	56.8	2615	50,900 PSI	62.5	2842	63,400 PSI
Retumbo	56.6	2585	48,500 PSI	62.2C	2855	63,500 PSI
H1000	53.7	2559	50,100 PSI	59.1C	2802	63,500 PSI
IMR 7828 SSC	50.0	2551	53,800 PSI	55.0	2746	63,500 PSI
Superformance	49.0	2515	50,600 PSI	54.0	2735	63,600 PSI
H4831	49.1	2541	52,900 PSI	54.0	2736	63,600 PSI
IMR 4831	48.7	2510	50,400 PSI	53.6	2750	63,600 PSI

27 NOSLER

Barrel: 24″ Twist: 1:10″ Trim: 2.575″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 129 GR. BAR LRX BT			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	87.0	3171	53,400 PSI	93.4C	3396	63,100 PSI
H50BMG	84.0	3120	53,500 PSI	90.0C	3305	61,900 PSI
StaBALL HD	77.5	3114	49,800 PSI	85.0	3445	63,100 PSI
Retumbo	75.0	3160	50,300 PSI	80.0	3386	61,800 PSI
H1000	73.0	3119	51,800 PSI	79.5	3359	63,300 PSI
IMR 7828 SSC	69.0	3139	52,800 PSI	74.2	3366	63,000 PSI
Bullet: 130 GR. SFT SCIR			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	87.0	3077	50,000 PSI	94.0	3404	63,500 PSI
H50BMG	83.0	3013	50,000 PSI	90.0C	3266	61,500 PSI
StaBALL HD	76.0	3041	49,300 PSI	83.5	3362	63,500 PSI
Retumbo	76.5	3164	51,500 PSI	82.0	3381	63,000 PSI
H1000	73.0	3122	52,600 PSI	79.5	3366	63,200 PSI
IMR 7828 SSC	70.0	3117	52,500 PSI	76.0	3350	63,600 PSI
Bullet: 136 GR. FED TLR			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	85.0	3071	51,500 PSI	92.0	3345	62,700 PSI
H50BMG	84.0	3055	53,700 PSI	90.0C	3242	61,100 PSI
StaBALL HD	76.5	3080	52,300 PSI	83.5	3328	62,800 PSI
H1000	74.5	3098	51,700 PSI	80.7	3321	63,100 PSI
Retumbo	74.0	3152	53,400 PSI	79.8	3344	62,900 PSI
IMR 7828 SSC	69.5	3061	51,700 PSI	76.4	3307	62,800 PSI
Bullet: 140 GR. SIE TGK			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.335″**
US 869	86.0	3180	51,400 PSI	93.0	3349	63,300 PSI
H50BMG	85.0	3025	50,800 PSI	90.0C	3184	58,900 PSI
LRT	82.6	3067	49,600 PSI	90.8	3383	63,500 PSI
StaBALL HD	75.7	3004	49,400 PSI	82.5	3310	63,300 PSI
Retumbo	77.0	3112	50,700 PSI	82.0	3351	62,800 PSI
H1000	74.0	3084	51,100 PSI	79.5	3334	63,500 PSI
IMR 7828 SSC	69.8	3037	50,100 PSI	76.7	3312	63,200 PSI
Bullet: 145 GR. HDY ELD-X			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	85.0	3026	50,100 PSI	92.0	3318	63,300 PSI
H50BMG	83.0	2966	51,200 PSI	90.0C	3218	63,100 PSI
LRT	81.5	3014	49,000 PSI	89.6	3316	63,300 PSI
StaBALL HD	74.5	2954	49,400 PSI	81.3	3238	63,000 PSI
Retumbo	76.0	3081	52,100 PSI	80.6	3290	62,900 PSI
H1000	71.0	2987	50,900 PSI	78.0	3232	63,000 PSI
IMR 7828 SSC	68.0	2947	50,200 PSI	75.2	3245	63,500 PSI
Bullet: 150 GR. HDY IB			**Dia: .277″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	83.0	2988	51,500 PSI	90.0	3233	63,400 PSI
LRT	81.3	2966	49,500 PSI	89.4	3261	63,300 PSI
H50BMG	80.0	2879	50,300 PSI	89.0C	3161	63,300 PSI
StaBALL HD	73.2	2935	50,400 PSI	79.8	3202	62,800 PSI
Retumbo	72.0	2974	51,800 PSI	79.0	3215	63,000 PSI
H1000	69.5	2948	51,800 PSI	76.5	3193	63,000 PSI
IMR 7828 SSC	66.0	2898	51,600 PSI	73.7	3192	63,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 165 GR. NOS ABLR Dia: .277″						
Case: Nosler		**Primer: Winchester LRM**				**Col: 3.340″**
US 869	81.1	2874	49,200 PSI	88.2	3154	63,100 PSI
LRT	78.0	2850	49,600 PSI	85.9	3127	63,300 PSI
H50BMG	80.0	2842	53,700 PSI	85.0C	2962	59,000 PSI
StaBALL HD	71.3	2800	50,200 PSI	77.8	3061	63,400 PSI
Retumbo	69.8	2844	52,800 PSI	75.5	3058	63,500 PSI
H1000	66.0	2784	52,400 PSI	72.0	2985	62,700 PSI
Bullet: 170 GR. BER EOL Dia: .277″						
Case: Nosler		**Primer: Winchester LRM**				**Col: 3.340″**
US 869	81.0	2841	50,400 PSI	88.0	3106	63,200 PSI
LRT	78.2	2799	48,500 PSI	86.0	3098	63,300 PSI
H50BMG	76.0	2760	51,600 PSI	84.0C	3001	63,500 PSI
StaBALL HD	72.0	2796	50,000 PSI	78.7	3039	62,600 PSI
Retumbo	68.0	2769	51,400 PSI	75.4	3006	62,300 PSI
H1000	66.5	2749	50,500 PSI	72.4	2964	62,200 PSI

7MM-08 REMINGTON

Barrel: 24″ Twist: 1:9.5″ Trim: 2.025″

Bullet: 120 GR. NOS BT Dia: .284″						
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.800″**
StaBALL 6.5	46.6	2839	39,000 PSI	53.0C	3201	54,800 PSI
H4350	48.0	2895	39,300 CUP	50.0C	3039	44,600 CUP
CFE 223	46.0	2944	40,700 CUP	49.5	3151	50,000 CUP
760	46.5	2867	40,600 CUP	49.0	3023	47,600 CUP
H380	46.0	2881	40,200 CUP	48.0	2977	43,400 CUP
StaBALL Match	43.2	2834	45,700 PSI	47.0	3074	59,700 PSI
BL-C(2)	43.5	2932	41,400 CUP	46.5	3109	50,100 CUP
Varget	42.5	2996	43,800 CUP	45.0	3117	49,900 CUP
IMR 4895	41.5	2861	43,900 CUP	44.0	3022	49,800 CUP
IMR 4064	41.0	2839	41,500 CUP	43.9	3017	50,000 CUP
H4895	41.0	2931	42,200 CUP	43.7	3085	49,700 CUP
IMR 8208 XBR	40.1	2830	40,500 CUP	42.7	2997	48,900 CUP
H335	39.5	2810	42,100 CUP	42.0	2984	49,400 CUP
Benchmark	39.0	2812	40,900 CUP	41.3	2968	49,000 CUP
IMR 3031	38.5	2826	42,700 CUP	41.0	2987	50,500 CUP
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.800″**
2495	40.5	2784	54,700 PSI	45.0	3055	60,800 PSI
2520	39.0	2802	54,900 PSI	43.3	3054	61,000 PSI
4064	38.7	2603	51,100 PSI	43.0	2958	56,800 PSI
2460	38.7	2782	54,500 PSI	43.0	3053	60,600 PSI
Bullet: 130 GR. SIE HPBT Dia: .284″						
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.800″**
StaBALL 6.5	46.1	2843	45,600 PSI	51.2	3125	59,700 PSI
H4350	47.0	2871	43,000 CUP	50.0C	2998	47,400 CUP
IMR 4350	45.0	2730	41,200 CUP	47.0C	2846	46,300 CUP
H380	45.0	2804	41,900 CUP	47.0	2934	45,700 CUP
760	44.0	2761	40,900 CUP	47.0	2925	50,000 CUP
CFE 223	41.9	2765	37,300 CUP	45.5	2957	47,800 CUP
BL-C(2)	41.5	2857	44,000 CUP	44.2	2989	49,800 CUP
StaBALL Match	40.0	2671	46,600 PSI	43.5	2893	59,500 PSI
Varget	40.0	2830	43,400 CUP	43.5	3004	50,100 CUP
IMR 4895	40.0	2759	43,300 CUP	42.4	2801	50,000 CUP
H4895	39.5	2824	43,500 CUP	42.0	2957	50,200 CUP
IMR 4064	39.0	2711	39,600 CUP	41.7	2890	49,900 CUP
IMR 8208 XBR	39.1	2755	42,600 CUP	41.6	2922	50,400 CUP
Benchmark	37.0	2701	41,500 CUP	39.8	2861	50,200 CUP
IMR 3031	37.0	2709	42,400 CUP	39.5	2860	50,000 CUP
H335	37.0	2690	44,800 CUP	39.0	2809	49,500 CUP
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.770″**
2700	42.8	2612	56,700 PSI	45.0	2779	59,600 PSI
2495	38.6	2662	54,900 PSI	42.9	2899	60,900 PSI
4064	38.2	2502	54,300 PSI	42.5	2844	60,400 PSI
2460	37.3	2655	54,800 PSI	41.5	2897	60,800 PSI
Bullet: 139 GR. HDY GMX Dia: .284″						
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.775″**
4064	38.2	2516	51,100 PSI	42.5	2714	56,800 PSI
2520	37.4	2592	54,900 PSI	41.6	2792	61,000 PSI
2495	37.4	2526	54,700 PSI	41.5	2752	60,800 PSI
2460	36.3	2517	54,900 PSI	40.3	2768	60,900 PSI
Bullet: 139 GR. HDY SP Dia: .284″						
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.800″**
StaBALL 6.5	45.9	2741	42,900 PSI	51.0C	3054	59,700 PSI
H4350	47.0	2729	40,400 CUP	50.0C	2906	47,500 CUP
IMR 4350	45.5	2646	39,700 CUP	48.0C	2793	45,200 CUP
H380	44.0	2674	41,800 CUP	47.0	2807	46,800 CUP
760	45.5	2710	40,400 CUP	47.0	2810	44,100 CUP
CFE 223	41.4	2666	38,900 CUP	45.0	2847	48,900 CUP
BL-C(2)	41.0	2641	41,200 CUP	44.7	2857	49,900 CUP
StaBALL Match	40.0	2602	48,100 PSI	43.5	2803	59,600 PSI
Varget	40.5	2721	44,700 CUP	43.5	2877	50,000 CUP
IMR 4895	40.5	2706	43,600 CUP	43.2	2851	49,900 CUP
H4895	39.0	2678	42,500 CUP	42.5	2857	50,200 CUP
IMR 4064	40.0	2682	42,500 CUP	42.5	2847	49,900 CUP
IMR 8208 XBR	39.0	2642	41,200 CUP	41.5	2783	49,000 CUP
Benchmark	37.5	2624	40,300 CUP	40.5	2799	49,600 CUP
IMR 3031	38.0	2633	42,000 CUP	40.3	2797	49,900 CUP
H335	37.5	2585	42,700 CUP	40.0	2730	49,400 CUP
Bullet: 139 GR. HDY SST Dia: .284″						
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.755″**
4350	42.8	2467	52,900 PSI	47.5	2803	58,800 PSI
2495	38.4	2577	54,600 PSI	42.6	2835	60,700 PSI
4064	37.8	2442	52,800 PSI	42.0	2775	58,600 PSI
2460	36.0	2574	54,800 PSI	40.1	2811	60,900 PSI
Bullet: 140 GR. NOS E-TIP Dia: .284″						
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.770″**
Big Game	42.7	2597	54,500 PSI	47.5	2870	60,500 PSI
4064	38.8	2529	54,300 PSI	43.1	2772	60,400 PSI
2495	37.4	2501	54,700 PSI	41.5	2736	60,800 PSI
Bullet: 140 GR. SFT A-FRAME Dia: .284″						
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.750″**
StaBALL 6.5	43.7	2699	44,200 PSI	48.5	2976	59,300 PSI
H4350	45.0	2692	42,300 CUP	48.0C	2868	49,800 CUP
IMR 4350	43.7	2616	38,600 CUP	46.5C	2826	50,000 CUP
760	43.5	2624	41,900 CUP	46.0	2791	49,500 CUP
H380	43.0	2645	44,200 CUP	45.7	2775	49,400 CUP
CFE 223	39.7	2577	38,400 CUP	43.2	2796	48,800 CUP
BL-C(2)	40.0	2660	44,800 CUP	42.5	2796	49,700 CUP
Varget	39.5	2695	43,700 CUP	42.2	2819	49,800 CUP
StaBALL Match	38.6	2537	46,800 PSI	42.0	2761	59,700 PSI
IMR 4895	38.5	2596	40,100 CUP	41.0	2752	49,600 CUP
H4895	38.0	2618	42,000 CUP	40.5	2769	49,700 CUP
IMR 4064	38.0	2593	41,200 CUP	40.5	2770	50,300 CUP
IMR 8208 XBR	37.3	2606	43,200 CUP	39.7	2732	48,800 CUP
Benchmark	36.0	2564	42,600 CUP	38.3	2688	49,300 CUP
IMR 3031	36.0	2537	40,700 CUP	38.3	2695	49,600 CUP
H335	35.5	2536	43,800 CUP	37.5	2647	49,800 CUP
Bullet: 150 GR. BAR TSX BT Dia: .284″						
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 2.735″**
Big Game	41.6	2550	54,100 PSI	46.2	2782	60,100 PSI
2700	40.2	2446	48,000 PSI	44.7	2689	53,400 PSI
4064	38.2	2500	54,000 PSI	42.5	2719	60,000 PSI
2495	36.8	2457	54,600 PSI	40.9	2675	60,700 PSI
Bullet: 150 GR. BAR TTSX BT Dia: .284″						
Case: Remington		**Primer: Remington 9 1/2, Large Rifle**				**Col: 2.770″**
StaBALL 6.5	44.3	2631	45,500 PSI	49.2C	2891	57,900 PSI
760	43.4	2576	43,500 CUP	46.2	2733	50,400 CUP
IMR 4350	41.4	2380	37,600 CUP	46.0C	2633	46,100 CUP
H4350	41.9	2475	40,100 CUP	45.5C	2659	50,400 CUP
H380	41.4	2441	41,400 CUP	45.0	2646	49,900 CUP
CFE 223	39.5	2501	43,500 CUP	42.0	2668	49,200 CUP
StaBALL Match	38.3	2463	49,500 PSI	41.7C	2679	60,000 PSI
IMR 4895	38.3	2512	44,800 CUP	41.0	2655	50,600 CUP
BL-C(2)	38.5	2463	41,400 CUP	41.0	2630	48,800 CUP
IMR 4064	37.4	2468	43,900 CUP	39.8	2576	49,900 CUP
Varget	37.3	2448	43,400 CUP	39.7	2580	50,700 CUP
IMR 8208 XBR	35.2	2404	44,600 CUP	37.4	2518	50,700 CUP
H335	35.2	2373	43,500 CUP	37.4	2522	50,400 CUP
Benchmark	34.8	2369	45,900 CUP	37.0	2506	50,600 CUP
IMR 3031	34.8	2400	43,900 CUP	37.0	2553	49,000 CUP
H4895	34.8	2428	45,200 CUP	37.0	2561	50,700 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 160 GR. SFT AFSP			**Dia: .284″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 2.770″**
Hunter	43.5	2421	48,500 PSI	48.4	2626	53,900 PSI
Big Game	40.6	2411	54,300 PSI	45.1	2658	60,400 PSI
2495	36.0	2334	53,000 PSI	40.0	2551	58,900 PSI
Bullet: 160 GR. SPR SPBT			**Dia: .284″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.800″**
H4831	47.5	2547	43,700 CUP	49.5C	2627	47,500 CUP
StaBALL 6.5	42.4	2500	40,800 PSI	47.7	2825	59,200 PSI
IMR 4350	43.0	2513	43,500 CUP	46.0C	2681	49,300 CUP
IMR 4831	43.5	2474	41,300 CUP	46.0C	2626	47,200 CUP
760	42.5	2566	43,300 CUP	45.5	2684	49,600 CUP
H4350	40.9	2471	45,400 CUP	43.5	2583	50,800 CUP
H380	40.5	2413	42,800 CUP	43.0	2566	49,700 CUP
StaBALL Match	37.7	2407	48,900 PSI	41.0	2593	59,700 PSI
CFE 223	37.9	2421	42,000 CUP	40.3	2525	49,500 CUP
IMR 4895	37.5	2477	43,100 CUP	40.0	2601	50,300 CUP
BL-C(2)	37.0	2382	43,900 CUP	39.5	2533	49,700 CUP
Varget	36.5	2451	43,400 CUP	39.0	2562	49,900 CUP
IMR 4064	36.5	2438	42,000 CUP	38.7	2564	49,000 CUP
Benchmark	36.0	2457	44,100 CUP	38.5	2592	50,700 CUP
H4895	35.0	2420	44,400 CUP	38.5	2530	50,000 CUP
IMR 8208 XBR	35.5	2459	45,400 CUP	37.7	2554	49,900 CUP
IMR 3031	34.5	2378	43,000 CUP	36.7	2516	49,200 CUP
H335	34.0	2335	44,100 CUP	36.5	2468	49,900 CUP
Bullet: 166 GR. HDY A-TIP			**Dia: .284″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.800″**
H4831	44.5	2446	45,000 PSI	48.7C	2659	58,700 PSI
Hunter	44.0	2475	47,000 PSI	48.3	2701	59,000 PSI
StaBALL 6.5	42.8	2495	46,600 PSI	47.0	2721	60,200 PSI
IMR 4350	41.5	2419	45,200 PSI	45.7C	2671	59,700 PSI
IMR 4831	41.3	2343	41,500 PSI	45.5C	2593	54,700 PSI
H4350	40.8	2447	46,300 PSI	44.7	2656	60,200 PSI
760	40.5	2457	47,000 PSI	44.5	2678	59,900 PSI
2700	40.5	2457	47,000 PSI	44.5	2678	59,900 PSI
Big Game	39.8	2414	45,300 PSI	43.5	2638	59,100 PSI
StaBALL Match	37.5	2376	46,600 PSI	40.8	2570	59,300 PSI
4064	36.5	2398	50,400 PSI	40.0C	2555	59,200 PSI
2495	36.0	2373	49,300 PSI	39.5	2555	59,700 PSI
IMR 4064	34.8	2336	45,200 PSI	38.2	2551	59,700 PSI
Varget	34.5	2390	50,600 PSI	38.0	2553	59,300 PSI
Bullet: 175 GR. BAR TSX FB			**Dia: .284″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 2.735″**
Hunter	39.1	2191	47,500 PSI	43.5	2400	52,800 PSI
Big Game	39.0	2289	54,800 PSI	43.3	2510	60,800 PSI
4064	35.5	2192	53,300 PSI	39.5	2413	59,300 PSI
2495	34.3	2170	54,700 PSI	38.2	2393	60,800 PSI
Bullet: 175 GR. NOS PART			**Dia: .284″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.800″**
H4831	47.0	2443	46,600 CUP	49.0C	2516	49,400 CUP
IMR 4350	41.4	2310	39,200 CUP	46.0C	2556	48,500 CUP
StaBALL 6.5	40.9	2395	41,300 PSI	46.0	2669	59,000 PSI
760	40.5	2322	40,600 CUP	43.0	2495	50,100 CUP
H380	40.0	2303	45,600 CUP	42.7	2415	49,900 CUP
H4350	39.9	2303	41,900 CUP	42.4	2451	50,400 CUP
IMR 4895	38.0	2343	43,900 CUP	40.5	2466	49,400 CUP
IMR 4064	37.5	2308	43,300 CUP	40.0C	2433	49,700 CUP
StaBALL Match	35.8	2241	48,800 PSI	38.5	2393	57,600 PSI
H4895	35.0	2240	44,500 CUP	37.5	2354	49,700 CUP
Varget	35.0	2231	43,400 CUP	37.5	2344	49,500 CUP
IMR 3031	35.2	2270	44,900 CUP	37.5	2381	49,700 CUP
BL-C(2)	35.0	2154	40,000 CUP	37.0	2298	49,500 CUP
Benchmark	34.0	2202	42,400 CUP	36.5	2333	49,700 CUP
H335	34.0	2195	46,200 CUP	36.0	2276	49,800 CUP
IMR 8208 XBR	33.4	2264	43,200 CUP	35.5	2372	48,200 CUP

7MM REMINGTON MAGNUM

Barrel: 24″ Twist: 1:9.5″ Trim: 2.490″

Bullet: 120 GR. HDY HP			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.230″**
Magnum	69.5	2992	54,100 PSI	77.3	3293	60,100 PSI
Magpro	69.2	3019	54,100 PSI	76.9	3315	60,100 PSI
IMR 7828	68.0	3044	50,000 PSI	72.5C	3261	59,100 PSI
H4831	65.0	3095	45,800 CUP	68.5	3236	50,600 CUP
IMR 4831	64.0	3040	51,300 PSI	68.2	3231	58,500 PSI
4350	60.0	2970	53,800 PSI	66.7	3273	59,800 PSI
IMR 4350	62.0	3050	49,900 PSI	66.5	3251	59,000 PSI
H4350	62.0	3106	44,700 CUP	65.0	3226	50,100 CUP
Hunter	57.6	2928	53,600 PSI	64.0	3220	59,600 PSI
IMR 4064	54.0	3062	52,600 PSI	58.2	3212	59,400 PSI
IMR 4895	54.0	3049	52,200 PSI	57.9	3189	58,700 PSI
Varget	53.0	3021	45,200 CUP	57.0	3218	50,900 CUP
Bullet: 130 GR. SPR SP			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.185″**
IMR 7828	65.0	2943	50,800 PSI	70.0	3159	59,300 PSI
IMR 4831	62.0	2971	53,200 PSI	66.3	3125	59,800 PSI
H4831	63.0	2952	46,300 CUP	66.0	3051	50,200 CUP
IMR 4350	60.0	2964	52,300 PSI	64.0	3131	59,300 PSI
H4350	58.0	2953	45,100 CUP	61.5	3082	50,800 CUP
IMR 4064	52.0	2904	52,200 PSI	55.4	3048	59,600 PSI
Varget	51.0	2877	45,700 CUP	54.0	2998	49,400 CUP
Bullet: 139 GR. HDY GMX			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.290″**
StaBALL HD	69.5	2954	48,500 PSI	76.2C	3219	59,700 PSI
Retumbo	68.0	2869	45,500 PSI	74.0C	3128	58,400 PSI
H1000	67.5	2847	46,300 PSI	73.0C	3065	56,000 PSI
IMR 7828	63.4	2841	45,800 PSI	70.0C	3191	59,400 PSI
H4831	64.5	2878	50,200 PSI	68.8	3054	58,100 PSI
IMR 4831	61.6	2862	48,400 PSI	65.5	3085	58,400 PSI
IMR 4350	59.6	2902	49,300 PSI	63.4	3099	58,500 PSI
760	56.2	2820	51,300 PSI	59.8	3043	59,300 PSI
H4350	56.1	2834	45,300 PSI	59.7	3007	57,800 PSI
Bullet: 140 GR. BAR TTSX-BT			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.240″**
Magnum	67.3	2797	54,700 PSI	74.8	3108	60,800 PSI
Magpro	64.9	2825	54,500 PSI	72.1	3111	60,500 PSI
4350	54.1	2773	54,400 PSI	60.1	2987	60,400 PSI
Bullet: 150 GR. BAR TTSX-BT			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.225″**
StaBALL HD	68.0	2847	47,500 PSI	74.9C	3104	59,400 PSI
Magnum	67.0	2709	54,500 PSI	74.4	3019	60,600 PSI
H1000	67.2	2847	49,200 PSI	73.8	3083	59,100 PSI
Retumbo	66.9	2895	47,900 PSI	73.5C	3115	57,200 PSI
IMR 7828	63.4	2851	48,400 PSI	68.7	3100	59,200 PSI
H4831	62.7	2852	50,600 PSI	68.0	3080	60,200 PSI
IMR 4831	60.4	2848	49,600 PSI	65.0	3075	59,600 PSI
IMR 4350	58.9	2856	49,800 PSI	63.7	3059	59,300 PSI
H4350	57.9	2836	50,800 PSI	62.5	3041	59,800 PSI
Bullet: 150 GR. NOS E-TIP			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.260″**
Magnum	65.9	2670	54,700 PSI	73.2	2986	60,700 PSI
Magpro	62.7	2703	54,100 PSI	69.7	2981	60,100 PSI
4350	51.9	2602	54,600 PSI	57.6	2823	60,700 PSI
Bullet: 160 GR. NOS PART			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.290″**
US 869	77.0	2786	52,300 PSI	80.0	2897	58,300 PSI
StaBALL HD	67.7	2823	48,000 PSI	74.6	3031	59,500 PSI
Retumbo	65.0	2756	43,200 CUP	69.5C	2915	49,900 CUP
H1000	63.0	2729	43,300 CUP	66.0	2839	49,600 CUP
IMR 7828	60.0	2709	50,500 PSI	64.0	2868	58,200 PSI
IMR 4831	57.0	2707	50,600 PSI	61.0	2858	58,400 PSI
H4831	58.0	2695	46,400 CUP	60.0	2787	49,800 CUP
IMR 4350	56.0	2697	49,700 PSI	59.5	2856	58,500 PSI
H4350	53.0	2651	46,400 CUP	55.5	2745	49,800 CUP
Bullet: 160 GR. SIE SBT			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.245″**
Magpro	65.3	2717	54,600 PSI	72.5	2993	60,700 PSI
Magnum	65.1	2646	54,300 PSI	72.3	2948	60,400 PSI
4350	57.6	2654	54,700 PSI	64.0	2898	60,700 PSI
Bullet: 166 GR. HDY A-TIP			**Dia: .284″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.290″**
US 869	74.0	2746	44,500 PSI	79.0	2962	53,600 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
LRT	73.0	2834	45,200 PSI	78.5	2990	50,800 PSI
Retumbo	68.0	2826	48,600 PSI	73.0C	3047	60,000 PSI
Magnum	67.5	2784	46,500 PSI	73.0	3049	59,300 PSI
StaBALL HD	67.5	2843	49,200 PSI	72.8	3054	59,600 PSI
Magpro	67.0	2876	50,200 PSI	72.0	3072	59,000 PSI
H1000	65.5	2819	49,400 PSI	70.5	3024	59,600 PSI
IMR 7828 SSC	62.5	2843	49,700 PSI	67.3	3023	60,000 PSI
H4831	61.0	2809	49,500 PSI	65.8	3003	59,500 PSI
4350	60.3	2796	50,700 PSI	65.0	2983	59,600 PSI
IMR 4831	60.3	2796	48,400 PSI	65.0	3020	59,900 PSI
IMR 4350	57.8	2818	50,500 PSI	62.3	2992	59,300 PSI
Hunter	57.2	2751	49,500 PSI	61.4	2947	59,500 PSI
StaBALL 6.5	56.4	2728	48,800 PSI	60.7	2935	59,900 PSI
H4350	54.5	2757	48,700 PSI	58.6	2954	60,200 PSI

Bullet: 175 GR. NOS PART Dia: .284″
Case: Winchester Primer: Winchester LRM Col: 3.290″

US 869	74.0	2632	49,300 PSI	77.0	2758	56,200 PSI
StaBALL HD	65.4	2639	46,700 PSI	72.1	2898	59,500 PSI
Magnum	63.4	2647	54,400 PSI	70.4	2879	60,500 PSI
Retumbo	64.0	2650	45,400 CUP	68.0	2800	51,200 CUP
Magpro	60.7	2614	54,600 PSI	67.4	2875	60,600 PSI
H1000	61.0	2567	45,000 CUP	64.5	2692	50,400 CUP
IMR 7828	57.0	2549	49,800 PSI	61.0	2707	58,300 PSI
H4831	55.0	2532	45,800 CUP	58.0	2660	50,200 CUP
IMR 4831	54.0	2540	50,100 PSI	58.0	2710	58,700 PSI
4350	52.1	2534	54,200 PSI	57.9	2740	60,200 PSI
IMR 4350	54.0	2586	52,600 PSI	57.0	2698	58,800 PSI
H4350	51.0	2504	46,200 CUP	54.0	2617	51,400 CUP

Bullet: 175 GR. SIE SBT Dia: .284″
Case: Winchester Primer: Winchester LRM Col: 3.245″

Magnum	63.9	2659	54,800 PSI	71.0	2915	60,900 PSI
Magpro	62.1	2632	54,400 PSI	69.0	2912	60,400 PSI
4350	53.5	2597	54,800 PSI	59.5	2782	60,900 PSI

Bullet: 180 GR. BER VLD Dia: .284″
Case: Winchester Primer: Winchester LRM Col: 3.290″

StaBALL HD	64.7	2649	46,800 PSI	71.3	2895	59,600 PSI
Retumbo	64.4	2638	46,400 PSI	70.8C	2914	59,600 PSI
Magnum	63.3	2629	54,500 PSI	70.3	2886	60,600 PSI
H1000	63.2	2605	46,000 PSI	69.5C	2884	60,000 PSI
Magpro	61.5	2584	54,500 PSI	68.3	2885	60,600 PSI
IMR 7828	59.6	2570	45,300 PSI	65.5	2874	58,900 PSI
H4831	58.6	2652	51,800 PSI	64.5	2830	60,200 PSI
IMR 4831	56.4	2608	48,900 PSI	62.0	2841	59,500 PSI
IMR 4350	55.5	2622	49,300 PSI	61.0	2837	59,400 PSI
4350	53.7	2547	54,200 PSI	59.7	2750	60,200 PSI
H4350	52.0	2553	48,000 PSI	56.0	2752	59,000 PSI

Bullet: 180 GR. SIE HPBT Dia: .284″
Case: Winchester Primer: Winchester LRM Col: 3.290″

Magnum	61.6	2614	54,400 PSI	68.5	2848	60,400 PSI
Magpro	60.9	2615	54,800 PSI	67.7	2877	60,900 PSI
4350	49.8	2505	54,700 PSI	55.4	2688	60,800 PSI

7MM PRC

Barrel: 24″ Twist: 1:8″ Trim: 2.275″

Bullet: 150 GR. NOS E-TIP Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.215″

LRT	72.8	2882	47,800 PSI	80.0C	3211	62,500 PSI
Magnum	65.5	2820	47,600 PSI	72.0	3137	62,500 PSI
StaBALL HD	64.8	2773	47,900 PSI	71.3	3075	62,200 PSI
Magpro	64.3	2900	49,400 PSI	70.7	3171	62,300 PSI
Retumbo	64.0	2806	47,700 PSI	70.3	3107	62,200 PSI
H1000	62.0	2824	48,500 PSI	68.3	3100	62,200 PSI
IMR 7828 SSC	59.0	2786	49,900 PSI	65.0	3066	62,300 PSI
IMR 4831	58.0	2839	52,200 PSI	63.8	3054	62,400 PSI
H4831	57.5	2783	48,800 PSI	63.2	3076	62,400 PSI

Bullet: 162 GR. HDY ELD-X Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.270″

LRT	71.8	2806	45,300 PSI	79.0C	3106	59,000 PSI
Magnum	65.2	2811	47,800 PSI	71.6	3085	62,500 PSI
StaBALL HD	64.4	2691	43,900 PSI	70.8	3055	62,500 PSI
Magpro	64.0	2870	50,100 PSI	70.4	3112	62,400 PSI
Retumbo	63.8	2759	45,400 PSI	70.2C	3074	62,300 PSI
H1000	61.6	2786	47,400 PSI	67.7	3054	62,200 PSI
IMR 7828 SSC	59.7	2801	50,800 PSI	65.6	3029	62,400 PSI
H4831	58.0	2785	49,800 PSI	64.2	3018	62,400 PSI
IMR 4831	57.3	2798	48,900 PSI	63.0	3044	62,500 PSI

Bullet: 168 GR. BAR LRX BT Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.200″

LRT	70.0	2683	43,400 PSI	77.0C	2956	55,500 PSI
StaBALL HD	64.4	2671	49,000 PSI	70.8C	2959	62,500 PSI
Magnum	64.3	2737	50,700 PSI	70.7	2975	62,100 PSI
Magpro	62.4	2747	49,200 PSI	68.6	3012	62,500 PSI
Retumbo	61.0	2654	46,700 PSI	67.0	2938	62,500 PSI
H1000	60.0	2713	49,600 PSI	66.0	2955	62,300 PSI
IMR 7828 SSC	56.7	2650	50,800 PSI	62.4	2900	62,400 PSI
H4831	55.5	2673	52,200 PSI	61.0	2887	62,500 PSI
IMR 4831	55.0	2656	51,400 PSI	60.5	2888	62,500 PSI

Bullet: 175 GR. NOS ABLR Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.300″

LRT	72.8	2794	47,100 PSI	80.0C	3083	62,400 PSI
StaBALL HD	64.7	2674	45,700 PSI	71.1	2978	62,400 PSI
Magnum	63.4	2653	43,800 PSI	70.4	2946	62,400 PSI
Retumbo	63.7	2705	46,800 PSI	70.0C	2985	62,200 PSI
Magpro	63.0	2729	47,700 PSI	69.3	3007	62,400 PSI
H1000	61.2	2711	48,100 PSI	67.2	2968	62,300 PSI
IMR 7828 SSC	57.8	2653	47,300 PSI	64.3	2934	62,400 PSI
H4831	57.0	2660	48,000 PSI	63.3	2923	62,300 PSI
IMR 4831	56.8	2661	47,200 PSI	62.8	2939	62,500 PSI

Bullet: 180 GR. HDY ELD-M Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.290″

LRT	69.3	2772	45,800 PSI	76.2	3097	62,400 PSI
StaBALL HD	63.0	2672	48,000 PSI	69.2	2930	62,200 PSI
Magpro	62.4	2744	50,400 PSI	68.6	2980	62,600 PSI
Magnum	61.6	2639	46,100 PSI	67.8	2934	62,400 PSI
Retumbo	60.5	2705	45,500 PSI	66.5	2989	62,300 PSI
H1000	58.7	2676	48,500 PSI	64.6	2925	62,400 PSI
IMR 7828 SSC	58.0	2757	55,500 PSI	61.0	2882	62,400 PSI
IMR 4831	55.5	2642	49,300 PSI	61.0	2862	62,100 PSI
H4831	55.0	2664	50,200 PSI	60.6	2881	62,300 PSI

Bullet: 195 GR. BER EOL Dia: .284″
Case: Hornady Primer: Federal 215M, LRM Match Col: 3.340″

LRT	70.0	2651	46,700 PSI	75.0	2871	59,500 PSI
StaBALL HD	64.0	2622	48,800 PSI	68.7	2840	62,500 PSI
Retumbo	62.0	2623	47,300 PSI	67.3	2826	62,000 PSI
Magnum	62.0	2637	50,300 PSI	67.3	2833	62,400 PSI
Magpro	60.0	2584	47,600 PSI	66.2	2837	62,300 PSI
H1000	60.0	2607	48,900 PSI	65.0	2821	62,100 PSI
H4831	55.0	2595	52,600 PSI	60.3	2774	62,400 PSI
IMR 7828 SSC	56.0	2592	51,300 PSI	59.8	2762	62,400 PSI
IMR 4831	54.0	2543	50,700 PSI	59.5	2741	62,500 PSI

7MM WEATHERBY MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.539″

Bullet: 140 GR. SFT AF Dia: .284″
Case: Remington Primer: Federal 215M, LRM Match Col: 3.250″

H1000	75.0	3104	42,800 CUP	79.0C	3273	49,900 CUP
H4831	69.0	3023	43,600 CUP	74.0	3258	54,000 CUP
IMR 7828	69.0	3098	45,100 CUP	74.0	3326	55,100 CUP
IMR 4831	65.0	3031	42,800 CUP	69.5	3255	52,800 CUP
H4350	64.0	3046	43,800 CUP	68.5	3248	54,000 CUP
IMR 4350	62.0	3037	41,400 CUP	67.0	3261	53,100 CUP

Bullet: 150 GR. NOS PART Dia: .284″
Case: Remington Primer: Federal 215M, LRM Match Col: 3.250″

H1000	75.0	3073	45,400 CUP	79.0C	3223	52,200 CUP
H4831	68.0	2973	44,800 CUP	72.0	3152	53,500 CUP
IMR 7828	67.0	2989	48,500 CUP	72.0	3212	54,100 CUP
IMR 4831	64.0	2957	44,300 CUP	69.0	3172	53,900 CUP
H4350	64.0	3012	45,800 CUP	68.0	3180	54,000 CUP
IMR 4350	62.0	3003	44,000 CUP	66.5	3175	54,100 CUP

Bullet: 160 GR. BAR TTSX Dia: .284″
Case: Remington Primer: Federal 215M, LRM Match Col: 3.250″

H1000	68.0	2778	45,600 CUP	75.0C	3034	54,800 CUP
IMR 7828 SSC	62.0	2699	43,900 CUP	69.5C	2998	54,200 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4831	62.0	2759	48,300 CUP	69.0C	3001	55,000 CUP
IMR 4831	59.0	2750	44,300 CUP	65.0	2991	54,100 CUP
IMR 4350	56.0	2715	46,900 CUP	62.0	2917	54,100 CUP
H4350	55.0	2723	48,500 CUP	61.5	2960	55,300 CUP
Bullet: 175 GR. HDY SP			**Dia: .284″**			
Case: Remington			**Primer: Federal 215M, LRM Match**			**Col: 3.350″**
US 869	78.0	2751	41,600 CUP	80.0	2862	45,200 CUP
H1000	70.0	2844	45,000 CUP	74.7C	3022	54,000 CUP
H4831	63.0	2724	43,500 CUP	67.5	2895	53,400 CUP
IMR 7828	64.0	2773	45,000 CUP	67.5	2942	52,600 CUP
IMR 4831	60.0	2756	46,400 CUP	64.0	2880	53,000 CUP
H4350	60.0	2755	45,900 CUP	63.7	2899	53,600 CUP
IMR 4350	59.0	2784	45,800 CUP	63.0	2885	53,400 CUP
Bullet: 180 GR. BER VLD			**Dia: .284″**			
Case: Remington			**Primer: Federal 215M, LRM Match**			**Col: 3.350″**
US 869	75.2	2698	42,800 CUP	81.8C	2927	50,900 CUP
H1000	66.3	2733	44,400 CUP	72.1C	2939	53,600 CUP
IMR 7828	62.6	2686	42,800 CUP	68.1C	2948	53,800 CUP
H4831	60.3	2647	42,800 CUP	66.3	2877	53,600 CUP
IMR 4831	59.1	2705	45,700 CUP	64.3	2886	52,700 CUP
H4350	55.4	2630	44,400 CUP	60.3	2840	53,900 CUP

28 NOSLER

Barrel: 24″ Twist: 1:9″ Trim: 2.575″

Bullet: 120 GR. NOS BT			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	93.2	3192	48,900 PSI	101.0C	3535	62,500 PSI
LRT	90.0	3268	48,100 PSI	98.5C	3633	63,400 PSI
H50BMG	90.2	3062	43,900 PSI	97.0C	3346	55,600 PSI
StaBALL HD	83.0	3272	49,600 PSI	91.5	3615	63,400 PSI
Magnum	83.0	3288	52,000 PSI	91.0	3573	63,900 PSI
Retumbo	83.8	3170	44,900 PSI	90.2	3576	62,900 PSI
H1000	84.0	3268	50,500 PSI	89.4C	3547	63,000 PSI
Magpro	81.0	3296	50,000 PSI	88.8	3634	64,000 PSI
IMR 7828	79.9	3336	52,600 PSI	84.8	3594	62,900 PSI
H4831	78.5	3323	54,700 PSI	83.5	3507	62,400 PSI
IMR 4831	75.0	3249	49,700 PSI	81.6	3557	62,500 PSI
Bullet: 140 GR. NOS E-TIP			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	90.2	3057	52,100 PSI	96.0	3305	62,500 PSI
LRT	86.0	3078	50,900 PSI	94.5	3398	63,600 PSI
H50BMG	88.1	3089	56,600 PSI	93.8C	3244	63,100 PSI
StaBALL HD	79.5	3069	50,700 PSI	86.5	3373	63,000 PSI
Magnum	77.0	2994	51,100 PSI	85.0	3287	63,500 PSI
Magpro	77.2	3055	50,600 PSI	84.8	3372	63,800 PSI
Retumbo	79.1	3131	55,100 PSI	84.1	3307	62,800 PSI
H1000	78.2	3107	56,300 PSI	83.2	3254	62,400 PSI
IMR 7828	73.1	3059	53,200 PSI	77.8	3256	62,200 PSI
H4831	71.8	3031	54,900 PSI	76.4	3194	62,400 PSI
IMR 4831	69.3	3014	53,300 PSI	73.8	3224	62,600 PSI
Bullet: 150 GR. BAR TTSX BT			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	88.5	3048	54,400 PSI	94.5	3265	63,500 PSI
LRT	84.0	3010	49,700 PSI	92.3	3330	63,700 PSI
H50BMG	81.4	3000	58,800 PSI	86.6C	3103	62,400 PSI
StaBALL HD	77.2	3008	51,800 PSI	84.0	3264	62,900 PSI
Magnum	73.0	2946	53,600 PSI	83.0	3220	63,700 PSI
Magpro	75.0	2973	50,900 PSI	82.2	3258	63,400 PSI
H1000	74.5	3016	57,300 PSI	79.3	3160	63,400 PSI
Retumbo	72.3	2959	53,300 PSI	77.1	3137	62,400 PSI
Bullet: 160 GR. NOS PART			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	88.2	3025	55,500 PSI	93.8	3199	63,700 PSI
LRT	83.2	2925	50,600 PSI	91.5	3223	63,600 PSI
H50BMG	83.2	2934	55,900 PSI	88.6C	3086	62,800 PSI
StaBALL HD	76.7	2935	52,300 PSI	83.4	3177	62,800 PSI
Magnum	75.0	2933	55,600 PSI	82.8	3128	63,700 PSI
Magpro	74.0	2856	49,500 PSI	81.4	3179	63,600 PSI
Retumbo	76.0	2984	55,700 PSI	80.9	3131	63,000 PSI
H1000	75.8	2984	57,800 PSI	80.6	3114	63,500 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 168 GR. BAR LRX BT			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	88.0	2930	50,600 PSI	93.5C	3129	58,600 PSI
H50BMG	83.5	2853	53,600 PSI	88.3C	2986	59,200 PSI
LRT	79.4	2862	51,900 PSI	86.8C	3135	63,200 PSI
StaBALL HD	75.5	2854	52,200 PSI	82.5C	3084	63,400 PSI
Magnum	72.5	2853	54,600 PSI	79.2	3030	63,000 PSI
Magpro	71.8	2863	52,800 PSI	78.5	3100	63,400 PSI
Retumbo	71.6	2829	51,800 PSI	78.3	3071	63,600 PSI
H1000	70.6	2871	54,000 PSI	77.2	3081	63,300 PSI
IMR 7828 SSC	67.5	2903	57,200 PSI	73.2	3049	63,900 PSI
Bullet: 175 GR. NOS PART			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	85.7	2873	52,900 PSI	91.2	3085	62,700 PSI
LRT	80.0	2782	50,900 PSI	88.2	3071	63,800 PSI
H50BMG	80.9	2850	57,800 PSI	84.8	2955	62,900 PSI
StaBALL HD	75.0	2815	52,300 PSI	81.3	3037	63,300 PSI
Magnum	73.0	2727	51,600 PSI	79.8	2978	63,600 PSI
Magpro	73.0	2787	51,500 PSI	79.7	3064	64,000 PSI
Retumbo	72.3	2858	56,000 PSI	78.0	3018	64,000 PSI
H1000	72.8	2864	57,300 PSI	77.5	2996	63,800 PSI
IMR 7828	68.1	2831	55,900 PSI	71.7	2959	62,500 PSI
Bullet: 180 GR. BER VLD			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
H50BMG	85.2	2808	53,700 PSI	90.6C	2968	62,600 PSI
US 869	85.1	2854	51,900 PSI	90.6	3087	62,900 PSI
LRT	80.0	2800	48,300 PSI	88.3	3102	63,400 PSI
Magnum	74.0	2770	53,300 PSI	81.7	3001	63,900 PSI
Retumbo	76.6	2804	51,600 PSI	81.5	3017	63,300 PSI
StaBALL HD	74.7	2828	53,200 PSI	81.0	3027	63,300 PSI
H1000	74.8	2830	55,100 PSI	79.6	2976	62,400 PSI
Magpro	72.0	2743	50,000 PSI	79.6	3035	63,400 PSI
IMR 7828	69.6	2825	54,700 PSI	74.1	2966	62,200 PSI
Bullet: 195 GR. BER EOL			**Dia: .284″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	82.6	2741	48,600 PSI	90.8C	3052	63,400 PSI
H50BMG	77.8	2672	51,000 PSI	85.5C	2933	63,200 PSI
LRT	77.3	2670	49,900 PSI	85.0	2949	63,300 PSI
StaBALL HD	72.0	2656	49,300 PSI	79.4	2945	63,100 PSI
Magnum	72.0	2642	52,600 PSI	79.4	2873	64,000 PSI
Magpro	71.2	2692	52,800 PSI	78.3	2917	63,600 PSI
Retumbo	71.0	2693	50,100 PSI	78.0	2943	63,500 PSI
H1000	68.6	2684	49,100 PSI	75.4	2941	63,200 PSI
IMR 7828 SSC	66.7	2675	52,500 PSI	73.3	2890	63,500 PSI

30 CARBINE

Barrel: 20″ Twist: 1:20″ Trim: 1.285″

Bullet: 85 GR. SIE RN			**Dia: .308″**			
Case: Winchester			**Primer: CCI 400, Small Rifle**			**Col: 1.625″**
H110	16.5	2293	26,000 CUP	17.5	2458	34,800 CUP
296	16.5	2293	26,000 CUP	17.5	2458	34,800 CUP
Lil'Gun	16.0	2140	20,300 CUP	17.0	2285	24,800 CUP
H4227	14.5	2054	25,200 CUP	15.5C	2181	30,700 CUP
Bullet: 90 GR. HDY XTP			**Dia: .308″**			
Case: Remington			**Primer: Winchester SR, Small Rifle**			**Col: 1.550″**
Enforcer	13.5	1935	34,200 PSI	15.0	2145	38,000 PSI
4100	13.4	1920	34,000 PSI	14.8	2125	37,700 PSI
No. 9	10.8	1865	35,500 PSI	12.0	2035	39,500 PSI
Bullet: 110 GR. HDY JRN			**Dia: .308″**			
Case: Winchester			**Primer: CCI 400, Small Rifle**			**Col: 1.680″**
H110	14.0	2006	32,000 CUP	15.0	2106	36,500 CUP
Lil'Gun	14.0	1998	28,000 CUP	15.0	2064	29,800 CUP
296	14.0	2006	32,000 CUP	15.0	2106	36,500 CUP
H4227	13.0	1826	30,100 CUP	14.5C	2003	38,800 CUP
IMR 4227	13.0	1826	30,100 CUP	14.5C	2003	38,800 CUP
Bullet: 110 GR. HDY FMJ			**Dia: .308″**			
Case: Remington			**Primer: Winchester SR, Small Rifle**			**Col: 1.680″**
Enforcer	11.9	1696	33,400 PSI	13.2	1853	37,000 PSI
4100	11.7	1667	33,000 PSI	13.0	1830	36,600 PSI
No. 9	9.9	1589	33,700 PSI	11.0	1738	37,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 115 GR. LY LPTGC Dia: .308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 1.635″						
Enforcer	10.7	1596	34,000 PSI	11.8	1734	37,700 PSI
4100	10.5	1566	33,600 PSI	11.6	1702	37,200 PSI
No. 9	8.6	1456	34,600 PSI	9.5	1568	38,200 PSI
Bullet: 130 GR. LY LPT Dia: .308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 1.680″						
Enforcer	10.4	1580	38,100 PSI	11.5	1727	38,900 PSI
4100	10.1	1535	34,300 PSI	11.3	1695	38,300 PSI
No. 9	8.2	1396	34,600 PSI	9.1	1517	38,300 PSI
300 AAC BLACKOUT						
Barrel: 16″ Twist: 1:8″ Trim: 1.750″						
Bullet: 110 GR. HDY V-MAX Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.050″						
No. 11FS	18.3	2095	44,700 PSI	21.0C	2381	51,400 PSI
Enforcer	17.4	2182	49,100 PSI	19.3C	2362	54,500 PSI
4100	17.3	2174	47,800 PSI	19.2C	2351	53,100 PSI
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.050″						
CFE BLK	22.5C	2168	28,500 PSI	23.7C	2303	35,900 PSI
Lil'Gun	19.9	2368	39,700 PSI	21.0C	2474	46,400 PSI
IMR 4227	19.0C	2120	40,900 PSI	20.0C	2220	47,600 PSI
H110	18.4	2191	38,900 PSI	19.4	2286	48,400 PSI
296	18.4	2191	38,900 PSI	19.4	2286	48,400 PSI
Bullet: 115 GR. BER TGT FB Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.050″						
CFE BLK	21.2	2004	22,400 PSI	23.0C	2169	28,600 PSI
Lil'Gun	20.2	2362	41,000 PSI	22.5C	2486	44,900 PSI
H110	18.3	2134	34,100 PSI	20.3	2336	52,700 PSI
296	18.3	2134	34,100 PSI	20.3	2336	52,700 PSI
IMR 4227	17.9	1987	34,700 PSI	19.8C	2178	45,300 PSI
Bullet: 125 GR. NOS BT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.060″						
1680	19.4	1925	35,400 PSI	21.5C	2126	39,300 PSI
5744	18.9	1984	46,800 PSI	21.0C	2207	52,000 PSI
Enforcer	16.5	2048	49,100 PSI	18.4C	2224	54,700 PSI
4100	16.5	2045	48,400 PSI	18.3C	2217	53,700 PSI
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.060″						
Lil'Gun	17.8	2210	42,700 PSI	21.0C	2402	48,800 PSI
CFE BLK	19.0	1866	23,700 PSI	20.0C	1945	26,500 PSI
H110	15.7	1921	32,400 PSI	18.5C	2205	52,500 PSI
296	15.7	1921	32,400 PSI	18.5C	2205	52,500 PSI
IMR 4227	15.7	1790	32,200 PSI	17.5C	1953	38,900 PSI
Bullet: 125 GR. SIE SPT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.035″						
4100	16.5	2041	48,200 PSI	18.3	2200	53,500 PSI
Enforcer	16.4	2038	47,900 PSI	18.3	2200	53,500 PSI
Bullet: 130 GR. BAR TTSX-BT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.065″						
1680	17.0	1704	40,100 PSI	18.9C	1923	44,600 PSI
5744	16.7	1718	45,700 PSI	18.5C	1940	50,600 PSI
No. 11FS	14.4	1687	37,700 PSI	16.5C	1936	43,300 PSI
Enforcer	14.4	1808	49,400 PSI	16.0C	1998	54,900 PSI
4100	14.2	1794	48,300 PSI	15.8C	1983	53,700 PSI
Bullet: 130 GR. SPR HP Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.005″						
CFE BLK	20.9	1966	28,200 PSI	22.0C	2092	37,100 PSI
IMR 4227	17.4	1885	38,700 PSI	19.4C	2062	49,000 PSI
H110	17.1	1942	37,900 PSI	18.6	2083	51,700 PSI
296	17.1	1942	37,900 PSI	18.6	2083	51,700 PSI
Lil'Gun	17.0	2090	41,700 PSI	18.5	2192	51,200 PSI
Bullet: 135 GR. SIE VAR HP Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.055″						
CFE BLK	20.7	1895	24,600 PSI	22.5C	2090	37,000 PSI
IMR 4227	17.8	1865	38,000 PSI	19.8C	2057	51,300 PSI
Lil'Gun	17.3	2069	42,000 PSI	19.3	2178	50,700 PSI
H110	16.9	1881	38,500 PSI	18.8C	2077	50,800 PSI
296	16.9	1881	38,500 PSI	18.8C	2077	50,800 PSI
Bullet: 140 GR. NOS HPBT Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.055″						
CFE BLK	18.5	1772	20,400 PSI	20.0C	1938	28,600 PSI
IMR 4227	15.5	1689	30,200 PSI	18.3C	2018	52,500 PSI
Lil'Gun	15.1	1922	36,000 PSI	17.8	2139	52,800 PSI
H110	15.1	1793	31,500 PSI	17.8	2047	52,700 PSI
296	15.1	1793	31,500 PSI	17.8	2047	52,700 PSI
Bullet: 150 GR. SIE FMJBT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.140″						
1680	19.5	1877	49,000PSI	21.7C	2057	54,600 PSI
5744	17.8	1848	49,200 PSI	19.9C	2053	55,000 PSI
Enforcer	15.1	1817	49,700 PSI	16.7	1970	55,000 PSI
4100	15.0	1809	48,500 PSI	16.6	1958	53,700 PSI
Bullet: 168 GR. HDY BTHP Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.230″						
CFE BLK	17.4	1653	25,900 PSI	20.0C	1887	41,800 PSI
IMR 4227	15.6	1658	40,200 PSI	17.2	1812	52,500 PSI
H110	14.5	1679	40,600 PSI	16.0	1817	53,300 PSI
296	14.5	1679	40,600 PSI	16.0	1817	53,300 PSI
Lil'Gun	13.9	1735	41,400 PSI	15.3	1866	52,900 PSI
Bullet: 168 GR. SIE HPBT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.200″						
1680	17.8	1667	49,100 PSI	19.7C	1840	54,300 PSI
5744	16.7	1694	48,900 PSI	18.5C	1897	54,200 PSI
Bullet: 175 GR. SIE HPBT Dia: 0.308″						
Case: Remington Primer: Winchester SR, Small Rifle Col: 2.215″						
1680	17.7	1637	49,300 PSI	19.7C	1801	54,900 PSI
5744	16.5	1679	49,300 PSI	18.4C	1868	55,000 PSI
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.215″						
CFE BLK	17.9	1691	30,000 PSI	19.5C	1821	37,400 PSI
IMR 4227	15.3	1620	38,900 PSI	16.8	1775	53,000 PSI
H110	14.5	1652	40,600 PSI	16.0	1785	52,600 PSI
296	14.5	1652	40,600 PSI	16.0	1785	52,600 PSI
Lil'Gun	14.1	1730	42,500 PSI	15.4	1834	52,800 PSI
Bullet: 180 GR. SPR SP Dia: .308″						
Case: Hornady Primer: Remington 7 1/2, Small Rifle BR Col: 2.210″						
CFE BLK	16.4	1516	26,900 PSI	19.3	1799	51,200 PSI
H4198	16.7	1596	31,400 PSI	17.6C	1675	35,900 PSI
IMR 4198	15.9	1567	33,400 PSI	16.8C	1636	37,900 PSI
IMR 4227	14.8	1579	41,400 PSI	16.3	1718	52,900 PSI
H110	14.1	1624	44,500 PSI	15.6	1736	53,700 PSI
296	14.1	1624	44,500 PSI	15.6	1736	53,700 PSI
Lil'Gun	13.4	1680	45,100 PSI	14.8	1786	52,900 PSI
30-30 WINCHESTER						
Barrel: 24″ Twist: 1:12″ Trim: 2.030″						
Bullet: 110 GR. HDY RN Dia: .308″						
Case: Winchester Primer: Winchester LR, Large Rifle Col: 2.440″						
4064	35.1	2380	37,300 PSI	39.0	2705	41,400 PSI
2520	34.2	2366	32,100 PSI	38.0	2689	35,700 PSI
2495	33.3	2375	36,900 PSI	37.0	2699	41,000 PSI
2460	33.3	2369	33,700 PSI	37.0	2692	37,400 PSI
2230	32.4	2450	37,400 PSI	36.0	2725	41,500 PSI
Bullet: 110 GR. SPR FP Dia: .308″						
Case: Winchester Primer: Winchester LR, Large Rifle Col: 2.415″						
StaBALL Match	36.4	2390	26,300 PSI	40.0	2601	33,100 PSI
BL-C(2)	36.0	2351	24,500 CUP	39.0	2526	25,400 CUP
Varget	34.5	2365	27,200 CUP	38.0C	2572	31,900 CUP
H335	35.0	2487	28,800 CUP	38.0	2684	34,300 CUP
H4895	34.0	2417	28,600 CUP	37.0	2605	31,100 CUP
IMR 4895	33.8	2290	30,500 CUP	36.0C	2459	35,400 CUP
IMR 4064	33.3	2342	31,800 CUP	35.5C	2506	36,100 CUP
IMR 3031	30.5	2281	22,400 CUP	32.5C	2445	33,700 CUP
Benchmark	30.5	2406	36,400 CUP	32.5	2507	37,800 CUP
H4198	23.0	2174	27,100 CUP	25.5	2409	35,900 CUP
IMR 4198	22.5	2168	27,800 CUP	24.0	2302	35,400 CUP
Bullet: 125 GR. SIE HP/FN Dia: .308″						
Case: Winchester Primer: Winchester LR, Large Rifle Col: 2.420″						
Big Game	34.9	2179	24,100 PSI	38.8	2421	26,800 PSI
2460	34.4	2472	37,300 PSI	38.2	2666	41,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
4064	34.2	2225	35,600 PSI	38.0	2529	39,600 PSI
TAC	32.2	2363	35,800 PSI	35.8	2625	39,800 PSI
2520	32.0	2391	36,500 PSI	35.6	2573	40,600 PSI
LT-32	30.6	2386	37,700 PSI	34.0	2586	41,900 PSI
2230	29.7	2322	37,300 PSI	33.0	2517	41,400 PSI
X-Terminator	29.7	2322	37,300 PSI	33.0	2517	41,400 PSI
2015	29.5	2279	37,700 PSI	32.8	2468	41,900 PSI
5744	20.5	1950	30,300 PSI	27.3	2511	40,400 PSI
Bullet: 130 GR. SPR FP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.540″**
StaBALL Match	36.0	2409	33,600 PSI	39.8C	2586	41,400 PSI
Varget	32.5	2312	30,200 CUP	36.0C	2496	35,700 CUP
IMR 4064	33.3	2196	27,200 CUP	35.5C	2424	37,300 CUP
BL-C(2)	34.0	2305	28,500 CUP	37.5	2473	32,800 CUP
CFE 223	32.8	2378	31,500 PSI	35.7	2533	37,000 PSI
H4895	31.5	2248	27,600 CUP	35.0	2482	35,300 CUP
H335	30.5	2173	27,600 CUP	34.0	2423	34,700 CUP
IMR 3031	29.6	2159	27,400 CUP	31.5	2323	33,500 CUP
Benchmark	27.7	2165	33,700 CUP	29.7	2295	37,100 CUP
H4198	22.5	2082	29,200 CUP	24.5	2234	36,400 CUP
IMR 4198	22.0	2025	28,700 CUP	23.5	2187	36,200 CUP
Bullet: 135 GR. HDY FTX			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
LEVERevolution	36.0	2461	30,800 PSI	39.6C	2667	37,700 PSI
StaBALL Match	34.2	2276	31,200 PSI	37.6C	2456	37,800 PSI
2520	32.7	2305	32,500 PSI	35.9	2508	40,500 PSI
2460	31.8	2334	33,000 PSI	35.0	2506	38,400 PSI
Varget	31.4	2301	33,400 PSI	34.7	2513	41,300 PSI
IMR 8208 XBR	31.0	2269	30,800 PSI	34.3	2525	40,500 PSI
IMR 4064	31.2	2182	30,700 PSI	34.2C	2442	41,000 PSI
H335	30.8	2282	33,900 PSI	33.9	2463	40,700 PSI
TAC	29.8	2265	34,400 PSI	32.9	2436	40,600 PSI
H4895	29.8	2245	31,900 PSI	32.8	2490	41,100 PSI
IMR 3031	29.5	2219	32,200 PSI	32.4	2445	40,600 PSI
Bullet: 140 GR. HDY MFTX			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
StaBALL Match	31.5	2168	34,400 PSI	35.2	2328	40,500 PSI
LEVERevolution	29.0	2175	32,400 PSI	34.0C	2436	39,700 PSI
BL-C(2)	29.0	2030	31,600 PSI	32.7	2239	39,900 PSI
Varget	27.0	1986	31,600 PSI	30.5C	2225	39,900 PSI
IMR 4064	26.0	1909	30,600 PSI	30.0C	2209	41,000 PSI
H4895	26.0	2077	36,800 PSI	29.7	2273	40,300 PSI
H335	25.0	1977	31,200 PSI	28.8	2224	40,600 PSI
IMR 3031	25.0	1963	32,300 PSI	28.5	2216	41,600 PSI
Benchmark	24.0	1839	26,400 PSI	28.0	2160	38,800 PSI
Bullet: 150 GR. SIE FN			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
LEVERevolution	35.0	2314	28,700 CUP	38.5C	2512	34,800 CUP
StaBALL Match	34.0	2206	31,400 PSI	37.5	2400	40,500 PSI
Big Game	33.5	2070	26,500 PSI	37.2	2300	29,400 PSI
BL-C(2)	33.0	2021	21,800 CUP	37.0	2358	33,900 CUP
CFE 223	33.9	2274	31,700 PSI	36.8	2409	36,700 PSI
Varget	31.0	2172	31,100 CUP	34.5	2349	36,200 CUP
H4895	30.5	2138	27,900 CUP	34.0	2390	36,700 CUP
2520	30.2	2046	35,000 PSI	33.5	2325	38,800 PSI
IMR 4895	31.5	2071	32,200 CUP	33.5	2213	34,300 CUP
IMR 4064	31.0	2106	33,300 CUP	33.3	2236	36,200 CUP
4064	29.7	1975	36,500 PSI	33.0	2245	40,500 PSI
H335	29.7	2098	28,700 CUP	33.0	2308	36,200 CUP
2460	29.3	2015	36,200 PSI	32.5	2290	40,200 PSI
IMR 8208 XBR	30.0	2213	35,000 CUP	32.0	2316	36,700 CUP
2230	27.9	2185	37,100 PSI	31.0	2375	41,200 PSI
2495	27.5	1960	36,600 PSI	30.5	2227	40,600 PSI
2015	27.5	2142	36,900 PSI	30.5	2341	40,900 PSI
IMR 3031	28.7	2085	28,700 CUP	30.5	2192	36,000 CUP
Benchmark	27.0	2042	32,100 CUP	29.0	2183	37,200 CUP
H4198	21.6	1924	26,900 CUP	24.0	2110	36,800 CUP
IMR 4198	21.5	1888	27,800 CUP	23.0	2055	35,500 CUP
Bullet: 160 GR. HDY FTX			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
LEVERevolution	32.0	2221	31,200 CUP	35.5C	2389	37,500 CUP
StaBALL Match	31.2	2125	34,000 PSI	34.4	2285	41,200 PSI
CFE 223	31.6	2170	30,700 PSI	34.0	2302	36,700 PSI
2520	29.8	2144	37,400 PSI	33.2	2316	41,600 PSI
Varget	29.8	2081	31,700 CUP	32.4	2235	35,900 CUP
4064	28.6	1920	33,000 PSI	31.8	2117	36,700 PSI
748	29.8	1994	31,500 CUP	31.7	2112	36,400 CUP
TAC	28.3	2060	37,000 PSI	31.4	2233	41,100 PSI
BL-C(2)	29.1	1863	27,400 CUP	31.0	2035	35,600 CUP
2495	27.8	1937	37,500 PSI	30.9	2148	41,700 PSI
2460	27.7	1950	36,300 PSI	30.8	2145	40,400 PSI
IMR 4064	28.7	2000	33,700 CUP	30.5	2095	36,200 CUP
2230	27.5	1995	36,300 PSI	30.5	2128	40,300 PSI
IMR 4895	28.2	1912	31,700 CUP	30.0	2065	36,900 CUP
H335	28.2	2005	31,600 CUP	30.0	2131	37,100 CUP
H4895	27.8	2045	31,100 CUP	30.0	2200	35,500 CUP
IMR 8208 XBR	27.0	2045	33,900 CUP	30.0	2207	37,000 CUP
IMR 3031	26.8	1992	34,300 CUP	28.5	2094	36,800 CUP
Benchmark	26.1	1933	31,000 CUP	27.8	2045	35,400 CUP
2015	24.9	1933	37,800 PSI	27.7	2095	42,000 PSI
Bullet: 170 GR. SIE FN			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.520″**
LEVERevolution	33.0	2145	28,900 CUP	36.3C	2332	35,400 CUP
BL-C(2)	32.5	2048	27,900 CUP	36.0	2227	34,700 CUP
StaBALL Match	32.3	2067	31,700 PSI	35.8	2256	40,900 PSI
CFE 223	32.2	2115	30,600 PSI	35.0	2258	36,800 PSI
Varget	29.5	1976	30,200 CUP	33.0	2168	36,500 CUP
2495	29.0	1919	37,300 PSI	32.2	2142	41,500 PSI
IMR 4064	29.8	1991	30,700 CUP	31.7	2090	35,300 CUP
IMR 4895	29.8	1938	30,500 CUP	31.7	2068	35,300 CUP
2520	28.4	1874	34,600 PSI	31.5	2129	38,400 PSI
IMR 8208 XBR	27.8	2052	36,400 CUP	30.9	2181	37,500 CUP
TAC	27.5	1962	33,400 PSI	30.5	2180	37,000 PSI
H335	27.5	1934	29,000 CUP	30.5	2086	36,300 CUP
H4895	27.5	1947	28,200 CUP	30.5	2138	35,200 CUP
IMR 3031	27.5	1959	27,500 CUP	29.2	2085	35,800 CUP
2015	25.7	1992	36,500 PSI	28.5	2189	40,400 PSI
LT-32	25.4	1941	37,100 PSI	28.3	2095	41,300 PSI
Benchmark	25.3	1894	32,200 CUP	27.0	2001	36,100 CUP
5744	18.9	1724	32,400 PSI	24.2	2127	41,500 PSI
H4198	20.5	1764	27,300 CUP	22.5	1918	32,600 CUP
IMR 4198	21.0	1800	27,400 CUP	22.3	1896	32,100 CUP

308 WINCHESTER

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 110 GR. BAR TSX FB			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.690″**
H335	47.3	3078	40,800 PSI	52.5	3358	53,900 PSI
Benchmark	45.2	3005	39,700 PSI	50.2C	3316	54,200 PSI
IMR 8208 XBR	45.5	2975	37,700 PSI	50.0C	3266	50,000 PSI
IMR 4895	45.0	2831	36,100 PSI	50.0C	3128	46,600 PSI
H322	46.1	3139	48,100 PSI	49.0C	3334	59,000 PSI
H4895	46.1	3055	40,300 PSI	49.0C	3212	46,200 PSI
IMR 3031	43.2	2913	37,700 PSI	47.0C	3170	47,700 PSI
H4198	39.9	3124	48,800 PSI	42.5	3278	58,700 PSI
IMR 4198	39.1	3064	46,200 PSI	41.6	3251	57,600 PSI
Bullet: 110 GR. BAR TTSX FB			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.700″**
2230	46.9	3230	55,100 PSI	52.1C	3498	61,200 PSI
X-Terminator	46.9	3230	55,100 PSI	52.1C	3498	61,200 PSI
TAC	46.8	3087	50,400 PSI	52.0C	3359	56,000 PSI
2520	46.3	3011	43,600 PSI	51.5C	3257	48,400 PSI
2460	45.4	3132	50,000 PSI	50.5C	3382	55,500 PSI
2200	43.8	3168	55,600 PSI	48.7	3448	61,800 PSI
2015	40.8	2884	47,900 PSI	45.4C	3140	53,200 PSI
LT-30	40.6	3047	55,700 PSI	45.1C	3326	61,900 PSI
Bullet: 125 GR. SIE SPT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.700″**
2520	46.5	2973	55,400 PSI	51.7	3233	61,600 PSI
TAC	45.0	2939	55,200 PSI	50.1	3198	61,400 PSI
2460	43.6	2923	55,300 PSI	48.5	3184	61,400 PSI
2230	42.9	2948	55,400 PSI	47.7	3195	61,500 PSI
X-Terminator	42.9	2948	55,400 PSI	47.7	3195	61,500 PSI
LT-30	38.2	2767	55,700 PSI	42.5	3015	61,900 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.700″**
BL-C(2)	48.0	2876	35,900 CUP	52.0	3069	42,600 CUP
IMR 4895	48.0	2969	45,600 PSI	51.8C	3185	55,200 PSI
IMR 4064	46.0	2891	42,500 PSI	50.1C	3119	52,100 PSI
Varget	48.0	3049	42,400 CUP	50.0C	3135	45,700 CUP
IMR 8208 XBR	46.0	3000	50,200 PSI	49.2C	3174	60,100 PSI
H4895	45.0	2891	36,800 CUP	49.0C	3127	48,400 CUP
IMR 3031	43.2	2866	40,200 PSI	48.0C	3194	58,100 PSI
H335	44.0	2840	37,500 CUP	48.0	3080	48,200 CUP
Benchmark	43.0	2821	40,600 CUP	47.5	3070	50,700 CUP
H322	42.0	2888	43,400 CUP	45.0	3052	51,400 CUP
H4198	36.0	2841	46,600 CUP	39.5	2988	49,800 CUP
Bullet: 130 GR. SPR HP			**Dia: .308″**			
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.615″**
CFE 223	52.0	3054	49,600 PSI	54.0	3202	59,500 PSI
BL-C(2)	48.0	2897	42,400 CUP	51.5	3089	49,700 CUP
IMR 4895	45.9	2867	44,500 PSI	51.0C	3153	57,800 PSI
StaBALL Match	46.4	2782	41,700 PSI	50.8C	3068	58,000 PSI
Varget	47.0	2975	42,900 CUP	50.0C	3130	50,400 CUP
IMR 4064	45.0	2809	43,600 PSI	49.5C	3036	52,300 PSI
H4895	45.0	2903	41,800 CUP	49.0C	3099	50,100 CUP
IMR 8208 XBR	43.0	2834	46,900 PSI	48.0C	3110	62,000 PSI
IMR 3031	42.0	2827	42,600 PSI	46.7C	3130	59,800 PSI
Benchmark	41.0	2704	38,800 CUP	46.0	2985	50,100 CUP
H335	43.0	2805	40,400 CUP	46.0	2980	49,700 CUP
H322	40.0	2754	41,200 CUP	43.0	2924	49,800 CUP
H4198	35.0	2745	44,700 CUP	37.0	2837	49,700 CUP
Bullet: 135 GR. BER FBT			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.810″**
2520	44.2	2820	55,800 PSI	49.1	3087	62,000 PSI
TAC	42.4	2780	54,900 PSI	47.1	3042	61,100 PSI
2460	41.7	2799	55,200 PSI	46.4	3031	61,300 PSI
2230	40.9	2800	55,600 PSI	45.4	3043	61,700 PSI
X-Terminator	40.9	2800	55,600 PSI	45.4	3043	61,700 PSI
Bullet: 150 GR. NOS BT			**Dia: .308″**			
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.800″**
CFE 223	48.4	2764	44,500 PSI	51.5	2974	57,000 PSI
StaBALL Match	45.7	2717	48,100 PSI	50.0C	2917	58,700 PSI
BL-C(2)	45.0	2661	40,200 CUP	48.0	2839	50,000 CUP
IMR 4064	43.0	2663	44,700 PSI	47.7C	2903	57,100 PSI
IMR 4895	42.6	2631	42,300 PSI	47.3C	2920	57,700 PSI
Varget	44.0	2788	43,300 CUP	47.0C	2937	50,300 CUP
H4895	43.0	2742	43,200 CUP	45.5	2870	51,000 CUP
IMR 8208 XBR	40.0	2604	45,500 PSI	44.5C	2870	60,800 PSI
H335	41.0	2619	42,600 CUP	44.0	2787	51,200 CUP
IMR 3031	40.2	2658	44,300 PSI	43.5C	2881	59,200 PSI
Benchmark	39.0	2521	38,800 CUP	43.0	2752	49,900 CUP
H322	37.0	2508	39,100 CUP	40.0	2702	50,500 CUP
Bullet: 150 GR. NOS E-TIP			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.800″**
2520	42.7	2651	55,400 PSI	47.4	2899	61,600 PSI
2495	40.7	2536	54,800 PSI	45.3	2805	60,900 PSI
TAC	40.8	2598	55,200 PSI	45.3	2858	61,300 PSI
2460	39.9	2629	55,300 PSI	44.3	2867	61,500 PSI
2230	38.9	2591	55,200 PSI	43.3	2830	61,300 PSI
X-Terminator	38.9	2591	55,200 PSI	43.3	2830	61,300 PSI
2015	37.1	2465	55,400 PSI	41.2	2690	61,600 PSI
LT-30	33.7	2404	55,600 PSI	37.5	2632	61,800 PSI
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.800″**
CFE 223	49.0	2865	52,300 PSI	51.1	2990	60,400 PSI
748	43.9	2762	50,800 PSI	47.3	2923	59,600 PSI
BL-C(2)	43.7	2654	47,800 PSI	47.0	2868	60,100 PSI
IMR 4064	42.9	2659	47,500 PSI	46.7C	2883	59,800 PSI
Varget	42.3	2670	46,700 PSI	46.5C	2914	60,400 PSI
IMR 4895	42.7	2684	48,800 PSI	46.5C	2899	60,100 PSI
H4895	41.5	2677	48,700 PSI	45.6	2893	60,500 PSI
IMR 8208 XBR	40.8	2659	45,900 PSI	44.3	2889	60,000 PSI
H335	40.4	2551	46,500 PSI	43.4	2790	59,100 PSI
Benchmark	39.9	2629	47,300 PSI	43.0	2819	59,600 PSI
IMR 3031	39.3	2628	48,500 PSI	42.8	2839	60,100 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 150 GR. SIE SBT			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.750″**
2520	43.4	2737	55,100 PSI	48.3	2978	61,200 PSI
TAC	41.9	2693	55,600 PSI	46.6	2947	61,700 PSI
2495	41.4	2598	55,500 PSI	46.0C	2886	61,700 PSI
2460	41.0	2716	55,600 PSI	45.6	2945	61,800 PSI
2230	40.7	2714	55,700 PSI	45.3	2951	61,900 PSI
X-Terminator	40.7	2714	55,700 PSI	45.3	2951	61,900 PSI
2015	38.8	2590	55,100 PSI	43.1	2815	61,300 PSI
Bullet: 155 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.775″**
2520	43.1	2689	55,400 PSI	47.9	2925	61,600 PSI
2495	41.4	2605	55,600 PSI	46.0	2869	61,800 PSI
TAC	41.1	2654	55,500 PSI	45.7	2874	61,700 PSI
2460	40.2	2656	55,300 PSI	44.6	2877	61,400 PSI
2230	39.7	2638	55,500 PSI	44.1	2867	61,700 PSI
X-Terminator	39.7	2638	55,500 PSI	44.1	2867	61,700 PSI
2015	37.6	2505	54,400 PSI	41.8	2725	60,500 PSI
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.775″**
CFE 223	49.5	2846	50,900 PSI	51.0	2966	60,500 PSI
StaBALL Match	44.3	2661	46,000 PSI	48.7C	2898	61,400 PSI
BL-C(2)	45.0	2658	37,500 CUP	48.0	2867	49,600 CUP
IMR 4064	43.0	2602	42,900 PSI	47.5C	2871	56,500 PSI
IMR 4895	43.5	2664	45,100 PSI	47.5C	2897	58,200 PSI
Varget	44.0	2759	41,300 CUP	47.0C	2909	49,400 CUP
H4895	43.0	2735	42,000 CUP	46.0	2873	49,700 CUP
IMR 8208 XBR	41.0	2619	47,300 PSI	45.3	2854	60,900 PSI
H335	41.0	2646	42,100 CUP	43.5	2779	49,900 CUP
IMR 3031	39.5	2594	43,400 PSI	43.2C	2832	58,500 PSI
Benchmark	39.0	2538	41,900 CUP	43.0	2753	50,200 CUP
H322	38.0	2588	42,400 CUP	41.0	2710	49,400 CUP
Bullet: 165 GR. HDY SP			**Dia: .308″**			
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.750″**
760	48.0	2537	43,500 CUP	52.0	2704	49,200 CUP
CFE 223	45.4	2649	46,700 PSI	48.3	2839	61,500 PSI
BL-C(2)	44.0	2528	37,700 CUP	47.5	2738	49,700 CUP
StaBALL Match	43.2	2567	48,700 PSI	47.3	2767	61,000 PSI
IMR 4064	42.0	2554	47,700 PSI	46.3C	2767	59,700 PSI
Varget	42.0	2582	40,800 CUP	46.0C	2773	50,500 CUP
IMR 4895	42.7	2584	49,200 PSI	45.5C	2745	58,800 PSI
H4895	41.0	2525	38,600 CUP	43.5	2694	50,000 CUP
IMR 8208 XBR	38.5	2491	49,100 PSI	42.8	2691	60,200 PSI
Benchmark	38.5	2438	40,200 CUP	42.5	2647	50,500 CUP
H335	39.0	2432	44,500 CUP	42.0	2608	49,100 CUP
IMR 3031	39.1	2537	49,600 PSI	41.6	2697	59,800 PSI
Bullet: 165 GR. NOS PART			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.810″**
4064	42.7	2535	53,700 PSI	47.5C	2805	59,700 PSI
2520	41.9	2603	55,800 PSI	46.6	2815	62,000 PSI
TAC	40.6	2577	55,400 PSI	45.2	2781	61,500 PSI
2495	40.5	2518	55,200 PSI	45.0C	2765	61,300 PSI
2460	39.4	2555	55,700 PSI	43.7	2765	61,800 PSI
2230	38.5	2526	55,500 PSI	42.8	2743	61,600 PSI
X-Terminator	38.5	2526	55,500 PSI	42.8	2743	61,600 PSI
2015	37.1	2423	55,300 PSI	41.2	2631	61,500 PSI
Bullet: 168 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester	**Primer: Winchester LR, Large Rifle**					**Col: 2.800″**
4064	41.9	2516	55,300 PSI	46.5C	2783	61,400 PSI
2520	40.1	2519	55,400 PSI	44.5	2741	61,500 PSI
2495	39.8	2464	55,700 PSI	44.2	2727	61,800 PSI
TAC	39.4	2511	55,800 PSI	43.7	2730	62,000 PSI
2460	38.1	2487	55,500 PSI	42.3	2705	61,700 PSI
X-Terminator	37.4	2470	55,400 PSI	41.6	2687	61,600 PSI
2015	35.8	2368	55,100 PSI	39.8	2575	61,200 PSI
5744	25.0	2062	42,900 PSI	35.8	2737	61,500 PSI
Case: Winchester	**Primer: Federal 210M, LR Match**					**Col: 2.800″**
CFE 223	46.6	2662	48,200 PSI	49.0	2828	60,400 PSI
BL-C(2)	44.0	2569	39,400 CUP	47.0	2754	50,200 CUP
StaBALL Match	42.7	2492	44,100 PSI	46.8	2734	60,800 PSI
Varget	42.0	2520	41,200 CUP	46.0C	2731	50,600 CUP
IMR 4064	41.5	2518	43,800 PSI	45.9C	2766	58,800 PSI
IMR 4895	41.0	2447	39,700 PSI	45.4C	2758	58,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4895	41.0	2551	38,300 CUP	43.5	2703	49,500 CUP
IMR 8208 XBR	39.0	2493	49,000 PSI	43.3	2707	61,500 PSI
Benchmark	38.0	2416	38,100 CUP	42.0	2630	49,300 CUP
H335	39.0	2451	37,700 CUP	42.0	2631	49,300 CUP
IMR 3031	39.0	2507	43,900 PSI	42.0	2710	58,900 PSI
Bullet: 175 GR. NOS HPBT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.810″**
4064	41.5	2458	54,900 PSI	46.2C	2733	61,100 PSI
2520	39.5	2458	55,100 PSI	43.9	2669	61,200 PSI
2495	39.0	2428	55,200 PSI	43.3	2674	61,400 PSI
TAC	38.5	2462	54,900 PSI	42.8	2673	61,000 PSI
2460	37.4	2466	55,200 PSI	41.6	2668	61,400 PSI
2015	35.6	2312	55,400 PSI	39.6	2510	61,600 PSI
Bullet: 175 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
IMR 4064	41.5	2500	45,200 PSI	45.6C	2728	59,500 PSI
Varget	42.0	2583	42,600 CUP	45.0C	2690	48,600 CUP
IMR 4895	41.0	2463	42,800 PSI	45.0C	2704	57,800 PSI
760	46.0	2484	40,300 CUP	49.0	2629	50,100 CUP
CFE 223	45.5	2612	49,600 PSI	47.5	2752	60,400 PSI
StaBALL Match	42.0	2432	43,500 PSI	46.0	2677	61,000 PSI
BL-C(2)	43.0	2517	39,200 CUP	46.0	2706	50,300 CUP
H4895	40.0	2489	39,100 CUP	42.7	2647	49,000 CUP
IMR 8208 XBR	39.0	2511	52,200 PSI	42.5	2664	61,800 PSI
Benchmark	38.0	2400	40,100 CUP	41.5	2590	50,800 CUP
H335	38.0	2390	38,800 CUP	41.3	2592	50,100 CUP
IMR 3031	38.0	2427	42,000 PSI	41.3	2653	59,100 PSI
Bullet: 180 GR. SPR GS			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.690″**
Big Game	43.7	2365	45,600 PSI	48.6C	2578	50,700 PSI
2520	39.8	2421	55,200 PSI	44.3	2631	61,300 PSI
TAC	39.4	2414	55,300 PSI	43.7	2617	61,500 PSI
2495	39.0	2373	55,400 PSI	43.4C	2603	61,500 PSI
2460	37.4	2372	55,600 PSI	41.6	2573	61,800 PSI
2015	35.7	2233	55,300 PSI	39.7	2433	61,400 PSI
Bullet: 180 GR. SPR SP			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
760	46.0	2433	39,800 CUP	49.0	2573	47,500 CUP
BL-C(2)	42.0	2460	40,300 CUP	46.0	2660	50,100 CUP
StaBALL Match	41.7	2406	47,600 PSI	45.8	2618	61,600 PSI
IMR 4064	40.7	2445	44,100 PSI	45.2C	2683	58,200 PSI
CFE 223	42.9	2502	52,500 PSI	45.1	2615	61,100 PSI
Varget	41.0	2470	41,200 CUP	45.0C	2661	49,600 CUP
IMR 4895	40.5	2439	43,800 PSI	44.7C	2674	58,700 PSI
H4895	40.0	2454	41,200 CUP	42.5	2595	49,700 CUP
Benchmark	38.0	2363	40,700 CUP	41.3	2542	50,800 CUP
H335	38.0	2374	41,100 CUP	41.0	2528	49,500 CUP
IMR 3031	37.0	2372	43,300 PSI	40.6	2594	58,000 PSI
IMR 8208 XBR	36.0	2340	51,600 PSI	40.0	2497	60,100 PSI
Bullet: 190 GR. HDY BTSP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.745″**
Big Game	43.4	2336	47,900 PSI	48.2C	2578	53,200 PSI
4064	40.2	2341	53,300 PSI	44.6C	2581	59,100 PSI
2520	39.2	2370	55,400 PSI	43.5	2580	61,600 PSI
TAC	38.1	2337	55,700 PSI	42.3	2554	61,800 PSI
2495	37.9	2286	55,400 PSI	42.1C	2528	61,600 PSI
2460	37.3	2349	55,100 PSI	41.5	2533	61,200 PSI
2015	35.4	2192	55,000 PSI	39.3	2398	61,100 PSI
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.745″**
760	45.0	2386	42,100 CUP	48.0	2504	48,700 CUP
StaBALL Match	41.0	2363	48,600 PSI	45.0	2577	61,800 PSI
CFE 223	41.4	2388	46,500 PSI	45.0	2589	60,200 PSI
BL-C(2)	42.0	2396	41,300 CUP	44.5	2543	48,700 CUP
Varget	41.0	2452	46,100 CUP	44.0C	2536	49,100 CUP
IMR 4895	40.0	2363	46,000 PSI	43.9C	2571	59,100 PSI
IMR 4064	39.4	2365	47,800 PSI	43.7C	2569	59,100 PSI
H4895	39.0	2359	40,400 CUP	42.0	2514	49,500 CUP
H335	37.0	2246	39,200 CUP	40.0	2449	49,800 CUP
IMR 8208 XBR	36.0	2303	51,700 PSI	40.0	2459	59,800 PSI
IMR 3031	36.0	2273	43,800 PSI	39.6C	2483	57,700 PSI
Benchmark	37.0	2288	41,100 CUP	39.5	2418	48,500 CUP

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 200 GR. SFT AF			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.700″**
CFE 223	41.7	2362	48,600 PSI	45.3	2582	60,600 PSI
StaBALL Match	40.2	2283	47,400 PSI	44.0	2481	61,600 PSI
BL-C(2)	41.0	2213	40,200 CUP	43.5	2514	49,800 CUP
IMR 4895	40.0	2302	47,500 PSI	43.2C	2476	59,000 PSI
IMR 4064	39.0	2268	46,100 PSI	42.5C	2466	58,400 PSI
Varget	39.0	2288	43,100 CUP	42.0C	2441	50,100 CUP
H4895	38.0	2256	42,400 CUP	41.0C	2403	49,400 CUP
Benchmark	37.5	2227	43,000 CUP	40.0	2355	50,100 CUP
IMR 3031	36.0	2219	46,100 PSI	39.5C	2410	59,200 PSI
H335	37.0	2217	41,600 CUP	39.5	2400	50,400 CUP
IMR 8208 XBR	35.5	2250	51,900 PSI	39.5	2400	59,900 PSI
Bullet: 208 GR. HDY BTHP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.810″**
Big Game	41.1	2183	43,200 PSI	45.7C	2412	48,000 PSI
4064	38.6	2163	51,500 PSI	42.9C	2429	57,300 PSI
TAC	38.0	2286	55,500 PSI	42.2	2482	61,600 PSI
2520	37.9	2276	55,100 PSI	42.1	2462	61,200 PSI
2495	36.9	2208	55,400 PSI	41.0	2435	61,600 PSI
2460	36.2	2285	55,600 PSI	40.3	2464	61,900 PSI
2015	34.0	2086	55,000 PSI	37.8C	2297	61,100 PSI
5744	22.9	1772	43,000 PSI	32.8	2424	61,600 PSI
Bullet: 208 GR. HDY ELD-M			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.820″**
StaBALL Match	40.5	2301	49,600 PSI	44.3	2474	61,200 PSI
BL-C(2)	40.7	2273	48,300 PSI	43.8	2455	58,900 PSI
CFE 223	40.6	2274	46,600 PSI	43.7	2474	57,500 PSI
748	39.8	2279	47,000 PSI	42.8	2453	57,300 PSI
Varget	38.1	2260	49,400 PSI	41.5C	2420	59,500 PSI
IMR 4064	37.7	2207	45,100 PSI	41.0C	2391	56,700 PSI
IMR 4895	37.7	2229	47,200 PSI	41.0C	2425	59,400 PSI
H335	37.5	2264	52,600 PSI	39.5	2381	59,700 PSI
IMR 8208 XBR	36.4	2219	48,100 PSI	39.2	2373	59,300 PSI
H4895	35.6	2218	49,900 PSI	38.8C	2359	58,600 PSI
Benchmark	35.2	2207	51,000 PSI	38.3	2346	59,300 PSI
IMR 3031	35.2	2214	48,600 PSI	38.1	2363	58,700 PSI
Bullet: 210 GR. BER VLD			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.810″**
Big Game	41.3	2167	50,000 PSI	45.8C	2413	55,500 PSI
4064	38.9	2174	53,500 PSI	43.2C	2422	59,400 PSI
2520	37.3	2213	55,500 PSI	41.5	2402	61,700 PSI
TAC	36.6	2176	55,200 PSI	40.7	2377	61,300 PSI
2495	36.0	2118	55,400 PSI	40.0C	2353	61,600 PSI
2460	35.2	2195	55,500 PSI	39.1	2380	61,700 PSI
2015	32.8	1991	55,200 PSI	36.5	2218	61,300 PSI
Bullet: 215 GR. BER HYB TG			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.810″**
CFE 223	42.7	2360	51,300 PSI	45.6C	2488	60,200 PSI
BL-C(2)	40.0	2180	44,800 PSI	45.0C	2453	61,300 PSI
748	40.0	2245	45,900 PSI	44.5C	2458	61,100 PSI
Varget	38.0	2213	49,700 PSI	41.3	2399	61,100 PSI
IMR 4064	37.0	2157	46,500 PSI	41.0C	2381	60,900 PSI
IMR 4895	38.0	2226	49,900 PSI	41.0	2383	60,900 PSI
H335	36.0	2116	44,700 PSI	40.6	2388	61,800 PSI
H4895	36.0	2184	48,800 PSI	39.8C	2371	61,700 PSI
IMR 8208 XBR	36.0	2184	48,900 PSI	39.3	2359	61,600 PSI
IMR 3031	35.0	2190	50,900 PSI	38.6	2358	61,700 PSI
Benchmark	34.0	2164	50,100 PSI	38.2	2329	61,600 PSI

308 WINCHESTER SERVICE RIFLE

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 150 GR. NOS BT			**Dia: .308″**			
Case: Winchester			**Primer: Federal 210M, LR Match**			**Col: 2.800″**
StaBALL Match	44.3	2640	45,900 PSI	46.6	2746	51,300 PSI
BL-C(2)	45.0	2661	40,200 CUP	46.0	2720	43,400 CUP
IMR 4895	42.6	2631	42,300 PSI	45.3	2795	51,100 PSI
IMR 4064	43.0	2663	44,700 PSI	45.0	2765	50,000 PSI
Varget	42.8	2728	40,500 CUP	44.0	2788	43,300 CUP
H4895	41.9	2685	40,000 CUP	43.0	2742	43,200 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 155 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester		**Primer: Federal 210M, LR Match**				**Col: 2.775″**
BL-C(2)	45.0	2658	37,500 CUP	46.4	2755	43,000 PSI
StaBALL Match	43.6	2571	42,000 PSI	45.9	2721	51,400 PSI
IMR 4064	43.0	2602	42,900 PSI	45.6	2757	51,000 PSI
IMR 4895	43.5	2664	45,100 PSI	45.3	2769	51,000 PSI
Varget	43.0	2709	39,000 CUP	44.0	2759	41,300 CUP
H4895	41.8	2680	39,000 CUP	43.0	2735	42,000 CUP
Bullet: 168 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester		**Primer: Federal 210M, LR Match**				**Col: 2.800″**
BL-C(2)	44.0	2569	39,400 CUP	45.2	2643	43,600 CUP
StaBALL Match	42.3	2464	44,000 PSI	44.5	2595	51,200 PSI
IMR 4895	41.0	2447	39,700 PSI	44.2	2673	53,000 PSI
IMR 4064	41.5	2518	43,800 PSI	43.9	2653	52,000 PSI
Varget	42.0	2520	41,200 CUP	43.2	2583	44,000 CUP
H4895	41.0	2551	38,300 CUP	42.3	2630	44,000 CUP
Bullet: 175 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester		**Primer: Federal 210M, LR Match**				**Col: 2.800″**
BL-C(2)	43.0	2517	39,200 CUP	44.0	2580	42,900 CUP
IMR 4064	40.7	2445	44,100 PSI	43.5	2593	53,000 PSI
IMR 4895	41.0	2463	42,800 PSI	43.4	2607	52,000 PSI
StaBALL Match	40.8	2419	44,100 PSI	43.0	2552	51,600 PSI
Varget	42.0	2583	42,600 CUP	43.0	2619	44,600 CUP
H4895	40.0	2454	41,200 CUP	40.8	2500	44,000 CUP

30-06

Barrel: 24″ Twist: 1:10″ Trim: 2.484″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 125 GR. SIE SPT			**Dia: .308″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.150″**
Hunter	61.4	3031	50,100 PSI	68.3C	3314	55,700 PSI
2700	58.8	3018	53,300 PSI	65.3C	3319	59,200 PSI
Big Game	57.2	3059	53,900 PSI	63.5	3331	59,900 PSI
4064	52.7	2949	53,700 PSI	58.6	3273	59,600 PSI
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.150″**
760	57.0	2952	40,300 CUP	62.5	3181	46,700 CUP
StaBALL Match	55.6	3098	50,300 PSI	60.5	3289	59,400 PSI
BL-C(2)	53.0	3117	38,000 CUP	58.7	3273	48,700 CUP
CFE 223	54.5	3081	53,000 PSI	58.0	3212	58,900 PSI
Varget	54.0	3159	45,500 CUP	57.2	3267	49,500 CUP
IMR 4895	53.0	3137	47,800 PSI	57.2	3331	56,800 PSI
IMR 4064	53.0	3129	47,400 PSI	56.5	3334	58,000 PSI
IMR 8208 XBR	51.5	3100	50,400 PSI	54.7	3243	57,400 PSI
H335	49.0	3046	43,000 CUP	54.0	3228	49,300 CUP
H4895	48.0	2977	41,400 CUP	53.7	3229	49,300 CUP
IMR 3031	49.0	3091	47,100 PSI	52.8	3298	58,400 PSI
Benchmark	49.0	2996	40,700 CUP	52.0	3178	48,700 CUP
748				51.0	3060	46,000 CUP
Bullet: 130 GR. SPR HP			**Dia: .308″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.060″**
BL-C(2)	52.0	2936	36,600 CUP	58.0	3179	48,300 CUP
CFE 223	54.0	3004	52,300 PSI	57.4	3145	59,100 PSI
StaBALL Match	51.8	2910	45,100 PSI	56.3	3167	59,300 PSI
IMR 4895	51.0	3074	50,800 PSI	54.7	3234	57,800 PSI
IMR 4064	51.0	3070	49,500 PSI	54.5	3243	58,200 PSI
H335	48.0	2912	39,600 CUP	53.5	3158	48,600 CUP
Varget	49.0	2979	41,300 CUP	53.5	3154	48,400 CUP
H4895	48.0	2927	38,600 CUP	53.1	3144	46,100 CUP
IMR 8208 XBR	49.1	3021	52,100 PSI	51.7	3126	56,900 PSI
Benchmark	48.0	2986	44,900 CUP	51.0	3107	48,700 CUP
IMR 3031	47.0	3010	49,500 PSI	50.3	3176	58,300 PSI
Bullet: 135 GR. BER FBT			**Dia: .308″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.300″**
Hunter	60.3	2985	51,300 PSI	67.0C	3223	57,000 PSI
Big Game	53.4	2924	53,300 PSI	59.3	3148	59,300 PSI
2700	53.1	2815	53,600 PSI	59.0	3116	59,600 PSI
4064	49.6	2839	53,700 PSI	55.1	3117	59,600 PSI
Bullet: 150 GR. NOS BT			**Dia: .308″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.250″**
Superformance	60.0	2850	43,100 PSI	65.0C	3072	53,000 PSI
StaBALL 6.5	58.5	2929	50,500 PSI	63.0C	3128	59,600 PSI
H4350	56.0	2792	37,100 CUP	62.0C	3068	48,400 CUP
760	54.0	2792	40,500 CUP	60.0	2992	48,600 CUP
H380	53.0	2798	40,200 CUP	59.0	3005	45,900 CUP
IMR 4350	54.0	2745	47,400 PSI	58.0C	2942	57,200 PSI
StaBALL Match	50.0	2756	47,500 PSI	55.0	2997	59,700 PSI
CFE 223	50.1	2763	50,500 PSI	54.2	2942	58,600 PSI
BL-C(2)	49.0	2759	39,700 CUP	54.0	2962	48,600 CUP
IMR 4895	49.0	2856	49,400 PSI	53.0	3009	56,700 PSI
H335	47.0	2785	42,500 CUP	51.5	2982	49,200 CUP
H4895	46.0	2806	44,400 CUP	51.0	2976	48,500 CUP
Varget	47.0	2808	42,600 CUP	51.0	2975	50,000 CUP
IMR 4064	47.0	2743	49,000 PSI	51.0	2928	58,600 PSI
IMR 8208 XBR	47.0	2797	50,500 PSI	50.0	2935	58,400 PSI
Benchmark	46.5	2792	44,600 CUP	49.5	2944	49,300 CUP
IMR 3031	43.0	2697	47,600 PSI	46.7	2887	59,300 PSI
Bullet: 150 GR. NOS E-TIP			**Dia: .308″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.300″**
Hunter	57.3	2826	53,100 PSI	63.6C	3082	59,000 PSI
2700	50.9	2749	53,700 PSI	56.6	2988	59,700 PSI
Big Game	50.9	2747	53,900 PSI	56.6	2995	59,800 PSI
4064	45.2	2630	53,400 PSI	50.3	2897	59,300 PSI
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.300″**
H4350	54.0	2747	47,000 PSI	57.8C	2927	57,700 PSI
IMR 4350	54.0	2744	48,800 PSI	57.5C	2930	57,300 PSI
760	53.0	2779	49,300 PSI	57.0	2945	57,100 PSI
H380	53.0	2763	50,400 PSI	57.0	2921	57,300 PSI
BL-C(2)	50.0	2777	51,300 PSI	53.5	2915	57,900 PSI
CFE 223	49.0	2715	47,600 PSI	53.2	2927	58,600 PSI
748	48.0	2704	48,000 PSI	51.5	2859	55,400 PSI
IMR 4064	47.0	2714	48,700 PSI	51.0	2926	59,500 PSI
IMR 4895	47.0	2717	50,000 PSI	50.8	2900	58,700 PSI
Varget	46.0	2697	49,900 PSI	49.5	2860	58,000 PSI
Benchmark	44.0	2631	46,400 PSI	48.0	2850	58,600 PSI
H335	44.0	2671	51,600 PSI	48.0	2842	59,200 PSI
IMR 8208 XBR	44.0	2677	50,100 PSI	47.7	2838	58,500 PSI
H4895	43.0	2658	49,000 PSI	47.5	2863	59,700 PSI
IMR 3031	43.0	2644	47,600 PSI	46.0	2811	56,600 PSI
Bullet: 150 GR. SIE SPT			**Dia: .308″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.225″**
Hunter	59.5	2921	53,500 PSI	66.1C	3167	59,400 PSI
2700	54.4	2836	53,300 PSI	60.5C	3076	59,200 PSI
Big Game	53.5	2822	53,800 PSI	59.4	3080	59,700 PSI
4064	48.5	2744	53,500 PSI	53.9	3017	59,500 PSI
Bullet: 155 GR. SIE HPBT			**Dia: .308″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.250″**
Hunter	58.5	2904	53,800 PSI	65.0C	3135	59,800 PSI
2700	55.0	2804	53,500 PSI	61.1C	3062	59,500 PSI
4350	54.2	2592	43,400 PSI	60.2	2877	48,300 PSI
Big Game	52.8	2820	53,700 PSI	58.7	3038	59,700 PSI
4064	49.1	2748	53,500 PSI	54.6	2998	59,500 PSI
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.250″**
Superformance	59.0	2843	43,400 PSI	65.2C	3125	58,800 PSI
H4350	56.0	2757	36,000 CUP	62.0C	3038	47,500 CUP
StaBALL 6.5	57.0	2800	43,400 PSI	62.0	3085	59,500 PSI
IMR 4350	56.0	2784	45,800 PSI	60.0C	2959	53,800 PSI
H380	53.0	2789	40,100 CUP	59.0	3009	47,800 CUP
StaBALL Match	50.0	2673	42,700 PSI	55.0	2959	60,000 PSI
BL-C(2)	49.0	2723	38,800 CUP	54.0	2912	46,300 CUP
IMR 4895	50.0	2851	49,800 PSI	53.8	3010	58,000 PSI
IMR 4064	49.0	2811	46,800 PSI	53.0	3005	58,800 PSI
CFE 223	49.2	2744	52,200 PSI	52.3	2879	59,500 PSI
H335	47.0	2776	42,200 CUP	51.5	2943	48,800 CUP
H4895	46.0	2752	41,200 CUP	51.0	2925	45,600 CUP
Varget	48.0	2822	44,600 CUP	50.7	2958	48,800 CUP
Benchmark	46.5	2779	40,500 CUP	49.5	2916	49,400 CUP
IMR 8208 XBR	46.1	2747	50,400 PSI	49.0	2869	57,500 PSI
IMR 3031	46.0	2779	47,600 PSI	49.0	2944	58,600 PSI
Bullet: 165 GR. HDY GMX			**Dia: .308″**			
Case: Winchester		**Primer: Winchester LR, Large Rifle**				**Col: 3.225″**
StaBALL 6.5	52.5	2733	50,400 PSI	57.1	2942	59,600 PSI
IMR 4350	52.0	2546	46,700 PSI	56.6	2770	58,200 PSI
H380	52.0	2652	52,700 PSI	56.0	2788	57,300 PSI
H4350	51.0	2587	48,600 PSI	55.4	2781	59,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
760	50.0	2656	52,400 PSI	53.1	2773	58,500 PSI
StaBALL Match	44.8	2532	48,000 PSI	48.8	2744	59,400 PSI
Varget	44.5	2526	46,600 PSI	48.3	2724	59,000 PSI
IMR 4064	44.4	2510	44,900 PSI	48.2	2729	58,600 PSI
IMR 4895	44.4	2535	45,100 PSI	47.8	2757	58,400 PSI
BL-C(2)	43.9	2511	49,200 PSI	47.5	2706	58,800 PSI
IMR 8208 XBR	43.2	2572	50,800 PSI	47.0	2717	58,300 PSI
H4895	43.4	2595	50,300 PSI	46.7	2712	57,100 PSI
CFE 223	43.9	2531	51,200 PSI	46.7	2672	57,500 PSI
IMR 3031	41.0	2510	46,400 PSI	44.1	2685	58,100 PSI
Bullet: 165 GR. NOS PART			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.305″**
Hunter	55.7	2746	53,900 PSI	61.9C	2991	59,800 PSI
4350	53.3	2626	53,400 PSI	59.3C	2908	59,300 PSI
2700	50.4	2662	53,400 PSI	56.0	2890	59,300 PSI
Big Game	50.0	2660	53,800 PSI	55.5	2900	59,800 PSI
4064	45.8	2577	53,400 PSI	50.8	2836	59,400 PSI
Bullet: 165 GR. SIE SBT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.300″**
Superformance	55.0	2724	45,100 PSI	61.0	2972	58,800 PSI
StaBALL 6.5	55.4	2804	50,100 PSI	60.2	3003	59,700 PSI
IMR 4350	54.5	2685	48,900 PSI	59.0C	2898	59,400 PSI
H4350	53.0	2678	38,400 CUP	59.0	2938	49,400 CUP
H380	51.0	2669	41,700 CUP	56.5	2892	50,000 CUP
760	51.0	2678	38,400 CUP	56.5	2877	49,700 CUP
StaBALL Match	48.3	2654	50,100 PSI	52.5	2829	59,400 PSI
IMR 4064	49.0	2752	50,400 PSI	52.5	2901	58,900 PSI
IMR 4895	49.0	2768	50,500 PSI	52.0	2888	57,200 PSI
BL-C(2)	46.0	2608	41,200 CUP	51.0	2805	49,800 CUP
Varget	47.0	2726	44,500 CUP	50.5	2873	49,700 CUP
CFE 223	46.5	2612	52,900 PSI	49.5	2731	58,700 PSI
IMR 3031	45.0	2707	51,000 PSI	48.0	2825	57,500 PSI
Benchmark	45.0	2686	45,600 CUP	47.7	2795	49,300 CUP
H4895	43.0	2607	41,100 CUP	47.5	2782	49,000 CUP
H335	42.0	2515	38,500 CUP	47.0	2749	49,300 CUP
IMR 8208 XBR	44.6	2667	55,100 PSI	46.5	2728	58,000 PSI
Bullet: 168 GR. BER VLD			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.330″**
Hunter	54.8	2721	53,500 PSI	60.9	2964	59,400 PSI
4350	53.6	2589	49,900 PSI	59.5C	2874	55,500 PSI
2700	50.9	2642	53,100 PSI	56.6	2885	59,000 PSI
Big Game	49.7	2666	53,900 PSI	55.3	2881	59,900 PSI
4064	46.4	2610	53,200 PSI	51.5	2840	59,100 PSI
Bullet: 168 GR. HDY HPBT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.230″**
H4350	55.0	2695	40,400 CUP	59.0	2897	48,100 CUP
StaBALL 6.5	54.0	2703	47,900 PSI	58.1	2903	58,900 PSI
IMR 4350	54.0	2720	48,500 PSI	58.0C	2903	57,800 PSI
H380	51.0	2648	42,800 CUP	56.5	2859	49,700 CUP
760	53.0	2686	40,300 CUP	56.5	2839	49,700 CUP
IMR 4895	48.0	2719	49,900 PSI	51.2	2859	58,200 PSI
StaBALL Match	47.0	2573	47,600 PSI	51.0	2780	59,700 PSI
BL-C(2)	46.0	2555	39,100 CUP	51.0	2767	49,200 CUP
IMR 4064	47.0	2660	46,800 PSI	50.8	2850	57,900 PSI
Varget	47.0	2710	42,700 CUP	50.5	2859	49,200 CUP
IMR 8208 XBR	45.1	2661	54,800 PSI	48.0	2748	58,700 PSI
H4895	43.0	2574	41,200 CUP	47.5	2789	50,000 CUP
Benchmark	44.0	2614	42,900 CUP	47.2	2760	49,400 CUP
H335	42.0	2459	39,900 CUP	46.5	2656	49,500 CUP
Bullet: 168 GR. NOS HPBT			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.330″**
4350	54.5	2603	49,900 PSI	60.5C	2875	55,400 PSI
Hunter	54.2	2702	53,200 PSI	60.2	2935	59,200 PSI
2700	51.6	2630	53,400 PSI	57.3	2873	59,300 PSI
Big Game	49.0	2637	53,800 PSI	54.4	2844	59,800 PSI
4064	47.4	2627	53,500 PSI	52.7	2863	59,500 PSI
Bullet: 175 GR. SIE HPBT			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.290″**
Hunter	53.3	2646	53,800 PSI	59.2	2883	59,800 PSI
4350	52.7	2573	50,700 PSI	58.5C	2828	56,300 PSI
2700	49.6	2596	53,600 PSI	55.1	2818	59,600 PSI
4064	45.8	2572	53,500 PSI	50.9	2790	59,500 PSI
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.300″**
H4831	57.0	2535	38,300 CUP	61.5C	2719	44,400 CUP
H4350	55.0	2661	42,100 CUP	59.0	2842	48,700 CUP
Superformance	53.0	2609	42,600 PSI	58.7	2881	59,400 PSI
IMR 4831	54.0	2615	48,100 PSI	57.5C	2781	56,900 PSI
IMR 4350	52.0	2546	45,000 PSI	57.0C	2780	57,100 PSI
StaBALL 6.5	52.5	2659	49,000 PSI	57.0	2855	59,100 PSI
760	52.5	2622	40,700 CUP	56.2	2794	49,200 CUP
H380	49.5	2564	43,400 CUP	53.0	2704	48,400 CUP
BL-C(2)	48.5	2644	44,100 CUP	51.5	2765	48,700 CUP
StaBALL Match	47.0	2557	50,200 PSI	51.2	2740	59,900 PSI
IMR 4064	46.5	2626	52,000 PSI	49.5	2741	58,000 PSI
IMR 4895	46.0	2619	51,600 PSI	49.0	2741	58,100 PSI
Varget	45.0	2551	41,700 CUP	48.0	2694	49,000 CUP
H4895	43.8	2584	44,100 CUP	46.7	2700	49,000 CUP
H335	43.0	2566	46,600 CUP	45.7	2667	49,400 CUP
Bullet: 180 GR. NOS E-TIP			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.340″**
Hunter	52.3	2588	53,500 PSI	58.1C	2821	59,500 PSI
4350	49.9	2425	46,800 PSI	55.5C	2643	52,000 PSI
2700	47.5	2467	53,500 PSI	52.7	2710	59,400 PSI
Big Game	47.1	2464	53,300 PSI	52.3	2701	59,200 PSI
4064	44.9	2453	53,700 PSI	49.9	2697	59,600 PSI
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.300″**
H4831	52.3	2515	48,700 PSI	57.2C	2711	59,400 PSI
IMR 4831	50.3	2445	46,000 PSI	55.0	2689	59,000 PSI
H4350	49.0	2528	50,200 PSI	53.5	2705	59,600 PSI
IMR 4350	48.3	2431	47,400 PSI	52.8	2663	59,900 PSI
Superformance	48.5	2529	49,500 PSI	52.7	2719	59,700 PSI
StaBALL 6.5	48.0	2503	49,100 PSI	52.1	2691	59,500 PSI
H380	46.8	2449	50,400 PSI	51.0	2627	59,400 PSI
760	44.2	2454	51,400 PSI	47.8	2603	59,100 PSI
IMR 4064	42.0	2418	50,200 PSI	45.9	2595	59,200 PSI
StaBALL Match	40.5	2361	50,800 PSI	43.8	2513	59,100 PSI
Varget	40.2	2382	49,200 PSI	43.6	2546	59,600 PSI
Bullet: 190 GR. HDY BTSP			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.220″**
Hunter	52.7	2557	53,700 PSI	58.6C	2782	59,700 PSI
4350	50.2	2404	49,400 PSI	55.7C	2655	54,900 PSI
2700	47.6	2431	53,200 PSI	52.9	2673	59,100 PSI
Big Game	47.5	2463	53,600 PSI	52.8	2689	59,600 PSI
4064	44.5	2427	53,500 PSI	49.5	2649	59,500 PSI
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.220″**
H4831	57.0	2514	44,100 CUP	61.0C	2668	50,000 CUP
IMR 7828	55.0	2429	46,200 PSI	59.8C*	2646	58,700 PSI
IMR 4831	51.0	2445	46,300 PSI	55.0C	2639	57,000 PSI
H4350	51.0	2451	39,500 CUP	56.5	2692	49,200 CUP
StaBALL 6.5	50.6	2536	49,300 PSI	55.2	2747	59,600 PSI
IMR 4350	51.0	2466	47,200 PSI	54.5	2647	58,500 PSI
760	48.0	2398	49,000 CUP	53.0	2640	49,500 CUP
H380	47.0	2369	40,900 CUP	51.5	2555	48,700 CUP
StaBALL Match	42.6	2282	43,900 PSI	48.3	2559	59,600 PSI
IMR 4064	45.0	2485	50,900 PSI	47.7	2593	57,600 PSI
BL-C(2)	43.0	2312	39,200 CUP	47.0	2510	48,600 CUP
Varget	43.5	2450	41,800 CUP	46.5	2608	49,700 CUP
H4895	41.0	2380	41,400 CUP	45.5	2525	48,000 CUP
H335	40.0	2271	40,200 CUP	44.0	2465	48,400 CUP
Bullet: 200 GR. BAR TSX FB			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.218″**
Hunter	50.7	2389	46,300 PSI	56.3C	2585	51,400 PSI
Big Game	48.1	2418	53,400 PSI	53.5	2626	59,300 PSI
2700	46.6	2374	53,600 PSI	51.7C	2589	59,600 PSI
4350	46.3	2283	46,400 PSI	51.4C	2445	51,600 PSI
4064	43.4	2341	53,400 PSI	48.2	2536	59,400 PSI
Bullet: 200 GR. NOS AB			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.300″**
H1000	57.0	2329	35,800 CUP	61.0C	2487	42,200 CUP
Grand	57.0	2361	44,800 PSI	61.0C	2506	51,500 PSI
H4831	55.0	2427	42,100 CUP	59.0C	2586	49,300 CUP
IMR 7828	53.0	2323	45,000 PSI	58.0C*	2559	58,100 PSI
IMR 4831	51.0	2375	46,600 PSI	54.2C	2550	56,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4350	50.0	2364	45,900 PSI	53.5C	2550	57,200 PSI
H4350	50.0	2412	40,400 CUP	53.7	2580	48,400 CUP
StaBALL 6.5	49.2	2458	49,400 PSI	53.5	2653	59,700 PSI
760	48.0	2413	42,900 CUP	51.5	2579	49,400 CUP
H380	45.5	2325	42,300 CUP	48.5	2463	48,800 CUP
Varget	42.0	2337	41,900 CUP	47.0	2505	49,100 CUP
StaBALL Match	42.6	2262	48,000 PSI	46.4	2453	59,700 PSI
IMR 4064	43.0	2292	44,600 PSI	46.0	2469	57,400 PSI
H4895	41.0	2355	43,700 CUP	44.0	2474	49,500 CUP
Bullet: 208 GR. HDY BTHP-M			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.340″**
Hunter	49.6	2381	53,700 PSI	55.1	2601	59,700 PSI
4350	49.2	2237	50,600 PSI	54.7C	2522	56,200 PSI
2700	44.9	2246	53,900 PSI	49.8	2506	59,800 PSI
4064	43.1	2261	53,800 PSI	47.9	2494	59,800 PSI
Bullet: 208 GR. HDY ELD-M			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.285″**
Grand	57.5	2389	47,400 PSI	62.0C	2555	55,600 PSI
H1000	55.4	2405	48,100 PSI	60.5C	2611	58,600 PSI
H4831	52.1	2301	47,100 PSI	58.0C	2511	58,700 PSI
IMR 7828	52.2	2239	43,600 PSI	57.0C	2442	53,100 PSI
IMR 4831	49.9	2291	46,100 PSI	54.9C	2538	59,500 PSI
StaBALL 6.5	49.8	2428	47,700 PSI	54.2	2660	59,100 PSI
IMR 4350	47.9	2259	45,000 PSI	52.7C	2503	58,600 PSI
H4350	47.6	2303	47,600 PSI	52.4	2499	59,600 PSI
760	46.1	2307	49,300 PSI	49.6	2467	58,300 PSI
H380	45.5	2231	45,600 PSI	49.5	2427	57,300 PSI
StaBALL Match	43.8	2268	47,800 PSI	47.8	2464	59,800 PSI
IMR 4064	42.5	2250	47,400 PSI	45.5	2404	57,000 PSI
Varget	40.9	2226	47,900 PSI	45.0	2415	59,200 PSI
H4895	38.9	2203	48,700 PSI	43.2	2362	57,400 PSI
Bullet: 215 GR. BER HYB TGT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 3.340″**
H4831	53.4	2427	44,800 PSI	58.7C	2643	59,300 PSI
IMR 7828 SSC	52.5	2346	43,700 PSI	57.8C	2570	56,300 PSI
4350	53.5	2382	42,800 PSI	57.5C	2579	53,500 PSI
IMR 4350	49.0	2351	43,000 PSI	54.2C	2607	58,700 PSI
IMR 4831	51.3	2384	45,000 PSI	56.3	2591	57,200 PSI
StaBALL 6.5	50.0	2454	45,800 PSI	54.8	2662	58,100 PSI
H4350	49.2	2429	47,600 PSI	54.0	2614	58,900 PSI
Big Game	48.0	2388	48,400 PSI	52.2	2564	58,900 PSI
760	47.0	2379	46,400 PSI	51.1	2595	59,100 PSI
H380	46.7	2328	47,400 PSI	50.9	2527	59,300 PSI
4064	44.3	2317	45,600 PSI	48.5	2525	59,300 PSI
IMR 4064	42.5	2316	46,800 PSI	47.0	2510	59,200 PSI
Varget	41.8	2311	48,300 PSI	46.3	2498	59,100 PSI
Bullet: 225 GR. HDY BTHP			**Dia: .308″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 3.340″**
4350	48.2	2167	51,300 PSI	53.6C	2413	57,000 PSI
Hunter	47.1	2232	53,400 PSI	52.4	2461	59,400 PSI
2700	43.9	2146	54,000 PSI	48.8	2399	60,000 PSI
4064	41.7	2156	53,500 PSI	46.3	2371	59,400 PSI

300 WINCHESTER SHORT MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.090″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 130 GR. HDY SP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.720″**
Superformance	69.0	3256	42,900 PSI	77.0C	3645	62,600 PSI
StaBALL 6.5	69.0	3242	48,000 PSI	74.6	3560	62,700 PSI
H4350	67.0	3237	54,900 PSI	71.0	3393	63,200 PSI
760	66.0	3267	54,500 PSI	70.0	3437	63,700 PSI
H380	66.0	3244	55,700 PSI	69.5	3497	63,300 PSI
Varget	60.0	3269	58,100 PSI	63.5	3388	63,500 PSI
IMR 8208 XBR	56.4	3272	56,600 PSI	60.0	3391	61,900 PSI
H4895	56.0	3213	55,700 PSI	58.5	3318	63,000 PSI
Bullet: 150 GR. NOS E-TIP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.820″**
Hunter	64.5	2992	57,800 PSI	71.7	3254	64,200 PSI
4350	60.8	2827	50,000 PSI	67.6	3075	55,600 PSI
2700	60.0	2927	58,200 PSI	66.7	3211	64,600 PSI
Big Game	59.9	2932	58,200 PSI	66.5	3206	64,600 PSI
4064	54.0	2864	57,900 PSI	60.0	3124	64,400 PSI
Bullet: 150 GR. SPR GSSP			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.780″**
Superformance	67.0	3129	50,000 PSI	74.0	3410	63,500 PSI
StaBALL 6.5	66.5	3060	49,800 PSI	72.5	3357	64,000 PSI
IMR 4350	64.0	3006	50,200 PSI	68.0	3221	62,100 PSI
H4350	63.0	3040	55,700 PSI	67.0	3187	63,200 PSI
760	62.0	3025	53,400 PSI	66.0	3204	63,300 PSI
H380	60.0	2987	54,900 PSI	64.0	3141	63,600 PSI
IMR 4064	57.0	3012	52,100 PSI	61.0	3198	63,300 PSI
IMR 4895	56.0	2980	50,800 PSI	60.5	3176	62,300 PSI
Varget	55.0	3008	56,800 PSI	58.5	3140	63,800 PSI
IMR 8208 XBR	52.6	2992	55,800 PSI	56.0	3115	62,300 PSI
H4895	51.0	2919	53,400 PSI	54.5	3078	63,100 PSI
Bullet: 155 GR. BER VLD			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.860″**
Hunter	66.5	3032	58,300 PSI	73.9	3298	64,800 PSI
2700	64.8	2987	59,100 PSI	70.5	3255	64,200 PSI
Big Game	63.7	3011	59,600 PSI	69.2	3241	64,800 PSI
4064	59.1	2947	59,700 PSI	64.3	3197	64,900 PSI
Bullet: 165 GR. HDY GMX			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.840″**
Hunter	63.3	2862	57,300 PSI	70.3	3090	63,700 PSI
Superformance	64.0	2952	51,600 PSI	69.0C	3169	62,700 PSI
StaBALL 6.5	62.0	2871	48,500 PSI	67.4	3135	63,300 PSI
4350	60.0	2753	54,500 PSI	66.7	3005	60,500 PSI
Big Game	58.2	2814	58,500 PSI	64.7	3040	64,900 PSI
2700	58.9	2855	60,400 PSI	63.3	3046	64,900 PSI
760	58.0	2860	53,400 PSI	62.5	3043	62,900 PSI
H4350	58.0	2821	52,400 PSI	62.0C	2986	61,300 PSI
H380	57.0	2800	52,500 PSI	61.8	2993	62,300 PSI
4064	52.4	2750	59,700 PSI	57.0	2942	64,900 PSI
Varget	51.0	2810	56,700 PSI	54.5	2948	63,600 PSI
IMR 8208 XBR	48.0	2743	55,600 PSI	52.0	2887	63,300 PSI
H4895	47.0	2700	51,900 PSI	51.0	2887	63,300 PSI
Bullet: 165 GR. NOS PART			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.860″**
Superformance	65.0	2987	47,800 PSI	72.0	3273	63,500 PSI
StaBALL 6.5	65.0	2940	49,400 PSI	70.2	3187	62,300 PSI
Hunter	62.1	2810	57,500 PSI	69.0	3122	63,900 PSI
H4350	61.0	2898	54,800 PSI	65.5	3047	63,600 PSI
760	61.0	2915	54,200 PSI	65.0	3069	63,200 PSI
H380	59.0	2854	55,100 PSI	63.0	3012	63,600 PSI
Varget	54.0	2859	56,400 PSI	57.5	2987	63,700 PSI
IMR 8208 XBR	51.1	2849	55,600 PSI	54.4	2963	61,700 PSI
H4895	51.0	2810	55,700 PSI	54.0	2929	63,200 PSI
Bullet: 167 GR. LAP SCENAR			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.840″**
4350	63.5	2811	53,400 PSI	69.0	3035	58,000 PSI
Hunter	62.9	2902	59,200 PSI	68.3	3091	64,300 PSI
2700	61.0	2882	59,700 PSI	66.3	3092	64,900 PSI
Big Game	59.8	2879	60,000 PSI	64.6	3064	64,900 PSI
4064	55.1	2811	59,700 PSI	59.9	3015	64,800 PSI
Bullet: 175 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.860″**
H4831	66.0	2848	55,300 PSI	70.0C	2980	63,100 PSI
StaBALL 6.5	63.0	2802	46,300 PSI	68.3	3097	62,700 PSI
Hunter	60.3	2775	57,900 PSI	67.0	3075	64,400 PSI
H4350	61.0	2839	53,300 PSI	65.0	3009	63,400 PSI
760	61.0	2868	53,900 PSI	65.0	3032	63,200 PSI
H380	60.0	2859	57,600 PSI	63.0	2954	63,200 PSI
Bullet: 180 GR. SFT SCIR			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 2.860″**
H4831	65.5	2775	52,000 PSI	70.0C	2929	64,000 PSI
IMR 7828	65.0	2783	54,400 PSI	69.5C*	2943	62,600 PSI
StaBALL 6.5	61.5	2720	46,200 PSI	68.0	3019	61,600 PSI
IMR 4831	62.0	2797	52,700 PSI	66.3C	2980	62,900 PSI
IMR 4350	61.0	2808	52,800 PSI	65.0C	2991	63,700 PSI
H4350	60.0	2799	55,700 PSI	64.0	2950	63,900 PSI
760	59.0	2801	54,100 PSI	62.5	2959	63,000 PSI
H380	57.0	2718	53,700 PSI	61.0	2884	63,400 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 180 GR. SIE SBT	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.800″**
Magpro	68.3	2733	53,900 PSI	76.0	3028	60,000 PSI
4350	60.3	2722	55,200 PSI	67.0	3024	61,300 PSI
2700	58.5	2683	55,000 PSI	65.0	2981	61,100 PSI
Bullet: 200 GR. NOS PART	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.800″**
4350	56.7	2540	54,700 PSI	63.0	2822	60,800 PSI
2700	55.8	2514	54,500 PSI	62.0	2793	60,600 PSI
Bullet: 200 GR. SFT AF	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.790″**
H1000	70.0	2660	51,600 PSI	72.0C	2737	57,200 PSI
IMR 7828	63.0	2580	50,000 PSI	67.5C*	2793	63,100 PSI
H4831	63.0	2678	56,000 PSI	66.5C	2802	63,700 PSI
IMR 4831	59.0	2565	49,200 PSI	63.7C	2780	62,200 PSI
IMR 4350	59.0	2643	52,900 PSI	63.5C	2827	63,700 PSI
StaBALL 6.5	58.7	2523	45,800 PSI	65.2	2847	61,700 PSI
H4350	58.0	2666	55,000 PSI	62.0	2792	63,200 PSI
760	58.0	2678	55,700 PSI	61.0	2803	63,200 PSI
Bullet: 208 GR. HDY ELD-M	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.900″**
H1000	62.0	2420	42,900 PSI	69.0C	2670	55,900 PSI
IMR 7828	62.0	2556	48,000 PSI	66.8C	2761	58,400 PSI
H4831	61.8	2624	54,800 PSI	66.5C	2761	62,500 PSI
IMR 4831	59.0	2594	51,500 PSI	63.5C	2785	62,600 PSI
IMR 4350	57.7	2593	52,000 PSI	62.0C	2773	62,900 PSI
StaBALL 6.5	58.0	2506	45,400 PSI	64.5	2818	62,700 PSI
H4350	56.4	2612	55,400 PSI	60.7	2748	62,800 PSI
760	55.6	2567	52,500 PSI	59.8	2732	62,100 PSI
Bullet: 210 GR. BER VLD-H	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.860″**
Hunter	59.5	2610	59,100 PSI	65.4	2787	65,000 PSI
4064	52.3	2496	59,000 PSI	57.5	2694	64,800 PSI
Bullet: 210 GR. NOS ABLR	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.860″**
H1000	64.0	2513	46,300 PSI	68.0C	2668	54,100 PSI
H4831	58.3	2486	48,200 PSI	66.3C	2774	63,100 PSI
IMR 7828 SSC	58.6	2467	47,800 PSI	65.9C	2763	63,200 PSI
StaBALL 6.5	57.0	2482	45,000 PSI	63.5	2792	62,200 PSI
H4350	51.0	2360	42,900 PSI	60.5	2734	61,700 PSI
Bullet: 212 GR. HDY ELD-X	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.860″**
H1000	63.0	2478	46,100 PSI	67.0C	2636	54,500 PSI
H4831	57.5	2453	45,900 PSI	66.0C	2771	63,700 PSI
IMR 7828 SSC	58.4	2402	44,300 PSI	65.9C	2747	63,000 PSI
Hunter	56.5	2448	47,500 PSI	64.7	2733	62,000 PSI
StaBALL 6.5	58.0	2489	45,500 PSI	64.0	2783	63,000 PSI
Big Game	53.0	2399	46,600 PSI	61.0	2700	63,200 PSI
H4350	52.0	2379	43,300 PSI	60.8	2721	63,300 PSI
Bullet: 220 GR. HDY ELD-X	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.860″**
H1000	60.8	2406	46,200 PSI	67.5C	2655	60,300 PSI
H4831	56.5	2417	49,300 PSI	63.5C	2653	61,200 PSI
StaBALL 6.5	55.3	2431	50,100 PSI	61.5	2672	63,100 PSI
H4350	52.2	2445	53,500 PSI	58.7	2634	63,800 PSI
Bullet: 220 GR. NOS PART	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 2.815″**
Magpro	67.6	2481	54,500 PSI	73.4	2702	59,300 PSI
4350	59.3	2442	53,800 PSI	65.2	2624	59,200 PSI
Hunter	58.5	2492	59,100 PSI	64.3	2672	65,000 PSI
5744	33.0	2038	47,400 PSI	42.8	2467	61,500 PSI

300 WINCHESTER MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.610″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 150 GR. BAR TTSX-BT	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 3.325″**
Grand	79.0	3092	48,600 PSI	84.0C	3294	57,900 PSI
IMR 7828 SSC	78.0	3120	51,100 PSI	83.0C*	3321	60,000 PSI
H4831	75.0	2985	46,300 PSI	80.0C	3182	50,100 PSI
IMR 4831	71.0	3027	47,700 PSI	76.0C	3278	58,800 PSI
IMR 4350	70.0	3078	49,000 PSI	75.0C	3347	61,300 PSI
H4350	69.0	3062	49,600 PSI	74.0C	3289	60,600 PSI
760	65.0	3053	51,200 PSI	69.7	3231	59,600 PSI
H380	65.0	3030	51,600 PSI	69.0	3166	57,400 PSI
IMR 4895	61.0	3018	49,600 PSI	66.3	3249	60,800 PSI
IMR 4064	60.0	2969	47,300 PSI	65.5	3239	60,500 PSI
IMR 8208 XBR	57.0	2925	47,900 PSI	64.0	3183	61,100 PSI
H4895	57.0	3006	52,000 PSI	63.0	3186	59,900 PSI
Bullet: 150 GR. HDY SST	**Dia: .308″**					
Case: Winchester	**Primer: Federal 215, LRM**					**Col: 3.340″**
Magnum	80.6	3017	57,000 PSI	89.6	3369	63,400 PSI
Magpro	79.6	3065	56,500 PSI	88.5	3372	62,800 PSI
Hunter	69.9	3118	57,600 PSI	77.7	3408	64,000 PSI
4350	69.5	2987	57,400 PSI	77.2	3368	63,800 PSI
2700	65.3	3023	57,400 PSI	72.5	3311	63,700 PSI
Bullet: 165 GR. NOS AB	**Dia: .308″**					
Case: Winchester	**Primer: Federal 215, LRM**					**Col: 3.340″**
Magnum	78.2	2860	56,400 PSI	86.8	3195	62,600 PSI
Magpro	77.5	2936	56,700 PSI	86.1	3222	63,000 PSI
Hunter	69.9	2987	57,600 PSI	77.6	3262	63,900 PSI
4350	66.2	2830	56,900 PSI	73.6	3197	63,300 PSI
2700	62.1	2873	57,200 PSI	69.0	3140	63,600 PSI
Bullet: 165 GR. SPR SP	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 3.340″**
H1000	79.0	2957	44,600 CUP	84.0	3117	51,300 CUP
Grand	75.7	2877	45,000 PSI	82.3C	3217	63,900 PSI
IMR 7828	74.0	2884	49,500 PSI	79.5C	3127	60,600 PSI
H4831	72.0	2934	47,600 CUP	75.5	3055	52,200 CUP
IMR 4831	70.0	2878	49,800 PSI	75.2C	3142	62,900 PSI
IMR 4350	68.0	2875	50,000 PSI	73.3	3142	63,100 PSI
H4350	66.0	2910	46,900 CUP	70.0	3042	51,900 CUP
760	61.0	2853	48,500 CUP	65.0	2968	52,900 CUP
H380	59.0	2754	44,500 CUP	63.0	2909	52,400 CUP
H4895	55.0	2839	46,700 CUP	59.0	2977	52,500 CUP
Varget	54.0	2799	43,900 CUP	58.5	2975	52,900 CUP
Bullet: 168 GR. HDY BTHP	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 3.340″**
H1000	79.0	2938	44,900 CUP	84.0	3110	51,000 CUP
IMR 7828	75.0	2888	50,900 PSI	80.0C	3129	62,300 PSI
IMR 4831	70.0	2854	50,500 PSI	75.5C	3115	62,700 PSI
H4831	72.0	2876	45,100 CUP	75.5	3023	51,400 CUP
IMR 4350	68.0	2883	50,900 PSI	72.5	3089	61,300 PSI
H4350	66.0	2900	45,500 CUP	70.0	3034	51,000 CUP
760	64.0	2873	45,400 CUP	68.0	3014	51,700 CUP
H380	59.0	2738	44,200 CUP	63.0	2903	52,700 CUP
H4895	55.0	2843	47,800 CUP	59.0	2977	52,900 CUP
Varget	54.0	2795	44,300 CUP	58.2	2964	52,900 CUP
Bullet: 168 GR. SIE HPBT	**Dia: .308″**					
Case: Winchester	**Primer: Federal 215, LRM**					**Col: 3.340″**
Magnum	79.0	2882	57,300 PSI	87.8	3180	63,700 PSI
Magpro	75.2	2842	57,500 PSI	83.6	3146	63,900 PSI
4350	67.4	2788	56,700 PSI	74.8	3137	62,900 PSI
Hunter	64.7	2874	57,400 PSI	71.9	3136	63,800 PSI
2700	62.2	2790	56,800 PSI	69.1	3067	63,100 PSI
Bullet: 180 GR. NOS E-TIP	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 3.340″**
Grand	73.5	2860	51,500 PSI	79.8C	3097	63,600 PSI
H1000	74.6	2821	53,300 PSI	79.4C	2984	62,400 PSI
IMR 7828	68.4	2811	52,700 PSI	73.5C	2995	61,600 PSI
H4831	66.8	2770	53,300 PSI	71.8C	2938	61,900 PSI
IMR 4831	67.3	2817	54,500 PSI	70.2C	2916	59,700 PSI
IMR 4350	64.7	2797	53,200 PSI	68.1	2932	60,500 PSI
H4350	62.1	2730	52,300 PSI	66.8	2916	62,600 PSI
760	60.0	2760	56,000 PSI	62.8	2849	60,600 PSI
Case: Winchester	**Primer: Federal 215, LRM**					**Col: 3.340″**
Magnum	75.4	2712	55,200 PSI	83.8	3025	61,300 PSI
Magpro	74.6	2803	55,700 PSI	82.8	3046	61,800 PSI
Hunter	64.1	2791	57,100 PSI	71.2	2998	63,500 PSI
Bullet: 190 GR. HDY CX	**Dia: .308″**					
Case: Winchester	**Primer: Winchester LRM**					**Col: 3.490″**
StaBALL HD	73.5	2732	51,500 PSI	80.0C	2940	61,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Retumbo	72.0	2741	51,500 PSI	78.5C	2976	62,600 PSI
H1000	69.5	2737	51,900 PSI	75.2	2951	62,300 PSI
IMR 7828 SSC	66.7	2748	53,400 PSI	72.5C	2969	63,200 PSI
H4831	65.7	2744	54,100 PSI	71.3C	2926	63,100 PSI
H4350	60.0	2719	54,900 PSI	65.1	2866	62,000 PSI
Bullet: 200 GR. NOS PART			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	83.0	2657	49,200 PSI	85.0	2712	51,800 PSI
Retumbo	79.0	2798	45,700 CUP	84.0C	2962	52,300 CUP
StaBALL HD	73.5	2637	47,700 PSI	81.7	2895	61,000 PSI
H1000	74.0	2725	45,500 CUP	79.0C	2883	52,800 CUP
Grand	71.0	2707	50,600 PSI	78.0C	2944	63,400 PSI
IMR 7828	71.0	2645	48,200 PSI	76.0C	2851	58,400 PSI
IMR 4831	69.0	2694	51,900 PSI	72.5C	2859	60,900 PSI
H4831	67.0	2686	47,000 CUP	72.0C	2825	53,100 CUP
IMR 4350	65.0	2700	53,900 PSI	69.5	2860	62,600 PSI
H4350	63.0	2646	47,800 CUP	66.0	2753	51,700 CUP
Case: Winchester			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	76.0	2724	56,900 PSI	84.4	3011	63,200 PSI
Magpro	75.2	2799	57,300 PSI	83.6	3029	63,700 PSI
Hunter	63.8	2649	57,100 PSI	70.9	2871	63,500 PSI
Bullet: 208 GR. HDY ELD-M			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.420″**
StaBALL HD	78.3	2621	48,400 PSI	81.1C	2866	62,600 PSI
Retumbo	74.5	2717	50,300 PSI	81.0C	2915	61,300 PSI
H1000	71.7	2650	47,800 PSI	78.0C	2869	60,200 PSI
Grand	71.0	2621	47,400 PSI	77.5C	2891	62,900 PSI
IMR 7828	68.0	2635	47,400 PSI	74.0C	2899	62,000 PSI
H4831	66.5	2671	53,200 PSI	72.3	2838	62,000 PSI
IMR 4831	63.7	2613	48,600 PSI	69.2	2832	60,500 PSI
H4350	60.4	2655	53,600 PSI	65.7	2813	62,000 PSI
Bullet: 210 GR. BER VLD			**Dia: .308″**			
Case: Winchester			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	74.7	2646	56,100 PSI	83.0	2951	62,300 PSI
Magpro	74.0	2702	55,600 PSI	82.2	2957	61,800 PSI
Hunter	62.7	2607	57,500 PSI	69.7	2828	63,900 PSI
Bullet: 220 GR. SIE HPBT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.340″**
Retumbo	73.0	2620	49,000 PSI	80.0C	2870	62,800 PSI
StaBALL HD	71.0	2547	47,800 PSI	78.4C	2807	62,500 PSI
H1000	70.2	2614	49,500 PSI	77.7C	2876	63,200 PSI
Grand	70.0	2568	49,300 PSI	75.7	2790	62,100 PSI
IMR 7828 SSC	66.5	2580	49,600 PSI	73.2	2823	62,800 PSI
H4831	65.7	2616	52,200 PSI	72.2	2821	63,000 PSI
IMR 4831	63.6	2576	51,100 PSI	70.2	2806	63,200 PSI
Case: Winchester			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	72.8	2580	57,100 PSI	80.9	2868	63,400 PSI
Magpro	72.1	2637	57,100 PSI	80.1	2875	63,400 PSI
Hunter	60.3	2504	57,200 PSI	67.0	2715	63,600 PSI
Bullet: 230 GR. BER TACT			**Dia: .308″**			
Case: Winchester			**Primer: Winchester LRM**			**Col: 3.395″**
US 869	77.7	2423	41,700 PSI	83.5C	2610	50,200 PSI
StaBALL HD	71.2	2504	48,900 PSI	78.2	2739	62,900 PSI
Retumbo	71.6	2520	44,700 PSI	77.0C	2714	55,200 PSI
Grand	69.0	2487	47,300 PSI	76.8C	2755	62,100 PSI
H1000	69.1	2471	44,200 PSI	76.0C	2721	58,200 PSI
IMR 7828	66.7	2507	46,200 PSI	72.6C	2774	61,300 PSI
H4831	64.1	2527	50,800 PSI	70.3	2710	61,200 PSI
IMR 4831	62.9	2553	51,500 PSI	68.7	2739	61,600 PSI

300 PRC

Barrel: 24″ Twist: 1:8.5″ Trim: 2.580″

Bullet: 150 GR. SFT SCIR			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.515″**
StaBALL HD	82.0	3056	49,400 PSI	90.3	3327	62,700 PSI
H1000	81.4	3060	47,000 PSI	89.5C	3354	62,500 PSI
Grand	81.0	3209	50,500 PSI	86.7	3446	63,300 PSI
H4831	76.8	3064	50,200 PSI	83.0	3306	62,900 PSI
IMR 7828 SSC	74.5	3016	47,800 PSI	81.4	3304	62,400 PSI
Bullet: 168 GR. HDY ELD-M			**Dia: .308″**			
Case: Hornady			**Primer: Federal 215M, LRM Match**			**Col: 3.390″**
Magnum	80.1	2962	57,500 PSI	89.0	3277	63,900 PSI
Magpro	75.9	2893	57,900 PSI	84.4	3206	64,300 PSI
Hunter	64.3	2862	57,500 PSI	71.4	3113	63,900 PSI
5744	45.6	2761	54,300 PSI	52.5	3046	62,600 PSI
Bullet: 168 GR. SIE TMK			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.500″**
StaBALL HD	81.5	2962	48,200 PSI	88.8	3232	62,900 PSI
Retumbo	81.2	2949	46,800 PSI	87.8C	3223	63,000 PSI
H1000	80.9	2973	49,100 PSI	87.0C	3205	62,800 PSI
Grand	81.0	3076	49,900 PSI	86.2	3286	63,100 PSI
IMR 7828 SSC	78.6	3020	53,300 PSI	82.4	3192	62,500 PSI
Bullet: 175 GR. BAR LRX BT			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.425″**
StaBALL HD	79.5	2938	50,600 PSI	87.2C	3179	63,200 PSI
Grand	79.0	3036	50,100 PSI	86.0C	3267	62,700 PSI
H1000	79.2	2927	50,900 PSI	85.5C	3142	62,700 PSI
Retumbo	78.5	2957	50,600 PSI	83.6C	3156	62,700 PSI
IMR 7828 SSC	73.4	2839	47,800 PSI	79.4C	3122	62,400 PSI
H4831	71.5	2863	51,100 PSI	77.3	3054	62,100 PSI
Superformance	68.7	2928	53,000 PSI	72.0	3072	61,400 PSI
Bullet: 180 GR. NOS E-TIP			**Dia: .308″**			
Case: Hornady			**Primer: Federal 215M, LRM Match**			**Col: 3.650″**
LRT	83.9	2904	57,400 PSI	93.3	3190	63,800 PSI
Magnum	73.7	2784	57,300 PSI	81.9	3070	63,600 PSI
Magpro	71.5	2785	57,400 PSI	79.5	3041	63,800 PSI
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
Grand	75.0	2927	50,200 PSI	81.7	3148	62,900 PSI
StaBALL HD	73.5	2771	50,200 PSI	81.6	3055	63,400 PSI
H1000	75.1	2833	51,600 PSI	80.8	3035	62,400 PSI
Retumbo	73.7	2826	50,200 PSI	79.3	3042	62,600 PSI
IMR 7828 SSC	70.2	2783	51,900 PSI	75.7	2997	62,400 PSI
Bullet: 190 GR. BER VLD			**Dia: .308″**			
Case: Hornady			**Primer: Federal 215M, LRM Match**			**Col: 3.575″**
LRT	86.1	2899	56,500 PSI	95.6	3169	62,700 PSI
Magnum	75.8	2807	57,300 PSI	84.2	3076	63,700 PSI
Magpro	73.0	2772	57,500 PSI	81.1	3047	63,900 PSI
Bullet: 190 GR. NOS ABLR			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
StaBALL HD	76.0	2771	47,400 PSI	84.0	3050	62,900 PSI
Grand	78.2	2926	50,000 PSI	83.5	3127	62,900 PSI
Retumbo	78.2	2820	48,300 PSI	83.2	3043	62,700 PSI
H1000	76.9	2786	47,500 PSI	83.1	3033	62,400 PSI
IMR 7828 SSC	73.4	2797	49,500 PSI	79.4	3037	63,200 PSI
H4831	71.6	2779	49,400 PSI	77.4	2990	62,100 PSI
Bullet: 200 GR. SFT AF			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.450″**
StaBALL HD	75.5	2650	45,600 PSI	82.2	2920	62,600 PSI
Grand	75.3	2780	49,300 PSI	81.0	3006	63,000 PSI
H1000	75.2	2694	49,900 PSI	80.9	2908	62,800 PSI
Retumbo	74.2	2643	45,600 PSI	80.6	2916	62,000 PSI
IMR 7828 SSC	71.7	2651	49,900 PSI	77.1	2879	62,600 PSI
H4831	70.1	2706	55,100 PSI	74.6	2839	62,200 PSI
Bullet: 210 GR. NOS ABLR			**Dia: .308″**			
Case: Hornady			**Primer: Federal 215M, LRM Match**			**Col: 3.650″**
LRT	80.4	2726	58,200 PSI	89.4	2999	64,700 PSI
Magnum	72.4	2649	57,500 PSI	80.4	2902	63,900 PSI
Bullet: 212 GR. HDY ELD-X			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
StaBALL HD	74.5	2652	48,300 PSI	81.1	2898	63,100 PSI
H1000	74.2	2686	51,400 PSI	79.4	2861	62,900 PSI
Grand	74.0	2739	50,000 PSI	79.2	2945	63,000 PSI
Retumbo	74.3	2666	47,100 PSI	78.3	2873	62,500 PSI
IMR 7828 SSC	70.1	2655	50,300 PSI	75.4	2870	63,700 PSI
Bullet: 215 GR. BER HYB TGT			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
StaBALL HD	75.5	2678	48,800 PSI	82.0	2898	62,800 PSI
Retumbo	74.6	2607	46,000 PSI	80.6	2871	63,100 PSI
Grand	74.8	2733	49,700 PSI	80.5	2953	62,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H1000	74.0	2652	49,800 PSI	79.2	2868	63,000 PSI
IMR 7828 SSC	67.0	2590	50,600 PSI	73.0	2802	62,500 PSI
Bullet: 220 GR. HDY ELD-X			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
StaBALL HD	73.0	2615	49,200 PSI	80.2	2849	63,100 PSI
H1000	72.2	2626	50,600 PSI	78.0	2812	62,300 PSI
Grand	71.5	2667	50,000 PSI	77.6	2872	62,800 PSI
Retumbo	70.7	2590	48,100 PSI	76.4	2803	62,800 PSI
IMR 7828 SSC	67.6	2602	52,300 PSI	73.0	2778	62,800 PSI
Bullet: 230 GR. BER TACT			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.575″**
StaBALL HD	71.4	2538	48,600 PSI	78.7	2784	62,300 PSI
Grand	71.2	2611	51,400 PSI	77.2	2823	62,800 PSI
Retumbo	71.5	2558	51,400 PSI	76.1	2733	62,900 PSI
H1000	70.4	2547	52,600 PSI	75.7	2721	63,000 PSI
IMR 7828 SSC	63.4	2475	52,300 PSI	68.2	2645	63,300 PSI
Bullet: 250 GR. HDY A-TIP			**Dia: .308″**			
Case: Hornady			**Primer: Winchester LRM**			**Col: 3.685″**
US 869	79.8	2514	50,700 PSI	86.8C	2728	63,300 PSI
StaBALL HD	70.0	2453	47,800 PSI	77.2	2691	63,000 PSI
Grand	70.0	2488	49,500 PSI	76.0	2698	62,900 PSI
Retumbo	70.3	2474	52,400 PSI	74.8	2641	63,900 PSI
H1000	67.4	2451	52,400 PSI	73.5	2616	62,900 PSI
IMR 7828 SSC	65.1	2438	52,500 PSI	71.6	2633	63,900 PSI

30 NOSLER

Barrel: 24″ Twist: 1:10″ Trim: 2.556″

Bullet: 150 GR. NOS AB			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	83.2	3066	58,400 PSI	92.4	3396	64,900 PSI
Magpro	81.2	3085	58,000 PSI	90.2	3402	64,500 PSI
Bullet: 150 GR. SIE SPBT			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
StaBALL HD	83.0	3067	48,800 PSI	92.0	3367	63,600 PSI
Grand	82.0	3161	46,200 PSI	91.0	3431	61,800 PSI
H1000	80.4	3102	51,600 PSI	88.2	3343	63,500 PSI
Retumbo	80.3	3054	47,800 PSI	88.2	3336	62,000 PSI
H4831	75.5	3046	50,400 PSI	83.0	3307	63,600 PSI
IMR 7828	75.0	3092	51,000 PSI	82.4	3370	63,500 PSI
Bullet: 165 GR. HDY SST			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.275″**
Magnum	81.6	2957	58,500 PSI	90.7	3286	65,000 PSI
Magpro	78.1	2926	58,400 PSI	86.8	3245	64,900 PSI
Bullet: 165 GR. SFT AF			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	87.8	2851	46,700 PSI	96.5C	3203	63,300 PSI
Retumbo	79.1	2927	47,200 PSI	86.9C	3236	63,500 PSI
StaBALL HD	79.5	2901	47,000 PSI	88.4	3207	62,300 PSI
Grand	78.5	2987	47,100 PSI	86.8	3289	62,800 PSI
H1000	79.0	2925	48,800 PSI	86.8	3216	63,300 PSI
IMR 7828	74.0	2955	50,300 PSI	81.0	3243	63,600 PSI
H4831	73.0	2912	50,900 PSI	80.3	3160	63,100 PSI
Bullet: 168 GR. BAR TTSX-BT			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	80.2	2901	57,600 PSI	89.1	3220	64,000 PSI
Magpro	77.7	2935	58,400 PSI	86.3	3234	64,900 PSI
Bullet: 168 GR. NOS E-TIP			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	86.1	2850	50,100 PSI	94.6C	3156	63,500 PSI
StaBALL HD	79.5	2875	48,100 PSI	87.5	3185	63,300 PSI
Grand	77.5	3006	49,500 PSI	85.8	3269	62,500 PSI
H1000	75.3	2926	53,000 PSI	82.8	3142	63,200 PSI
Retumbo	74.6	2859	48,200 PSI	82.0	3160	63,800 PSI
H4831	68.3	2827	51,900 PSI	75.0	3070	63,400 PSI
IMR 7828	66.4	2770	47,400 PSI	73.0	3099	62,400 PSI
Bullet: 180 GR. BAR TTSX-BT			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	79.1	2823	58,400 PSI	87.9	3138	64,900 PSI
Magpro	76.6	2851	58,400 PSI	85.1	3140	64,800 PSI
Bullet: 180 GR. SIE SPBT			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	86.0	2825	49,400 PSI	94.5C	3105	62,800 PSI
StaBALL HD	79.5	2848	47,100 PSI	88.0	3148	63,500 PSI
Grand	77.0	2894	47,100 PSI	85.5	3193	62,300 PSI
Retumbo	76.0	2853	49,200 PSI	83.0	3099	62,800 PSI
H1000	75.0	2842	49,900 PSI	82.5	3090	63,000 PSI
IMR 7828	71.5	2886	52,000 PSI	78.5	3112	63,000 PSI
H4831	71.1	2854	52,400 PSI	78.1	3059	62,400 PSI
Bullet: 190 GR. NOS ABLR			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	87.3	2756	47,200 PSI	96.0C	3005	58,300 PSI
Magnum	82.5	2871	49,900 PSI	90.6C	3148	64,800 PSI
StaBALL HD	80.5	2853	49,700 PSI	88.5C	3133	65,000 PSI
Retumbo	80.5	2878	50,200 PSI	88.5C	3151	65,000 PSI
Magpro	78.2	2868	51,500 PSI	86.0	3140	64,800 PSI
H1000	77.3	2833	49,700 PSI	85.0C	3104	64,900 PSI
IMR 7828 SSC	71.4	2760	48,600 PSI	78.5	3058	65,000 PSI
H4831	70.6	2846	52,500 PSI	77.6	3054	64,700 PSI
IMR 4831	68.2	2753	48,700 PSI	75.0	3022	64,900 PSI
Bullet: 200 GR. BAR LRX BT			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	81.4	2686	50,800 PSI	89.5	2943	63,600 PSI
StaBALL HD	73.0	2705	52,700 PSI	81.2	2915	63,000 PSI
Grand	72.5	2733	48,700 PSI	80.6C	2991	62,200 PSI
Retumbo	69.8	2735	54,600 PSI	76.8	2906	63,000 PSI
H1000	69.5	2686	52,700 PSI	76.4	2890	63,200 PSI
IMR 7828	66.1	2680	52,800 PSI	72.7	2896	63,700 PSI
H4831	66.0	2685	55,300 PSI	71.0	2833	63,300 PSI
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
Magnum	75.1	2686	58,500 PSI	83.5	2954	65,000 PSI
Magpro	72.5	2690	58,300 PSI	80.5	2944	64,800 PSI
Bullet: 210 GR. BER VLD			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
LRT	84.3	2760	58,500 PSI	93.7	3043	65,000 PSI
Magnum	74.3	2641	58,500 PSI	82.5	2922	65,000 PSI
Magpro	73.2	2680	58,400 PSI	81.3	2944	64,900 PSI
Bullet: 210 GR. NOS ABLR			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	83.4	2621	47,400 PSI	91.7C	2885	60,100 PSI
StaBALL HD	76.0	2665	48,900 PSI	84.3	2934	63,500 PSI
Grand	75.2	2732	48,300 PSI	83.5C	2995	62,900 PSI
Retumbo	73.1	2685	51,700 PSI	80.3	2909	63,500 PSI
H1000	66.2	2479	42,900 PSI	78.7	2864	62,500 PSI
IMR 7828	67.9	2645	50,900 PSI	74.6	2883	63,400 PSI
Bullet: 220 GR. HDY ELD-X			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
LRT	83.2	2687	50,200 PSI	92.5C	2924	61,600 PSI
US 869	82.3	2596	49,200 PSI	90.5	2855	62,600 PSI
Magnum	74.7	2589	50,000 PSI	83.0	2867	63,700 PSI
Grand	73.8	2627	46,900 PSI	81.8	2905	62,800 PSI
StaBALL HD	73.0	2565	48,000 PSI	81.4	2832	63,000 PSI
Magpro	72.5	2608	50,500 PSI	80.5	2863	63,200 PSI
Retumbo	70.7	2618	52,600 PSI	77.7C	2809	62,900 PSI
H1000	70.1	2618	54,000 PSI	77.1	2795	63,800 PSI
IMR 7828	65.8	2582	52,100 PSI	72.3	2788	63,900 PSI
Bullet: 225 GR. HDY BTHP			**Dia: .308″**			
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
LRT	83.2	2679	58,300 PSI	92.4	2954	64,700 PSI
Magnum	72.5	2584	58,400 PSI	80.6	2824	64,900 PSI
Magpro	71.0	2609	58,300 PSI	78.9	2832	64,800 PSI
Bullet: 230 GR. BER TACT			**Dia: .308″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
US 869	82.8	2581	48,600 PSI	90.0C	2812	60,800 PSI
StaBALL HD	72.8	2524	48,300 PSI	81.2	2789	63,200 PSI
Grand	72.5	2564	46,200 PSI	80.6	2846	63,100 PSI
Retumbo	71.5	2508	45,400 PSI	78.6	2784	62,300 PSI
H1000	70.1	2539	49,900 PSI	77.0	2748	62,500 PSI
IMR 7828	66.4	2552	50,900 PSI	73.0	2761	63,200 PSI
Case: Nosler			**Primer: Federal 215, LRM**			**Col: 3.340″**
LRT	82.3	2653	58,500 PSI	91.5	2919	65,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Magnum	72.5	2569	58,400 PSI	80.5	2805	64,900 PSI
Magpro	70.8	2586	58,500 PSI	78.7	2809	65,000 PSI

300 NORMA MAGNUM

Barrel: 24″ Twist: 1:8″ Trim: 2.482″

Bullet: 208 GR. BAR LRX BT Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.640″**

US 869	85.5	2643	44,100 PSI	95.0	2929	58,100 PSI
LRT	77.1	2680	45,800 PSI	85.6	2948	60,300 PSI
H50BMG	78.4	2635	54,800 PSI	82.5	2741	60,000 PSI
StaBALL HD	75.5	2642	51,900 PSI	79.5	2766	59,100 PSI
Retumbo	72.5	2648	52,400 PSI	76.3	2766	59,300 PSI
H1000	71.4	2641	52,200 PSI	75.2	2763	59,000 PSI

Bullet: 210 GR. NOS ABLR Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.500″**

US 869	86.9	2702	44,500 PSI	96.6	3001	59,000 PSI
LRT	80.3	2647	46,000 PSI	89.3	2961	60,200 PSI
H50BMG	82.8	2675	53,600 PSI	87.2	2805	59,300 PSI
StaBALL HD	78.3	2730	53,400 PSI	82.4	2861	60,000 PSI
Retumbo	74.7	2735	54,800 PSI	78.7	2849	60,900 PSI
H1000	74.4	2717	53,900 PSI	78.3	2832	59,500 PSI

Bullet: 220 GR. HDY ELD-X Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.500″**

US 869	86.1	2641	44,000 PSI	95.6	2937	58,500 PSI
H50BMG	82.9	2661	54,000 PSI	87.3	2784	59,500 PSI
LRT	76.7	2534	44,400 PSI	85.2	2822	59,900 PSI
StaBALL HD	78.9	2670	53,400 PSI	83.1	2801	60,200 PSI
Retumbo	77.2	2711	54,100 PSI	81.3	2839	60,000 PSI
H1000	74.4	2698	55,000 PSI	78.3	2812	60,700 PSI

Bullet: 230 GR. BER OTM Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.450″**

US 869	85.4	2600	42,900 PSI	94.9	2885	58,000 PSI
H50BMG	79.0	2488	47,000 PSI	87.7	2747	59,300 PSI
LRT	78.0	2521	44,000 PSI	86.7	2813	59,200 PSI
StaBALL HD	78.9	2627	52,900 PSI	83.1	2762	60,100 PSI
Retumbo	76.3	2628	53,100 PSI	80.3	2754	59,000 PSI
H1000	73.4	2626	54,200 PSI	77.2	2735	59,800 PSI

Bullet: 245 GR. BER EOL Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.630″**

US 869	83.4	2475	42,800 PSI	92.7	2800	59,000 PSI
H50BMG	77.2	2420	48,000 PSI	85.8	2674	60,700 PSI
LRT	76.8	2459	46,700 PSI	85.4	2726	60,000 PSI
StaBALL HD	78.0	2565	54,100 PSI	82.1	2683	60,300 PSI
Retumbo	74.0	2530	52,900 PSI	77.9	2649	59,500 PSI
H1000	71.3	2524	54,300 PSI	75.1	2634	60,100 PSI

Bullet: 250 GR. HDY A-TIP Dia: .308″

Case: Lapua **Primer: Federal 215M, LRM Match** **Col: 3.680″**

US 869	84.6	2472	42,900 PSI	94.0	2790	58,500 PSI
H50BMG	77.6	2395	47,300 PSI	86.2	2646	60,000 PSI
LRT	75.7	2457	46,900 PSI	84.2	2700	60,400 PSI
StaBALL HD	78.0	2542	53,400 PSI	82.1	2673	60,200 PSI
Retumbo	74.1	2517	52,500 PSI	78.0	2636	59,500 PSI
H1000	71.7	2511	54,000 PSI	75.5	2625	59,900 PSI

300 WEATHERBY MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.810″

Bullet: 150 GR. BAR TSX Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.570″**

H1000	83.0	3056	43,500 CUP	88.0C	3220	49,900 CUP
IMR 7828 SSC	79.0	3146	45,600 CUP	86.5C*	3400	54,200 CUP
H4831	77.0	3031	45,200 CUP	84.0C	3275	52,900 CUP
IMR 4831	76.0	3154	46,400 CUP	82.7C	3437	54,100 CUP
IMR 4350	73.0	3151	45,400 CUP	79.5	3396	54,300 CUP
H4350	70.0	3084	44,700 CUP	76.5	3310	53,800 CUP
H380	63.0	2908	44,200 CUP	69.5	3142	53,800 CUP
IMR 4064	62.0	3045	44,200 CUP	67.0	3244	51,900 CUP
IMR 4895	61.0	3011	44,000 CUP	66.0	3214	53,100 CUP
Varget	59.0	2935	42,200 CUP	64.5	3155	54,000 CUP
H4895	57.0	2926	42,200 CUP	61.5	3112	54,100 CUP

Bullet: 165 GR. NOS BT Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.560″**

H1000	84.0	3014	45,600 CUP	89.7C	3216	54,200 CUP
IMR 7828	77.0	2957	46,800 CUP	82.0	3145	53,400 CUP
H4831	75.0	2934	46,400 CUP	80.2	3113	54,000 CUP
IMR 4831	73.0	2981	46,600 CUP	78.0	3175	54,100 CUP
IMR 4350	70.0	2973	46,900 CUP	75.0	3143	53,400 CUP
H4350	69.0	2908	45,400 CUP	74.0	3074	54,100 CUP
760	65.0	2892	48,200 CUP	70.0	3034	53,700 CUP
H380	63.0	2787	46,300 CUP	67.5	2950	53,700 CUP
H4895	58.0	2871	48,000 CUP	62.5	3028	54,200 CUP
Varget	58.0	2873	46,300 CUP	62.0	3033	54,200 CUP

Bullet: 168 GR. NOS E-TIP Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.590″**

H1000	82.0	2959	44,100 CUP	88.0C	3197	53,700 CUP
IMR 7828 SSC	78.0	2956	46,700 CUP	84.0C*	3205	54,200 CUP
H4831	74.0	2865	43,700 CUP	81.0C	3107	54,200 CUP
IMR 4831	71.0	2907	45,800 CUP	77.5	3158	54,000 CUP
IMR 4350	70.0	2911	45,300 CUP	76.0	3164	54,300 CUP
H4350	66.0	2898	46,900 CUP	72.5	3099	53,800 CUP
760	62.0	2750	44,300 CUP	69.0	2994	53,900 CUP
H380	63.0	2752	45,700 CUP	68.0	2929	53,800 CUP
Varget	59.0	2854	48,000 CUP	63.5	2999	53,800 CUP
H4895	55.0	2773	47,000 CUP	60.0	2968	54,500 CUP

Bullet: 180 GR. SPR BTSP Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.560″**

H1000	83.0	2971	43,800 CUP	88.5C	3151	53,500 CUP
H4831	76.0	2910	45,300 CUP	81.5	3096	54,000 CUP
IMR 7828	75.0	2583	47,000 CUP	80.5	3064	53,400 CUP
IMR 4831	70.0	2835	47,100 CUP	75.5	2997	53,500 CUP
H4350	69.0	2876	44,600 CUP	73.5	3022	54,000 CUP
IMR 4350	68.0	2865	46,200 CUP	72.6	3018	53,000 CUP
760	67.0	2825	45,600 CUP	71.5	2984	53,000 CUP
H380	62.0	2734	45,000 CUP	67.0	2896	54,000 CUP

Bullet: 200 GR. SFT A-FRAME Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.510″**

Retumbo	80.0	2764	46,100 CUP	85.5C	2981	54,400 CUP
StaBALL HD	79.5	2713	42,800 CUP	85.0C	2939	52,700 CUP
H1000	79.0	2766	43,200 CUP	85.0C	2963	53,400 CUP
IMR 7828	73.0	2693	48,100 CUP	78.3	2872	53,800 CUP
H4831	72.0	2708	44,700 CUP	77.5	2869	52,900 CUP
IMR 4831	68.0	2641	45,800 CUP	73.0	2806	53,400 CUP
H4350	66.0	2706	45,800 CUP	71.0	2866	54,300 CUP
IMR 4350	66.0	2680	46,000 CUP	70.5	2807	52,800 CUP

Bullet: 220 GR. HDY RN Dia: .308″

Case: Remington **Primer: Federal 215M, LRM Match** **Col: 3.565″**

Retumbo	79.0	2679	45,900 CUP	84.0C	2853	54,000 CUP
StaBALL HD	78.0	2624	42,000 CUP	84.0	2848	54,200 CUP
H1000	77.0	2670	45,100 CUP	82.5	2833	53,400 CUP
H4831	71.0	2630	47,200 CUP	75.7	2766	54,500 CUP
IMR 7828	70.0	2569	47,200 CUP	75.3	2739	54,100 CUP
H4350	66.0	2599	45,900 CUP	70.0	2725	53,800 CUP
IMR 4831	65.0	2529	46,000 CUP	70.0	2657	53,600 CUP
IMR 4350	63.0	2517	46,300 CUP	67.7	2700	53,500 CUP

300 REMINGTON ULTRA MAG

Barrel: 24″ Twist: 1:10″ Trim: 2.840″

Bullet: 150 GR. SIE SBT Dia: .308″

Case: Remington **Primer: Remington 9 1/2M, LRM** **Col: 3.530″**

Retumbo	100.0	3343	52,600 PSI	106.0C	3531	60,800 PSI
StaBALL HD	96.5	3210	51,900 PSI	103.5	3446	62,600 PSI
H1000	98.0	3258	53,100 PSI	102.0	3457	62,900 PSI
H4831	90.0	3243	55,100 PSI	94.0	3408	62,900 PSI
IMR 7828	86.5	3105	52,100 PSI	92.0	3319	63,000 PSI
IMR 4831	85.0	3207	50,600 PSI	90.5	3380	63,700 PSI
IMR 4350	81.5	3147	53,200 PSI	86.7	3362	63,500 PSI

Bullet: 165 GR. SFT AF Dia: .308″

Case: Remington **Primer: Remington 9 1/2M, LRM** **Col: 3.530″**

Retumbo	97.0	3241	54,200 PSI	103.0C	3414	62,300 PSI
StaBALL HD	91.5	3031	49,600 PSI	98.0	3255	62,400 PSI
H1000	94.0	3135	53,300 PSI	98.0	3321	62,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4831	85.0	3057	52,300 PSI	90.0	3255	62,100 PSI
IMR 7828	84.5	2985	54,300 PSI	90.0	3178	63,200 PSI
IMR 4831	80.0	2951	51,100 PSI	87.0	3215	62,900 PSI
IMR 4350	78.0	2985	52,800 PSI	83.0	3181	63,100 PSI
Bullet: 180 GR. BAR TTSX-BT			**Dia: .308″**			
Case: Remington			**Primer: Remington 9 1/2M, LRM**			**Col: 3.600″**
US 869	98.0	2861	47,000 PSI	107.0	3155	58,700 PSI
H50BMG	97.0	2977	55,800 PSI	103.5C	3101	62,000 PSI
StaBALL HD	87.0	2943	54,500 PSI	94.2	3130	62,700 PSI
Retumbo	86.0	2973	53,200 PSI	92.0	3159	62,600 PSI
H1000	81.5	2890	53,900 PSI	89.0	3083	60,600 PSI
IMR 7828 SSC	78.0	2938	55,800 PSI	84.0	3110	63,600 PSI
H4831	77.0	2956	57,400 PSI	83.0	3098	63,300 PSI
IMR 4831	75.0	2906	54,500 PSI	80.5	3081	63,000 PSI
IMR 4350	73.5	2915	55,200 PSI	78.5	3084	63,600 PSI
Bullet: 180 GR. SPR SPBT			**Dia: .308″**			
Case: Remington			**Primer: Remington 9 1/2M, LRM**			**Col: 3.530″**
H50BMG	103.0	3005	53,700 PSI	108.0C	3159	62,100 PSI
Retumbo	94.0	3182	58,400 PSI	100.5C	3300	62,400 PSI
US 869	104.0	2994	53,800 PSI	107.0	3070	57,300 PSI
StaBALL HD	91.0	2983	52,600 PSI	97.7	3193	63,200 PSI
H1000	91.0	3018	52,300 PSI	96.0	3218	62,800 PSI
H4831	84.0	2997	54,000 PSI	89.0	3167	62,500 PSI
IMR 7828	81.0	2869	52,000 PSI	86.5	3069	63,200 PSI
IMR 4831	78.0	2907	53,700 PSI	83.0	3075	63,200 PSI
IMR 4350	76.0	2869	51,800 PSI	81.0	3071	63,200 PSI
Bullet: 190 GR. HDY BTSP			**Dia: .308″**			
Case: Remington			**Primer: Remington 9 1/2M, LRM**			**Col: 3.555″**
H50BMG	100.0	2938	54,900 PSI	105.0C	3085	63,000 PSI
US 869	100.0	2905	52,600 PSI	104.0	3035	59,200 PSI
Retumbo	90.0	3069	56,500 PSI	96.0	3204	62,500 PSI
StaBALL HD	87.5	2910	53,500 PSI	94.5	3095	63,000 PSI
H1000	88.0	2971	54,900 PSI	93.0	3130	63,500 PSI
IMR 7828	80.5	2802	51,700 PSI	85.5	2985	62,000 PSI
H4831	80.0	2892	53,000 PSI	85.0	3069	62,500 PSI
IMR 4831	77.0	2849	54,300 PSI	82.5	3013	63,900 PSI
IMR 4350	75.0	2804	51,800 PSI	80.0	3001	63,100 PSI
Bullet: 200 GR. NOS AB			**Dia: .308″**			
Case: Remington			**Primer: Remington 9 1/2M, LRM**			**Col: 3.600″**
H50BMG	96.0	2762	49,700 PSI	102.0C	2950	58,900 PSI
Retumbo	89.0	2904	56,400 PSI	95.5C	3048	62,400 PSI
H1000	87.0	2839	56,000 PSI	92.5	2975	62,800 PSI
StaBALL HD	84.5	2804	56,100 PSI	92.0	2986	63,200 PSI
H4831	79.0	2787	54,700 PSI	85.0	2953	63,600 PSI
IMR 7828	77.0	2670	51,200 PSI	82.0	2857	61,800 PSI
Bullet: 220 GR. NOS PART			**Dia: .308″**			
Case: Remington			**Primer: Remington 9 1/2M, LRM**			**Col: 3.530″**
US 869	97.0	2758	49,500 PSI	101.0	2875	55,200 PSI
H50BMG	95.0	2699	54,000 PSI	100.5C	2850	62,500 PSI
StaBALL HD	83.5	2681	54,000 PSI	89.0	2840	63,400 PSI
Retumbo	84.0	2800	56,600 PSI	89.0	2905	61,900 PSI
H1000	83.0	2704	54,500 PSI	89.0	2863	63,500 PSI
IMR 7828	77.5	2600	53,400 PSI	82.5	2774	63,200 PSI

7.62 x 39MM RUSSIAN

Barrel: 20″ Twist: 1:9.45″ Trim: 1.518″

Bullet: 108 GR. BAR MPG			**Dia: .310″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.200″**
2200	26.9	2233	35,100 PSI	29.9C	2440	39,000 PSI
1680	26.5	2454	45,900 PSI	29.5C	2647	51,000 PSI
LT-32	24.1	2015	40,000 PSI	26.8C	2209	44,500 PSI
5744	19.7	1954	40,100 PSI	24.6	2498	50,000 PSI
Case: Midway			**Primer: CCI 200, Large Rifle**			**Col: 2.200″**
H335	27.1	2020	39,300 CUP	28.8	2098	42,300 CUP
H322	25.7	1974	34,500 CUP	28.5C	2199	41,200 CUP
Benchmark	25.0	1826	32,200 CUP	28.5C	2118	38,700 CUP
CFE BLK	24.9	2301	38,100 CUP	27.0	2471	41,400 CUP
H4198	23.3	2155	38,300 CUP	25.0	2310	42,300 CUP
IMR 4198	21.7	1985	37,500 CUP	23.6C	2163	41,700 CUP
IMR 4227	15.0	1526	26,100 CUP	17.6	1907	41,000 CUP

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 123 GR. HDY SST			**Dia: .310″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.190″**
2200	26.5	2183	38,000 PSI	29.4C	2387	42,200 PSI
2230	26.3	2058	39,200 PSI	29.2C	2233	43,600 PSI
X-Terminator	26.3	2058	39,200 PSI	29.2C	2233	43,600 PSI
1680	24.6	2260	46,300 PSI	27.3C	2445	51,400 PSI
LT-32	23.7	2146	43,200 PSI	26.4C	2335	48,000 PSI
2015	23.1	1854	33,000 PSI	25.6C	2030	36,600 PSI
5744	19.1	1865	40,200 PSI	23.8	2377	50,100 PSI
Bullet: 125 GR. SIE SPT			**Dia: .311″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.185″**
2200	27.6	2234	38,100 PSI	30.7C	2452	42,300 PSI
2230	26.7	2119	39,000 PSI	29.6C	2289	43,300 PSI
X-Terminator	26.7	2119	39,000 PSI	29.6C	2289	43,300 PSI
LT-32	25.2	2060	34,300 PSI	28.0C	2259	38,100 PSI
1680	25.0	2316	46,100 PSI	27.7	2475	51,200 PSI
2015	24.4	1968	35,400 PSI	27.1C	2154	39,300 PSI
LT-30	23.5	2149	39,800 PSI	26.1C	2309	44,200 PSI
5744	19.2	1907	39,000 PSI	24.6	2433	50,000 PSI
Bullet: 125 GR. SPR SP			**Dia: .311″**			
Case: Midway			**Primer: CCI 200, Large Rifle**			**Col: 2.150″**
BL-C(2)	30.0	2155	32,200 CUP	31.5	2349	38,800 CUP
H335	30.0	2219	35,400 CUP	31.5	2408	40,900 CUP
CFE BLK	27.5	2377	34,200 CUP	29.7	2554	40,500 CUP
H322	28.0	2210	32,900 CUP	29.0	2323	35,400 CUP
H4895	28.0	2171	29,900 CUP	29.0	2249	33,600 CUP
H4198	24.5	2190	34,200 CUP	26.5	2378	40,400 CUP
IMR 4198	22.6	2035	36,800 CUP	24.0	2250	42,500 CUP
Bullet: 150 GR. HDY SP			**Dia: .312″**			
Case: Midway			**Primer: CCI 200, Large Rifle**			**Col: 2.200″**
BL-C(2)	27.0	1904	33,600 CUP	29.5	2090	40,400 CUP
H335	27.0	2055	36,000 CUP	29.0	2132	42,500 CUP
H322	27.0	2084	34,200 CUP	28.5	2192	40,400 CUP
H4895	27.0	2080	33,600 CUP	28.0	2154	39,300 CUP
H4198	22.5	1947	33,600 CUP	24.5	2122	39,800 CUP
CFE BLK	22.6	1984	37,800 CUP	24.5	2156	43,200 CUP
IMR 4198	21.2	1917	42,200 CUP	22.5	2070	43,600 CUP
Bullet: 150 GR. SIE SPT			**Dia: .311″**			
Case: Winchester			**Primer: Winchester LR, Large Rifle**			**Col: 2.200″**
2200	26.1	2103	43,800 PSI	29.0C	2291	48,700 PSI
2230	26.0	1983	43,400 PSI	28.9C	2161	48,200 PSI
X-Terminator	26.0	1983	43,400 PSI	28.9C	2161	48,200 PSI
LT-32	23.3	1881	37,300 PSI	25.9C	2056	41,400 PSI
2015	22.7	1789	37,600 PSI	25.3C	1950	41,700 PSI
LT-30	22.7	1971	46,300 PSI	25.2C	2155	51,400 PSI
1680	21.2	1970	46,300 PSI	23.6	2109	51,400 PSI
5744	15.7	1523	34,900 PSI	22.5	2176	50,000 PSI

303 BRITISH

Barrel: 24″ Twist: 1:10″ Trim: 2.212″

Bullet: 125 GR. SPR SP			**Dia: .311″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.915″**
4064	45.0	2599	34,300 PSI	50.0C	2954	38,100 PSI
2700	45.0	2419	39,100 PSI	50.0	2749	43,400 PSI
2495	43.2	2541	32,300 PSI	48.0C	2887	35,900 PSI
2520	42.8	2657	40,400 PSI	47.5	3019	44,800 PSI
2460	41.4	2622	38,300 PSI	46.0	2979	42,500 PSI
2015	41.4	2706	39,800 PSI	46.0	3075	44,200 PSI
2230	39.6	2561	38,300 PSI	44.0	2910	42,600 PSI
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 2.915″**
CFE 223	49.6	2886	36,000 PSI	54.0	3077	43,000 PSI
StaBALL Match	46.0	2723	31,700 PSI	50.2	2909	38,000 PSI
Varget	45.0	2766	39,200 CUP	48.0	2883	42,100 CUP
H335	42.0	2741	35,900 CUP	46.0	2966	43,000 CUP
H4895	41.0	2791	42,400 CUP	45.0	2931	43,700 CUP
IMR 8208 XBR	39.0	2708	38,400 CUP	43.0	2886	43,100 CUP
Bullet: 150 GR. HDY SP			**Dia: .312″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.995″**
2700	43.2	2254	38,900 PSI	48.0C	2561	43,200 PSI
4064	42.7	2424	36,400 PSI	47.5C	2755	40,500 PSI
4350	41.4	1984	27,100 PSI	46.0C	2254	30,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
2495	41.4	2400	38,300 PSI	46.0C	2727	42,500 PSI
2520	41.4	2437	40,500 PSI	46.0	2769	45,000 PSI
2460	39.6	2401	38,600 PSI	44.0	2728	42,900 PSI
2230	38.7	2380	39,200 PSI	43.0	2704	43,600 PSI
2015	36.9	2388	38,100 PSI	41.0	2714	42,300 PSI
Case: Remington		**Primer: Federal 210M, LR Match**				**Col: 2.995″**
StaBALL 6.5	46.3	2477	35,700 PSI	51.7	2729	45,800 PSI
BL-C(2)	43.0	2502	34,000 CUP	48.0	2756	39,200 CUP
StaBALL Match	42.3	2589	40,500 PSI	46.0	2751	47,800 PSI
CFE 223	40.9	2558	38,100 PSI	44.0	2699	45,900 PSI
Varget	39.0	2458	39,600 CUP	43.0	2656	42,700 CUP
IMR 4064	38.8	2485	38,300 PSI	42.7	2699	47,400 PSI
LEVERevolution	38.8	2541	39,800 PSI	42.5	2716	46,900 PSI
IMR 4895	38.3	2452	38,200 PSI	42.2	2677	47,500 PSI
IMR 3031	36.7	2484	39,500 PSI	40.4	2682	47,500 PSI
H335	37.0	2430	34,700 CUP	42.0	2706	43,100 CUP
H4895	36.0	2447	40,300 CUP	40.0	2627	43,600 CUP
IMR 8208 XBR	34.0	2392	37,700 CUP	36.7	2515	41,300 CUP
Bullet: 174 GR. HDY RN IL			**Dia: .312″**			
Case: Remington		**Primer: Federal 210M, LR Match**				**Col: 2.945″**
StaBALL 6.5	43.0	2397	39,900 PSI	47.6	2576	47,500 PSI
H4350	42.5	2331	37,100 PSI	46.9	2569	48,000 PSI
IMR 4350	42.3	2289	37,200 PSI	46.2	2501	46,600 PSI
Big Game	41.7	2378	39,400 PSI	45.8	2558	47,100 PSI
760	41.3	2397	41,000 PSI	45.3	2559	47,600 PSI
BL-C(2)	38.6	2369	40,000 PSI	41.8	2518	46,800 PSI
CFE 223	38.5	2374	40,400 PSI	41.6	2513	46,900 PSI
2520	38.0	2347	38,300 PSI	41.1	2505	46,100 PSI
4064	37.4	2281	40,500 PSI	40.7	2437	47,200 PSI
StaBALL Match	37.2	2301	40,200 PSI	40.3	2441	47,000 PSI
IMR 4064	36.8	2291	39,300 PSI	39.9	2458	47,100 PSI
Varget	36.2	2304	39,900 PSI	39.0	2457	47,100 PSI
LEVERevolution	34.7	2300	41,500 PSI	37.5	2422	47,300 PSI
Bullet: 174 GR. SIE HPBT			**Dia: .311″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.075″**
4350	41.4	2118	38,500 PSI	46.0C	2407	42,800 PSI
2700	38.7	2068	40,100 PSI	43.0	2351	44,600 PSI
2495	37.8	2196	38,100 PSI	42.0	2496	42,300 PSI
4064	36.0	2136	39,000 PSI	40.0	2428	43,300 PSI
2520	35.1	2153	38,600 PSI	39.0	2447	42,900 PSI
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 3.075″**
StaBALL 6.5	42.5	2266	34,500 PSI	48.7	2604	47,600 PSI
H4350	43.0	2266	35,400 CUP	48.0C	2517	41,900 CUP
BL-C(2)	43.0	2442	36,400 CUP	46.5	2616	42,900 CUP
760	43.0	2302	35,200 CUP	46.0	2447	41,000 CUP
StaBALL Match	38.8	2328	38,700 PSI	42.8	2509	47,100 PSI
Varget	38.0	2345	38,800 CUP	42.0	2509	43,800 CUP
CFE 223	37.5	2345	40,500 PSI	40.4	2470	46,500 PSI
H335	36.0	2340	38,600 CUP	39.5	2503	43,400 CUP
H4895	34.0	2262	38,800 CUP	38.0	2446	43,600 CUP
Bullet: 180 GR. SIE SP			**Dia: .311″**			
Case: Remington		**Primer: Federal 210, Large Rifle**				**Col: 3.075″**
H4350	44.0	2295	35,700 CUP	48.0C	2500	43,800 CUP
StaBALL 6.5	40.0	2177	35,100 PSI	47.8	2535	47,500 PSI
760	42.0	2231	35,400 CUP	46.0	2435	42,500 CUP
BL-C(2)	41.0	2395	37,100 CUP	45.0	2563	43,000 CUP
IMR 4064				41.1	2400	45,700 PSI
Varget	37.0	2282	38,200 CUP	41.0	2440	43,400 CUP
IMR 4895				41.0	2399	46,100 PSI
StaBALL Match	38.7	2231	39,900 PSI	40.5	2412	48,100 PSI
CFE 223	37.5	2262	39,600 PSI	40.4	2394	45,200 PSI
H335	36.0	2286	36,400 CUP	39.0	2449	42,700 CUP
IMR 3031				38.3	2341	46,500 PSI
H4895	34.0	2178	35,200 CUP	38.0	2400	43,500 CUP
IMR 8208 XBR	31.0	2108	34,900 CUP	35.0	2325	43,300 CUP
Bullet: 180 GR. SIE SPT			**Dia: .311″**			
Case: Remington		**Primer: Winchester LR, Large Rifle**				**Col: 3.075″**
2700	41.4	2137	39,700 PSI	46.0C	2428	44,100 PSI
4350	41.4	2006	32,200 PSI	46.0	2280	35,800 PSI
4064	40.5	2232	37,500 PSI	45.0	2537	41,700 PSI
2520	39.6	2260	40,500 PSI	44.0	2568	45,000 PSI
2495	39.6	2181	38,400 PSI	44.0	2478	42,700 PSI
2460	36.5	2149	37,400 PSI	40.5	2442	41,500 PSI
2230	36.0	2175	39,400 PSI	40.0	2472	43,800 PSI
2015	34.2	2130	38,100 PSI	38.0	2420	42,300 PSI

338 FEDERAL

Barrel: 24″ Twist: 1:10″ Trim: 2.005″

Bullet: 160 GR. BAR TTSX FB			**Dia: .338″**			
Case: Federal		**Primer: Federal 210M, LR Match**				**Col: 2.840″**
IMR 8208 XBR	46.0	2733	46,500 PSI	50.0C	2910	54,700 PSI
Benchmark	45.1	2725	47,900 PSI	49.0C	2894	56,200 PSI
H335	43.8	2579	39,900 PSI	48.7	2814	49,700 PSI
H322	44.6	2761	52,400 PSI	48.5C	2937	61,800 PSI
IMR 3031	41.9	2559	41,000 PSI	45.5C	2763	50,400 PSI
H4198	40.2	2756	53,600 PSI	42.8	2884	61,500 PSI
IMR 4198	38.5	2706	52,900 PSI	41.0	2850	62,400 PSI
Bullet: 180 GR. NOS AB			**Dia: .338″**			
Case: Federal		**Primer: Federal 210M, LR Match**				**Col: 2.810″**
748	45.0	2486	40,300 PSI	51.0	2746	51,100 PSI
BL-C(2)	44.0	2338	34,700 PSI	50.0	2648	47,500 PSI
CFE 223	46.0	2408	32,700 PSI	50.0	2620	42,100 PSI
IMR 8208 XBR	44.6	2641	49,600 PSI	48.5C	2811	59,900 PSI
StaBALL Match	43.2	2375	39,000 PSI	48.2C	2598	48,900 PSI
H4895	43.0	2486	42,400 PSI	47.0C	2682	50,800 PSI
Benchmark	42.0	2532	47,900 PSI	47.0C	2768	61,300 PSI
IMR 4895	42.0	2373	40,700 PSI	47.0C	2624	50,900 PSI
H335	42.0	2483	43,000 PSI	47.0	2712	53,900 PSI
H322	41.0	2514	46,000 PSI	45.5C	2743	59,700 PSI
IMR 3031	40.0	2438	42,500 PSI	45.0C	2705	55,200 PSI
Bullet: 185 GR. BAR TSX BT			**Dia: .338″**			
Case: Federal		**Primer: Federal 210M, LR Match**				**Col: 2.800″**
CFE 223	47.5	2488	39,800 PSI	50.5	2624	46,200 PSI
BL-C(2)	44.0	2386	41,600 PSI	49.0	2597	51,100 PSI
748	44.0	2477	45,200 PSI	49.0	2665	53,100 PSI
StaBALL Match	43.5	2375	41,600 PSI	48.0C	2548	47,700 PSI
Varget	42.0	2364	43,000 PSI	47.0C	2607	54,700 PSI
IMR 8208 XBR	44.2	2601	51,800 PSI	47.0C	2721	59,500 PSI
H4895	42.0	2456	45,400 PSI	46.5C	2690	58,200 PSI
H335	41.0	2460	46,300 PSI	46.0	2679	56,700 PSI
IMR 4064	41.0	2388	45,100 PSI	45.0C	2584	53,400 PSI
IMR 4895	41.0	2342	43,500 PSI	45.0C	2541	51,400 PSI
Benchmark	39.0	2416	48,000 PSI	44.0C	2637	60,100 PSI
IMR 3031	39.0	2410	47,200 PSI	44.0C	2666	60,000 PSI
H322	39.0	2447	49,400 PSI	43.3C	2645	59,700 PSI
Bullet: 200 GR. HDY SP			**Dia: .338″**			
Case: Federal		**Primer: Federal 210M, LR Match**				**Col: 2.810″**
748	44.0	2322	37,300 PSI	50.0	2584	49,500 PSI
CFE 223	45.8	2326	33,600 PSI	50.0	2545	44,900 PSI
BL-C(2)	45.0	2289	36,900 PSI	49.0	2442	43,300 PSI
StaBALL Match	43.0	2276	37,000 PSI	48.3C	2503	48,800 PSI
Varget	42.0	2264	40,400 PSI	47.0C	2510	52,100 PSI
H4895	42.0	2350	42,600 PSI	47.0C	2597	55,100 PSI
IMR 4895	42.0	2296	41,400 PSI	47.0C	2535	52,100 PSI
IMR 8208 XBR	44.0	2504	50,200 PSI	47.0C	2657	60,300 PSI
H335	42.0	2389	44,400 PSI	47.0	2606	56,400 PSI
Benchmark	40.0	2309	43,200 PSI	45.0C	2584	59,700 PSI
IMR 4064	40.0	2224	37,500 PSI	45.0C	2486	48,600 PSI
IMR 3031	40.0	2316	41,300 PSI	45.0C	2598	57,300 PSI
H322	40.0	2412	49,500 PSI	44.5	2596	59,300 PSI
Bullet: 210 GR. SFT SCIR			**Dia: .338″**			
Case: Federal		**Primer: Federal 210M, LR Match**				**Col: 2.820″**
LEVERevolution	45.0	2468	48,800 PSI	49.0C	2622	56,400 PSI
StaBALL Match	43.0	2327	49,000 PSI	48.2C	2531	59,500 PSI
CFE 223	43.8	2381	45,900 PSI	47.6	2549	57,100 PSI
BL-C(2)	42.0	2270	52,000 PSI	47.0	2548	59,100 PSI
Varget	41.0	2248	42,000 PSI	46.0C	2503	56,500 PSI
748	41.0	2289	42,200 PSI	45.7	2534	56,300 PSI
H4895	40.0	2281	41,600 PSI	45.0C	2551	58,100 PSI
IMR 4895	40.0	2195	39,500 PSI	45.0C	2482	53,900 PSI
IMR 8208 XBR	40.7	2402	52,000 PSI	43.3C	2508	59,400 PSI
Benchmark	38.0	2277	45,900 PSI	43.0C	2514	60,800 PSI
IMR 4064	40.0	2254	42,200 PSI	43.0C	2394	48,800 PSI
IMR 3031	38.0	2267	43,700 PSI	42.5C	2499	57,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H322	38.0	2296	45,900 PSI	42.3C	2511	59,200 PSI
H335	38.0	2267	45,300 PSI	41.7	2469	57,400 PSI
Bullet: 215 GR. SIE SP			**Dia: .338″**			
Case: Federal			**Primer: Federal 210M, LR Match**			**Col: 2.810″**
LEVERevolution	47.0	2509	50,900 PSI	52.0C	2668	57,900 PSI
CFE 223	44.5	2330	40,800 PSI	48.4	2494	49,800 PSI
StaBALL Match	43.0	2321	48,200 PSI	48.0C	2492	55,800 PSI
BL-C(2)	43.0	2242	39,000 PSI	47.0	2428	47,900 PSI
Varget	41.0	2216	41,000 PSI	46.0C	2452	53,100 PSI
H4895	41.0	2297	43,500 PSI	46.0C	2539	57,600 PSI
748	41.0	2218	38,000 PSI	46.0	2445	48,900 PSI
IMR 4064	41.0	2267	43,800 PSI	45.0C	2468	54,400 PSI
IMR 4895	41.0	2234	42,400 PSI	45.0C	2448	53,200 PSI
IMR 8208 XBR	41.9	2396	50,500 PSI	44.6	2519	59,400 PSI
H335	40.0	2312	46,100 PSI	44.0	2512	58,300 PSI
Benchmark	39.0	2286	47,200 PSI	43.3	2487	60,000 PSI
IMR 3031	38.0	2227	42,500 PSI	43.0C	2469	56,300 PSI
H322	38.0	2305	50,400 PSI	43.0	2504	60,300 PSI
Bullet: 225 GR. SFT AF			**Dia: .338″**			
Case: Federal			**Primer: Federal 210M, LR Match**			**Col: 2.750″**
LEVERevolution	43.0	2293	46,500 PSI	48.0C	2518	61,800 PSI
BL-C(2)	42.0	2178	41,800 PSI	47.0	2436	57,800 PSI
StaBALL Match	42.0	2247	52,300 PSI	46.2C	2428	61,900 PSI
Varget	41.0	2149	43,100 PSI	46.0C	2410	57,900 PSI
748	41.0	2199	42,000 PSI	46.0	2453	57,400 PSI
CFE 223	43.2	2278	47,700 PSI	46.0	2423	57,900 PSI
H4895	40.0	2167	42,900 PSI	45.3C	2445	60,000 PSI
IMR 4895	40.0	2151	45,300 PSI	44.5C	2383	58,200 PSI
IMR 4064	39.0	2148	43,800 PSI	43.8C	2386	58,400 PSI
IMR 8208 XBR	40.5	2283	52,400 PSI	43.1	2394	60,500 PSI
Benchmark	38.0	2150	46,600 PSI	42.8	2365	59,500 PSI
H335	38.0	2166	46,100 PSI	42.0	2378	59,200 PSI
IMR 3031	37.0	2149	45,800 PSI	41.0C	2361	59,500 PSI
H322	37.0	2204	52,700 PSI	41.0	2357	60,000 PSI

338 WBY RPM

Barrel: 24″ Twist: 1:9.3″ Trim: 2.560″

Bullet: 185 GR. BAR TSX BT			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.370″**
StaBALL 6.5	66.0	2924	51,500 PSI	72.7	3150	63,000 PSI
H4350	65.3	2865	50,600 PSI	71.8	3096	63,500 PSI
IMR 4350	64.0	2809	49,200 PSI	70.7C	3075	62,000 PSI
Big Game	64.5	2936	55,900 PSI	70.6	3108	63,200 PSI
4064	58.0	2757	49,700 PSI	63.3	2996	63,200 PSI
StaBALL Match	57.5	2794	52,600 PSI	62.6	2985	63,600 PSI
IMR 4064	56.5	2783	50,200 PSI	61.7	3012	63,100 PSI
IMR 4895	56.3	2783	50,200 PSI	61.6	3012	63,400 PSI
Varget	56.4	2811	52,000 PSI	61.3	3002	63,200 PSI
H4895	53.8	2786	53,000 PSI	58.3	2964	63,300 PSI
Bullet: 200 GR. FED FUSION			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.330″**
StaBALL 6.5	67.0	2825	48,900 PSI	73.5	3065	62,100 PSI
IMR 4831	66.0	2668	43,100 PSI	73.0	2962	57,300 PSI
H4350	66.0	2776	48,500 PSI	73.0	3032	62,600 PSI
Big Game	65.5	2863	53,300 PSI	72.0	3053	62,900 PSI
IMR 4350	64.8	2712	45,300 PSI	71.2C	2983	58,900 PSI
4064	59.0	2709	48,700 PSI	64.8	2953	62,800 PSI
StaBALL Match	58.5	2728	52,000 PSI	63.9	2911	62,800 PSI
IMR 4064	58.0	2749	49,900 PSI	63.7	2981	63,600 PSI
IMR 4895	57.8	2766	51,000 PSI	63.2	2960	62,700 PSI
Varget	57.0	2751	51,700 PSI	62.4	2949	63,100 PSI
Bullet: 225 GR. HDY SST			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.370″**
H4831	66.5	2560	45,300 PSI	73.5C	2787	58,300 PSI
IMR 4831	65.5	2559	45,000 PSI	72.5C	2837	58,900 PSI
StaBALL 6.5	63.5	2671	49,400 PSI	70.2	2907	62,900 PSI
IMR 4350	63.0	2602	48,300 PSI	69.8	2861	62,000 PSI
H4350	62.5	2609	48,500 PSI	69.3C	2855	63,000 PSI
Big Game	62.0	2437	50,600 PSI	68.0	2855	63,400 PSI
4064	55.0	2523	49,700 PSI	61.2	2757	63,000 PSI
StaBALL Match	54.5	2546	52,600 PSI	59.5	2732	63,600 PSI
IMR 4064	53.8	2538	48,900 PSI	59.5	2761	63,400 PSI
Varget	53.0	2544	51,600 PSI	59.3	2750	63,000 PSI
Bullet: 250 GR. SIE SPBT			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.370″**
H1000	67.0	2424	44,500 PSI	74.2C	2688	59,100 PSI
IMR 7828 SSC	65.0	2453	49,200 PSI	71.5C	2700	63,000 PSI
Hunter	64.8	2532	51,700 PSI	71.3	2738	62,800 PSI
H4831	63.0	2468	49,800 PSI	69.6C	2674	62,100 PSI
4350	62.5	2471	49,600 PSI	69.0C	2683	62,000 PSI
IMR 4831	59.5	2424	48,600 PSI	65.6C	2667	63,200 PSI
H4350	59.2	2471	50,900 PSI	65.3	2668	63,000 PSI
IMR 4350	59.0	2440	48,700 PSI	65.2	2672	63,000 PSI
StaBALL 6.5	59.2	2495	52,000 PSI	65.1	2683	63,300 PSI
Big Game	57.7	2454	52,800 PSI	63.2	2627	62,500 PSI
Bullet: 265 GR. BAR LRX BT			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.380″**
H1000	64.0	2335	47,900 PSI	70.0C	2535	59,200 PSI
IMR 7828 SSC	61.0	2330	51,200 PSI	67.5C	2559	63,200 PSI
H4831	60.0	2336	50,400 PSI	66.0C	2530	63,100 PSI
4350	59.5	2327	50,500 PSI	65.4C	2545	63,000 PSI
Hunter	58.8	2348	51,300 PSI	64.6C	2561	63,100 PSI
StaBALL 6.5	57.0	2342	51,300 PSI	63.9	2576	63,100 PSI
IMR 4831	57.0	2310	50,500 PSI	63.0C	2532	63,500 PSI
IMR 4350	54.8	2302	51,300 PSI	60.9C	2519	63,500 PSI
H4350	53.5	2279	50,400 PSI	59.4C	2486	63,000 PSI
Big Game	53.3	2284	52,600 PSI	59.3	2483	63,500 PSI
Bullet: 265 GR. NOS ABLR			**Dia: .338″**			
Case: Weatherby			**Primer: Federal 215, LRM**			**Col: 3.380″**
H1000	69.0	2480	49,900 PSI	73.0C	2612	57,900 PSI
IMR 7828 SSC	64.0	2364	47,000 PSI	71.5C	2639	63,100 PSI
H4831	62.3	2389	48,300 PSI	69.5C	2620	62,800 PSI
Hunter	61.5	2397	48,800 PSI	68.3	2638	62,900 PSI
4350	61.0	2275	39,800 PSI	68.0C	2574	56,800 PSI
IMR 4831	60.3	2374	47,600 PSI	67.0C	2630	63,100 PSI
StaBALL 6.5	60.5	2423	48,000 PSI	67.0	2656	62,900 PSI
IMR 4350	58.0	2366	48,000 PSI	64.4C	2603	62,400 PSI
H4350	57.6	2405	52,100 PSI	64.0C	2594	62,800 PSI
Big Game	57.0	2386	50,900 PSI	63.8	2583	62,600 PSI

33 NOSLER

Barrel: 24″ Twist: 1:10″ Trim: 2.440″

Bullet: 180 GR. NOS AB			**Dia: .338″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
H4831	81.5	3040	52,200 PSI	85.8C	3201	62,400 PSI
IMR 7828	81.2	3064	52,700 PSI	85.5C	3259	62,500 PSI
IMR 4831	78.3	3051	52,700 PSI	82.5C	3240	62,200 PSI
H4350	76.0	3104	54,500 PSI	80.0	3243	62,200 PSI
IMR 4350	74.2	2989	50,100 PSI	79.0	3227	61,900 PSI
Bullet: 185 GR. BAR TSX BT			**Dia: .338″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.260″**
H4831	81.0	3001	53,800 PSI	85.3C	3157	62,300 PSI
IMR 7828	80.4	3003	52,600 PSI	84.6C	3196	62,500 PSI
IMR 4831	77.2	2991	51,900 PSI	81.3	3181	62,400 PSI
H4350	74.7	3026	52,700 PSI	78.7	3194	61,900 PSI
IMR 4350	73.4	2978	50,700 PSI	77.8	3194	61,800 PSI
Bullet: 200 GR. NOS E-TIP			**Dia: .338″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.340″**
IMR 7828	79.1	2932	53,600 PSI	83.3C	3097	62,200 PSI
H4831	79.0	2894	53,300 PSI	83.2C	3041	62,400 PSI
IMR 4831	76.0	2918	53,100 PSI	79.9	3088	62,500 PSI
H4350	72.6	2898	51,800 PSI	76.4	3066	62,500 PSI
IMR 4350	72.4	2895	51,200 PSI	76.3	3077	62,200 PSI
Bullet: 210 GR. NOS PART			**Dia: .338″**			
Case: Nosler			**Primer: Winchester LRM**			**Col: 3.300″**
H1000	81.7	2842	51,800 PSI	87.0C	3025	62,300 PSI
H4831	76.3	2810	52,700 PSI	81.2	2978	62,600 PSI
IMR 7828	75.1	2818	51,600 PSI	79.9	3021	62,500 PSI
IMR 4831	72.2	2818	52,900 PSI	76.9	2983	62,100 PSI
IMR 4350	70.2	2838	52,900 PSI	74.5	3014	62,400 PSI
H4350	69.3	2815	52,000 PSI	74.5	3005	62,900 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 215 GR. SIE SBT Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.310″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H1000	84.0	2855	50,800 PSI	88.0C	2980	59,300 PSI
H4831	77.7	2786	51,900 PSI	82.7	2966	62,600 PSI
IMR 7828	77.7	2775	49,800 PSI	81.8	2989	62,100 PSI
IMR 4831	75.5	2814	51,500 PSI	78.9	2993	62,000 PSI
H4350	72.8	2833	52,100 PSI	77.5	3003	61,800 PSI
IMR 4350	70.9	2786	51,100 PSI	76.2	2991	62,200 PSI

Bullet: 225 GR. HDY SST Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.400″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H1000	81.3	2721	52,400 PSI	86.1C	2878	62,400 PSI
H4831	75.8	2702	53,600 PSI	79.8	2843	62,000 PSI
IMR 7828	74.8	2688	50,900 PSI	79.6	2895	62,600 PSI
IMR 4831	72.5	2672	50,700 PSI	76.2	2863	62,000 PSI
IMR 4350	72.0	2810	54,400 PSI	75.0	2939	62,500 PSI
H4350	69.2	2689	52,400 PSI	73.6	2827	62,000 PSI

Bullet: 250 GR. HDY BTHP Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.400″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H1000	79.4	2688	53,000 PSI	84.0C	2832	62,100 PSI
Retumbo	79.1	2694	55,100 PSI	83.9C	2824	62,300 PSI
StaBALL HD	76.5	2504	50,300 PSI	83.2	2715	62,700 PSI
IMR 7828	72.9	2657	52,400 PSI	77.1	2814	62,000 PSI
H4831	71.2	2591	52,800 PSI	75.4	2734	62,200 PSI
IMR 4831	70.1	2627	52,200 PSI	74.2	2789	62,000 PSI
H4350	67.5	2626	52,400 PSI	71.4	2762	62,200 PSI
IMR 4350	67.3	2620	52,100 PSI	71.2	2773	62,200 PSI

Bullet: 265 GR. BAR LRX BT Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.450″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
StaBALL HD	72.8	2370	51,400 PSI	80.2	2577	62,900 PSI
H1000	73.9	2536	53,800 PSI	79.0C	2684	62,600 PSI
Retumbo	71.7	2518	53,600 PSI	76.7C	2650	62,100 PSI
IMR 7828	68.3	2520	54,900 PSI	73.0	2657	62,300 PSI
H4831	68.1	2485	55,000 PSI	72.3	2611	62,200 PSI
IMR 4831	65.4	2471	54,000 PSI	69.2	2607	62,100 PSI
IMR 4350	62.6	2458	54,000 PSI	66.3	2595	61,900 PSI
H4350	62.4	2462	53,900 PSI	66.2	2579	61,300 PSI

Bullet: 275 GR. SFT AF Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.280″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
StaBALL HD	72.8	2357	52,400 PSI	80.2	2555	62,800 PSI
H1000	74.4	2512	54,000 PSI	78.7C	2633	62,100 PSI
Retumbo	71.4	2472	53,000 PSI	75.6C	2608	62,500 PSI
IMR 7828	67.3	2460	53,600 PSI	72.0	2610	62,400 PSI
H4831	67.1	2465	55,600 PSI	70.7	2564	61,700 PSI
IMR 4831	64.7	2434	53,500 PSI	68.4	2552	62,100 PSI
H4350	61.8	2416	52,900 PSI	65.4	2543	62,200 PSI
IMR 4350	61.4	2417	54,500 PSI	65.0	2543	62,700 PSI

Bullet: 300 GR. NOS AB Dia: .338″

Case: Nosler **Primer: Winchester LRM** **Col: 3.400″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
StaBALL HD	74.5	2319	51,800 PSI	82.0	2508	62,800 PSI
Retumbo	75.9	2483	53,800 PSI	81.0C	2589	61,700 PSI
H1000	74.2	2464	54,000 PSI	79.0C	2589	62,100 PSI
IMR 7828	69.3	2430	52,700 PSI	73.8	2580	62,500 PSI
IMR 4831	68.0	2454	52,900 PSI	72.5	2606	62,300 PSI
H4831	64.8	2376	52,200 PSI	72.0	2526	61,800 PSI
IMR 4350	63.8	2394	52,800 PSI	68.1	2530	62,300 PSI
H4350	64.3	2426	51,900 PSI	67.9	2557	61,600 PSI

338 WINCHESTER MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.490″

Bullet: 160 GR. BAR TTSX-BT Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.325″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
StaBALL 6.5	72.0	3088	51,000 PSI	80.0C	3353	62,400 PSI
760	70.0	3003	41,100 CUP	75.5	3195	46,400 CUP
IMR 4895	62.0	3038	43,300 CUP	69.0	3277	52,100 CUP
Varget	62.0	2984	41,600 CUP	68.5	3196	51,100 CUP
IMR 4064	61.0	2974	40,200 CUP	68.0C	3246	50,900 CUP
H4895	60.0	3057	45,000 CUP	67.0	3271	51,600 CUP
IMR 8208 XBR	58.0	3023	47,000 CUP	64.0	3198	51,900 CUP

Bullet: 180 GR. NOS BT Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.340″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4831	70.0	2776	35,200 CUP	78.0C	3067	49,100 CUP
IMR 4831	70.0	2822	39,000 CUP	75.0C	3034	47,500 CUP
IMR 4350	70.5	2848	40,800 CUP	75.0C	3038	48,300 CUP
H4350	69.0	2928	41,200 CUP	74.5	3157	52,200 CUP
StaBALL 6.5	66.5	2905	51,000 PSI	73.4	3139	62,100 PSI
H380	65.0	2886	44,200 CUP	72.5	3111	51,100 CUP
760	66.0	2914	43,200 CUP	72.0	3107	51,800 CUP
IMR 4895	62.5	2896	43,000 CUP	66.5	3059	51,200 CUP
IMR 4064	60.6	2885	43,300 CUP	64.5	3041	51,600 CUP
H4895	58.0	2893	45,100 CUP	64.0	3066	52,300 CUP
Varget	57.0	2871	45,500 CUP	63.5	3087	53,200 CUP

Bullet: 185 GR. BAR TSX Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.290″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 4831	70.5	2749	39,500 CUP	75.0C	3031	49,800 CUP
H4350	69.6	2896	47,500 CUP	74.0C	3048	52,800 CUP
IMR 4350	67.0	2792	41,000 CUP	74.0C	3072	51,900 CUP
StaBALL 6.5	65.0	2848	51,600 PSI	72.3	3086	61,800 PSI
760	66.0	2889	48,400 CUP	70.0	3002	52,000 CUP
H380	65.8	2870	48,000 CUP	70.0	3007	52,800 CUP
Varget	60.0	2831	47,200 CUP	65.0	3013	52,900 CUP
IMR 4895	60.2	2837	43,900 CUP	64.0	2990	51,400 CUP
IMR 4064	59.2	2831	45,400 CUP	63.0	2981	51,600 CUP
H4895	56.0	2764	46,600 CUP	59.5	2901	52,300 CUP

Bullet: 200 GR. SPR SP Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.300″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H4831	70.0	2703	41,300 CUP	77.5C	2965	52,400 CUP
IMR 4831	70.0	2751	43,500 CUP	74.5C	2934	50,200 CUP
IMR 4350	69.6	2837	46,700 CUP	74.0C	2979	52,900 CUP
H4350	65.0	2695	39,900 CUP	72.5	2969	52,200 CUP
StaBALL 6.5	63.5	2718	50,700 PSI	70.3	2951	62,000 PSI
760	63.0	2730	43,000 CUP	69.5	2942	52,400 CUP
H380	62.0	2685	44,900 CUP	69.0	2921	52,800 CUP
IMR 4895	62.3	2830	47,700 CUP	66.3	2958	52,900 CUP
IMR 4064	60.2	2793	47,100 CUP	64.0	2918	52,700 CUP
H4895	56.0	2702	44,700 CUP	62.0	2877	52,600 CUP
Varget	53.0	2597	39,100 CUP	58.5	2805	51,100 CUP

Bullet: 210 GR. NOS PART Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.280″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 7828	72.0	2676	43,900 CUP	78.0C*	2895	52,600 CUP
H4831	68.0	2648	42,600 CUP	75.5C	2888	52,300 CUP
IMR 4831	68.0	2677	41,000 CUP	73.0C	2877	50,600 CUP
IMR 4350	67.0	2711	44,200 CUP	71.5C	2894	52,800 CUP
H4350	63.0	2618	41,500 CUP	70.0	2855	51,800 CUP
StaBALL 6.5	62.0	2648	51,400 PSI	68.6	2865	62,300 PSI
760	60.0	2617	42,300 CUP	67.0	2848	51,800 CUP
H380	59.0	2555	42,400 CUP	66.0	2797	53,000 CUP
IMR 4064	57.0	2651	44,200 CUP	62.0	2843	53,300 CUP
IMR 4895	56.0	2581	41,900 CUP	62.0	2809	52,500 CUP
H4895	54.0	2609	44,100 CUP	60.0	2788	53,000 CUP
Varget	53.0	2577	41,800 CUP	58.5	2784	52,500 CUP

Bullet: 215 GR. SIE BTSP Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.340″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 7828	72.0	2706	46,000 CUP	77.5C*	2889	53,400 CUP
IMR 4831	68.0	2708	45,700 CUP	72.5C	2889	53,000 CUP
IMR 4350	67.0	2643	44,200 CUP	71.5	2845	52,900 CUP
IMR 4064	57.0	2596	45,800 CUP	62.0	2776	53,100 CUP
IMR 4895	56.0	2572	42,600 CUP	61.5	2779	52,600 CUP

Bullet: 225 GR. HDY SP Dia: .338″

Case: Winchester **Primer: Winchester LRM** **Col: 3.340″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
IMR 7828	72.0	2605	44,100 CUP	77.0C*	2777	49,400 CUP
H4831	67.0	2542	40,200 CUP	74.5C	2792	52,000 CUP
IMR 4831	69.0	2637	44,900 CUP	73.5C	2805	50,200 CUP
IMR 4350	67.0	2657	43,600 CUP	72.0C	2832	52,000 CUP
H4350	63.0	2571	41,100 CUP	69.5	2785	51,700 CUP
760	62.0	2611	43,200 CUP	69.0	2811	51,700 CUP
StaBALL 6.5	63.5	2613	52,500 PSI	69.0	2787	61,700 PSI
H380	58.0	2490	43,700 CUP	65.0	2708	52,600 CUP
IMR 4895	58.0	2605	44,400 CUP	62.0	2761	52,600 CUP
IMR 4064	57.0	2583	43,200 CUP	61.7	2764	52,800 CUP
H4895	53.0	2505	43,000 CUP	59.0	2688	52,400 CUP
Varget	52.0	2481	41,500 CUP	57.5	2680	52,700 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 250 GR. HDY SP		**Dia: .338″**				
Case: Winchester		**Primer: Winchester LRM**				**Col: 3.340″**
H1000	72.0	2512	41,500 CUP	76.0 C	2622	46,500 CUP
IMR 7828	70.0	2423	44,000 CUP	75.0C*	2628	51,800 CUP
IMR 4831	67.0	2474	45,300 CUP	71.6C	2632	52,400 CUP
H4831	64.0	2424	41,900 CUP	71.5C	2655	52,300 CUP
IMR 4350	65.0	2468	45,800 CUP	69.5C	2634	52,400 CUP
H4350	61.0	2448	42,000 CUP	67.5	2657	51,900 CUP
760	59.0	2426	44,100 CUP	65.0	2622	52,900 CUP
StaBALL 6.5	58.0	2396	49,400 PSI	64.0	2606	62,200 PSI
IMR 4895	55.0	2392	45,700 CUP	59.0	2529	53,200 CUP
IMR 4064	54.0	2339	43,300 CUP	58.5	2518	52,700 CUP
Bullet: 250 GR. SIE SBT		**Dia: .338″**				
Case: Winchester		**Primer: Federal 215, LRM**				**Col: 3.340″**
4350	58.5	2276	54,600 PSI	65.0	2586	60,700 PSI
2700	59.9	2394	59,700 PSI	63.0	2547	62,800 PSI
Bullet: 265 GR. BAR TTSX-BT		**Dia: .338″**				
Case: Winchester		**Primer: Winchester LRM**				**Col: 3.450″**
IMR 7828 SSC	61.2	2239	42,400 CUP	68.0C*	2443	50,000 CUP
H4831	60.3	2236	44,000 CUP	67.0C	2434	52,500 CUP
IMR 4831	58.0	2287	43,100 CUP	62.5C	2426	49,600 CUP
IMR 4350	57.0	2304	44,100 CUP	62.0C	2468	49,900 CUP
H4350	55.8	2287	48,400 CUP	59.4	2409	52,200 CUP
StaBALL 6.5	53.0	2259	51,400 PSI	58.0	2445	62,400 PSI
760	52.2	2223	45,200 CUP	55.5	2329	50,200 CUP
Bullet: 275 GR. SPR SP		**Dia: .338″**				
Case: Winchester		**Primer: Winchester LRM**				**Col: 3.340″**
H1000	70.0	2402	43,400 CUP	76.0 C	2564	51,100 CUP
H4831	62.0	2304	42,600 CUP	69.0	2502	52,300 CUP
IMR 7828	63.0	2263	42,000 CUP	68.0C	2454	52,700 CUP
IMR 4831	61.0	2304	47,000 CUP	65.5C	2465	53,100 CUP
H4350	57.0	2259	41,100 CUP	63.5	2447	52,100 CUP
760	56.0	2269	44,800 CUP	62.0	2445	52,500 CUP
IMR 4350	58.0	2285	45,600 CUP	62.0	2401	52,500 CUP
StaBALL 6.5	56.0	2229	49,300 PSI	62.0	2441	62,100 PSI
Bullet: 300 GR. SIE HPBT		**Dia: .338″**				
Case: Winchester		**Primer: Winchester LRM**				**Col: 3.340″**
H1000	66.0	2241	42,200 CUP	70.0C	2347	46,900 CUP
H4831	63.0	2255	45,900 CUP	69.0C	2422	52,800 CUP
IMR 7828	64.0	2274	45,500 CUP	68.0C*	2434	52,600 CUP
IMR 4831	62.0	2293	46,900 CUP	67.0C	2441	53,200 CUP
IMR 4350	60.0	2263	47,100 CUP	64.0C	2420	52,300 CUP
StaBALL 6.5	57.0	2161	47,800 PSI	63.0	2404	61,900 PSI
H4350	56.0	2202	44,000 CUP	61.5	2362	52,600 CUP

338 REMINGTON ULTRA MAG

Barrel: 24″ Twist: 1:10″ Trim: 2.750″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 185 GR. BAR TSX BT		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.550″**
H1000	96.0	3068	52,300 PSI	102.0C	3241	61,500 PSI
H4831	91.0	3040	52,000 PSI	97.0	3232	62,100 PSI
IMR 7828	88.0	2986	49,800 PSI	95.7	3267	63,400 PSI
IMR 4831	86.0	3075	50,300 PSI	92.5	3313	61,800 PSI
IMR 4350	84.0	3075	52,500 PSI	90.5	3299	63,100 PSI
H4350	82.0	3037	51,400 PSI	89.0	3274	63.800 PSI
Bullet: 200 GR. SPR SP		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.590″**
H1000	96.0	2944	48,300 PSI	102.0C	3127	58,600 PSI
H4831	91.0	2979	54,500 PSI	96.5	3138	63,000 PSI
IMR 7828	87.0	2930	52,900 PSI	93.7	3136	62,500 PSI
IMR 4831	84.0	2971	52,200 PSI	90.5	3186	62,200 PSI
H4350	84.0	3011	55,400 PSI	89.5	3156	63,000 PSI
IMR 4350	82.0	2940	52,200 PSI	88.0	3149	62,100 PSI
Bullet: 210 GR. NOS PART		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.540″**
H1000	96.0	2952	51,200 PSI	102.0C	3153	62,900 PSI
H4831	89.0	2913	54,600 PSI	94.5	3084	63,100 PSI
IMR 7828	86.0	2867	52,500 PSI	93.0	3095	63,400 PSI
IMR 4831	83.0	2907	51,600 PSI	89.7	3119	62,300 PSI
H4350	82.0	2941	53,700 PSI	87.0	3107	62,900 PSI
IMR 4350	80.0	2873	51,400 PSI	87.0	3097	62,400 PSI
Bullet: 215 GR. SIE SBT		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.590″**
H1000	96.0	2947	51,800 PSI	102.0C	3127	62,800 PSI
H4831	89.0	2881	51,800 PSI	94.5	3057	62,800 PSI
IMR 7828	86.0	2810	50,300 PSI	93.0	3059	62,400 PSI
IMR 4831	83.0	2875	50,500 PSI	90.3	3124	63,400 PSI
H4350	83.0	2940	54,100 PSI	88.0	3088	62,700 PSI
IMR 4350	80.0	2826	50,300 PSI	87.0	3067	62,600 PSI
Bullet: 225 GR. NOS PART		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.550″**
Retumbo	97.0	2662	52,800 PSI	103.0C	3055	61,100 PSI
StaBALL HD	93.0	2848	52,300 PSI	101.0C	3047	63,200 PSI
H1000	94.0	2860	51,400 PSI	100.0C	3058	63,000 PSI
H4831	88.0	2825	54,400 PSI	93.5	2977	63,000 PSI
IMR 7828	85.0	2768	51,100 PSI	92.0	2986	62,600 PSI
IMR 4831	81.0	2824	50,500 PSI	88.5	3071	63,400 PSI
H4350	81.0	2832	54,200 PSI	86.0	2976	62,600 PSI
IMR 4350	79.0	2800	50,800 PSI	85.7	3030	62,700 PSI
Bullet: 250 GR. HDY SP		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.580″**
US 869	100.0	2658	51,300 PSI	104.0	2751	56,200 PSI
Retumbo	95.0	2798	54,600 PSI	101.0C	2964	64,500 PSI
StaBALL HD	90.0	2714	51,700 PSI	98.0C	2916	63,500 PSI
H1000	92.0	2756	52,400 PSI	98.0C	2923	62,400 PSI
H4831	84.0	2662	50,000 PSI	90.0	2858	62,500 PSI
IMR 7828	83.0	2674	51,000 PSI	90.0	2896	63,500 PSI
IMR 4831	79.0	2703	51,800 PSI	86.0	2914	63,300 PSI
IMR 4350	77.0	2668	50,800 PSI	84.0	2890	63,700 PSI
H4350	78.0	2698	55,700 PSI	83.0	2820	63,000 PSI
Bullet: 275 GR. SFT AF		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.490″**
US 869	96.0	2525	50,700 PSI	102.0	2698	60,600 PSI
Retumbo	88.0	2649	57,900 PSI	94.0C	2764	63,100 PSI
StaBALL HD	85.0	2522	50,700 PSI	92.5	2720	63,400 PSI
H1000	86.0	2602	54,800 PSI	91.0C	2729	62,700 PSI
H4831	81.0	2570	55,000 PSI	86.0	2693	62,500 PSI
IMR 7828	79.0	2545	54,700 PSI	86.0	2731	64,100 PSI
H4350	73.0	2507	54,800 PSI	78.0	2650	62,900 PSI
IMR 4831	72.0	2463	51,500 PSI	78.0	2641	61,200 PSI
Bullet: 300 GR. SIE HPBT		**Dia: .338″**				
Case: Remington		**Primer: Remington 9 1/2M, LRM**				**Col: 3.580″**
US 869	96.0	2455	49,500 PSI	101.0	2595	57,000 PSI
StaBALL HD	84.0	2440	51,000 PSI	91.5C	2668	63,700 PSI
Retumbo	84.0	2501	53,900 PSI	90.5C	2662	62,200 PSI
H1000	82.0	2443	51,900 PSI	88.5C	2619	62,500 PSI

338 LAPUA MAGNUM

Barrel: 24″ Twist: 1:9″ Trim: 2.714″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 160 GR. BAR TTSX-BT		**Dia: .338″**				
Case: Norma		**Primer: Federal 215M, LRM Match**				**Col: 3.565″**
IMR 7828	98.7	3330	54,000 PSI	105.0	3531	62,800 PSI
H4831	98.5	3290	52,900 PSI	104.8C	3472	61,200 PSI
IMR 4831	93.0	3346	51,500 PSI	99.0	3589	62,500 PSI
IMR 4350	90.2	3350	53,700 PSI	96.0	3525	61,200 PSI
H4350	89.3	3348	54,100 PSI	95.0	3511	61,800 PSI
760	87.4	3341	54,700 PSI	93.0	3502	62,400 PSI
Bullet: 185 GR. BAR TSX BT		**Dia: .338″**				
Case: Norma		**Primer: Federal 215M, LRM Match**				**Col: 3.530″**
H1000	100.0	3051	49,300 PSI	106.0C	3218	57,300 PSI
H4831	93.7	3085	52,500 PSI	100.0	3281	61,500 PSI
IMR 7828	94.0	3133	54,200 PSI	100.0	3312	62,000 PSI
IMR 4831	89.0	3176	53,000 PSI	94.6	3371	62,800 PSI
IMR 4350	85.4	3122	53,000 PSI	90.8	3307	61,800 PSI
H4350	85.0	3120	53,200 PSI	90.4	3311	63,400 PSI
760	81.8	3124	56,100 PSI	87.0	3247	62,400 PSI
Bullet: 200 GR. NOS PART		**Dia: .338″**				
Case: Lapua		**Primer: Winchester LRM**				**Col: 3.580″**
Magnum	97.2	3053	58,300 PSI	108.0C	3376	64,700 PSI
Magpro	95.7	3112	57,800 PSI	106.4C	3381	64,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 200 GR. SPR SP			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.525″**
StaBALL HD	96.5	2942	51,300 PSI	106.0	3193	63,100 PSI
Retumbo	96.0	2928	43,700 CUP	104.0C	3189	52,600 CUP
H1000	92.0	2854	42,300 CUP	102.0C	3116	52,500 CUP
IMR 7828	89.0	2965	44,300 CUP	95.0	3133	52,300 CUP
H4831	83.0	2855	44,900 CUP	92.0	3086	53,200 CUP
IMR 4831	85.5	2970	47,600 CUP	91.0	3162	53,100 CUP
IMR 4350	83.0	3001	47,400 CUP	88.0	3161	52,700 CUP
H4350	79.0	2925	45,900 CUP	85.5	3099	52,500 CUP
Bullet: 210 GR. NOS PART			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.525″**
StaBALL HD	94.5	2866	50,300 PSI	103.5	3120	62,800 PSI
Retumbo	92.0	2846	42,100 CUP	102.0C	3142	52,600 CUP
H1000	90.0	2800	42,900 CUP	99.5	3052	52,500 CUP
IMR 7828	88.0	2920	47,300 CUP	93.4	3099	52,900 CUP
H4831	80.0	2735	44,600 CUP	89.0	3006	53,000 CUP
IMR 4831	83.0	2920	47,900 CUP	88.5	3076	53,500 CUP
IMR 4350	80.0	2891	46,400 CUP	85.0	3034	51,900 CUP
H4350	76.0	2834	47,000 CUP	82.0	3005	52,200 CUP
Bullet: 215 GR. SIE SBT GK			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.625″**
Magnum	93.6	2944	58,100 PSI	104.0	3249	64,600 PSI
Magpro	92.9	2978	58,100 PSI	103.2	3262	64,600 PSI
Bullet: 215 GR. SIE SPBT			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.550″**
Retumbo	94.0	2849	43,700 CUP	104.0C	3125	51,900 CUP
StaBALL HD	95.5	2862	50,500 PSI	104.0	3108	62,800 PSI
H1000	92.0	2809	43,500 CUP	102.0C	3068	53,000 CUP
IMR 7828	87.7	2906	47,600 CUP	93.3	3076	51,900 CUP
H4831	82.0	2763	44,500 CUP	91.0	2997	53,000 CUP
IMR 4831	83.0	2868	45,900 CUP	88.5	3033	52,600 CUP
IMR 4350	80.0	2888	45,900 CUP	85.0	3042	52,200 CUP
H4350	76.0	2791	45,000 CUP	84.0	3015	52,800 CUP
Bullet: 225 GR. NOS PART			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.550″**
Magnum	93.0	2842	58,000 PSI	103.3	3150	64,400 PSI
Magpro	91.8	2927	57,900 PSI	102.0	3169	64,400 PSI
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.550″**
Retumbo	92.0	2744	41,200 CUP	102.0C	3040	52,300 CUP
H1000	91.0	2713	42,100 CUP	101.0C	2995	53,100 CUP
StaBALL HD	91.0	2714	47,400 PSI	100.0	3010	62,600 PSI
IMR 7828	85.0	2831	46,900 CUP	90.5	2966	52,100 CUP
H4831	80.0	2699	44,000 CUP	89.6	2918	52,900 CUP
IMR 4831	81.8	2794	47,300 CUP	87.0	2965	53,500 CUP
IMR 4350	78.0	2821	45,200 CUP	83.3	2944	52,300 CUP
H4350	74.0	2715	45,200 CUP	82.5	2936	52,800 CUP
Bullet: 245 GR. LD M-HYB			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.970″**
Magpro	90.0	2882	58,200 PSI	100.0	3142	64,600 PSI
Magnum	88.9	2779	58,100 PSI	98.8	3077	64,600 PSI
Bullet: 250 GR. HDY SP			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.550″**
US 869	101.5	2728	47,000 CUP	108.0	2879	51,100 CUP
Retumbo	90.0	2620	43,200 CUP	98.0C	2853	52,000 CUP
H1000	88.0	2567	41,400 CUP	98.0C	2838	52,800 CUP
StaBALL HD	88.5	2656	50,400 PSI	97.5	2889	62,800 PSI
IMR 7828	83.0	2636	46,200 CUP	88.5	2802	52,100 CUP
H4831	79.0	2600	46,100 CUP	85.0	2740	52,200 CUP
IMR 4831	80.0	2657	47,700 CUP	85.0	2801	52,900 CUP
H4350	74.0	2615	48,300 CUP	78.0	2742	52,300 CUP
Bullet: 250 GR. SIE SBT			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.575″**
Magpro	86.8	2755	57,900 PSI	96.4	3007	64,300 PSI
Magnum	84.3	2736	58,300 PSI	93.7	2985	64,800 PSI
Bullet: 265 GR. BAR TTSX-BT			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.685″**
US 869	93.8	2518	48,400 PSI	100.0	2677	55,900 PSI
StaBALL HD	82.0	2512	50,300 PSI	91.5	2762	62,800 PSI
H1000	77.7	2510	52,800 PSI	83.6	2656	61,100 PSI
Retumbo	76.4	2483	50,400 PSI	83.0	2660	60,600 PSI
IMR 7828	76.1	2533	54,000 PSI	81.0	2658	60,500 PSI
H4831	74.6	2518	54,400 PSI	79.4	2642	61,600 PSI
IMR 4831	70.5	2503	53,800 PSI	75.0	2634	62,300 PSI
Bullet: 275 GR. SFT AF			**Dia: .338″**			
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.460″**
US 869	99.0	2636	46,200 CUP	104.5	2761	52,200 CUP
H1000	83.0	2444	43,500 CUP	91.5C	2648	52,600 CUP
StaBALL HD	82.5	2429	47,300 PSI	91.5	2695	62,900 PSI
Retumbo	80.0	2421	41,800 CUP	89.0	2671	52,700 CUP
IMR 7828	73.0	2429	44,500 CUP	81.0	2632	53,000 CUP
H4831	71.0	2349	42,800 CUP	79.0	2572	52,800 CUP
IMR 4831	73.0	2450	46,000 CUP	77.3	2584	52,900 CUP
Bullet: 285 GR. HDY BTHP			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.680″**
LRT	94.3	2683	57,400 PSI	104.8	2909	63,700 PSI
Magnum	85.3	2550	57,900 PSI	94.8	2821	64,400 PSI
Magpro	82.8	2561	57,900 PSI	92.0	2817	64,300 PSI
Bullet: 300 GR. SIE HPBT			**Dia: .338″**			
Case: Lapua			**Primer: Winchester LRM**			**Col: 3.680″**
LRT	90.9	2592	57,400 PSI	101.0C	2807	63,700 PSI
Magnum	82.1	2455	58,200 PSI	91.2	2707	64,700 PSI
Magpro	79.9	2473	58,400 PSI	88.7	2721	64,800 PSI
Case: Norma			**Primer: Federal 215M, LRM Match**			**Col: 3.680″**
US 869	98.5	2567	47,500 CUP	104.0	2677	51,500 CUP
Retumbo	85.0	2376	41,100 CUP	94.0C	2654	53,400 CUP
H1000	83.0	2383	43,200 CUP	92.0C	2590	53,000 CUP
StaBALL HD	82.5	2405	50,200 PSI	91.0	2633	63,100 PSI
IMR 7828	73.0	2376	44,600 CUP	81.0	2566	53,000 CUP
H4831	71.0	2307	44,400 CUP	79.0	2511	53,100 CUP
IMR 4831	68.0	2316	43,500 CUP	76.0	2541	53,300 CUP

350 LEGEND

Barrel: 16″ Twist: 1:16″ Trim: 1.700″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 115 GR. LD FTM-EX			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.060″**
Enforcer	27.9	2584	40,400 PSI	31.0	2828	52,100 PSI
4100	27.8	2577	40,000 PSI	30.9	2820	51,700 PSI
No. 9	25.0	2523	42,700 PSI	27.8	2723	52,000 PSI
Bullet: 118 GR. LD XD			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.100″**
Enforcer	26.9	2480	37,100 PSI	29.9	2750	52,000 PSI
4100	26.8	2472	36,700 PSI	29.8	2741	51,500 PSI
5744	26.4	2158	34,100 PSI	29.3	2408	45,000 PSI
296	23.0	2159	38,100 PSI	28.0	2518	51,900 PSI
H110	23.0	2159	38,100 PSI	28.0	2518	51,900 PSI
No. 9	25.1	2489	41,500 PSI	27.9	2700	52,400 PSI
IMR 4227	24.0	1879	30,500 PSI	27.5C	2201	43,200 PSI
Bullet: 125 GR. BAR TAC-XP			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.050″**
No. 11FS	25.2	2370	36,300 PSI	28.0	2569	45,500 PSI
IMR 4227	24.0	2054	33,000 PSI	27.5C	2307	46,100 PSI
Lil'Gun	24.0	2428	42,400 PSI	27.5	2600	50,300 PSI
Enforcer	24.1	2359	38,200 PSI	26.8	2565	51,700 PSI
4100	24.0	2353	37,800 PSI	26.7	2557	51,200 PSI
H110	23.7	2352	41,300 PSI	26.3	2543	51,800 PSI
296	23.7	2352	41,300 PSI	26.3	2543	51,800 PSI
No. 9	22.0	2331	39,300 PSI	24.5	2519	52,000 PSI
Bullet: 147 GR. HDY XTP			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.000″**
Lil'Gun	27.0	2347	36,400 PSI	28.5	2455	40,500 PSI
No. 11FS	25.6	2289	34,300 PSI	28.4	2487	50,000 PSI
H110	27.0	2368	41,900 PSI	28.2	2495	52,100 PSI
296	27.0	2368	41,900 PSI	28.2	2495	52,100 PSI
IMR 4227	24.0	2066	38,000 PSI	27.5C	2276	45,800 PSI
5744	24.5	2057	33,700 PSI	27.2	2313	50,000 PSI
Enforcer	23.9	2227	35,300 PSI	26.6	2440	51,700 PSI
4100	23.8	2219	34,700 PSI	26.5	2431	51,000 PSI
No. 9	21.7	2182	37,100 PSI	24.1	2375	52,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 155 GR. SIE PRO-HUNTER Dia: .355″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester SR, Small Rifle					Col: 2.140″
296	26.5	2237	47,500 PSI	28.8	2333	51,100 PSI
H110	26.5	2237	47,500 PSI	28.8	2333	51,100 PSI
No. 11FS	26.5	2237	47,500 PSI	28.8	2333	51,100 PSI
5744	26.0	2030	37,700 PSI	28.5C	2277	52,000 PSI
IMR 4227	25.5	2032	39,700 PSI	28.0C	2196	49,000 PSI

Bullet: 165 GR. HDY FTX Dia: .355″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester SR, Small Rifle					Col: 2.255″
Lil'Gun	25.7	2138	35,200 PSI	28.6	2298	41,200 PSI
No. 11FS	24.4	2100	38,200 PSI	27.1	2285	51,000 PSI
296	24.3	2104	39,100 PSI	27.0	2270	51,800 PSI
H110	24.3	2104	39,100 PSI	27.0	2270	51,800 PSI
5744	24.2	1967	39,900 PSI	26.9	2185	52,000 PSI
IMR 4227	22.7	1875	35,100 PSI	25.2	2040	42,800 PSI
Enforcer	22.5	2057	40,600 PSI	24.9	2227	52,000 PSI
4100	22.4	2051	40,200 PSI	24.8	2220	51,500 PSI

Bullet: 170 GR. HDY SP Dia: .355″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester SR, Small Rifle					Col: 2.240″
CFE BLK	27.0	1857	24,000 PSI	30.0C	2075	31,000 PSI
IMR 4227	25.0	1946	38,500 PSI	27.4C	2122	50,900 PSI
Lil'Gun	27.0	2239	43,500 PSI	27.9	2307	45,900 PSI
5744	24.7	2022	38,800 PSI	27.4	2238	52,000 PSI
No. 11FS	24.2	2122	37,700 PSI	26.8	2300	51,900 PSI
H110	24.0	2049	40,600 PSI	26.7	2221	51,600 PSI
296	24.0	2049	40,600 PSI	26.7	2221	51,600 PSI
Enforcer	22.0	2036	38,500 PSI	24.5	2211	52,500 PSI
4100	22.0	2030	38,100 PSI	24.4	2204	52,000 PSI

Bullet: 180 GR. WIN PP Dia: .355″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester SR, Small Rifle					Col: 2.110″
CFE BLK	24.7	1691	21,000 PSI	27.5C	1889	28,100 PSI
1680	24.5	1834	21,600 PSI	27.2	2026	31,000 PSI
Lil'Gun	23.0	2049	41,300 PSI	25.5	2213	50,600 PSI
5744	22.5	1891	36,100 PSI	25.0	2069	49,000 PSI
IMR 4227	22.7	1880	42,100 PSI	24.7	2032	51,200 PSI
H110	22.0	1894	36,700 PSI	24.0	2079	51,100 PSI
296	22.0	1894	36,700 PSI	24.0	2079	51,100 PSI
No. 11FS	21.6	1966	37,500 PSI	24.0	2133	51,500 PSI
Enforcer	21.0	1957	39,100 PSI	23.3	2126	52,700 PSI
4100	20.9	1950	38,500 PSI	23.2	2118	52,000 PSI

35 REMINGTON

Barrel: 24″ Twist: 1:16″ Trim: 1.910″

Bullet: 180 GR. SPR SPFN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester LR, Large Rifle					Col: 2.470″
2495	36.9	1866	18,000 PSI	41.0C	2121	20,000 PSI
2520	35.1	1867	24,400 PSI	39.0	2122	27,100 PSI
2460	33.3	1838	25,500 PSI	37.0	2089	28,300 PSI
2230	32.9	1814	26,000 PSI	36.5	2061	28,900 PSI
2015	32.4	1847	25,000 PSI	36.0	2099	27,800 PSI
5744	22.5	1664	29,400 PSI	25.0	1891	32,700 PSI

Bullet: 180 GR. SPR SPFN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Remington 9 1/2, Large Rifle					Col: 2.470″
LEVERevolution	40.0	2044	26,700 CUP	45.0C	2302	33,900 CUP
BL-C(2)	39.0	2014	29,300 CUP	43.0	2147	32,300 CUP
StaBALL Match	37.5	1965	29,500 CUP	41.0	2185	34,100 CUP
Varget	37.0	1972	27,200 CUP	40.5	2196	32,500 CUP
H4895	35.0	1991	27,500 CUP	39.0	2232	33,100 CUP
H335	34.0	1953	29,900 CUP	37.5	2111	33,600 CUP
IMR 8208 XBR	33.0	1915	30,900 CUP	37.0	2074	33,900 CUP
Benchmark	32.5	1865	29,300 CUP	35.5	2034	32,300 CUP
H322	31.0	1901	28,200 CUP	35.0	2104	33,100 CUP
H4198	28.0	1971	28,600 CUP	32.0	2172	33,000 CUP

Bullet: 200 GR. RCB LFNGC Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester LR, Large Rifle					Col: 2.410″
2495	36.0	1769	21,600 PSI	40.0	2010	24,000 PSI
2520	34.2	1834	27,800 PSI	38.0	2084	30,900 PSI
2460	30.6	1726	27,300 PSI	34.0	1961	30,300 PSI
2230	29.3	1680	26,800 PSI	32.5	1909	29,700 PSI
2015	29.3	1705	27,800 PSI	32.5	1938	30,800 PSI
5744	20.7	1546	24,800 PSI	23.0	1757	27,600 PSI

Bullet: 200 GR. SIE RN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Winchester LR, Large Rifle					Col: 2.470″
2495	36.0	1784	23,000 PSI	40.0	2027	25,500 PSI
2520	35.1	1822	25,000 PSI	39.0	2071	27,800 PSI
2460	33.3	1785	24,500 PSI	37.0	2028	27,200 PSI
2230	31.5	1744	27,800 PSI	35.0	1982	30,900 PSI
2015	31.5	1806	27,900 PSI	35.0	2052	31,000 PSI
5744	21.6	1563	26,800 PSI	24.0	1777	29,800 PSI

Bullet: 200 GR. HDY FTX Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Remington 9 1/2, Large Rifle					Col: 2.540″
LEVERevolution	37.0	1897	26,500 CUP	41.4C	2116	34,700 CUP
Varget	36.0	1845	29,800 CUP	38.3C	1963	32,000 CUP
748	35.7	1815	28,600 CUP	38.0	1913	31,300 CUP
StaBALL Match	34.3	1821	29,000 CUP	37.9	1999	33,600 CUP
IMR 4064	34.1	1741	30,400 CUP	36.3C	1861	32,200 CUP
H4895	33.8	1839	30,000 CUP	36.0C	1959	31,900 CUP
IMR 8208 XBR	33.2	1799	28,800 CUP	35.3	1932	32,000 CUP

Bullet: 200 GR. HDY RN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Remington 9 1/2, Large Rifle					Col: 2.510″
LEVERevolution	42.0	2040	25,600 CUP	45.0C	2235	31,200 CUP
StaBALL Match	39.0	1943	28,800 CUP	42.8	2126	33,900 CUP
BL-C(2)	38.0	1877	23,200 CUP	41.5	2011	31,700 CUP
Varget	36.0	1966	28,800 CUP	39.5	2139	33,300 CUP
H4895	35.0	1920	26,100 CUP	38.5	2110	32,300 CUP
H335	33.0	1855	27,100 CUP	37.0	2048	33,200 CUP
IMR 8208 XBR	33.0	1872	31,000 CUP	36.6	1997	33,600 CUP
Benchmark	32.5	1847	29,400 CUP	35.5	1984	32,600 CUP
H322	31.0	1866	28,500 CUP	33.8	1987	33,100 CUP
H4198	27.0	1816	26,700 CUP	30.5	1999	31,700 CUP

Bullet: 220 GR. SPR SPFN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Remington 9 1/2, Large Rifle					Col: 2.470″
BL-C(2)	36.0	1824	26,900 CUP	39.5	1917	31,000 CUP
Varget	34.0	1803	27,800 CUP	38.0	1998	33,300 CUP
StaBALL Match	34.2	1796	29,500 CUP	37.5	1935	33,500 CUP
H4895	33.0	1848	29,000 CUP	36.3	2010	33,600 CUP
IMR 8208 XBR	31.0	1679	30,500 CUP	34.8	1932	34,500 CUP
Benchmark	31.0	1725	30,600 CUP	34.0	1865	33,300 CUP
H335	30.0	1633	29,100 CUP	33.5	1821	33,400 CUP
H322	29.0	1692	26,100 CUP	32.5	1870	32,600 CUP
H4198	26.0	1744	30,400 CUP	29.0	1867	33,400 CUP

35 WHELEN

Barrel: 24″ Twist: 1:16″ Trim: 2.484″

Bullet: 180 GR. SPR SPFN Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Remington 9 1/2, Large Rifle					Col: 3.040″
BL-C(2)	62.0	2644	38,100 CUP	65.0	2860	48,500 CUP
Varget	54.0	2609	39,900 CUP	60.0C	2764	42,500 CUP
IMR 4064	56.0	2544	39,700 CUP	60.0C	2708	44,700 CUP
IMR 8208 XBR	56.0	2736	42,600 CUP	60.0C	2891	47,500 CUP
IMR 4895	56.0	2636	43,600 CUP	60.0C	2780	46,800 CUP
H335	56.0	2741	45,600 CUP	60.0	2870	50,000 CUP
H4895	56.0	2649	40,000 CUP	60.0	2798	46,800 CUP
H322	55.0	2707	44,000 CUP	58.0	2829	48,500 CUP
Case: Remington	**Primer: Federal 210, Large Rifle**					**Col: 3.040″**
2520	54.5	2564	43,700 PSI	60.5	2914	48,500 PSI
2495	53.6	2585	46,700 PSI	59.5	2937	51,800 PSI
2460	53.1	2518	40,500 PSI	59.0	2861	45,000 PSI
2230	51.3	2482	40,100 PSI	57.0	2820	44,600 PSI
2015	50.9	2607	46,800 PSI	56.5	2963	51,900 PSI

Bullet: 200 GR. BAR X Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Federal 210, Large Rifle					Col: 3.225″
2520	50.9	2374	41,600 PSI	56.5	2698	46,200 PSI
2460	50.4	2420	43,500 PSI	56.0	2750	48,300 PSI
2495	49.1	2316	42,000 PSI	54.5	2632	46,600 PSI
2230	49.1	2378	41,900 PSI	54.5	2702	46,500 PSI
2015	45.9	2359	42,200 PSI	51.0	2681	46,900 PSI

Bullet: 200 GR. HDY SP Dia: .358″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
	Primer: Federal 210, Large Rifle					Col: 3.140″
2520	52.7	2424	43,200 PSI	58.5	2755	47,900 PSI
2495	51.3	2458	45,200 PSI	57.0	2793	50,200 PSI
2460	51.3	2401	44,800 PSI	57.0	2728	49,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
2230	49.5	2379	45,600 PSI	55.0	2703	50,700 PSI
2015	48.6	2462	47,200 PSI	54.0	2798	52,400 PSI
Bullet: 200 GR. SIE RN			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.050″**
BL-C(2)	60.0	2636	43,000 CUP	63.0	2807	49,000 CUP
H380	59.0	2511	41,500 CUP	61.0	2602	45,000 CUP
IMR 4064	54.0	2460	40,800 CUP	59.0C	2637	46,400 CUP
IMR 4895	54.0	2512	42,800 CUP	59.0C	2696	48,800 CUP
IMR 8208 XBR	53.0	2579	41,300 CUP	59.0C	2802	48,900 CUP
H4895	54.0	2544	43,500 CUP	57.0	2689	49,000 CUP
Varget	52.0	2508	40,400 CUP	57.0	2653	42,300 CUP
H322	52.0	2540	42,600 CUP	56.0	2691	48,500 CUP
IMR 3031	50.0	2467	40,900 CUP	55.5	2711	48,900 CUP
H335	52.0	2588	44,900 CUP	55.0	2684	50,000 CUP
Bullet: 204 GR. LY LRNGC			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.045″**
2520	48.6	2410	45,000 PSI	54.0	2739	50,000 PSI
2495	46.8	2388	43,800 PSI	52.0	2714	48,700 PSI
2460	46.8	2358	43,600 PSI	52.0	2679	48,400 PSI
2230	46.8	2378	48,300 PSI	52.0	2702	53,700 PSI
2015	45.0	2387	44,500 PSI	50.0	2713	49,400 PSI
5744	30.0	2023	38,000 PSI	38.0	2452	48,100 PSI
Bullet: 220 GR. SPR FP			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.045″**
BL-C(2)	58.0	2492	44,000 CUP	61.0	2636	49,000 CUP
H380	58.0	2389	41,500 CUP	60.0	2490	44,800 CUP
IMR 4895	50.0	2332	42,200 CUP	56.0C	2569	50,300 CUP
IMR 4064	49.5	2248	41,000 CUP	55.5C	2499	48,000 CUP
H4895	51.0	2461	44,000 CUP	55.0	2588	50,000 CUP
IMR 8208 XBR	49.5	2397	42,600 CUP	55.0	2623	50,200 CUP
H322	50.0	2392	43,500 CUP	54.0	2566	49,500 CUP
H335	50.0	2429	44,500 CUP	53.0	2519	49,500 CUP
IMR 3031	46.0	2270	41,300 CUP	51.5	2516	49,100 CUP
Bullet: 225 GR. BAR X			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.220″**
2520	48.2	2226	44,100 PSI	53.5	2529	48,900 PSI
2495	47.7	2174	43,900 PSI	53.0	2470	48,800 PSI
2460	46.8	2261	45,400 PSI	52.0	2569	50,400 PSI
2230	46.8	2251	46,200 PSI	52.0	2558	51,300 PSI
2015	43.2	2198	45,500 PSI	48.0	2498	50,600 PSI
Bullet: 225 GR. NOS PART			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.215″**
2520	49.5	2291	47,100 PSI	55.0	2603	52,300 PSI
2460	48.6	2292	47,000 PSI	54.0	2604	52,200 PSI
2230	47.7	2278	47,200 PSI	53.0	2589	52,400 PSI
2495	45.9	2264	47,000 PSI	51.0	2573	52,200 PSI
2015	44.1	2271	46,500 PSI	49.0	2581	51,700 PSI
Bullet: 225 GR. SIE SBT			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.250″**
IMR 4064	51.0	2321	42,400 CUP	56.0C	2547	49,200 CUP
Varget	51.0	2442	43,500 CUP	56.0	2588	46,400 CUP
IMR 4895	49.5	2315	41,300 CUP	55.0C	2553	50,000 CUP
IMR 8208 XBR	49.5	2409	40,500 CUP	55.0C	2618	49,600 CUP
H4895	49.5	2404	40,900 CUP	55.0C	2611	49,200 CUP
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.250″**
2520	49.5	2287	46,000 PSI	55.0	2599	51,100 PSI
2460	48.6	2299	46,700 PSI	54.0	2613	51,900 PSI
2230	47.3	2264	44,300 PSI	52.5	2573	49,200 PSI
2495	44.6	2207	46,200 PSI	49.5	2508	51,300 PSI
2015	44.1	2248	46,100 PSI	49.0	2554	51,200 PSI
Bullet: 250 GR. BAR X			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.220″**
2495	47.3	2084	48,200 PSI	52.5	2368	53,500 PSI
2520	45.9	2109	46,400 PSI	51.0	2397	51,500 PSI
2460	44.1	2123	47,300 PSI	49.0	2412	52,500 PSI
2230	44.1	2116	47,500 PSI	49.0	2405	52,800 PSI
2015	42.8	2106	46,100 PSI	47.5	2393	51,200 PSI
Bullet: 250 GR. HDY RN			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.250″**
2520	48.3	2131	45,500 PSI	53.7	2422	50,600 PSI
2495	47.7	2220	48,600 PSI	53.0	2523	54,000 PSI
2460	46.8	2119	42,800 PSI	52.0	2408	47,500 PSI
2015	46.8	2200	48,600 PSI	52.0	2500	54,000 PSI
2230	45.9	2108	43,500 PSI	51.0	2395	48,300 PSI
Bullet: 250 GR. HDY SP			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 3.290″**
BL-C(2)	56.0	2382	43,000 CUP	59.0	2503	48,900 CUP
H380	57.0	2304	41,000 CUP	59.0	2416	44,500 CUP
Varget	50.0	2348	44,900 CUP	55.0	2486	49,900 CUP
IMR 4064	49.0	2200	41,700 CUP	54.8C	2449	50,200 CUP
IMR 8208 XBR	49.0	2311	44,000 CUP	54.3C	2515	50,300 CUP
IMR 4895	48.0	2178	41,400 CUP	53.5	2421	50,300 CUP
H4895	49.0	2330	43,700 CUP	53.0	2455	50,000 CUP
H322	48.0	2249	44,000 CUP	52.0	2398	48,500 CUP
H335	49.0	2288	44,200 CUP	52.0	2404	50,000 CUP
Bullet: 250 GR. NOS PART			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.255″**
2520	45.9	2146	48,000 PSI	51.0	2439	53,300 PSI
2495	44.1	2126	49,100 PSI	49.0	2416	54,500 PSI
2460	44.1	2111	47,700 PSI	49.0	2399	53,000 PSI
2230	43.7	2092	46,900 PSI	48.5	2377	52,100 PSI
2015	40.5	2062	45,700 PSI	45.0	2343	50,800 PSI
Bullet: 250 GR. RCB LSPGC			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.250″**
2495	50.0	2190	45,100 PSI	55.5	2489	50,100 PSI
2520	45.0	2088	47,700 PSI	50.0	2373	53,000 PSI
2460	42.3	2029	43,400 PSI	47.0	2306	48,200 PSI
2230	41.4	2028	45,800 PSI	46.0	2305	50,900 PSI
2015	40.5	2020	44,000 PSI	45.0	2296	48,900 PSI
5744	32.4	1912	42,900 PSI	36.0	2173	47,700 PSI
Bullet: 250 GR. SPR GS			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.245″**
2520	46.8	2122	46,400 PSI	52.0	2411	51,500 PSI
2460	46.4	2140	47,600 PSI	51.5	2432	52,800 PSI
2230	45.9	2138	46,500 PSI	51.0	2429	51,700 PSI
2495	45.5	2142	47,800 PSI	50.5	2434	53,100 PSI
2015	42.8	2122	47,000 PSI	47.5	2411	52,200 PSI
Bullet: 280 GR. LY RN GC			**Dia: .358″**			
Case: Remington			**Primer: Federal 210, Large Rifle**			**Col: 3.050″**
2495	43.2	1925	34,700 PSI	48.0	2188	38,500 PSI
2520	40.5	1909	41,400 PSI	45.0	2169	46,000 PSI
2460	38.3	1863	40,000 PSI	42.5	2117	44,400 PSI
2230	37.8	1846	38,400 PSI	42.0	2098	42,700 PSI
2015	36.9	1857	41,500 PSI	41.0	2110	46,100 PSI
5744	30.6	1773	39,500 PSI	34.0	2015	43,900 PSI

360 BUCKHAMMER

Barrel: 20″ Twist: 1:12″ Trim: 1.800″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 180 GR. REM CORE-LOKT			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.380″**
1680	34.2	2274	37,100 PSI	38.0C	2503	48,300 PSI
CFE BLK	35.0	2275	34,000 PSI	37.5C	2431	42,200 PSI
5744	28.0	2124	37,400 PSI	31.0	2349	48,900 PSI
IMR 4227	27.2	2109	41,600 PSI	30.2C	2270	48,700 PSI
No. 11FS	24.8	2167	45,500 PSI	27.0	2259	48,200 PSI
Bullet: 200 GR. REM CORE-LOKT			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.380″**
CFE BLK	34.0	2155	36,800 PSI	37.0C	2342	48,100 PSI
1680	32.0	2096	36,300 PSI	35.5C	2327	49,100 PSI
LT-30	32.0	2053	36,400 PSI	34.0C	2165	41,400 PSI
IMR 4227	26.0	1975	42,300 PSI	29.0C	2129	49,200 PSI
5744	26.7	2007	38,000 PSI	29.6	2215	48,700 PSI
Bullet: 223 GR. HAM SHOCK			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.380″**
1680	28.8	2019	42,100 PSI	32.0C	2155	48,600 PSI
CFE BLK	29.4	2000	40,600 PSI	32.0C	2108	43,900 PSI
5744	21.6	1714	40,400 PSI	24.0C	1860	48,800 PSI
IMR 4227	20.7	1591	36,900 PSI	23.0C	1781	48,700 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 225 GR. SFT AF			**Dia: .358″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.385″**
CFE BLK	29.0	1896	36,500 PSI	32.3C	2050	48,700 PSI
1680	28.0	1866	36,700 PSI	31.2C	2056	48,800 PSI
LT-30	28.0	1810	36,300 PSI	31.0C	2014	48,400 PSI
5744	23.0	1758	38,500 PSI	25.5C	1944	48,600 PSI
IMR 4227	22.0	1689	38,300 PSI	24.3C	1838	48,400 PSI

9.3 x 62

Barrel: 24″ Twist: 1:10″ Trim: 2.431″

Bullet: 250 GR. BAR TSX			**Dia: .366″**			
Case: Norma			**Primer: CCI 200, Large Rifle**			**Col: 3.200″**
IMR 4895	52.0	2185	39,200 CUP	58.0C	2438	48,700 CUP
Varget	52.0	2199	33,900 CUP	58.0C	2436	47,200 CUP
H4895	51.0	2221	37,000 CUP	57.0C	2484	48,700 CUP
H335	49.5	2188	38,800 CUP	56.0	2435	48,800 CUP
IMR 3031	49.0	2182	36,500 CUP	54.5C	2423	47,700 CUP
Bullet: 270 GR. SPR SP			**Dia: .366″**			
Case: Norma			**Primer: CCI 200, Large Rifle**			**Col: 3.280″**
H4350	63.0	2322	38,500 CUP	67.0C	2438	44,600 CUP
IMR 4350	58.0	2117	38,400 CUP	64.0C	2347	47,600 CUP
BL-C(2)	60.0	2338	39,600 CUP	66.0	2548	47,400 CUP
Varget	55.0	2290	40,100 CUP	59.5	2440	48,100 CUP
H335	54.0	2283	40,700 CUP	58.0	2411	47,600 CUP
H4895	52.0	2244	39,800 CUP	56.5	2406	48,000 CUP
IMR 4895	50.0	2092	37,200 CUP	56.0	2328	48,300 CUP
IMR 4064	50.0	2139	40,200 CUP	54.5	2317	48,300 CUP
IMR 3031	48.0	2154	36,900 CUP	53.5	2380	48,800 CUP
Bullet: 286 GR. NOS PART			**Dia: .366″**			
Case: Norma			**Primer: CCI 200, Large Rifle**			**Col: 3.225″**
H4350	64.0	2321	40,800 CUP	67.0C	2407	46,300 CUP
760	60.0	2205	40,700 CUP	63.0C	2305	47,800 CUP
Varget	55.0	2242	39,800 CUP	59.0C	2350	47,500 CUP
748	52.0	2056	34,300 CUP	57.0	2241	43,200 CUP
IMR 4895	51.0	2108	38,200 CUP	56.0C	2279	48,000 CUP
H4895	51.0	2131	39,000 CUP	55.5	2331	47,800 CUP
H335	51.0	2178	41,300 CUP	55.0	2323	48,100 CUP
IMR 4064	49.0	2015	35,700 CUP	54.5C	2218	46,100 CUP
IMR 3031	47.0	2058	35,700 CUP	51.5C	2219	46,900 CUP
Bullet: 300 GR. SFT AF			**Dia: .366″**			
Case: Norma			**Primer: CCI 200, Large Rifle**			**Col: 3.150″**
H4350	60.0	2142	40,000 CUP	64.0C	2288	48,100 CUP
760	59.0	2136	41,500 CUP	62.0C	2242	46,200 CUP
BL-C(2)	54.0	2140	42,900 CUP	57.5	2211	47,900 CUP
748	52.0	2096	36,700 CUP	56.5	2234	44,500 CUP
Varget	52.0	2083	42,000 CUP	56.0	2194	47,800 CUP
IMR 4895	49.0	2020	38,800 CUP	54.7C	2224	48,500 CUP
IMR 4064	49.0	2002	38,600 CUP	54.5C	2205	48,900 CUP
IMR 3031	46.0	2002	37,200 CUP	52.0C	2230	48,600 CUP
H4895	47.0	1979	40,200 CUP	52.0	2133	48,200 CUP

375 H & H Magnum

Barrel: 24″ Twist: 1:12″ Trim: 2.840″

Bullet: 200 GR. SIE FN			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.350″**
CFE 223	81.8	2985	41,600 CUP	89.0	3186	46,200 CUP
Varget	69.5	2915	45,200 CUP	77.3	3109	51,000 CUP
IMR 4064	68.4	2819	46,000 CUP	76.0C	3013	50,800 CUP
H4895	67.7	2924	42,200 CUP	75.2	3117	51,300 CUP
IMR 4895	67.6	2834	43,700 CUP	75.1	3022	51,000 CUP
Bullet: 235 GR. SPR SP			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.600″**
StaBALL 6.5	83.0	2721	42,800 CUP	91.5C	2926	48,500 CUP
760	79.2	2714	42,300 CUP	87.0	2912	46,600 CUP
CFE 223	76.6	2858	43,700 CUP	84.2	3026	50,600 CUP
IMR 4064	65.0	2641	42,700 CUP	71.5	2824	50,900 CUP
Varget	65.0	2718	43,600 CUP	71.5	2874	51,400 CUP
Bullet: 250 GR. SFT AF			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.555″**
H4350	76.0	2641	44,000 CUP	83.0C	2841	51,200 CUP
IMR 4350	71.0	2423	41,300 CUP	79.0C	2695	48,400 CUP
760	77.0	2750	44,500 CUP	82.5	2820	48,800 CUP
StaBALL 6.5	73.8	2579	44,600 CUP	82.0	2789	50,100 CUP
Bullet: 250 GR. SIE SBT			**Dia: .375″**			
Case: Winchester			**Primer: Federal 215, LRM**			**Col: 3.600″**
4350	75.6	2431	44,000 PSI	84.0	2763	48,900 PSI
2700	76.0	2644	56,800 PSI	80.0	2813	59,800 PSI
Big Game	71.5	2561	49,500 PSI	79.4	2845	55,000 PSI
Bullet: 260 GR. NOS PART			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.580″**
IMR 4831	76.0	2508	44,200 CUP	83.0C	2727	49,900 CUP
H4831	76.0	2371	41,800 CUP	83.0C	2616	46,300 CUP
H4350	73.5	2611	43,300 CUP	81.5	2818	51,400 CUP
StaBALL 6.5	72.5	2551	44,900 CUP	80.6	2771	51,000 CUP
IMR 4350	70.0	2406	41,500 CUP	78.6C	2710	50,700 CUP
760	67.0	2459	43,000 CUP	74.5	2663	50,300 CUP
Bullet: 270 GR. BAR TSX FB			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.550″**
StaBALL 6.5	71.0	2442	42,600 CUP	79.0C	2653	51,500 CUP
760	72.0	2511	46,300 CUP	79.0	2650	48,400 CUP
IMR 4350	69.0	2300	39,500 CUP	76.0C	2555	46,700 CUP
H4350	69.0	2379	41,600 CUP	75.0C	2563	44,400 CUP
Bullet: 300 GR. SFT AF/SS			**Dia: .375″**			
Case: Remington			**Primer: Winchester LRM**			**Col: 3.570″**
StaBALL 6.5	72.0	2425	45,100 CUP	80.0	2570	50,700 CUP
H4350	68.0	2304	41,300 CUP	76.0C	2548	48,400 CUP
IMR 4350	67.5	2253	43,200 CUP	75.0C	2481	47,800 CUP
760	69.0	2314	40,600 CUP	75.0	2484	44,200 CUP
Bullet: 350 GR. BAR BAND-S			**Dia: .375″**			
Case: Winchester			**Primer: Federal 215, LRM**			**Col: 3.560″**
4350	67.5	2072	49,300 PSI	75.0	2355	54,800 PSI
2700	63.7	2123	53,800 PSI	67.0	2259	56,600 PSI

400 Legend

Barrel: 20″ Twist: 1:16″ Trim: 1.640″

Bullet: 140 GR. BAR TAC-XP			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.050″**
H110	35.0	2700	35,900 PSI	38.2C	2890	44,100 PSI
296	35.0	2700	35,900 PSI	38.2C	2890	44,100 PSI
No. 11FS	35.0	2700	35,900 PSI	38.2C	2890	44,100 PSI
Enforcer	33.4	2639	35,100 PSI	36.4C	2835	43,800 PSI
IMR 4227	33.0	2276	30,800 PSI	36.0C	2498	40,300 PSI
5744	33.0	2341	34,500 PSI	35.8C	2562	44,000 PSI
Bullet: 165 GR. FED SYNTECH			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.050″**
H110	35.0	2533	33,800 PSI	39.0	2788	44,200 PSI
296	35.0	2533	33,800 PSI	39.0	2788	44,200 PSI
No. 11FS	35.0	2533	33,800 PSI	39.0	2788	44,200 PSI
5744	34.0	2308	34,300 PSI	37.0	2503	43,900 PSI
IMR 4227	33.0	2212	32,100 PSI	36.0C	2398	37,400 PSI
Bullet: 180 GR. SPR GDHP			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.050″**
5744	32.5	2173	34,900 PSI	35.4	2391	44,200 PSI
IMR 4227	31.0	2088	34,500 PSI	34.0C	2316	43,900 PSI
H110	29.0	2237	37,500 PSI	31.6	2409	43,800 PSI
296	29.0	2237	37,500 PSI	31.6	2409	43,800 PSI
No. 11FS	29.0	2237	37,500 PSI	31.6	2409	43,800 PSI
Lil'Gun	25.7	2210	37,100 PSI	28.0	2352	44,000 PSI
Bullet: 200 GR. HDY XTP			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.050″**
5744	30.5	2061	35,500 PSI	33.2	2258	43,800 PSI
IMR 4227	29.0	1948	32,500 PSI	31.5C	2180	44,100 PSI
H110	27.2	2044	33,300 PSI	29.6	2265	43,900 PSI
296	27.2	2044	33,300 PSI	29.6	2265	43,900 PSI
No. 11FS	27.2	2044	33,300 PSI	29.6	2265	43,900 PSI
Lil'Gun	24.8	2094	37,200 PSI	27.0	2254	43,900 PSI
Bullet: 215 GR. WIN PP			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.200″**
Lil'Gun	30.5	2217	37,700 PSI	33.5	2370	43,700 PSI
5744	30.5	2043	36,300 PSI	33.3	2218	44,500 PSI
IMR 4227	30.0	2008	36,900 PSI	33.0C	2174	43,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Rifle Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H110	29.0	2096	35,300 PSI	31.5	2269	43,400 PSI
296	29.0	2096	35,300 PSI	31.5	2269	43,400 PSI
No. 11FS	29.0	2096	35,300 PSI	31.5	2269	43,400 PSI
Bullet: 220 GR. RR LEAD			**Dia: .400″**			
Case: Winchester			**Primer: Winchester SR, Small Rifle**			**Col: 2.000″**
IMR 4227	27.7	1908	36,500 PSI	30.2C	2050	44,000 PSI
5744	27.0	1857	33,900 PSI	30.0	2065	44,000 PSI
H110	25.0	1903	31,200 PSI	28.0	2128	43,700 PSI
296	25.0	1903	31,200 PSI	28.0	2128	43,700 PSI
No. 11FS	25.0	1903	31,200 PSI	28.0	2128	43,700 PSI
Lil'Gun	23.0	1997	40,200 PSI	26.3	2136	44,100 PSI

44-40 Winchester

Barrel: 20″ Twist: 1:36″ Trim: 1.295″

Bullet: 200 GR. LEA RNFP			**Dia: .428″**			
Case: Winchester			**Primer: Winchester LP, Large Pistol**			**Col: 1.600″**
Universal	6.6	950	10,000 PSI	7.3	1069	11,100 PSI
HP-38	5.5	901	9,800 PSI	6.5	1020	12,400 PSI
231	5.5	901	9,800 PSI	6.5	1020	12,400 PSI
Titegroup	5.0	956	8,400 PSI	6.2	1117	12,900 PSI
Clays	4.2	845	8,200 PSI	5.0	924	11,700 PSI

44 Remington Magnum

Barrel: 20″ Twist: 1:20″ Trim: 1.280″

Bullet: 210 GR. SIE JHC			**Dia: .430″**			
Case: Winchester			**Primer: Remington 2 1/2, Large Pistol**			**Col: 1.600″**
H110	26.0	1969	29,900 CUP	27.0	2030	31,100 CUP
H4227	25.0	1843	29,200 CUP	27.0	1970	37,600 CUP
Bullet: 225 GR. HDY FTX			**Dia: .430″**			
Case: Winchester			**Primer: Remington 2 1/2, Large Pistol**			**Col: 1.665″**
IMR 4227	19.8	1330	26,800 PSI	22.0	1484	34,500 PSI
H110	19.4	1480	26,700 PSI	21.5	1669	33,400 PSI
296	19.4	1480	26,700 PSI	21.5	1669	33,400 PSI
Lil'Gun	18.6	1595	26,600 PSI	20.7	1749	34,300 PSI

444 Marlin

Barrel: 24″ Twist: 1:38″ Trim: 2.215″

Bullet: 200 GR. BAR XFB			**Dia: .429″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.550″**
H335	53.0	2080	27,800 CUP	56.0	2215	33,800 CUP
Benchmark	50.0	2040	27,600 CUP	54.0	2212	35,800 CUP
H322	50.0	2139	30,200 CUP	52.0C	2206	33,600 CUP
H4198	46.0	2309	34,400 CUP	51.2C	2566	42,900 CUP
IMR 4198	42.6	2171	31,800 CUP	47.3C	2396	40,300 CUP
Bullet: 225 GR. BAR XFB			**Dia: .429″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.550″**
Benchmark	49.0	2028	34,500 CUP	52.0C	2127	38,100 CUP
H335	49.0	1891	25,500 CUP	52.0	2031	34,500 CUP
H322	47.0	2029	33,400 CUP	50.0C	2144	37,000 CUP
H4198	42.2	2107	32,300 CUP	46.9	2361	42,300 CUP
IMR 4198	41.6	2137	36,900 CUP	46.2C	2324	43,200 CUP
Bullet: 240 GR. SIE JHP			**Dia: .430″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.535″**
H335	52.5	2049	29,200 CUP	56.0	2222	38,900 CUP
Benchmark	51.0	2042	31,600 CUP	55.0C	2234	40,600 CUP
H4895	51.0	1999	29,600 CUP	53.0C	2069	33,100 CUP
H322	49.5	2049	31,400 CUP	52.0C	2185	35,900 CUP
H4198	44.0	2206	36,100 CUP	49.2C	2499	42,100 CUP
IMR 4198	42.0	2112	36,000 CUP	45.6	2276	42,600 CUP
Bullet: 240 GR. SIE JHC			**Dia: .430″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.535″**
2230	54.2	2181	41,800 CUP	57.0C	2320	44,000 CUP
2460	54.2	2138	40,600 CUP	57.0C	2274	42,700 CUP
2015	52.3	2217	40,900 CUP	55.0C	2359	43,000 CUP
5744	33.3	1820	37,700 CUP	37.0	2069	41,900 CUP
Bullet: 260 GR. FA FP			**Dia: .430″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.550″**
H335	52.5	2034	31,600 CUP	56.0	2200	41,400 CUP
H4895	50.0	1913	32,700 CUP	53.0C	2057	36,800 CUP
H322	47.0	1944	33,400 CUP	52.0C	2159	41,400 CUP
H4198	41.0	2016	35,600 CUP	45.5	2194	40,900 CUP
Bullet: 265 GR. HDY FP			**Dia: .429″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.570″**
2460	53.2	2084	41,500 CUP	56.0	2217	43,700 CUP
2230	52.3	2074	41,800 CUP	55.0	2206	44,000 CUP
2015	49.4	2088	39,400 CUP	52.0	2221	41,500 CUP
5744	31.5	1692	36,500 CUP	35.0	1923	40,500 CUP
Bullet: 265 GR. HDY JFP			**Dia: .430″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.550″**
H335	52.5	2032	32,100 CUP	56.0	2187	39,700 CUP
IMR 8208 XBR	51.0	2030	34,700 CUP	53.5C	2135	39,100 CUP
Benchmark	49.0	1911	31,000 CUP	53.0C	2139	40,700 CUP
H4895	50.0	1944	29,300 CUP	53.0C	2080	34,800 CUP
H322	47.0	1991	33,200 CUP	52.0C	2164	38,300 CUP
H4198	42.0	2034	31,100 CUP	47.0	2273	41,100 CUP
IMR 4198	42.6	2105	39,800 CUP	44.4	2187	42,100 CUP
Bullet: 270 GR. SPR DCSP			**Dia: .429″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.540″**
H335	51.0	1992	31,800 CUP	55.8	2200	42,100 CUP
Benchmark	50.0	1978	33,500 CUP	54.0C	2166	41,700 CUP
IMR 8208 XBR	51.0	2019	34,300 CUP	53.5C	2107	38,300 CUP
H4895	50.0	1950	29,300 CUP	53.0C	2080	33,400 CUP
H322	47.0	1973	31,700 CUP	52.0C	2169	38,100 CUP
H4198	42.0	2092	34,900 CUP	46.5	2261	41,400 CUP
IMR 4198	41.4	2050	37,300 CUP	44.0	2169	43,100 CUP
Bullet: 275 GR. BAR FP			**Dia: .430″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.520″**
H335	50.0	1984	35,400 CUP	53.5	2120	41,100 CUP
H4895	47.0	1780	27,100 CUP	52.0C	2021	36,200 CUP
Benchmark	48.0	1930	35,900 CUP	51.0C	2069	42,300 CUP
H322	46.0	1930	33,800 CUP	51.0C	2146	43,100 CUP
H4198	40.0	1973	33,500 CUP	44.5	2172	41,800 CUP
Bullet: 280 GR. SFT AF			**Dia: .429″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.620″**
H335	49.5	1983	36,100 CUP	52.8	2109	42,000 CUP
StaBALL Match	49.2	1854	27,000 PSI	52.2C	1938	31,300 PSI
H4895	47.0	1875	30,300 CUP	52.0C	2089	37,600 CUP
Varget	49.0	1914	33,000 CUP	52.0C	2025	36,800 CUP
IMR 8208 XBR	48.0	1942	35,900 CUP	52.0	2099	41,600 CUP
Benchmark	46.0	1935	38,300 CUP	49.5C	2070	42,600 CUP
H322	44.5	1901	33,400 CUP	49.5	2120	42,400 CUP
H4198	38.0	1938	37,300 CUP	42.5	2108	42,300 CUP
IMR 4198	38.7	1907	36,500 CUP	42.0	2050	42,500 CUP
Bullet: 300 GR. SFT AF			**Dia: .429″**			
Case: Remington			**Primer: Remington 9 1/2, Large Rifle**			**Col: 2.620″**
H335	49.0	1935	37,600 CUP	52.0	2023	42,300 CUP
IMR 4064	47.2	1738	30,900 CUP	51.3C	1908	38,000 CUP
IMR 4895	46.6	1762	33,300 CUP	50.6C	1915	38,300 CUP
StaBALL Match	47.0	1756	27,800 PSI	50.0C	1873	33,700 PSI
H4895	47.0	1839	33,600 CUP	50.0C	1931	35,600 CUP
Varget	47.0	1784	30,700 CUP	50.0C	1914	35,700 CUP
IMR 8208 XBR	46.0	1829	35,700 CUP	49.0	2029	41,600 CUP
IMR 3031	44.9	1859	35,600 CUP	48.8C	2004	40,100 CUP
Benchmark	46.0	1899	36,200 CUP	48.5	1993	41,900 CUP
H322	43.0	1776	30,600 CUP	48.0	2038	42,600 CUP
H4198	38.5	1917	36,200 CUP	42.5	2082	42,500 CUP
IMR 4198	36.8	1796	37,700 CUP	39.2	1911	42,100 CUP

450 Bushmaster

Barrel: 24″ Twist: 1:24″ Trim: 1.690″

Bullet: 200 GR. HDY FTX			**Dia: .452″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.200″**
4100	39.4	2236	35,600 PSI	43.8C	2531	39,500 PSI
Enforcer	39.4	2236	35,600 PSI	43.8C	2531	39,500 PSI
5744	38.0	2052	35,800 PSI	42.2C	2273	39,800 PSI
No. 9	36.1	2252	35,300 PSI	40.2	2472	39,300 PSI
Bullet: 200 GR. SIE FPJ			**Dia: .452″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.200″**
4100	40.5	2334	35,500 PSI	45.0	2522	39,500 PSI
Enforcer	40.5	2334	35,500 PSI	45.0	2522	39,500 PSI
5744	40.1	2104	35,800 PSI	44.5	2336	39,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 9	35.3	2289	35,200 PSI	39.2	2417	39,200 PSI
Bullet: 225 GR. HDY FTX			**Dia: .452″**			
Case: Starline			**Primer: Winchester SR, Small Rifle**			**Col: 2.150″**
H110	40.4	2169	26,300 PSI	44.4	2426	36,100 PSI
Lil'Gun	38.0	2309	31,300 PSI	42.2	2495	36,300 PSI
IMR 4227	37.9	1942	25,700 PSI	41.7	2221	36,600 PSI
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.150″**
4100	36.5	2082	35,400 PSI	40.5	2332	39,300 PSI
Enforcer	36.5	2082	35,400 PSI	40.5	2332	39,300 PSI
5744	36.1	1927	35,800 PSI	40.1	2129	39,800 PSI
No. 9	33.8	2098	35,700 PSI	37.6	2288	39,600 PSI
Bullet: 230 GR. SIE FMJ			**Dia: .452″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.150″**
1680	48.3	2231	35,700 PSI	53.7C	2430	39,700 PSI
5744	38.5	1954	35,900 PSI	42.8	2196	39,800 PSI
4100	34.3	2080	35,300 PSI	38.2	2226	39,200 PSI
Enforcer	34.3	2080	35,300 PSI	38.2	2226	39,200 PSI
No. 9	32.6	2053	35,500 PSI	36.2	2214	39,400 PSI
Bullet: 250 GR. NOS JHP			**Dia: .451″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.025″**
1680	42.2	1970	35,200 PSI	46.9C	2207	39,200 PSI
5744	35.2	1837	35,800 PSI	39.1	2042	39,800 PSI
4100	34.6	1963	34,600 PSI	38.5	2147	38,400 PSI
Enforcer	34.6	1963	34,600 PSI	38.5	2147	38,400 PSI
No. 9	33.0	1944	35,400 PSI	36.7	2145	39,400 PSI
Bullet: 250 GR. HDY FTX			**Dia: .452″**			
Case: Starline			**Primer: Winchester SR, Small Rifle**			**Col: 2.225″**
H110	37.3	2010	27,900 PSI	41.0	2240	36,100 PSI
Lil'Gun	35.0	2158	32,500 PSI	38.5	2289	35,900 PSI
IMR 4227	34.5	1848	28,900 PSI	38.0	2044	36,400 PSI
Bullet: 275 GR. BAR TSX FB			**Dia: .451″**			
Case: Starline			**Primer: Winchester SR, Small Rifle**			**Col: 2.225″**
H4198	39.1	1772	24,000 PSI	43.0C	1986	31,600 PSI
CFE BLK	34.4	1731	25,400 PSI	37.8	1931	36,200 PSI
H110	33.4	1869	33,500 PSI	37.6	2036	36,100 PSI
IMR 4227	32.9	1698	30,400 PSI	36.6	1878	36,400 PSI
Lil'Gun	30.4	1892	33,100 PSI	35.4	2084	36,200 PSI
Bullet: 300 GR. HDY XTP			**Dia: .452″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.085″**
1680	37.5	1741	35,300 PSI	41.7C	1900	39,300 PSI
5744	31.8	1617	35,800 PSI	35.4	1808	39,700 PSI
4100	28.4	1640	35,200 PSI	31.6	1788	39,100 PSI
Enforcer	28.4	1640	35,200 PSI	31.6	1788	39,100 PSI
No. 9	26.0	1622	35,400 PSI	28.9	1761	39,300 PSI
Bullet: 300 GR. SFT AF			**Dia: .452″**			
Case: Starline			**Primer: Winchester SR, Small Rifle**			**Col: 2.065″**
H4198	39.0	1776	27,700 PSI	42.8C	1973	35,400 PSI
CFE BLK	33.7	1604	25,600 PSI	37.0	1811	34,100 PSI
IMR 4227	31.8	1631	29,200 PSI	35.0	1793	35,500 PSI
H110	26.4	1484	28,200 PSI	28.7	1657	35,900 PSI
Lil'Gun	25.0	1661	32,200 PSI	27.0	1758	36,000 PSI
Bullet: 325 GR. BAR BSTR			**Dia: .451″**			
Case: Hornady			**Primer: Winchester SR, Small Rifle**			**Col: 2.190″**
1680	32.1	1529	35,700 PSI	35.7	1720	39,700 PSI
5744	31.6	1536	35,500 PSI	35.1	1733	39,500 PSI
4100	24.2	1427	35,900 PSI	26.9	1598	39,900 PSI
Enforcer	24.2	1427	35,900 PSI	26.9	1598	39,900 PSI
No. 9	22.4	1394	35,300 PSI	24.9	1529	39,200 PSI

458 SOCOM

Barrel: 16″ Twist: 1:14″ Trim: 1.575″

Bullet: 250 GR. BAR TSX-FN			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.125″**
H4198	36.5	1693	24,500 CUP	41.0C	1948	38,700 CUP
CFE BLK	35.7	1742	22,100 CUP	41.7	1991	39,100 CUP
IMR 4198	34.0	1602	23,200 CUP	38.7	1857	39,200 CUP
IMR 4227	29.6	1538	26,300 CUP	34.5	1783	38,900 CUP
Bullet: 300 GR. BAR TTSX-BT			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.245″**
H4198	33.1	1534	24,600 CUP	36.1C	1727	39,000 CUP
CFE BLK	35.4	1672	24,600 CUP	37.3	1794	33,800 CUP
IMR 4198	31.7	1531	27,300 CUP	35.0	1673	39,100 CUP
IMR 4227	27.4	1435	26,000 CUP	31.3	1629	38,800 CUP
Bullet: 300 GR. BAR TSX-FN			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.015″**
2200	42.9	1766	31,400 PSI	47.7	1968	34,900 PSI
2230	40.3	1591	31,400 PSI	44.7	1740	34,900 PSI
X-Terminator	40.3	1591	31,400 PSI	44.7	1740	34,900 PSI
LT-30	38.6	1631	31,000 PSI	42.9	1825	34,500 PSI
1680	37.8	1782	31,100 PSI	42.0	1961	34,600 PSI
5744	33.6	1679	31,000 PSI	37.4	1844	34,500 PSI
4100	25.3	1635	31,100 PSI	28.1	1750	34,500 PSI
Enforcer	25.3	1635	31,100 PSI	28.1	1750	34,500 PSI
Bullet: 325 GR. HDY FTX			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.185″**
2200	38.1	1561	31,200 PSI	42.3C	1739	34,700 PSI
CFE BLK	35.5	1644	23,800 CUP	39.9	1812	38,700 CUP
LT-30	35.4	1449	27,500 PSI	39.3C	1644	30,500 PSI
1680	32.3	1581	31,000 PSI	35.9	1752	34,400 PSI
H4198	34.0	1506	21,000 CUP	35.8C	1661	33,300 CUP
IMR 4198	33.2	1518	24,800 CUP	34.7C	1614	34,300 CUP
5744	29.4	1463	31,500 PSI	32.6	1632	35,000 PSI
IMR 4227	27.7	1404	26,100 CUP	32.1	1622	40,000 CUP
Bullet: 330 GR. BAR BAND-S			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.260″**
LT-32	42.3	1612	30,200 PSI	47.0C	1802	33,600 PSI
LT-30	39.7	1616	31,000 PSI	44.1C	1803	34,400 PSI
Bullet: 350 GR. HDY RN			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.040″**
2200	39.0	1564	31,200 PSI	43.3C	1745	34,700 PSI
LT-32	37.7	1427	27,500 PSI	41.9C	1610	30,600 PSI
LT-30	36.4	1480	31,200 PSI	40.4C	1663	34,700 PSI
1680	32.5	1552	30,800 PSI	36.1	1708	34,200 PSI
5744	30.4	1479	31,400 PSI	33.8	1630	34,900 PSI
Bullet: 350 GR. SFT AF			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.050″**
Benchmark	38.2	1358	22,800 CUP	42.0C	1596	39,400 CUP
H322	34.9	1338	22,900 CUP	39.7	1627	38,900 CUP
CFE BLK	34.3	1544	22,700 CUP	37.5	1688	38,800 CUP
H4198	33.0	1410	23,100 CUP	35.2	1611	39,000 CUP
IMR 4198	31.3	1391	24,800 CUP	34.0	1576	38,700 CUP
IMR 4227	26.3	1285	24,600 CUP	30.0	1470	39,200 CUP
Bullet: 400 GR. SPR FN			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.040″**
Benchmark	37.4	1302	24,700 CUP	41.0C	1521	38,800 CUP
H322	35.9	1398	22,300 CUP	39.5C	1565	39,400 CUP
CFE BLK	34.8	1502	25,000 CUP	38.9	1662	39,400 CUP
H4198	32.3	1379	24,700 CUP	35.1	1582	39,600 CUP
IMR 4198	31.2	1323	22,900 CUP	33.9	1490	39,200 CUP
IMR 4227	26.9	1261	25,600 CUP	29.5	1391	39,100 CUP
Bullet: 400 GR. BAR BSTR			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.030″**
2200	33.8	1443	30,900 PSI	37.6C	1580	34,400 PSI
LT-32	32.0	1228	30,200 PSI	35.6C	1390	33,600 PSI
LT-30	30.2	1227	30,800 PSI	33.5C	1383	34,200 PSI
1680	28.2	1281	31,000 PSI	31.3	1437	34,400 PSI
5744	25.7	1245	31,000 PSI	28.6	1402	34,400 PSI
Bullet: 400 GR. SPR FN			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.040″**
2200	37.4	1492	31,200 PSI	41.6C	1649	34,700 PSI
1680	31.5	1448	31,200 PSI	35.0	1570	34,600 PSI
5744	28.6	1392	31,400 PSI	31.8	1538	34,900 PSI
Bullet: 570 GR. LD CF			**Dia: .458″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 2.780″**
1680	19.1	758	30,000 PSI	21.3	901	33,300 PSI
5744	17.5	701	29,800 PSI	19.5	823	33,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

45-70 GOVERNMENT (TRAPDOOR RIFLES)*

Barrel: 24″ Twist: 1:20″ Trim: 2.100″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 250 GR. BAR TSX FN				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.525″**
Varget	56.3	1846	19,200 PSI	62.5C	2102	26,100 PSI
H335	55.2	1979	22,500 PSI	60.1	2107	26,800 PSI
H4895	53.8	1925	22,000 PSI	60.0C	2112	26,600 PSI
IMR 4064	55.0	1832	20,400 PSI	60.0C	2012	25,500 PSI
IMR 3031	51.9	1756	18,000 PSI	58.0C	2048	27,000 PSI
IMR 4895	53.2	1745	19,200 PSI	57.9	1940	24,600 PSI
IMR 8208 XBR	52.1	1801	18,000 PSI	57.8	2106	27,000 PSI
Benchmark	51.5	1852	19,800 PSI	56.2	2085	27,300 PSI
H322	48.3	1849	19,900 PSI	53.3	2080	26,100 PSI
H4198	45.9	1994	21,600 PSI	48.3	2118	26,200 PSI
IMR 4198	39.8	1781	18,900 PSI	47.4	2067	26,300 PSI
Bullet: 300 GR. CAST LFP				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.465″**
Benchmark	54.0	1788	18,300 CUP	58.0	1940	21,900 CUP
Varget	45.0	1599	17,800 CUP	55.0	1880	20,600 CUP
IMR 3031	51.7	1839	18,700 CUP	55.0	1995	24,900 CUP
IMR 8208 XBR	51.2	1723	19,500 CUP	55.0	1924	24,700 CUP
IMR 4064	49.8	1685	19,400 CUP	53.0	1813	21,800 CUP
H4895	45.0	1572	14,400 CUP	51.0	1703	15,500 CUP
IMR 4895	47.5	1590	16,500 CUP	50.5	1703	20,400 CUP
IMR 4198	33.8	1649	15,500 CUP	36.0	1752	20,200 CUP
H4198	30.0	1390	14,400 CUP	35.5	1641	16,100 CUP
Bullet: 300 GR. SIE HP/FN				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.525″**
StaBALL Match	60.0	1745	15,100 PSI	66.0C	2010	23,700 PSI
Benchmark	59.5	1907	19,400 CUP	63.5C	2113	27,400 CUP
H335	57.0	1901	17,500 CUP	63.5	2143	27,400 CUP
Varget	57.0	1770	16,300 CUP	63.0C	2020	23,800 CUP
H4895	58.0	1805	16,500 CUP	62.0C	1974	21,000 CUP
IMR 4895	57.0	1826	21,700 CUP	61.0C	1968	23,900 CUP
IMR 4064	57.0	1865	22,500 CUP	60.5C	1992	25,100 CUP
H322	54.0	1850	18,100 CUP	60.0	2142	28,000 CUP
IMR 8208 XBR	54.0	1728	18,800 CUP	60.0	2023	25,400 CUP
IMR 3031	56.0	1884	21,100 CUP	59.5C	2021	22,000 CUP
H4198	45.0	1807	16,700 CUP	55.0	2221	27,600 CUP
IMR 4198	45.0	2008	23,500 CUP	48.0	2138	27,800 CUP
Bullet: 325 GR. HDY FTX				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.590″**
StaBALL Match	56.0	1658	18,900 PSI	61.5C	1876	27,100 PSI
IMR 8208 XBR	48.5	1618	18,400 CUP	56.8C	1936	25,800 CUP
H335	48.8	1688	17,800 CUP	56.8	1958	26,300 CUP
IMR 3031	46.3	1491	16,600 CUP	54.3	1862	24,700 CUP
H4895	41.8	1327	13,700 CUP	53.3C	1834	23,500 CUP
H322	36.5	1401	17,100 CUP	51.5	1951	26,000 CUP
Bullet: 385 GR. CAST LFP				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.505″**
Benchmark	50.0	1621	16,300 CUP	53.0	1779	21,300 CUP
Varget	42.5	1537	15,400 CUP	52.5	1805	21,800 CUP
IMR 3031	49.0	1684	22,300 CUP	52.0	1819	25,900 CUP
IMR 4064	47.0	1545	18,800 CUP	50.0	1661	24,000 CUP
IMR 4895	44.2	1412	16,200 CUP	47.0	1486	18,100 CUP
H4895	35.0	1280	11,900 CUP	42.0	1526	23,100 CUP
IMR 4198	31.0	1405	15,000 CUP	33.0	1491	17,400 CUP
H4198	28.0	1302	13,300 CUP	32.0	1483	14,700 CUP
Bullet: 405 GR. CAST LFP				**Dia: .458″**		
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.540″**
StaBALL Match	54.4	1657	21,700 PSI	58.7C	1772	27,000 PSI
IMR 8208 XBR	47.9	1637	21,800 CUP	51.0	1727	23,600 CUP
H335	48.0	1674	21,500 PSI	51.0	1781	25,600 PSI
Benchmark	47.0	1564	17,100 CUP	50.0	1695	22,600 CUP
Varget	40.0	1392	15,600 CUP	50.0	1718	20,900 CUP
IMR 4064	46.0	1534	17,900 CUP	49.5	1660	23,200 CUP
IMR 4895	45.6	1496	18,900 CUP	48.5	1598	23,000 CUP
IMR 3031	45.5	1597	17,300 CUP	48.5	1706	21,100 CUP
H4895	40.0	1424	14,900 CUP	48.0	1645	18,900 CUP
IMR 4198	30.0	1370	17,000 CUP	32.0	1462	19,000 CUP
H4198	27.0	1251	14,200 CUP	31.0	1459	17,100 CUP

45-70 GOVERNMENT (LEVER ACTIONS)*

Barrel: 24″ Twist: 1:20″ Trim: 2.100″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 250 GR. BAR TSX FN				**Dia: .458″**		
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.525″**
2200	47.3	1847	20,300 PSI	55.0	2142	23,700 PSI
LT-30	44.3	1771	23,400 PSI	52.1C	2069	27,500 PSI
5744	31.9	1556	23,500 PSI	37.5	1851	27,700 PSI
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.525″**
H335	60.2	2131	27,900 PSI	67.5	2371	38,300 PSI
IMR 8208 XBR	54.3	1897	20,600 PSI	64.1C	2308	32,700 PSI
Benchmark	56.2	2085	27,300 PSI	62.5C	2298	34,000 PSI
H322	53.3	2080	26,100 PSI	61.9C	2423	38,100 PSI
H4198	49.4	2152	26,400 PSI	56.5C	2487	38,700 PSI
IMR 4198	47.0	2079	25,700 PSI	55.3	2432	38,600 PSI
Bullet: 300 GR. SIE HP/FN				**Dia: .458″**		
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.525″**
LT-32	47.4	1736	22,900 PSI	57.8C	2099	27,900 PSI
2200	50.5	1931	25,000 PSI	56.1	2115	27,800 PSI
LT-30	44.3	1758	23,800 PSI	52.1	2018	28,000 PSI
2230	42.0	1740	25,400 PSI	46.0	1900	27,800 PSI
X-Terminator	42.0	1740	25,400 PSI	46.0	1900	27,800 PSI
5744	36.7	1712	24,500 PSI	40.8	1874	27,200 PSI
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.525″**
H335	61.0	2073	22,500 CUP	68.0	2326	38,800 CUP
IMR 4064	59.0	1858	20,300 CUP	65.5C	2125	28,700 CUP
IMR 4895	58.5	1800	19,900 CUP	65.0C	2087	30,000 CUP
IMR 8208 XBR	60.0	2023	25,400 CUP	65.0C	2240	32,900 CUP
IMR 3031	58.0	1971	21,900 CUP	64.0C	2196	29,500 CUP
H322	57.0	2002	21,400 CUP	63.0C	2252	32,600 CUP
H4198	55.0	2221	27,600 CUP	60.0	2424	40,000 CUP
IMR 4198	53.7	2293	33,100 CUP	57.2	2407	39,100 CUP
Bullet: 325 GR. HDY FTX				**Dia: .458″**		
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.590″**
2200	45.3	1772	25,100 PSI	50.4	1956	27,900 PSI
LT-32	40.7	1524	20,800 PSI	49.0C	1831	25,100 PSI
LT-30	40.8	1611	23,400 PSI	48.0C	1879	27,500 PSI
2015	39.2	1504	23,700 PSI	46.1C	1757	27,800 PSI
2230	37.5	1484	25,000 PSI	41.6	1622	27,800 PSI
X-Terminator	37.5	1484	25,000 PSI	41.6	1622	27,800 PSI
5744	29.0	1423	23,500 PSI	34.1	1672	27,600 PSI
Bullet: 350 GR. HDY RN				**Dia: .458″**		
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2015	47.3	1703	25,000 PSI	52.5	1890	27,800 PSI
2200	45.4	1758	26,200 PSI	48.3	1858	27,900 PSI
LT-32	38.4	1473	22,500 PSI	46.9	1757	27,400 PSI
LT-30	37.0	1478	23,300 PSI	43.5	1702	27,400 PSI
2230	37.7	1487	24,900 PSI	41.8	1626	27,600 PSI
X-Terminator	37.7	1487	24,900 PSI	41.8	1626	27,600 PSI
5744	33.8	1529	25,000 PSI	37.5	1676	27,700 PSI
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.550″**
StaBALL Match	59.0	1850	28,000 PSI	65.0C	2012	36,000 PSI
IMR 4064	58.0	1967	32,700 CUP	62.0C	2085	36,700 CUP
IMR 4895	57.5	1891	29,200 CUP	61.0C	2026	37,200 CUP
IMR 8208 XBR	55.0	1930	26,800 CUP	61.0C	2152	36,200 CUP
Benchmark	56.0	1886	26,900 CUP	60.0C	2092	39,300 CUP
Varget	54.0	1786	21,800 CUP	60.0C	2013	29,500 CUP
IMR 3031	56.5	2022	31,400 CUP	60.0C	2135	37,100 CUP
H335	54.0	1903	26,000 CUP	60.0	2094	38,800 CUP
H4895	53.0	1784	21,700 CUP	59.0C	2045	32,900 CUP
H4198	48.5	2036	32,200 CUP	54.0	2191	39,300 CUP
IMR 4198	47.0	2032	32,500 CUP	50.0	2131	36,600 CUP
Bullet: 400 GR. BAR BSTR				**Dia: .458″**		
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.500″**
2015	31.2	1175	21,300 PSI	40.1	1452	27,300 PSI
2200	37.4	1503	26,400 PSI	39.3	1569	27,700 PSI
LT-32	30.6	1201	22,600 PSI	37.7	1463	28,000 PSI
X-Terminator	33.0	1280	24,600 PSI	36.7	1404	27,300 PSI
2230	33.0	1280	24,600 PSI	36.7	1404	27,300 PSI
LT-30	30.0	1260	24,000 PSI	34.5	1412	27,600 PSI
5744	24.1	1158	22,500 PSI	29.4	1399	27,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 400 GR. BAR TSX FN Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.515″
2200	40.1	1583	25,800 PSI	42.3	1654	27,200 PSI	
2015	33.3	1261	21,600 PSI	42.2	1551	27,300 PSI	
LT-32	33.7	1293	22,600 PSI	41.6	1578	28,000 PSI	
LT-30	32.4	1334	23,700 PSI	38.1	1535	27,900 PSI	
2230	34.1	1327	24,700 PSI	37.9	1453	27,400 PSI	
X-Terminator	34.1	1327	24,700 PSI	37.9	1453	27,400 PSI	

Bullet: 400 GR. SPR SPFN Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2230	39.0	1585	25,600 PSI	43.0	1695	28,200 PSI	
X-Terminator	39.0	1585	25,600 PSI	43.0	1695	28,200 PSI	
5744	29.7	1460	25,000 PSI	33.0	1610	27,800 PSI	

Bullet: 400 GR. SPR SPFN Dia: .458″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 200, Large Rifle Col: 2.540″
StaBALL Match	57.7	1754	28,600 PSI	63.5C	1907	38,100 PSI	
Benchmark	55.0	1856	29,600 CUP	58.5C	1986	40,000 CUP	
IMR 4895	54.0	1785	30,500 CUP	58.0C	1930	38,600 CUP	
H335	52.0	1798	25,400 CUP	58.0	1995	40,000 CUP	
IMR 4064	53.5	1808	29,700 CUP	57.0C	1918	36,400 CUP	
H322	50.0	1767	23,700 CUP	55.0C	1984	39,200 CUP	
H4895	50.0	1614	19,200 CUP	55.0C	1859	26,500 CUP	
Varget	50.0	1655	18,600 CUP	55.0C	1845	25,000 CUP	
IMR 3031	51.0	1809	26,900 CUP	55.0C	1971	37,300 CUP	
H4198	46.0	1854	29,500 CUP	50.5	2002	39,400 CUP	
IMR 4198	43.0	1868	31,600 CUP	46.0	1960	37,600 CUP	

Bullet: 405 GR. CPB LWLNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2200	44.4	1712	26,200 PSI	46.7	1792	27,600 PSI	
LT-32	37.4	1483	22,600 PSI	46.2	1769	28,000 PSI	
LT-30	34.5	1497	22,300 PSI	42.1	1732	27,300 PSI	
2230	35.5	1490	24,800 PSI	39.4	1604	27,500 PSI	
X-Terminator	35.5	1490	24,800 PSI	39.4	1604	27,500 PSI	

Bullet: 405 GR. LC FP Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2015	44.3	1666	24,700 PSI	49.2	1817	27,400 PSI	
2230	38.6	1550	24,600 PSI	43.2	1694	27,500 PSI	
X-Terminator	38.6	1550	24,600 PSI	43.2	1694	27,500 PSI	
5744	30.6	1468	25,000 PSI	34.0	1600	27,800 PSI	

Bullet: 420 GR. CPB LLFNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2015	42.6	1584	24,700 PSI	47.3	1763	27,400 PSI	
X-Terminator	38.0	1523	24,700 PSI	42.2	1646	27,400 PSI	
2230	38.0	1523	24,700 PSI	42.2	1646	27,400 PSI	
5744	29.3	1401	24,300 PSI	32.5	1538	27,000 PSI	

Bullet: 420 GR. CPB LWLNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2200	41.9	1654	25,900 PSI	44.6	1737	27,600 PSI	
LT-32	35.5	1444	22,300 PSI	44.4	1717	27,900 PSI	
LT-30	34.1	1460	22,700 PSI	41.1	1683	27,300 PSI	
2230	34.7	1447	24,500 PSI	38.6	1560	27,300 PSI	
X-Terminator	34.7	1447	24,500 PSI	38.6	1560	27,300 PSI	

Bullet: 440 GR. CPB LLFNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2015	38.6	1514	24,400 PSI	43.2	1652	27,300 PSI	
2230	34.5	1437	25,200 PSI	38.3	1553	28,000 PSI	
X-Terminator	34.5	1437	25,200 PSI	38.3	1553	28,000 PSI	
5744	28.1	1362	24,900 PSI	31.2	1490	27,600 PSI	

Bullet: 460 GR. CPB LWFNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2230	34.4	1404	24,600 PSI	38.2	1511	27,300 PSI	
X-Terminator	34.4	1404	24,600 PSI	38.2	1511	27,300 PSI	
5744	27.5	1321	24,500 PSI	30.5	1444	27,200 PSI	

Bullet: 460 GR. CPB LWLFNGC Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2015	38.3	1482	24,400 PSI	42.6	1636	27,100 PSI	
2200	37.6	1520	25,700 PSI	40.0	1596	27,300 PSI	
LT-32	31.8	1321	22,000 PSI	39.7	1567	27,500 PSI	
5744	23.9	1254	19,000 PSI	28.8	1452	27,300 PSI	

Bullet: 473 GR. LD SLD Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.850″
2200	36.3	1339	26,200 PSI	38.2	1408	27,600 PSI	
2230	31.7	1044	24,800 PSI	35.2	1196	27,600 PSI	
X-Terminator	31.7	1044	24,800 PSI	35.2	1196	27,600 PSI	
LT-32	29.7	1119	24,600 PSI	33.8	1279	28,000 PSI	
LT-30	30.0	1174	24,800 PSI	33.4	1295	27,600 PSI	

Bullet: 500 GR. LC LFP Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2015	34.7	1350	25,100 PSI	38.5	1510	27,900 PSI	
2230	33.3	1320	24,800 PSI	37.0	1450	27,500 PSI	
X-Terminator	33.3	1320	24,800 PSI	37.0	1450	27,500 PSI	
5744	25.2	1265	25,100 PSI	28.0	1400	27,900 PSI	

Bullet: 500 GR. MCB LRNFP Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.700″
2015	29.6	1224	21,800 PSI	38.0	1451	27,900 PSI	
LT-32	31.3	1296	23,000 PSI	37.3	1465	27,300 PSI	
LT-30	30.7	1352	24,600 PSI	34.9	1468	27,900 PSI	
5744	23.9	1213	23,000 PSI	28.4	1393	27,400 PSI	

45-70 GOVERNMENT (MODERN RIFLES)*

Barrel: 24″ Twist: 1:20″ Trim: 2.100″

Bullet: 250 GR. BAR TSX FN Dia: .458″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 200, Large Rifle Col: 2.525″
H4198	51.9	2260	29,500 PSI	60.0C	2607	44,600 PSI	
IMR 4198	50.0	2188	31,100 PSI	57.5C	2513	43,100 PSI	

Bullet: 300 GR. SIE HP Dia: .458″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 200, Large Rifle Col: 2.525″
H4198	59.5	2394	37,300 CUP	63.0	2532	50,000 CUP	
IMR 4198	54.0	2253	31,800 CUP	58.5C	2450	43,000 CUP	

Bullet: 300 GR. SIE HP/FN Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.525″
2200	56.1	2115	30,900 PSI	65.3	2414	35,900 PSI	
2230	56.0	2100	34,800 PSI	62.0	2250	38,600 PSI	
X-Terminator	56.0	2100	34,800 PSI	62.0	2250	38,600 PSI	
LT-30	52.1	2009	30,000 PSI	59.0	2243	34,000 PSI	
5744	43.2	1986	35,000 PSI	48.0	2159	38,900 PSI	

Bullet: 325 GR. HDY FTX Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.590″
2230	41.6	1622	29,800 PSI	53.9	2028	38,600 PSI	
X-Terminator	41.6	1622	29,800 PSI	53.9	2028	38,600 PSI	
5744	34.1	1672	32,200 PSI	40.4	1977	38,100 PSI	
Case: Winchester							**Primer: CCI 200, Large Rifle Col: 2.650″**
H335	63.0	2170	37,000 CUP	66.0C	2272	44,000 CUP	
H322	59.4	2250	37,600 CUP	63.0C	2375	45,900 CUP	
H4198	52.0	2242	37,700 CUP	56.0C	2378	46,500 CUP	
IMR 4198	50.0	2149	37,000 CUP	54.0C	2292	44,100 CUP	

Bullet: 350 GR. HDY JRN Dia: .458″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 200, Large Rifle Col: 2.540″
H335	57.0	2016	32,200 CUP	63.0	2174	47,300 CUP	
H322	52.0	1898	25,800 CUP	57.0C	2143	41,100 CUP	
H4198	50.5	2104	35,100 CUP	56.0	2300	50,000 CUP	
IMR 4198	49.0	2118	37,700 CUP	52.0	2212	43,900 CUP	

Bullet: 350 GR. HDY RN Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.550″
2200	48.3	1858	32,500 PSI	58.6	2217	39,500 PSI	
2230	41.8	1626	30,600 PSI	54.5	2045	39,800 PSI	
X-Terminator	41.8	1626	30,600 PSI	54.5	2045	39,800 PSI	
LT-30	43.5	1702	30,600 PSI	54.0	2067	38,000 PSI	
5744	39.4	1771	34,200 PSI	43.8	1929	38,000 PSI	

Bullet: 400 GR. BAR BSTR Dia: .458″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester LR, Large Rifle Col: 2.500″
2200	39.3	1569	31,000 PSI	50.0	1930	39,500 PSI	
LT-32	37.7	1463	31,200 PSI	47.8	1834	39,500 PSI	
X-Terminator	36.7	1404	30,300 PSI	47.8	1782	39,500 PSI	
2230	36.7	1404	30,300 PSI	47.8	1782	39,500 PSI	
LT-30	34.5	1414	31,600 PSI	43.0	1710	39,400 PSI	
5744	29.4	1399	31,100 PSI	35.9	1696	38,000 PSI	

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 400 GR. SPR FN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2230	46.0	1665	34,600 PSI	51.8	1885	39,000 PSI
X-Terminator	46.0	1665	34,600 PSI	51.8	1885	39,000 PSI
Bullet: 400 GR. SPR JFP			**Dia: .458″**			
Case: Winchester			**Primer: CCI 200, Large Rifle**			**Col: 2.540″**
H335	54.0	1883	31,900 CUP	60.0	2057	49,800 CUP
H4198	48.0	1915	31,800 CUP	53.0	2108	49,100 CUP
IMR 4198	47.0	1954	35,400 CUP	50.0	2089	47,100 CUP
Bullet: 405 GR. CPB L WLN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2200	46.7	1792	32,800 PSI	56.0	2107	39,200 PSI
LT-30	42.1	1732	31,000 PSI	52.5	2056	38,600 PSI
LT-32	46.2	1764	29,500 PSI	52.4	1964	33,500 PSI
2230	39.4	1604	30,500 PSI	51.2	1943	39,700 PSI
X-Terminator	39.4	1604	30,500 PSI	51.2	1943	39,700 PSI
Bullet: 405 GR. LC FP			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2230	48.2	1845	34,900 PSI	53.5	1978	38,700 PSI
X-Terminator	48.2	1845	34,900 PSI	53.5	1978	38,700 PSI
5744	36.0	1667	34,600 PSI	40.0	1826	38,400 PSI
Bullet: 420 GR. CPB L LFN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2230	46.8	1791	33,500 PSI	52.2	1920	37,400 PSI
X-Terminator	46.8	1791	33,500 PSI	52.2	1920	37,400 PSI
5744	35.1	1641	34,400 PSI	39.0	1783	38,200 PSI
Bullet: 420 GR. CPB L WLN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2200	44.6	1737	32,400 PSI	54.4	2046	39,500 PSI
LT-30	41.1	1682	31,000 PSI	50.3	1975	37,800 PSI
X-Terminator	38.6	1560	30,400 PSI	50.2	1897	39,500 PSI
2230	38.6	1560	30,400 PSI	50.2	1897	39,500 PSI
Bullet: 440 GR. CPB L LFN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2230	42.8	1674	34,800 PSI	47.5	1804	38,600 PSI
X-Terminator	42.8	1674	34,800 PSI	47.5	1804	38,600 PSI
5744	32.9	1558	34,300 PSI	36.5	1705	38,000 PSI
Bullet: 460 GR. CPB L WLN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2200	40.0	1596	31,900 PSI	49.8	1908	39,700 PSI
5744	28.8	1452	31,200 PSI	35.2	1711	38,100 PSI
Bullet: 460 GR. CPB L WFN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
2230	42.8	1668	34,100 PSI	47.5	1782	37,900 PSI
X-Terminator	42.8	1668	34,100 PSI	47.5	1782	37,900 PSI
Bullet: 473 GR. LD SLD			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.850″**
2200	38.2	1408	31,200 PSI	48.1	1764	39,200 PSI
X-Terminator	35.2	1196	30,500 PSI	45.3	1637	39,300 PSI
2230	35.2	1196	30,500 PSI	45.3	1637	39,300 PSI
LT-30	33.4	1295	31,000 PSI	42.7	1632	39,600 PSI
LT-32	33.8	1279	31,400 PSI	42.6	1626	39,600 PSI
Bullet: 500 GR. HDY RN			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.550″**
X-Terminator	40.0	1450	35,000 PSI	44.0	1550	38,500 PSI
2230	40.0	1450	35,000 PSI	44.0	1550	38,500 PSI
Bullet: 500 GR. MCB L RN F			**Dia: .458″**			
Case: Remington			**Primer: Winchester LR, Large Rifle**			**Col: 2.700″**
LT-32	37.3	1465	31,400 PSI	46.5	1731	39,200 PSI
LT-30	34.9	1471	32,800 PSI	42.0	1674	39,500 PSI
5744	28.4	1393	31,600 PSI	34.2	1621	38,000 PSI

470 NITRO EXPRESS

Barrel: 24″ Twist: 1:20″ Trim: 3.240″

Bullet: 500 GR. WDL RN SN			**Dia: .475″**			
Case: Hornady			**Primer: Federal 215M, LRM Match**			**Col: 3.875″**
Retumbo	118.0	2088	30,600 PSI	125.0C	2202	34,800 PSI
H1000	118.0	2172	33,900 PSI	124.0C	2300	40,500 PSI
StaBALL HD	116.0	2072	35,700 PSI	123.5C	2161	39,600 PSI
IMR 7828	113.0	2172	37,000 PSI	117.0	2252	40,500 PSI
H4831	108.0	2184	38,000 PSI	112.0	2247	40,800 PSI
IMR 4831	104.0	2157	36,200 PSI	108.0	2248	40,800 PSI
IMR 4350	99.0	2111	35,700 PSI	105.0	2229	40,800 PSI
H4350	95.0	2134	36,900 PSI	100.0	2234	41,700 PSI

50 BROWNING MACHINE GUN

Barrel: 45″ Twist: 1:16.5″ Trim: 3.900″

Bullet: 750 GR. HDY A-MAX			**Dia: .510″**			
Case: FNB			**Primer: CCI 35, 50 BMG**			**Col: 5.450″**
US 869				250.0	2944	
H50BMG				233.0	2800	
Bullet: 800 GR. BAR SOLID			**Dia: .510″**			
Case: FNB			**Primer: CCI 35, 50 BMG**			**Col: 5.630″**
US 869				250.0	2895	
H50BMG				225.0	2725	

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

5.7x28 FN

Barrel: 5″ Twist: 1:9″ Trim: 1.130″

Bullet: 35 GR. HDY V-MAX Dia: .224″

Case: FNH	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.491″
No. 7	7.4	2041	40,800 PSI	8.2	2197	45,200 PSI	
No. 5	6.0	1955	40,700 PSI	6.7	2100	45,500 PSI	
True Blue	5.7	1923	40,500 PSI	6.4	2007	45,500 PSI	

Bullet: 40 GR. HDY V-MAX Dia: .224″

Case: FNH	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.580″
No. 7	6.1	1679	43,200 PSI	6.8	1880	48,200 PSI	
No. 5	5.1	1657	42,900 PSI	5.7	1875	48,000 PSI	
True Blue	5.0	1660	43,600 PSI	5.6	1850	48,800 PSI	

Bullet: 40 GR. SIE HORNET Dia: .224″

Case: FNH	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.456″
No. 7	7.0	1896	41,000 PSI	7.7	2044	45,100 PSI	
No. 5	5.8	1850	40,300 PSI	6.5	1975	45,200 PSI	
True Blue	5.6	1813	40,300 PSI	6.3	1961	45,300 PSI	

Bullet: 45 GR. SIE HORNET Dia: .224″

Case: FNH	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.490″
No. 7	6.7	1782	41,100 PSI	7.4	1913	45,400 PSI	
No. 5	5.7	1740	40,400 PSI	6.4	1875	45,400 PSI	
True Blue	5.4	1700	40,400 PSI	6.1	1858	45,600 PSI	

Bullet: 45 GR. SIE SPT Dia: .224″

Case: FNH	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.580″
No. 7	5.9	1568	43,800 PSI	6.5	1782	48,300 PSI	
No. 5	5.0	1558	42,700 PSI	5.6	1746	47,800 PSI	
True Blue	4.8	1562	41,100 PSI	5.4	1725	46,200 PSI	

22 TCM

Barrel: 5″ Twist: 1:12″ Trim: 1.025″

Bullet: 35 GR. HDY V-MAX Dia: .224″

Case: Armscor	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 500, Small Pistol Col: 1.290″
No. 11FS	10.0	1791	34,400 PSI	11.1	2054	38,200 PSI	
Enforcer	9.5	1877	34,000 PSI	10.5	2064	37,800 PSI	
4100	9.4	1858	33,200 PSI	10.4	2043	36,900 PSI	
TCM	9.1	1918	34,500 PSI	10.2	2095	38,400 PSI	

Bullet: 39 GR. COR HP Dia: .224″

Case: Armscor	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 500, Small Pistol Col: 1.150″
No. 11FS	9.6	1682	34,100 PSI	10.7	1914	37,900 PSI	
Enforcer	9.1	1777	34,100 PSI	10.1	1921	37,900 PSI	
4100	9.0	1762	33,400 PSI	10.0	1904	37,100 PSI	
TCM	8.5	1806	34,400 PSI	9.4	1943	38,200 PSI	

Bullet: 40 GR. SIE HORNET Dia: .224″

Case: Armscor	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 500, Small Pistol Col: 1.285″
No. 11FS	10.0	1762	34,600 PSI	11.2	1945	38,500 PSI	
Enforcer	9.3	1791	34,100 PSI	10.3	1929	37,900 PSI	
4100	9.2	1774	33,500 PSI	10.2	1911	37,100 PSI	
TCM	8.7	1807	34,400 PSI	9.6	1958	38,200 PSI	

30 Luger (7.65mm Parabellum)

Barrel: 4″ Twist: 1:11″ Trim: .845″

Bullet: 86 GR. HDY RN SP Dia: .308″

Case: Fiocchi	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.175″
No. 7	6.8	1247	24,000 PSI	7.6	1417	26,800 PSI	
No. 5	5.6	1240	25,300 PSI	6.2	1409	28,000 PSI	
No. 2	4.3	1190	28,800 PSI	4.8	1316	32,100 PSI	

Bullet: 90 GR. HDY XTP Dia: .308″

Case: Fiocchi	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.170″
No. 7	6.5	1177	23,800 PSI	7.2	1338	26,400 PSI	
No. 5	5.2	1145	23,600 PSI	5.8	1301	26,300 PSI	
No. 2	4.1	1106	25,500 PSI	4.5	1257	28,000 PSI	

Bullet: 100 GR. SPR PLINKR Dia: .308″

Case: Fiocchi	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.180″
No. 7	6.2	1139	23,500 PSI	6.9	1294	26,200 PSI	
No. 5	5.0	1126	24,300 PSI	5.5	1280	26,700 PSI	
No. 2	3.7	1061	27,900 PSI	4.4	1204	33,200 PSI	

30 Carbine

Barrel: 7″ Twist: 1:20″ Trim: 1.286″

Bullet: 85 GR. SIE RN Dia: .308″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 400, Small Rifle Col: 1.625″
H110	16.5	1834	26,000 CUP	17.5	1966	34,800 CUP	
H4227	14.5	1643	25,200 CUP	15.5C	1745	30,700 CUP	

Bullet: 100 GR. SPR SP Dia: .308″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 400, Small Rifle Col: 1.625″
H110	14.5	1660	28,200 CUP	15.5	1762	36,100 CUP	
H4227	13.0	1503	28,900 CUP	14.5C	1621	33,600 CUP	

Bullet: 110 GR. HDY JRN Dia: .308″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 400, Small Rifle Col: 1.680″
H110	14.0	1605	32,000 CUP	15.0	1685	36,500 CUP	
H4227	13.0	1461	30,100 CUP	14.5C	1602	38,800 CUP	

30 Super Carry

Barrel: 4″ Twist: 1:16″ Trim: .827″

Bullet: 71 GR. MAGTECH JHP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 205, Small Rifle Col: 1.100″
No. 7	8.0	1466	35,400 PSI	9.0C	1606	41,200 PSI	
572	7.2	1538	35,700 PSI	8.0C	1642	40,600 PSI	
HS-6	6.7	1434	34,300 PSI	7.7	1658	48,900 PSI	
Silhouette	5.6	1400	32,800 PSI	7.0C	1600	41,300 PSI	
True Blue	5.8	1367	31,800 PSI	7.0	1624	49,100 PSI	
CFE Pistol	5.4	1420	32,200 PSI	6.4	1672	49,200 PSI	
AutoComp	5.4	1420	32,200 PSI	6.4	1672	49,200 PSI	
WSF	5.0	1365	32,800 PSI	6.0C	1564	47,200 PSI	
No. 2	4.2	1285	33,700 PSI	5.7C	1500	43,700 PSI	
244	4.4	1327	31,600 PSI	5.4	1589	48,300 PSI	
231	4.4	1313	32,400 PSI	5.2	1532	49,000 PSI	
HP-38	4.4	1313	32,400 PSI	5.2	1532	49,000 PSI	
Titegroup	4.2	1388	34,200 PSI	5.0	1537	49,500 PSI	

Bullet: 85 GR. HDY XTP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 205, Small Rifle Col: 1.080″
No. 7	6.5	1245	35,800 PSI	7.8	1450	48,900 PSI	
572	4.6	1245	35,000 PSI	6.8	1469	48,500 PSI	
HS-6	5.6	1209	34,000 PSI	6.6	1412	48,700 PSI	
No. 5	5.6	1209	34,000 PSI	6.6	1412	48,700 PSI	
True Blue	5.0	1184	33,500 PSI	6.0	1400	49,000 PSI	
Silhouette	4.7	1199	33,500 PSI	6.0	1414	48,100 PSI	
CFE Pistol	4.3	1191	31,100 PSI	5.3	1429	48,100 PSI	
AutoComp	4.3	1191	31,100 PSI	5.3	1429	48,100 PSI	
WSF	4.4	1190	33,700 PSI	5.3	1393	48,900 PSI	
No. 2	3.6	1124	32,500 PSI	5.0C	1325	48,600 PSI	
244	3.6	1169	31,400 PSI	4.6	1403	48,000 PSI	
231	3.6	1119	31,000 PSI	4.5	1334	48,700 PSI	
HP-38	3.6	1119	31,000 PSI	4.5	1334	48,700 PSI	
Titegroup	3.3	1127	32,000 PSI	4.2	1354	48,800 PSI	

Bullet: 90 GR. SIE JHC Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 205, Small Rifle Col: 1.090″
No. 7	6.4	1216	37,000 PSI	7.4	1388	48,900 PSI	
HS-6	5.3	1134	32,800 PSI	6.3	1333	48,600 PSI	
No. 5	5.3	1134	32,800 PSI	6.3	1333	48,600 PSI	
True Blue	5.0	1164	35,600 PSI	6.0	1362	48,500 PSI	
Silhouette	4.7	1204	36,700 PSI	5.7	1374	49,000 PSI	
572	4.2	1183	34,200 PSI	5.5	1394	48,500 PSI	
WST	4.3	1106	35,100 PSI	5.0C	1218	40,600 PSI	
CFE Pistol	4.0	1140	30,100 PSI	5.0	1364	48,700 PSI	
AutoComp	4.0	1140	30,100 PSI	5.0	1364	48,700 PSI	
WSF	4.0	1114	32,800 PSI	5.0	1322	48,600 PSI	
No. 2	3.5	1065	33,800 PSI	4.8C	1239	48,800 PSI	
244	3.5	1109	33,300 PSI	4.5	1334	49,000 PSI	
231	3.5	1086	34,100 PSI	4.2	1261	49,000 PSI	
HP-38	3.5	1086	34,100 PSI	4.2	1261	49,000 PSI	
Titegroup	3.0	1106	34,500 PSI	4.0	1266	47,900 PSI	

Bullet: 100 GR. ACME RNFP-CTD Dia: .313″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 205, Small Rifle Col: 1.120″
Longshot	4.5	1210	41,000 PSI	6.6C	1374	49,500 PSI	
No. 7	5.3	1123	35,800 PSI	6.6	1283	48,400 PSI	
HS-6	4.5	1047	30,900 PSI	5.5	1262	48,400 PSI	
No. 5	4.5	1047	30,900 PSI	5.5	1262	48,400 PSI	

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
True Blue	4.4	1138	37,700 PSI	5.3	1276	49,000 PSI
Silhouette	4.0	1122	36,700 PSI	5.0	1285	48,900 PSI
WST	3.8	1057	36,100 PSI	4.8C	1201	48,100 PSI
572	3.8	1134	36,200 PSI	4.6	1285	48,800 PSI
CFE Pistol	3.7	1119	35,000 PSI	4.5	1273	48,100 PSI
AutoComp	3.7	1119	35,000 PSI	4.5	1273	48,100 PSI
WSF	3.4	1035	31,800 PSI	4.4	1243	48,600 PSI
No. 2	3.4	1071	38,900 PSI	4.3	1200	48,700 PSI
244	3.0	1058	33,300 PSI	4.0	1243	48,700 PSI
231	3.0	1010	32,000 PSI	3.7	1163	48,300 PSI
HP-38	3.0	1010	32,000 PSI	3.7	1163	48,300 PSI
Titegroup	3.0	1076	36,200 PSI	3.6	1195	48,800 PSI

Bullet: 100 GR. HDY XTP Dia: .312″

Case: Federal		Primer: Federal 205, Small Rifle			Col: 1.090″
Longshot	5.1	1190	38,700 PSI	6.7C	1336	47,200 PSI
No. 7	5.4	1056	33,600 PSI	6.7	1283	48,600 PSI
572	4.0	1071	35,800 PSI	5.4	1282	48,100 PSI
HS-6	4.1	963	31,700 PSI	5.2	1185	48,300 PSI
No. 5	4.1	963	31,700 PSI	5.2	1185	48,300 PSI
WSF	3.6	1030	38,500 PSI	5.0	1221	49,200 PSI
True Blue	4.1	1021	35,600 PSI	5.0	1198	49,500 PSI
Silhouette	4.1	1058	37,200 PSI	5.0	1235	48,200 PSI
WST	4.0	1044	38,600 PSI	5.0	1186	46,400 PSI
CFE Pistol	3.9	1109	38,400 PSI	4.6	1250	49,200 PSI
AutoComp	3.9	1109	38,400 PSI	4.6	1250	49,200 PSI
No. 2	3.5	1004	38,900 PSI	4.0	1121	47,900 PSI
244	3.3	1029	35,600 PSI	3.8	1158	48,900 PSI
231	3.2	983	39,200 PSI	3.7	1095	48,400 PSI
HP-38	3.2	983	39,200 PSI	3.7	1095	48,400 PSI
Titegroup	3.0	984	34,800 PSI	3.5	1133	48,300 PSI

Bullet: 115 GR. SPR GDHP Dia: .312″

Case: Federal		Primer: Federal 205, Small Rifle			Col: 1.120″
Longshot	4.2	1015	35,100 PSI	6.0	1188	43,800 PSI
No. 7	4.8	960	38,300 PSI	5.7	1114	48,800 PSI
WSF	3.6	984	38,700 PSI	5.1	1145	49,000 PSI
HS-6	4.2	958	36,400 PSI	4.9	1139	49,200 PSI
572	4.0	1020	38,400 PSI	4.8	1160	49,300 PSI
Silhouette	4.0	1000	39,700 PSI	4.5	1130	49,100 PSI
True Blue	3.8	871	37,500 PSI	4.4	1074	48,200 PSI
WST	3.0	811	33,200 PSI	4.0	993	41,400 PSI
CFE Pistol	3.4	970	36,600 PSI	3.9	1085	49,500 PSI
AutoComp	3.4	970	36,600 PSI	3.9	1085	49,500 PSI
No. 2	3.0	843	38,200 PSI	3.6	989	48,600 PSI
244	3.0	912	35,000 PSI	3.5	1054	48,600 PSI
231	2.8	823	35,000 PSI	3.4	1002	48,800 PSI
HP-38	2.8	823	35,000 PSI	3.4	1002	48,800 PSI
Titegroup	2.5	835	36,300 PSI	3.0	961	48,300 PSI

32 H&R MAGNUM

Barrel: 5″ Twist: 1:16″ Trim: 1.070″

Bullet: 77 GR. CAST LFP Dia: .314″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.335″
572	3.4	828	8,400 CUP	4.0	1013	13,000 CUP
CFE Pistol	3.4	864	9,300 CUP	4.0	1003	13,500 CUP
AutoComp	3.0	773	6,700 CUP	4.0	1016	12,800 CUP
WSF	3.4	831	8,800 CUP	3.8	926	11,100 CUP
231	2.4	797	6,700 CUP	3.4	998	12,300 CUP
HP-38	2.4	797	6,700 CUP	3.4	998	12,300 CUP
244	2.5	749	7,800 CUP	3.3	987	11,700 CUP
Titegroup	2.0	745	5,300 CUP	3.0	993	11,300 CUP
700-X	2.3	832	9,900 CUP	2.7	913	11,500 CUP

Bullet: 83 GR. BER HBWC Dia: .314″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.095″
IMR 4227	8.3	1024	16,800 CUP	9.3	1133	19,900 CUP
HS-6	4.5	959	16,000 CUP	5.2	1104	20,400 CUP
Longshot	3.6	887	13,600 CUP	4.4	1099	20,500 CUP
572	3.7	971	15,100 CUP	4.3	1130	20,400 CUP
CFE Pistol	3.7	941	14,900 CUP	4.3	1125	19,900 CUP
AutoComp	3.3	856	12,500 CUP	4.3	1138	20,700 CUP
WSF	3.3	879	14,000 CUP	4.2	1091	20,200 CUP
231	2.9	870	13,500 CUP	3.8	1120	20,000 CUP
HP-38	2.9	870	13,500 CUP	3.8	1120	20,000 CUP
Universal	2.9	911	14,600 CUP	3.4	1043	20,000 CUP
700-X	2.9	940	15,100 CUP	3.4	1082	19,700 CUP
Titegroup	2.6	917	14,200 CUP	3.3	1081	20,100 CUP

Bullet: 85 GR. HDY HP Dia: .312″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.290″
Lil'Gun	10.5	1163	13,700 CUP	12.0	1263	16,800 CUP
H4227	8.5	989	19,300 CUP	9.5	1151	21,000 CUP
HS-6	5.2	902	17,100 CUP	5.6	1146	20,200 CUP
Longshot	4.0	948	11,500 CUP	5.0	1167	20,200 CUP
572	4.3	1058	17,200 CUP	4.8	1145	20,700 CUP
WSF	4.2	1030	15,900 CUP	4.8	1147	20,400 CUP
CFE Pistol	4.2	1014	16,400 CUP	4.7	1147	21,000 CUP
AutoComp	4.2	1037	15,500 CUP	4.6	1114	19,200 CUP
Universal	4.0	1090	18,400 CUP	4.3	1123	19,000 CUP
244	3.6	980	15,000 CUP	4.1	1111	20,300 CUP
231	3.2	785	15,200 CUP	3.8	1003	20,700 CUP
HP-38	3.2	785	15,200 CUP	3.8	1003	20,700 CUP
Titegroup	3.0	929	14,000 CUP	3.7	1110	20,900 CUP
700-X	3.2	951	14,600 CUP	3.7	1071	18,700 CUP

Bullet: 90 GR. HDY LSWC Dia: .314″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.350″
HS-6	4.6	845	10,900 CUP	5.0	963	14,800 CUP
AutoComp	3.4	874	10,400 CUP	3.9	997	14,500 CUP
WSF	3.2	821	10,500 CUP	3.8	967	15,000 CUP
Universal	3.0	819	8,400 CUP	3.2	908	11,500 CUP
231	2.8	828	9,600 CUP	3.2	919	12,500 CUP
HP-38	2.8	828	9,600 CUP	3.2	919	12,500 CUP
700-X	2.6	901	11,300 CUP	3.0	973	15,500 CUP
Titegroup	2.4	819	10,500 CUP	2.8	911	13,300 CUP

Bullet: 90 GR. SIE JHP Dia: .312″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.340″
Lil'Gun	10.0	1156	14,900 CUP	11.5	1227	18,000 CUP
H4227	9.5	1042	15,000 CUP	10.0	1079	17,000 CUP
HS-6	5.4	1026	16,400 CUP	6.0	1140	20,200 CUP
Longshot	4.0	945	12,100 CUP	5.0	1139	19,500 CUP
572	4.0	920	14,000 CUP	4.7	1098	20,600 CUP
CFE Pistol	3.8	927	14,500 CUP	4.5	1076	20,200 CUP
AutoComp	4.0	957	15,700 CUP	4.5	1082	20,300 CUP
WSF	4.0	966	15,900 CUP	4.5	1065	19,500 CUP
244	3.5	945	15,100 CUP	4.1	1070	20,200 CUP
Universal	3.7	1008	16,900 CUP	4.0	1072	20,000 CUP
231	3.5	930	16,200 CUP	4.0	1033	20,300 CUP
HP-38	3.5	930	16,200 CUP	4.0	1033	20,300 CUP
Titegroup	3.1	932	15,300 CUP	3.6	1060	20,600 CUP
700-X	3.0	914	14,500 CUP	3.5	1036	19,400 CUP

Bullet: 100 GR. SPR JHP Dia: .312″

Case: Federal		Primer: Federal 100, Small Pistol			Col: 1.345″
Lil'Gun	10.0	1151	17,900 CUP	11.0	1208	19,900 CUP
H4227	9.0	980	15,700 CUP	10.0	1060	19,300 CUP
HS-6	4.8	885	15,800 CUP	5.4	1023	20,200 CUP
Longshot	4.0	903	13,900 CUP	4.7	1056	19,300 CUP
572	3.9	892	14,700 CUP	4.4	1018	20,700 CUP
WSF	3.8	858	15,100 CUP	4.3	1000	20,300 CUP
AutoComp	3.7	867	15,200 CUP	4.2	964	18,900 CUP
Universal	3.3	847	14,300 CUP	3.7	973	19,900 CUP
231	3.3	860	15,600 CUP	3.7	947	19,400 CUP
HP-38	3.3	860	15,600 CUP	3.7	947	19,400 CUP
700-X	3.1	857	15,900 CUP	3.5	976	20,200 CUP
Titegroup	2.8	833	15,000 CUP	3.3	956	19,900 CUP

32-20 WINCHESTER

Barrel: 5.5″ Twist: 1:20″ Trim: 1.305″

Bullet: 77 GR. LFP Dia: .314″

Case: Remington		Primer: Winchester SP, Small Pistol			Col: 1.555″
231	3.4	957	11,000 CUP	3.8	1031	12,700 CUP
HP-38	3.4	957	11,000 CUP	3.8	1031	12,700 CUP
Titegroup	2.9	945	10,300 CUP	3.2	1020	11,700 CUP

Bullet: 85 GR. HDY JHP Dia: .312″

Case: Remington		Primer: Winchester SP, Small Pistol			Col: 1.550″
Lil'Gun	7.5	1048	13,200 CUP	8.0	1102	15,700 CUP
Titegroup	3.1	866	11,600 CUP	3.5	961	15,900 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 90 GR. CAST LRNFP Dia: .314″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.490″
231	3.2	833	11,900 CUP	3.5	969	16,000 CUP	
HP-38	3.2	833	11,900 CUP	3.5	969	16,000 CUP	
Titegroup	3.0	937	12,300 CUP	3.4	1012	15,800 CUP	

Bullet: 100 GR. REM JFP Dia: .312″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.580″
Lil'Gun	7.0	947	12,200 CUP	7.5	1018	15,700 CUP	
Titegroup	3.0	839	14,100 CUP	3.5	908	16,000 CUP	

Bullet: 115 GR. CAST LRNFP Dia: .314″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.580″
231	3.2	839	11,100 CUP	3.5	915	15,600 CUP	
HP-38	3.2	839	11,100 CUP	3.5	915	15,600 CUP	
Universal	3.0	808	14,200 CUP	3.2	869	16,000 CUP	
Titegroup	2.7	815	12,900 CUP	3.0	857	15,300 CUP	

327 FEDERAL MAGNUM

Barrel: 5″ Twist: 1:16″ Trim: 1.200″

Bullet: 77 GR. CAST LFP Dia: .314″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.460″
AutoComp	5.9	1251	17,700 PSI	6.7	1393	21,900 PSI	
572	5.5	1233	18,500 PSI	6.2	1381	24,300 PSI	
CFE Pistol	5.1	1254	18,600 PSI	5.8	1382	23,100 PSI	
231	5.1	1273	20,700 PSI	5.8	1380	25,000 PSI	
HP-38	5.1	1273	20,700 PSI	5.8	1380	25,000 PSI	
Universal	4.9	1190	15,700 PSI	5.5	1357	22,800 PSI	
244	4.9	1267	19,500 PSI	5.5	1383	23,500 PSI	
Titegroup	4.5	1225	17,200 PSI	5.3	1391	24,700 PSI	
700-X	4.5	1236	17,500 PSI	5.3	1388	24,600 PSI	
Clays	3.7	1121	18,000 PSI	4.5	1297	30,900 PSI	

Bullet: 78 GR. LC RN Dia: .313″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.454″
No. 7	10.1	1616	37,000 PSI	11.2	1796	41,000 PSI	
No. 5	8.4	1585	39,300 PSI	9.3	1761	43,500 PSI	
True Blue	8.1	1572	38,300 PSI	9.0	1747	42,500 PSI	

Bullet: 83 GR. BER HBWC Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.200″
CFE Pistol	4.1	1064	15,900 PSI	5.0	1250	23,700 PSI	
AutoComp	3.8	970	13,200 PSI	5.0	1232	24,800 PSI	
WSF	3.8	958	14,100 PSI	4.8	1199	26,300 PSI	
231	3.6	1006	17,200 PSI	4.6	1217	26,600 PSI	
HP-38	3.6	1006	17,200 PSI	4.6	1217	26,600 PSI	
Universal	3.4	958	13,400 PSI	4.4	1221	27,000 PSI	
700-X	3.4	1023	17,200 PSI	4.4	1236	25,700 PSI	
Titegroup	3.2	1020	18,500 PSI	4.2	1234	27,800 PSI	
Clays	2.8	979	23,900 PSI	3.5	1108	36,900 PSI	

Bullet: 85 GR. HDY XTP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.450″
HS-6	7.6	1402	30,800 PSI	8.5	1561	41,600 PSI	
CFE Pistol	6.7	1474	33,400 PSI	7.5	1600	41,200 PSI	
572	6.4	1403	32,000 PSI	7.3	1564	42,000 PSI	
Longshot	6.5	1404	32,700 PSI	7.2	1549	41,800 PSI	
AutoComp	6.3	1387	32,700 PSI	7.0	1518	42,100 PSI	
WSF	6.4	1359	31,900 PSI	7.0	1475	38,200 PSI	
244	5.8	1384	28,800 PSI	6.6	1571	40,100 PSI	
Universal	5.3	1253	32,100 PSI	6.0	1378	38,700 PSI	
231	5.5	1299	34,000 PSI	6.0	1416	39,800 PSI	
HP-38	5.5	1299	34,000 PSI	6.0	1416	39,800 PSI	
Titegroup	5.0	1294	27,000 PSI	5.8	1438	37,600 PSI	
No. 7	9.4	1503	39,800 PSI	10.4	1670	44,000 PSI	
True Blue	7.8	1480	39,200 PSI	8.7	1644	43,500 PSI	
No. 5	7.7	1448	39,400 PSI	8.5	1609	43,500 PSI	

Bullet: 90 GR. CAST LRNFP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.460″
AutoComp	5.5	1210	19,900 PSI	6.3	1348	28,700 PSI	
HP-38	4.5	1118	18,400 PSI	5.5	1299	30,400 PSI	
Universal	4.3	1090	16,600 PSI	5.2	1274	27,800 PSI	
Titegroup	3.8	1066	16,300 PSI	5.0	1283	28,800 PSI	
700-X	4.1	1108	17,800 PSI	5.0	1277	28,100 PSI	
Clays	3.5	1065	26,400 PSI	4.2	1186	37,900 PSI	

Bullet: 90 GR. HDY LSWC Dia: .314″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.487″
No. 9	13.1	1544	33,600 PSI	14.5	1715	37,200 PSI	
No. 7	9.0	1445	39,700 PSI	10.0	1605	44,200 PSI	
No. 5	7.4	1400	39,200 PSI	8.2	1555	43,500 PSI	
True Blue	7.1	1382	37,100 PSI	7.9	1536	41,300 PSI	

Bullet: 90 GR. SIE JHC Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.460″
HS-6	8.0	1337	23,400 PSI	8.8	1491	36,400 PSI	
572	6.5	1377	33,400 PSI	7.4	1531	42,100 PSI	
Longshot	6.6	1340	26,400 PSI	7.3	1512	42,600 PSI	
CFE Pistol	6.4	1395	31,800 PSI	7.3	1530	41,500 PSI	
AutoComp	6.4	1337	29,200 PSI	7.2	1493	42,900 PSI	
WSF	6.0	1320	29,300 PSI	6.6	1426	41,900 PSI	
244	5.7	1342	29,100 PSI	6.4	1492	41,600 PSI	
231	5.4	1279	32,100 PSI	6.1	1415	43,000 PSI	
HP-38	5.4	1279	32,100 PSI	6.1	1415	43,000 PSI	
Universal	5.3	1275	26,800 PSI	5.7	1372	40,900 PSI	
Titegroup	5.0	1287	28,200 PSI	5.7	1402	39,600 PSI	

Bullet: 100 GR. HDY XTP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.450″
Lil'Gun	12.7	1347	25,600 PSI	14.0	1431	27,900 PSI	
296	12.2	1419	31,400 PSI	13.2	1525	38,500 PSI	
H110	12.2	1419	31,400 PSI	13.2	1525	38,500 PSI	
IMR 4227	11.5	1239	27,100 PSI	12.5C	1318	30,000 PSI	
HS-6	7.0	1289	34,100 PSI	7.7	1384	42,000 PSI	
CFE Pistol	5.9	1298	31,800 PSI	7.0	1451	42,300 PSI	
572	6.0	1299	33,500 PSI	6.8	1413	42,800 PSI	
Longshot	6.0	1287	35,400 PSI	6.7	1400	43,500 PSI	
AutoComp	5.5	1190	32,500 PSI	6.2	1328	41,400 PSI	
244	5.3	1269	32,100 PSI	6.0	1407	42,500 PSI	
Universal	4.5	1087	28,000 PSI	5.4	1250	40,800 PSI	
HP-38	4.8	1146	31,100 PSI	5.4	1261	39,800 PSI	
Titegroup	4.3	1102	33,300 PSI	5.2	1261	42,800 PSI	
Enforcer	12.2	1370	27,000 PSI	13.6	1522	30,000 PSI	
No. 9	11.7	1417	33,300 PSI	13.0	1574	37,000 PSI	
No. 7	8.5	1355	39,000 PSI	9.4	1505	43,100 PSI	
True Blue	6.9	1297	37,800 PSI	7.7	1441	42,000 PSI	

Bullet: 115 GR. MEI LRNFP Dia: .312″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Federal 200, Small Pistol Mag Col: 1.460″
AutoComp	4.7	1062	22,100 PSI	5.5	1194	33,500 PSI	
572	4.6	1068	23,500 PSI	5.4	1222	33,800 PSI	
231	4.3	1053	27,400 PSI	5.3	1218	41,200 PSI	
HP-38	4.3	1053	27,400 PSI	5.3	1218	41,200 PSI	
Universal	4.2	1059	25,200 PSI	5.0	1184	40,200 PSI	
244	4.0	1066	23,500 PSI	5.0	1226	33,700 PSI	
Titegroup	3.6	1012	23,900 PSI	4.6	1173	40,600 PSI	
700-X	3.8	1024	26,400 PSI	4.6	1158	35,300 PSI	
Clays	3.0	913	26,600 PSI	3.7	1017	39,500 PSI	

Bullet: 115 GR. LC FP Dia: .313″

Case: Federal	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.500″
Enforcer	11.5	1343	31,400 PSI	12.8	1492	34,900 PSI	
No. 9	10.8	1355	34,900 PSI	12.0	1506	38,800 PSI	
No. 7	7.9	1276	40,000 PSI	8.8	1418	44,600 PSI	
No. 5	6.6	1209	39,900 PSI	7.3	1343	44,100 PSI	
True Blue	6.3	1209	37,200 PSI	7.0	1343	41,300 PSI	

380 AUTO

Barrel: 3.75″ Twist: 1:16″ Trim: .675″

Bullet: 56 GR. PLY S ARX Dia: .355″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 500, Small Pistol Col: .975″
572	4.7	1213	17,900 PSI	5.5	1326	20,000 PSI	
AutoComp	4.3	1072	15,500 PSI	5.2	1310	20,300 PSI	
CFE Pistol	4.3	1103	15,700 PSI	5.1	1356	20,400 PSI	
Universal	3.6	1025	14,800 PSI	4.2	1274	20,000 PSI	
244	3.4	1113	16,700 PSI	4.0	1297	20,200 PSI	
HP-38	3.3	1073	16,400 PSI	3.9	1257	20,400 PSI	
Titegroup	3.1	1102	15,700 PSI	3.7	1309	20,200 PSI	

Bullet: 60 GR. PLY S RNP Dia: .355″

Case: Remington	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: CCI 500, Small Pistol Col: .975″
572	4.5	1134	16,900 PSI	5.2	1272	20,300 PSI	

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
CFE Pistol	4.1	1090	15,800 PSI	4.8	1303	20,200 PSI
AutoComp	4.1	1065	16,200 PSI	4.8	1250	20,100 PSI
Universal	3.4	1005	15,300 PSI	4.0	1228	20,000 PSI
244	3.2	1058	16,100 PSI	3.8	1234	20,300 PSI
HP-38	3.1	1020	15,700 PSI	3.7	1213	20,300 PSI
Titegroup	2.9	1033	15,300 PSI	3.5	1240	20,100 PSI
Bullet: 65 GR. LD XD			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .950″**
HS-6	5.0	956	13,800 PSI	6.0	1215	20,100 PSI
Longshot	4.8	1057	14,500 PSI	5.2	1276	19,500 PSI
AutoComp	4.2	1027	14,100 PSI	4.9	1245	19,900 PSI
CFE Pistol	4.4	1053	13,800 PSI	4.8	1278	20,500 PSI
572	4.2	997	13,400 PSI	4.7	1230	20,200 PSI
Universal	3.8	882	11,800 PSI	4.3	1248	20,400 PSI
244	3.4	1005	14,600 PSI	4.0	1214	20,400 PSI
231	3.1	969	14,700 PSI	3.6	1161	20,300 PSI
Titegroup	3.1	1004	14,300 PSI	3.6	1194	20,200 PSI
Bullet: 75 GR. CEB RAPTOR			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .950″**
HS-6	4.7	941	15,900 PSI	5.4	1079	19,700 PSI
Longshot	3.9	951	16,200 PSI	4.5	1071	19,100 PSI
AutoComp	3.7	939	15,300 PSI	4.4	1108	19,600 PSI
572	3.5	918	15,200 PSI	4.2	1090	19,400 PSI
CFE Pistol	3.5	927	15,200 PSI	4.2	1095	19,200 PSI
Universal	3.7	954	15,700 PSI	4.1	1125	19,600 PSI
244	3.0	933	16,100 PSI	3.5	1066	19,900 PSI
231	2.8	848	15,000 PSI	3.3	1025	20,000 PSI
Titegroup	2.7	919	16,100 PSI	3.2	1064	19,800 PSI
Bullet: 80 GR. BAR TAC XP			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .980″**
572	3.3	901	16,100 PSI	3.8	1043	19,700 PSI
AutoComp	3.3	911	16,100 PSI	3.8	1024	20,200 PSI
CFE Pistol	2.9	814	12,600 PSI	3.7	1036	20,300 PSI
244	2.9	930	16,200 PSI	3.3	1053	19,900 PSI
Universal	2.8	889	16,100 PSI	3.0	964	17,900 PSI
231	2.4	817	15,000 PSI	2.7	936	20,300 PSI
HP-38	2.4	817	15,000 PSI	2.7	936	20,300 PSI
Titegroup	2.3	865	15,700 PSI	2.6	970	19,300 PSI
700-X	2.3	846	15,900 PSI	2.6	960	19,700 PSI
Bullet: 80 GR. BAR XPB			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.970″**
No. 5	3.6	807	18,100 PSI	4.0	897	20,100 PSI
Silhouette	3.4	856	18,300 PSI	3.8	951	20,400 PSI
True Blue	3.2	790	18,500 PSI	3.5	878	20,500 PSI
No. 2	2.6	807	18,800 PSI	2.9	897	20,900 PSI
ZIP	2.3	776	18,100 PSI	2.6	862	20,100 PSI
Competition	2.1	786	18,300 PSI	2.3	873	20,400 PSI
Nitro 100 NF	1.8	772	18,200 PSI	2.1	867	21,500 PSI
Bullet: 90 GR. HDY JHP			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .955″**
AutoComp	4.1	893	11,200 CUP	4.5	1012	15,000 CUP
572	3.9	919	15,600 PSI	4.4	1053	19,900 PSI
CFE Pistol	3.7	880	11,900 PSI	4.2	1010	19,500 PSI
244	3.2	930	15,600 PSI	3.7	1061	19,800 PSI
Universal	3.2	815	10,700 CUP	3.6	955	15,700 CUP
231	3.2	917	13,900 CUP	3.5	957	15,400 CUP
HP-38	3.2	917	13,900 CUP	3.5	957	15,400 CUP
Titegroup	2.7	826	10,800 CUP	3.2	970	15,600 CUP
700-X				2.9	895	15,900 CUP
Bullet: 90 GR. HDY XTP			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.960″**
No. 5	4.3	810	18,300 PSI	4.8	920	20,400 PSI
True Blue	3.7	800	15,400 PSI	4.5	960	18,700 PSI
No. 2	3.3	818	18,700 PSI	3.7	930	20,900 PSI
ZIP	2.7	800	14,700 PSI	3.4	980	18,500 PSI
Bullet: 95 GR. ACME RN CT			**Dia: .356″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .970″**
572	4.0	916	14,600 PSI	4.7	1078	19,700 PSI
CFE Pistol	4.0	901	13,400 PSI	4.7	1082	20,300 PSI
AutoComp	4.0	880	12,400 PSI	4.7	1080	20,300 PSI
Universal	3.5	906	14,700 PSI	4.6	1104	20,300 PSI
244	3.0	856	13,200 PSI	3.8	1060	20,100 PSI
231	3.0	812	13,300 PSI	3.8	1043	20,400 PSI
HP-38	3.0	812	13,300 PSI	3.8	1043	20,400 PSI
Titegroup	2.8	887	14,300 PSI	3.5	1073	20,300 PSI
Bullet: 95 GR. SIE FMJ			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.945″**
No. 5	4.3	784	16,400 PSI	4.8	891	18,300 PSI
No. 2	3.3	822	16,300 PSI	3.7	934	18,300 PSI
Bullet: 95 GR. SPR FMJ			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .970″**
AutoComp	3.9	816	10,600 CUP	4.3	937	14,100 CUP
572	3.5	785	13,700 PSI	4.2	982	19,900 PSI
CFE Pistol	3.7	822	12,000 PSI	4.2	986	19,900 PSI
244	3.2	848	14,800 PSI	3.7	995	19,600 PSI
Universal	3.1	814	12,500 CUP	3.5	901	15,500 CUP
231	2.9	802	13,100 CUP	3.2	884	15,400 CUP
HP-38	2.9	802	13,100 CUP	3.2	884	15,400 CUP
Titegroup	2.7	796	10,600 CUP	3.2	953	15,600 CUP
Bullet: 100 GR. BER RNHB			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.960″**
No. 5	4.3	813	18,300 PSI	5.1	952	21,500 PSI
True Blue	3.8	823	18,200 PSI	4.5	951	21,400 PSI
Silhouette	3.7	791	18,300 PSI	4.4	960	21,500 PSI
ZIP	3.0	786	18,200 PSI	3.5	923	21,500 PSI
No. 2	2.8	766	18,200 PSI	3.2	895	21,400 PSI
Competition	2.0	693	18,300 PSI	2.3	794	21,500 PSI
Nitro 100 NF	1.9	686	18,200 PSI	2.3	800	21,500 PSI
Bullet: 100 GR. HDY FMJ			**Dia: .355″**			
Case: Remington			**Primer: CCI 500, Small Pistol**			**Col: .980″**
AutoComp	3.8	822	11,000 CUP	4.2	934	14,400 CUP
572	3.4	816	15,300 PSI	4.1	965	19,800 PSI
CFE Pistol	3.3	794	12,400 PSI	4.0	955	19,800 PSI
244	3.0	851	15,600 PSI	3.5	994	19,500 PSI
Universal	3.0	721	11,400 CUP	3.4	889	16,100 CUP
231	2.9	819	13,800 CUP	3.1	843	15,400 CUP
HP-38	2.9	819	13,800 CUP	3.1	843	15,400 CUP
Titegroup	2.6	793	11,400 CUP	3.0	912	14,700 CUP
700-X				2.7	840	15,200 CUP
Bullet: 100 GR. RAI RN			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.960″**
No. 5	4.2	801	18,300 PSI	5.0	948	21,500 PSI
True Blue	3.7	820	18,300 PSI	4.4	941	21,500 PSI
Silhouette	3.7	819	18,200 PSI	4.4	973	21,400 PSI
ZIP	2.8	781	18,100 PSI	3.3	918	21,300 PSI
No. 2	2.7	769	18,200 PSI	3.2	897	21,400 PSI
Competition	1.9	692	18,300 PSI	2.2	799	21,500 PSI
Nitro 100 NF	1.9	683	18,300 PSI	2.2	799	21,500 PSI
Bullet: 102 GR. REM GSBR			**Dia: .355″**			
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 0.965″**
No. 5	4.1	777	18,300 PSI	4.8	917	21,500 PSI
True Blue	3.6	788	18,200 PSI	4.2	905	21,400 PSI
ZIP	2.9	765	18,200 PSI	3.4	892	21,500 PSI
No. 2	2.6	748	18,300 PSI	3.1	863	21,500 PSI

9mm Luger

Barrel: 4″ Twist: 1:10″ Trim: .750″

Bullet: 65 GR. PLY S ARX			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.155″**
572	7.8	1526	25,800 PSI	8.5	1621	28,500 PSI
CFE Pistol	6.3	1552	28,100 PSI	7.3	1713	33,000 PSI
AutoComp	6.2	1489	26,600 PSI	7.1	1634	32,700 PSI
Universal	5.2	1453	28,200 PSI	5.8	1593	33,000 PSI
244	4.8	1400	27,000 PSI	5.5	1562	33,400 PSI
HP-38	4.7	1359	27,900 PSI	5.3	1480	32,900 PSI
Titegroup	4.5	1422	27,000 PSI	5.1	1554	33,600 PSI
Bullet: 65 GR. PLY S RNP			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.125″**
WSF	6.0	1517	28,200 PSI	8.0	1666	30,500 PSI
CFE Pistol	6.2	1504	27,100 PSI	7.1	1697	33,200 PSI
AutoComp	6.2	1503	27,500 PSI	7.1	1626	32,900 PSI
Universal	4.9	1368	23,700 PSI	5.7	1592	32,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
HP-38	4.8	1384	26,300 PSI	5.6	1537	33,100 PSI
244	4.7	1369	23,900 PSI	5.5	1575	33,300 PSI
Titegroup	4.7	1438	26,200 PSI	5.5	1610	33,700 PSI
Bullet: 80 GR. BAR TAC-XP			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.025″**
Longshot	5.7	1239	31,100 PSI	6.6	1327	33,500 PSI
572	5.4	1311	27,400 PSI	6.2	1424	31,200 PSI
CFE Pistol	5.0	1221	26,100 PSI	5.9	1420	33,500 PSI
WSF	5.0	1235	25,800 PSI	5.9	1378	32,700 PSI
HS-6	5.4	1102	28,000 PSI	5.7	1167	32,100 PSI
AutoComp	4.4	1101	27,700 PSI	4.8	1207	31,800 PSI
244	4.0	1212	26,400 PSI	4.6	1356	33,000 PSI
Universal	3.7	1156	31,400 PSI	3.9	1166	31,500 PSI
231	3.3	1021	26,300 PSI	3.8	1125	32,000 PSI
HP-38	3.3	1021	26,300 PSI	3.8	1125	32,000 PSI
Titegroup	3.0	1015	25,700 PSI	3.6	1174	32,900 PSI
700-X	3.1	1038	25,800 PSI	3.5	1119	31,000 PSI
Bullet: 90 GR. CEB RAPTOR			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.140″**
HS-6	6.5	1140	28,200 PSI	7.3	1292	32,600 PSI
Longshot	6.0	1210	28,100 PSI	6.6	1315	29,700 PSI
572	5.4	1189	28,500 PSI	6.0	1312	32,800 PSI
AutoComp	5.2	1108	25,500 PSI	5.8	1270	32,600 PSI
WSF	5.1	1129	27,600 PSI	5.7	1272	32,800 PSI
CFE Pistol	5.2	1169	27,800 PSI	5.6	1277	32,800 PSI
Universal	5.0	1157	28,200 PSI	5.4	1246	31,200 PSI
244	4.3	1114	27,200 PSI	4.9	1271	32,900 PSI
HP-38	4.1	1029	26,800 PSI	4.7	1187	32,500 PSI
Titegroup	4.0	1085	27,500 PSI	4.5	1232	32,500 PSI
Bullet: 90 GR. SPR GDHP			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.010″**
HS-6	7.9	1361	27,400 CUP	8.2	1413	30,900 CUP
Longshot	6.0	1278	29,400 PSI	7.0	1378	32,300 PSI
AutoComp	6.1	1255	27,700 PSI	6.5	1332	32,100 PSI
WSF	5.8	1321	28,300 PSI	6.5	1388	32,000 PSI
572	5.5	1239	25,000 PSI	6.4	1419	33,500 PSI
CFE Pistol	6.0	1310	27,200 PSI	6.4	1404	32,900 PSI
231	5.5	1312	25,400 CUP	5.8	1349	30,100 CUP
HP-38	5.5	1312	25,400 CUP	5.8	1349	30,100 CUP
Universal	5.0	1170	25,700 CUP	5.5	1266	30,100 CUP
244	4.5	1212	25,000 PSI	5.2	1378	31,800 PSI
Titegroup	4.7	1239	25,700 CUP	5.0	1305	30,000 CUP
700-X	4.1	1215	27,700 PSI	4.5	1279	32,200 PSI
Bullet: 90 GR. HDY XTP			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.070″**
Silhouette	6.2	1253	31,200 PSI	6.9	1368	34,700 PSI
No. 2	4.8	1214	31,400 PSI	5.4	1293	34,900 PSI
ZIP	4.6	1172	31,400 PSI	5.1	1280	34,900 PSI
Competition	3.9	1145	31,100 PSI	4.4	1209	34,600 PSI
Nitro 100 NF	3.8	1140	31,300 PSI	4.2	1206	34,800 PSI
Bullet: 95 GR. BAR TAC-XP			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.125″**
HS-6	6.0	1104	24,900 PSI	6.7	1249	30,700 PSI
Longshot	5.5	1162	26,800 PSI	6.5	1277	27,900 PSI
572	5.1	1197	26,900 PSI	6.0	1340	33,200 PSI
CFE Pistol	5.0	1171	25,700 PSI	5.8	1336	33,100 PSI
AutoComp	5.1	1176	26,900 PSI	5.8	1329	32,700 PSI
Universal	4.4	1122	25,100 PSI	5.1	1329	32,600 PSI
244	4.4	1158	26,100 PSI	5.0	1297	33,300 PSI
231	4.1	1103	26,600 PSI	4.7	1240	32,600 PSI
Titegroup	3.9	1156	28,700 PSI	4.6	1299	33,200 PSI
Bullet: 95 GR. SIE FMJ			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.020″**
HS-6	7.3	1232	26,500 CUP	7.8	1339	31,300 CUP
Longshot	5.8	1192	25,800 PSI	6.8	1356	33,300 PSI
CFE Pistol	5.9	1207	27,900 PSI	6.4	1362	32,200 PSI
WSF	5.7	1237	27,000 PSI	6.4	1386	32,900 PSI
572	5.4	1233	25,900 PSI	6.3	1379	33,400 PSI
AutoComp	5.6	1216	27,300 PSI	6.1	1306	32,600 PSI
231	4.8	1189	26,300 CUP	5.3	1273	31,400 CUP
HP-38	4.8	1189	26,300 CUP	5.3	1273	31,400 CUP

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Universal	4.6	1182	26,800 CUP	5.2	1292	31,700 CUP
244	4.5	1199	25,700 PSI	5.2	1340	32,300 PSI
Titegroup	4.7	1241	28,500 CUP	5.0	1298	32,000 CUP
700-X	4.1	1137	26,300 PSI	4.5	1224	31,500 PSI
Bullet: 95 GR. BAR TAC-XP			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.160″**
No. 7	6.8	1071	29,700 PSI	8.0	1242	34,900 PSI
No. 5	5.6	1066	29,300 PSI	6.6	1228	34,500 PSI
Silhouette	5.7	1179	31,400 PSI	6.3	1281	34,900 PSI
True Blue	5.2	1071	29,500 PSI	6.1	1226	34,700 PSI
ZIP	4.2	1070	30,900 PSI	4.7	1172	34,300 PSI
No. 2	4.2	1083	31,300 PSI	4.7	1158	34,800 PSI
Competition	3.7	1052	31,100 PSI	4.1	1115	34,600 PSI
Nitro 100 NF	3.4	1023	30,700 PSI	3.7	1109	34,100 PSI
Bullet: 100 GR. SPR FMJ			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.050″**
HS-6	7.2	1270	23,900 CUP	7.5	1313	28,600 CUP
Longshot	5.5	1158	26,500 PSI	6.5	1315	33,300 PSI
231	5.1	1218	25,200 CUP	5.5	1282	28,400 CUP
HP-38	5.1	1218	25,200 CUP	5.5	1282	28,400 CUP
Universal	4.8	1119	27,200 CUP	5.3	1212	31,500 CUP
Titegroup	4.7	1234	28,300 CUP	5.0	1289	30,300 CUP
Bullet: 115 GR. LRN			**Dia: .356″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.100″**
HS-6	6.4	1117	27,900 CUP	6.9	1170	32,200 CUP
Longshot	5.0	1032	20,200 CUP	6.0	1166	27,300 CUP
WSF	4.9	1109	27,500 PSI	5.6	1225	33,300 PSI
CFE Pistol	4.9	1124	28,800 PSI	5.4	1209	33,800 PSI
572	4.6	1118	26,300 PSI	5.1	1200	31,900 PSI
AutoComp	4.4	1002	24,800 PSI	5.1	1145	31,500 PSI
231	4.3	1079	28,400 CUP	4.8	1135	32,000 CUP
HP-38	4.3	1079	28,400 CUP	4.8	1135	32,000 CUP
Universal	4.0	1034	24,400 CUP	4.5	1124	31,300 CUP
244	4.0	1092	25,300 PSI	4.5	1199	32,900 PSI
Titegroup	3.9	1075	25,800 CUP	4.3	1151	30,500 CUP
700-X	3.3	986	25,200 PSI	3.7	1082	31,900 PSI
Clays	3.0	954	25,300 CUP	3.4	1039	31,000 CUP
Bullet: 115 GR. SPR GDHP			**Dia: .355″**			
Case: Winchester			**Primer: CCI 500, Small Pistol**			**Col: 1.125″**
HS-6	6.7	1171	26,700 CUP	7.0	1234	29,400 CUP
Longshot	5.0	1127	29,000 PSI	6.0	1203	32,300 PSI
CFE Pistol	5.3	1059	23,200 PSI	5.9	1185	31,800 PSI
WSF	5.2	1075	25,800 PSI	5.9	1197	33,000 PSI
572	5.3	1137	26,400 PSI	5.7	1221	33,000 PSI
AutoComp	5.1	1078	28,200 PSI	5.6	1161	32,500 PSI
231	4.7	1075	25,300 CUP	5.1	1167	28,100 CUP
HP-38	4.7	1075	25,300 CUP	5.1	1167	28,100 CUP
Universal	4.5	1029	27,400 CUP	5.0	1149	31,200 CUP
Titegroup	4.5	1135	29,500 CUP	4.8	1158	30,500 CUP
244	4.2	1071	25,400 PSI	4.7	1197	33,100 PSI
700-X	3.9	991	26,000 PSI	4.2	1091	31,900 PSI
Clays	3.7	1066	30,900 CUP	3.9	1095	32,600 CUP
Bullet: 115 GR. BAR XPB			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.160″**
No. 5	5.0	959	30,500 PSI	5.5	1065	33,900 PSI
Silhouette	4.8	1003	30,600 PSI	5.3	1114	34,000 PSI
True Blue	4.4	902	28,900 PSI	4.9	1002	32,200 PSI
No. 2	4.1	905	30,000 PSI	4.6	1005	33,300 PSI
ZIP	3.3	876	29,300 PSI	3.7	973	32,500 PSI
Bullet: 115 GR. BER RN			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.130″**
No. 2	4.2	1043	31,400 PSI	4.7	1103	34,900 PSI
Competition	3.5	980	30,900 PSI	3.9	1018	34,300 PSI
Nitro 100 NF	3.3	947	30,600 PSI	3.7	1009	34,000 PSI
Bullet: 115 GR. BER RNDS			**Dia: .355″**			
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.130″**
No. 7	7.0	1037	29,700 PSI	8.2	1185	34,900 PSI
No. 5	5.6	1007	29,500 PSI	6.6	1162	34,700 PSI
Silhouette	5.5	1099	31,300 PSI	6.2	1189	34,800 PSI
True Blue	5.1	1019	29,500 PSI	6.0	1161	34,700 PSI
ZIP	4.1	1005	30,800 PSI	4.6	1089	34,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Bullet: 115 GR. LC RN — Dia: .356″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.070″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.4	1052	28,600 PSI	7.5	1178	33,600 PSI
No. 5	5.2	1034	29,300 PSI	6.1	1179	34,400 PSI
True Blue	4.8	1041	29,500 PSI	5.7	1174	34,800 PSI
Silhouette	5.1	1126	31,200 PSI	5.7	1199	34,700 PSI
No. 2	3.9	1055	31,300 PSI	4.4	1109	34,800 PSI
ZIP	3.8	1041	31,000 PSI	4.2	1125	34,400 PSI
Competition	3.5	1038	31,200 PSI	3.8	1084	34,600 PSI
Nitro 100 NF	2.9	980	31,000 PSI	3.3	1032	34,500 PSI

Bullet: 115 GR. NOS JHP — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.077″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.5	1000	29,100 PSI	7.6	1139	34,300 PSI
No. 5	5.3	987	29,700 PSI	6.3	1137	34,900 PSI
True Blue	5.2	1046	31,200 PSI	5.8	1132	34,700 PSI
Silhouette	5.1	1060	30,800 PSI	5.7	1136	34,200 PSI
No. 2	4.2	1016	31,300 PSI	4.7	1077	34,700 PSI
ZIP	4.1	990	31,200 PSI	4.5	1083	34,600 PSI
Competition	3.2	919	31,300 PSI	3.6	992	34,800 PSI
Nitro 100 NF	3.1	912	31,200 PSI	3.4	972	34,700 PSI

Bullet: 115 GR. SIE FMJ — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.100″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.6	1036	29,400 PSI	7.8	1166	34,600 PSI
No. 5	5.3	1001	29,100 PSI	6.3	1148	34,200 PSI
True Blue	5.0	1006	29,300 PSI	5.9	1147	34,500 PSI
Silhouette	5.3	1109	31,500 PSI	5.9	1180	35,000 PSI
No. 2	3.7	971	27,500 PSI	4.6	1088	34,200 PSI
ZIP	4.0	1016	31,500 PSI	4.5	1106	35,000 PSI
Competition	3.3	958	30,500 PSI	3.7	1020	33,900 PSI
Nitro 100 NF	2.9	926	30,500 PSI	3.3	986	33,900 PSI

Bullet: 118 GR. LD XD — Dia: .355″

Case: Winchester — **Primer: CCI 500, Small Pistol** — **Col: 1.135″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
HS-6	5.2	877	27,400 PSI	5.7	1035	33,200 PSI
Longshot	4.8	944	26,900 PSI	5.5	1128	33,300 PSI
572	4.4	940	28,400 PSI	5.2	1098	33,100 PSI
CFE Pistol	4.2	936	27,400 PSI	4.8	1066	32,900 PSI
AutoComp	4.2	915	27,000 PSI	4.8	1059	33,200 PSI
Universal	3.9	863	26,600 PSI	4.4	1018	32,100 PSI
244	3.5	848	27,000 PSI	4.0	985	32,800 PSI
Titegroup	3.0	742	23,300 PSI	3.8	989	32,700 PSI

Bullet: 124 GR. BER HBRN — Dia: .356″

Case: Winchester — **Primer: CCI 500, Small Pistol** — **Col: 1.150″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
HS-6	6.0	1016	28,200 PSI	6.6	1116	32,400 PSI
Longshot	4.8	958	23,000 PSI	5.8	1135	32,300 PSI
572	5.3	1131	27,200 PSI	5.8	1212	32,600 PSI
WSF	5.0	1050	27,900 PSI	5.6	1158	33,300 PSI
CFE Pistol	4.9	1006	27,300 PSI	5.5	1120	33,800 PSI
AutoComp	4.8	1020	28,400 PSI	5.4	1120	32,900 PSI
244	4.0	1010	26,300 PSI	4.5	1131	32,600 PSI
Universal	3.8	904	26,300 PSI	4.4	1045	33,500 PSI
231	3.9	920	27,400 PSI	4.4	1037	31,900 PSI
HP-38	3.9	920	27,400 PSI	4.4	1037	31,900 PSI
700-X	3.7	894	24,700 PSI	4.2	1068	33,400 PSI
Titegroup	3.6	957	27,700 PSI	4.1	1057	32,700 PSI
Titewad	2.9	847	28,700 PSI	3.4	942	32,200 PSI
Clays	2.7	791	27,900 PSI	3.0	857	31,200 PSI

Bullet: 124 GR. HDY XTP — Dia: .355″

Case: Winchester — **Primer: CCI 500, Small Pistol** — **Col: 1.060″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.2	997	26,000 PSI	7.4	1144	33,000 PSI
Longshot	4.8	1051	26,200 PSI	6.2	1209	32,900 PSI
HS-6	5.6	1050	28,100 PSI	6.1	1136	33,100 PSI
True Blue	5.0	1002	27,200 PSI	5.6	1123	32,700 PSI
Silhouette	4.7	994	25,600 PSI	5.3	1116	33,300 PSI
572	4.3	996	25,600 PSI	5.1	1126	32,500 PSI
CFE Pistol	4.5	1061	27,300 PSI	5.1	1181	33,600 PSI
AutoComp	4.5	1061	27,300 PSI	5.1	1181	33,600 PSI
Universal	4.0	993	25,400 PSI	4.5	1126	33,300 PSI
No. 2	3.7	931	25,800 PSI	4.3	1030	31,700 PSI
244	3.7	968	26,000 PSI	4.2	1090	33,000 PSI
231	3.7	957	26,300 PSI	4.2	1050	33,600 PSI
HP-38	3.7	957	26,300 PSI	4.2	1050	33,600 PSI
ZIP	3.7	917	25,200 PSI	4.1	1035	32,100 PSI
Titegroup	3.4	953	26,700 PSI	3.9	1069	32,800 PSI
700-X	3.2	910	24,600 PSI	3.7	1040	31,300 PSI
Clays	3.0	891	24,300 PSI	3.4	1007	31,500 PSI
Titewad	2.9	838	26,400 PSI	3.4	958	31,200 PSI
Competition	2.7	833	26,300 PSI	3.4	946	33,000 PSI

Bullet: 124 GR. BER HBFP — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.060″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	5.9	929	29,400 PSI	6.9	1072	34,600 PSI
No. 5	4.9	929	29,300 PSI	5.8	1069	34,500 PSI
True Blue	4.6	936	29,700 PSI	5.5	1074	34,900 PSI
Silhouette	4.8	1000	30,900 PSI	5.4	1082	34,300 PSI
ZIP	3.7	928	30,700 PSI	4.1	1004	34,100 PSI
No. 2	3.7	940	30,800 PSI	4.1	999	34,200 PSI
Competition	3.0	872	30,600 PSI	3.3	945	34,000 PSI
Nitro 100 NF	2.9	865	31,100 PSI	3.2	918	34,600 PSI

Bullet: 124 GR. BER RN — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.160″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.5	966	29,200 PSI	7.6	1120	34,300 PSI
No. 5	5.4	956	29,500 PSI	6.4	1116	34,700 PSI
True Blue	5.1	970	29,700 PSI	6.0	1133	34,900 PSI
Silhouette	5.2	1023	31,500 PSI	5.8	1133	35,000 PSI
ZIP	4.1	938	31,300 PSI	4.6	1033	34,800 PSI
No. 2	4.0	962	30,800 PSI	4.4	1042	34,200 PSI
Nitro 100 NF	3.2	901	31,200 PSI	3.6	965	34,600 PSI
Competition	3.1	875	31,200 PSI	3.5	948	34,600 PSI

Bullet: 124 GR. HDY XTP — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.060″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.2	978	29,500 PSI	7.3	1150	34,800 PSI
No. 5	4.8	905	29,100 PSI	5.7	1075	34,500 PSI
True Blue	4.7	892	29,500 PSI	5.5	1060	34,500 PSI
Silhouette	4.6	945	29,700 PSI	5.4	1072	34,900 PSI
ZIP	3.3	888	31,400 PSI	3.7	967	34,900 PSI
Competition	2.7	846	31,200 PSI	3.0	898	34,700 PSI
Nitro 100 NF	2.6	839	31,400 PSI	2.9	883	34,800 PSI

Bullet: 124 GR. LC RN — Dia: .356″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.050″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	5.5	944	29,400 PSI	6.5	1086	34,500 PSI
No. 5	4.6	939	29,400 PSI	5.4	1078	34,600 PSI
True Blue	4.3	944	29,700 PSI	5.0	1070	34,900 PSI
Silhouette	4.5	1020	31,200 PSI	5.0	1096	34,600 PSI
No. 2	3.4	953	31,300 PSI	3.8	1012	34,800 PSI
ZIP	3.4	958	31,200 PSI	3.7	1035	34,700 PSI
Competition	2.6	894	31,200 PSI	2.9	954	34,700 PSI
Nitro 100 NF	2.6	896	31,500 PSI	2.9	947	35,000 PSI

Bullet: 124 GR. REM GSBR — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.145″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.7	981	29,500 PSI	7.9	1140	34,700 PSI
No. 5	5.5	970	29,400 PSI	6.5	1127	34,500 PSI
True Blue	5.3	995	29,400 PSI	6.2	1145	34,600 PSI
Silhouette	5.3	1034	30,800 PSI	5.9	1124	34,200 PSI
No. 2	4.3	989	31,400 PSI	4.8	1054	34,900 PSI
ZIP	4.1	970	31,400 PSI	4.6	1055	34,900 PSI
Competition	3.2	890	31,200 PSI	3.5	964	34,700 PSI
Nitro 100 NF	2.9	841	30,100 PSI	3.3	941	34,200 PSI

Bullet: 124 GR. SPR GDHP — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.105″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.3	944	29,500 PSI	7.4	1090	34,700 PSI
No. 5	5.1	924	29,700 PSI	6.0	1067	35,000 PSI
True Blue	4.9	929	29,700 PSI	5.7	1075	34,900 PSI
Silhouette	5.0	1002	31,500 PSI	5.6	1090	35,000 PSI
No. 2	3.9	917	30,900 PSI	4.3	989	34,300 PSI
ZIP	3.8	888	30,800 PSI	4.2	979	34,200 PSI
Competition	3.0	816	31,200 PSI	3.3	884	34,600 PSI
Nitro 100 NF	2.9	761	31,800 PSI	3.2	865	35,000 PSI

Bullet: 124 GR. WIN FMJ — Dia: .355″

Case: Winchester — **Primer: Winchester SP, Small Pistol** — **Col: 1.100″**

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
No. 7	6.4	975	29,800 PSI	7.5	1139	34,900 PSI
No. 5	5.3	950	30,500 PSI	6.0	1075	34,600 PSI
No. 2	3.6	880	29,700 PSI	4.2	992	34,700 PSI
Nitro 100 NF	2.6	761	29,300 PSI	3.0	864	33,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 125 GR. HDY HAP Dia: .356″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.069″**
Longshot	4.8	1032	25,900 PSI	6.0	1182	32,900 PSI
HS-6	4.5	865	25,700 PSI	5.1	971	33,100 PSI
WSF	4.3	991	27,900 PSI	5.0	1083	33,200 PSI
CFE Pistol	4.2	956	25,600 PSI	4.8	1096	33,400 PSI
572	4.0	961	26,400 PSI	4.6	1074	32,800 PSI
AutoComp	3.6	842	25,000 PSI	4.1	954	31,600 PSI
244	3.4	960	26,500 PSI	3.9	1060	32,600 PSI
700-X	2.9	843	27.000 PSI	3.4	938	33,500 PSI
Universal	3.0	803	26,800 PSI	3.3	892	32,200 PSI
231	2.8	753	25,300 PSI	3.3	876	33,600 PSI
HP-38	2.8	753	25,300 PSI	3.3	876	33,600 PSI
Titegroup	2.8	816	27,100 PSI	3.2	930	33,700 PSI
Bullet: 125 GR. LCN Dia: .356″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.125″**
HS-6	5.9	1023	24,400 CUP	6.6	1124	30,700 CUP
Longshot	5.0	1052	24,700 CUP	5.7	1115	28,300 CUP
WSF	4.4	1029	26,400 PSI	5.2	1138	33,500 PSI
CFE Pistol	4.4	1041	27,200 PSI	5.0	1156	33,000 PSI
AutoComp	4.3	1012	26,700 PSI	4.8	1101	32,800 PSI
231	3.9	1009	25,700 CUP	4.4	1086	31,200 CUP
HP-38	3.9	1009	25,700 CUP	4.4	1086	31,200 CUP
Universal	3.8	993	24,400 CUP	4.3	1096	31,300 CUP
244	3.6	1009	26,100 PSI	4.1	1119	33,300 PSI
Titegroup	3.6	1002	22,900 CUP	4.0	1096	30,400 CUP
700-X	2.9	899	23,700 PSI	3.4	1003	31,600 PSI
Clays	2.9	899	22,700 CUP	3.3	993	30,900 CUP
Bullet: 125 GR. SIE FMJ Dia: .355″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.090″**
HS-6	6.4	1131	25,600 CUP	6.8	1169	27,100 CUP
Longshot	4.7	1022	28,100 PSI	5.7	1162	33,400 PSI
WSF	4.6	1015	27,300 PSI	5.3	1121	32,800 PSI
AutoComp	4.7	1055	28,900 PSI	5.2	1120	33,300 PSI
CFE Pistol	4.6	1009	26,900 PSI	5.1	1118	33,000 PSI
572	4.3	1001	25,600 PSI	4.9	1119	31,600 PSI
Universal	4.3	1031	26,900 CUP	4.9	1118	30,600 CUP
231	4.4	1009	24,600 CUP	4.8	1088	28,800 CUP
HP-38	4.4	1009	24,600 CUP	4.8	1088	28,800 CUP
Titegroup	4.1	1069	27,300 CUP	4.4	1136	30,600 CUP
244	3.6	996	27,100 PSI	4.1	1091	32,500 PSI
Clays	3.5	1010	28,000 CUP	3.7	1056	32,500 CUP
700-X	3.0	845	21,600 PSI	3.6	1007	31,000 PSI
Bullet: 125 GR. SIE JHP Dia: .355″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.035″**
No. 7	5.6	897	29,500 PSI	6.5	1035	34,700 PSI
No. 5	4.6	899	29,700 PSI	5.4	1027	35,000 PSI
Silhouette	4.6	984	31,200 PSI	5.1	1060	34,700 PSI
True Blue	4.2	879	29,500 PSI	5.0	1008	34,700 PSI
No. 2	3.6	889	31,200 PSI	4.0	961	34,700 PSI
ZIP	3.4	886	30,900 PSI	3.8	970	34,300 PSI
Competition	2.8	836	30,700 PSI	3.1	897	34,200 PSI
Nitro 100 NF	2.6	827	30,600 PSI	2.9	882	34,000 PSI
Bullet: 130 GR. BER RN Dia: .356″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.150″**
HS-6	5.9	970	28,300 PSI	6.5	1097	31,800 PSI
Longshot	5.2	970	27,500 PSI	5.8	1115	33,900 PSI
AutoComp	4.8	990	27,500 PSI	5.3	1093	33,500 PSI
WSF	4.7	988	25,600 PSI	5.3	1113	33,000 PSI
572	4.6	990	25,600 PSI	5.2	1131	33,500 PSI
244	3.9	1005	27,300 PSI	4.4	1097	33,400 PSI
231	3.9	903	27,600 PSI	4.3	1005	33,000 PSI
HP-38	3.9	903	27,600 PSI	4.3	1005	33,100 PSI
Universal	3.8	857	26,600 PSI	4.2	978	31,500 PSI
Titegroup	3.5	895	27,400 PSI	3.9	1006	32,100 PSI
700-X	3.5	904	26,300 PSI	3.9	998	31,100 PSI
Clays	2.7	755	27,400 PSI	3.0	853	31,700 PSI
Bullet: 135 GR. ACME RN CTD Dia: .356″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.150″**
No. 7	5.8	965	26,600 PSI	6.6	1067	33,000 PSI
HS-6	5.3	969	27,100 PSI	5.9	1080	33,400 PSI
No. 5	5.2	965	27,300 PSI	5.9	1065	33,300 PSI
Longshot	4.5	964	25,000 PSI	5.5	1112	32,900 PSI
True Blue	4.5	938	26,600 PSI	5.3	1064	33,300 PSI
572	4.6	1009	27,900 PSI	5.2	1108	33,500 PSI
AutoComp	4.3	969	26,700 PSI	5.0	1087	33,800 PSI
Silhouette	4.4	961	26,800 PSI	5.0	1068	32,900 PSI
WSF	4.0	933	24,000 PSI	4.9	1092	33,600 PSI
CFE Pistol	4.2	974	25,900 PSI	4.8	1092	33,500 PSI
Universal	3.8	973	27,700 PSI	4.3	1073	33,300 PSI
231	3.6	937	28,400 PSI	4.2	1028	33,200 PSI
244	3.6	934	27,300 PSI	4.1	1044	33,200 PSI
No. 2	3.3	897	27,800 PSI	3.9	1001	33,000 PSI
IMR Red	3.4	922	26,300 PSI	3.9	1039	33,500 PSI
Titegroup	3.3	938	28,500 PSI	3.8	1040	33,400 PSI
700-X	3.4	947	27,500 PSI	3.8	1033	33,200 PSI
Clays	2.9	883	26,100 PSI	3.4	997	33,300 PSI
Competition	2.4	824	28,100 PSI	3.0	932	33,200 PSI
Bullet: 145 GR. ACME RN CTD Dia: .356″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.150″**
No. 7	5.2	877	25,100 PSI	6.0	992	33,100 PSI
HS-6	4.5	852	25,500 PSI	5.3	995	33,100 PSI
No. 5	4.6	885	26,100 PSI	5.3	993	33,000 PSI
Longshot	4.1	907	27,500 PSI	4.9	1049	33,200 PSI
True Blue	3.9	849	26,100 PSI	4.7	979	33,500 PSI
WSF	3.7	862	24,200 PSI	4.6	1028	32,800 PSI
Silhouette	3.9	874	26,200 PSI	4.5	988	33,500 PSI
572	3.7	865	25,700 PSI	4.4	1008	33,700 PSI
AutoComp	3.7	862	25,300 PSI	4.4	1006	33,400 PSI
CFE Pistol	3.6	867	25,800 PSI	4.3	1001	33,700 PSI
Universal	3.2	853	25,100 PSI	3.8	985	33,100 PSI
244	3.0	829	26,500 PSI	3.6	978	33,900 PSI
Titegroup	2.9	851	26,700 PSI	3.4	957	33,400 PSI
700-X	2.9	835	26,900 PSI	3.4	948	33,300 PSI
No. 2	2.9	837	26,200 PSI	3.4	931	33,600 PSI
Competition	2.1	749	26,700 PSI	2.6	846	33,300 PSI
Bullet: 147 GR. HDY XTP Dia: .355″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.100″**
HS-6	4.3	773	20,200 CUP	5.0	885	27,900 CUP
Longshot	3.8	851	25,700 PSI	4.7	1004	33,800 PSI
WSF	3.8	837	25,600 PSI	4.6	976	32,000 PSI
CFE Pistol	3.7	864	26,700 PSI	4.2	963	33,000 PSI
572	3.5	855	25,600 PSI	4.1	957	32,200 PSI
AutoComp	3.6	827	27,900 PSI	4.0	916	32,800 PSI
Titegroup	3.2	855	22,500 CUP	3.6	929	27,500 CUP
244	3.0	827	26,200 PSI	3.4	931	33,000 PSI
231	3.0	755	30,100 PSI	3.4	845	34,300 PSI
HP-38	3.0	755	30,100 PSI	3.4	845	34,300 PSI
Universal	3.0	803	24,100 CUP	3.3	869	31,000 CUP
700-X	2.6	764	27,300 PSI	2.9	838	32,000 PSI
Bullet: 147 GR. LC FP Dia: .356″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.145″**
No. 7	5.4	881	29,500 PSI	6.3	996	34,700 PSI
No. 5	4.4	867	29,700 PSI	5.2	990	35,000 PSI
True Blue	4.0	868	29,400 PSI	4.7	979	34,600 PSI
Silhouette	4.1	906	30,600 PSI	4.6	981	34,000 PSI
No. 2	3.2	852	31,000 PSI	3.6	911	34,400 PSI
ZIP	3.2	867	31,300 PSI	3.5	941	34,700 PSI
Competition	2.6	835	31,500 PSI	2.9	896	35,000 PSI
Nitro 100 NF	2.5	806	30,800 PSI	2.7	854	34,200 PSI
Bullet: 147 GR. REM GSBR Dia: .355″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.165″**
No. 7	5.7	854	29,700 PSI	6.7	986	35,000 PSI
No. 5	4.7	857	29,300 PSI	5.5	974	34,400 PSI
True Blue	4.4	846	29,700 PSI	5.2	970	34,900 PSI
Silhouette	4.6	911	30,700 PSI	5.2	993	34,100 PSI
No. 2	3.6	831	30,800 PSI	4.0	890	34,200 PSI
ZIP	3.5	835	31,200 PSI	3.9	911	34,700 PSI
Competition	3.1	804	31,000 PSI	3.4	856	34,400 PSI
Nitro 100 NF	2.8	781	30,600 PSI	3.1	825	34,000 PSI
Bullet: 160 GR. BLU RN CT Dia: .355″						
Case: Winchester	**Primer: CCI 500, Small Pistol**					**Col: 1.150″**
No. 7	4.2	733	26,700 PSI	4.7	849	34,200 PSI
No. 5	3.7	778	29,400 PSI	4.2	849	34,200 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
HS-6	3.0	681	24,800 PSI	3.7	800	32,800 PSI
Longshot	3.2	790	27,700 PSI	3.6	888	34,300 PSI
True Blue	3.2	750	28,600 PSI	3.6	853	34,200 PSI
Silhouette	3.0	732	26,100 PSI	3.4	843	34,300 PSI
572	2.9	789	29,800 PSI	3.3	866	34,200 PSI
CFE Pistol	2.8	760	28,000 PSI	3.1	830	32,100 PSI
No. 2	2.6	749	31,800 PSI	2.9	795	34,500 PSI
WSF	2.5	683	26,100 PSI	2.8	778	33,700 PSI
ZIP	2.5	742	28,000 PSI	2.8	816	34,300 PSI
Universal	2.5	755	26,700 PSI	2.7	837	34,200 PSI
Titegroup	2.1	705	27,000 PSI	2.6	820	34,400 PSI
700-X	2.0	679	25,800 PSI	2.5	787	34,100 PSI
244	2.2	732	28,400 PSI	2.3	767	33,200 PSI
231	2.0	639	25,500 PSI	2.2	692	29,000 PSI
Competition	1.9	677	31,600 PSI	2.1	723	34,200 PSI
Nitro 100 NF	1.9	684	29,300 PSI	2.1	717	32,800 PSI

38 Super Auto

Barrel: 5″ Twist: 1:16″ Trim: .895″

Bullet: 90 GR. CEB RAPTOR Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.275″
HS-6	8.4	1386	28,800 PSI	9.2	1517	34,200 PSI
Longshot	7.3	1377	28,800 PSI	8.0	1530	33,900 PSI
572	6.8	1407	30,000 PSI	7.4	1509	35,200 PSI
CFE Pistol	6.7	1400	29,800 PSI	7.3	1515	35,100 PSI
AutoComp	6.7	1338	27,400 PSI	7.3	1479	34,200 PSI
WSF	6.3	1294	28,000 PSI	7.0	1440	34,900 PSI
Universal	6.0	1329	28,200 PSI	6.6	1476	34,700 PSI
244	5.8	1355	30,900 PSI	6.3	1449	35,000 PSI
HP-38	5.8	1334	32,000 PSI	6.3	1422	35,500 PSI
Titegroup	5.3	1345	30,700 PSI	5.8	1436	35,500 PSI

Bullet: 90 GR. SIE JHP Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.180″
HS-6	8.5	1298	24,300 CUP	9.5	1392	32,000 CUP
Longshot	7.8	1448	27,600 CUP	8.4	1526	32,100 CUP
WSF	6.8	1374	28,200 PSI	7.7	1510	34,700 PSI
CFE Pistol	7.0	1391	24,600 CUP	7.6	1482	31,800 CUP
AutoComp	6.6	1311	27,100 CUP	7.2	1388	32,500 CUP
231	6.0	1253	26,700 CUP	6.7	1345	32,000 CUP
HP-38	6.0	1253	26,700 CUP	6.7	1345	32,000 CUP
244	5.9	1397	28,600 PSI	6.6	1506	34,400 PSI
Universal	5.7	1312	26,200 CUP	6.3	1352	31,600 CUP
Titegroup	5.3	1288	23,200 CUP	6.0	1384	31,200 CUP

Bullet: 95 GR. BAR TAC-XP Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.255″
HS-6	7.3	1269	24,500 CUP	8.3	1434	32,000 CUP
Longshot	6.6	1339	25,800 CUP	7.3	1454	32,000 CUP
WSF	6.3	1326	29,000 PSI	7.1	1447	34,900 PSI
572	6.1	1273	24,500 PSI	7.0	1450	34,300 PSI
CFE Pistol	6.0	1286	26,100 CUP	6.8	1434	32,700 CUP
AutoComp	5.9	1279	26,900 CUP	6.6	1398	31,700 CUP
244	5.2	1281	27,800 PSI	6.0	1431	34,800 PSI
231	5.0	1186	25,700 CUP	5.6	1341	32,500 CUP
HP-38	5.0	1186	25,700 CUP	5.6	1341	32,500 CUP
Universal	5.0	1232	26,400 CUP	5.4	1323	31,500 CUP
Titegroup	4.6	1334	25,900 CUP	5.1	1334	31,400 CUP
Clays	3.5	1072	27,100 CUP	4.6	1287	32,200 CUP
Titewad	4.2	1184	27,900 CUP	4.6	1247	31,400 CUP

Bullet: 100 GR. SPR JHP Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.215″
HS-6	8.5	1284	25,500 CUP	9.4	1347	32,500 CUP
Longshot	7.2	1343	26,100 CUP	7.9	1446	32,100 CUP
231	5.7	1206	26,300 CUP	6.4	1272	31,500 CUP
HP-38	5.7	1206	26,300 CUP	6.4	1272	31,500 CUP
Universal	5.4	1233	25,200 CUP	6.0	1327	32,500 CUP
Titegroup	5.1	1204	25,300 CUP	5.8	1292	31,400 CUP

Bullet: 115 GR. HDY XTP Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.245″
HS-6	7.8	1212	25,500 CUP	8.5	1314	31,500 CUP
Longshot	6.5	1214	25,500 CUP	7.1	1301	31,600 CUP
572	6.2	1212	26,900 PSI	7.1	1355	34,400 PSI
CFE Pistol	6.3	1246	27,700 CUP	6.9	1340	32,600 CUP
WSF	5.9	1160	25,900 PSI	6.7	1315	34,900 PSI
AutoComp	5.7	1152	27,400 CUP	6.2	1238	32,000 CUP
231	5.7	1198	29,000 CUP	6.1	1261	32,700 CUP
HP-38	5.7	1198	29,000 CUP	6.1	1261	32,700 CUP
244	5.2	1187	27,300 PSI	6.0	1317	34,900 PSI
Universal	4.9	1141	25,300 CUP	5.5	1225	32,300 CUP
Titegroup	4.7	1107	25,000 CUP	5.3	1208	31,800 CUP
700-X				4.0	955	22,900 CUP

Bullet: 115 GR. LRN Dia: .356″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.240″
No. 7	9.9	1367	32,100 PSI	11.0	1519	35,700 PSI
HS-6	7.8	1204	24,700 CUP	8.7	1307	31,100 CUP
No. 5	7.6	1296	32,000 PSI	8.4	1440	35,500 PSI
Silhouette	7.3	1306	32,500 PSI	8.1	1451	36,100 PSI
True Blue	7.2	1259	31,600 PSI	8.0	1399	35,100 PSI
Longshot	6.5	1180	20,400 CUP	7.3	1289	30,900 CUP
572	5.8	1212	25,700 PSI	6.7	1355	34,500 PSI
CFE Pistol	6.0	1200	20,300 CUP	6.5	1310	30,900 CUP
AutoComp	6.0	1178	26,400 CUP	6.5	1246	32,000 CUP
WSF	5.8	1162	26,200 PSI	6.3	1252	33,600 PSI
244	5.0	1171	25,800 PSI	5.8	1312	33,500 PSI
Universal	5.0	1115	21,900 CUP	5.7	1216	31,900 CUP
231	4.9	1059	19,700 CUP	5.7	1191	30,700 CUP
HP-38	4.9	1059	19,700 CUP	5.7	1191	30,700 CUP
Titegroup	4.8	1156	26,700 CUP	5.4	1213	31,900 CUP
Clays	4.0	1046	28,600 CUP	4.6	1104	31,600 CUP

Bullet: 115 GR. SIE FMJ Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.240″
No. 7	9.7	1324	32,700 PSI	10.8	1471	36,300 PSI
No. 5	7.6	1225	32,000 PSI	8.4	1361	35,500 PSI
Silhouette	7.3	1247	32,400 PSI	8.1	1386	36,000 PSI
True Blue	7.2	1193	32,100 PSI	8.0	1326	35,700 PSI

Bullet: 118 GR. LD XD Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.260″
HS-6	6.7	1035	25,700 PSI	7.7	1217	34,400 PSI
Longshot	5.9	1101	27,700 PSI	6.8	1252	34,600 PSI
572	5.5	1076	28,300 PSI	6.2	1202	34,500 PSI
CFE Pistol	5.3	1042	26,900 PSI	6.0	1188	35,100 PSI
AutoComp	5.1	958	24,200 PSI	5.9	1154	33,200 PSI
Universal	4.8	953	25,500 PSI	5.4	1151	33,800 PSI
244	4.6	993	28,300 PSI	5.2	1136	34,500 PSI
231	4.3	872	27,000 PSI	4.9	1038	32,900 PSI
Titegroup	4.0	919	27,500 PSI	4.6	1052	33,600 PSI

Bullet: 124 GR. BER HBRN Dia: .356″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.250″
Lil'Gun	12.5	1271	23,100 CUP	13.0	1315	26,600 CUP
HS-6	7.1	1160	26,100 CUP	8.0	1280	32,500 CUP
Longshot	5.9	1140	22,400 CUP	6.8	1286	31,300 CUP
572	5.8	1160	26,100 PSI	6.7	1297	35,300 PSI
WSF	5.9	1163	27,900 PSI	6.6	1269	34,200 PSI
CFE Pistol	5.8	1170	26,100 CUP	6.4	1260	32,200 CUP
AutoComp	5.7	1126	25,100 CUP	6.3	1222	32,100 CUP
244	5.0	1119	24,800 PSI	5.8	1255	34,800 PSI
231	4.7	1062	26,100 CUP	5.4	1200	32,400 CUP
HP-38	4.7	1062	26,100 CUP	5.4	1200	32,400 CUP
Universal	4.8	1088	24,300 CUP	5.2	1182	32,100 CUP
Titegroup	4.3	1086	25,100 CUP	4.9	1181	31,000 PSI
Titewad	4.0	1068	28,600 CUP	4.6	1140	32,000 CUP
Clays	3.8	1000	26,700 CUP	4.4	1126	31,900 CUP

Bullet: 124 GR. HDY FMJ Dia: .355″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.270″
No. 7	9.0	1249	32,300 PSI	10.0	1388	35,900 PSI
No. 5	7.3	1174	32,400 PSI	8.1	1304	36,000 PSI
True Blue	6.9	1148	32,500 PSI	7.7	1275	36,100 PSI
Silhouette	6.8	1179	31,700 PSI	7.6	1310	35,300 PSI

Bullet: 124 GR. LC RN Dia: .356″

Case: Remington	Primer: Remington 1 1/2, Small Pistol					Col: 1.270″
No. 7	9.1	1283	32,600 PSI	10.1	1425	36,200 PSI
No. 5	7.2	1230	32,300 PSI	8.0	1367	35,900 PSI
True Blue	6.7	1193	31,600 PSI	7.4	1326	35,100 PSI
Silhouette	6.5	1220	32,400 PSI	7.2	1355	36,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Bullet: 125 GR. CAST LCN Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.230″**
Lil'Gun	12.6	1288	25,900 CUP	14.0C	1379	30,500 CUP
HS-6	7.2	1151	24,300 CUP	8.1	1264	31,300 CUP
Longshot	6.0	1157	25,100 CUP	6.8	1243	31,200 CUP
572	5.8	1191	26,600 PSI	6.6	1303	34,500 PSI
CFE Pistol	5.0	1195	26,100 CUP	6.3	1271	31,800 CUP
AutoComp	5.5	1109	26,300 CUP	6.1	1174	31,700 CUP
WSF	5.3	1113	26,600 PSI	5.8	1214	34,300 PSI
231	5.1	1129	27,900 CUP	5.7	1214	32,600 CUP
HP-38	5.1	1129	27,900 CUP	5.7	1214	32,600 CUP
Universal	4.7	1110	25,200 CUP	5.3	1171	32,300 CUP
244	4.6	1124	26,600 PSI	5.3	1230	34,200 PSI
Titegroup	4.5	1114	23,400 CUP	5.1	1199	32,200 CUP
Clays	3.9	1014	27,300 CUP	4.4	1063	31,600 CUP

Bullet: 125 GR. HDY HAP Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.210″**
Lil'Gun	12.2	1285	23,900 CUP	13.6C	1399	29,700 CUP
HS-6	6.9	1175	25,700 CUP	7.7	1300	32,300 CUP
Longshot	5.8	1170	25,500 CUP	6.6	1294	32,400 CUP
572	5.5	1135	26,000 PSI	6.3	1266	34,800 PSI
CFE Pistol	5.5	1166	26,500 CUP	6.1	1259	32,300 CUP
AutoComp	5.5	1148	24,800 CUP	6.0	1240	31,200 CUP
WSF	5.4	1113	28,300 PSI	6.0	1215	34,400 PSI
244	4.6	1103	27,200 PSI	5.4	1234	34,900 PSI
231	4.8	1113	27,100 CUP	5.4	1237	31,900 CUP
HP-38	4.8	1113	27,100 CUP	5.4	1237	31,900 CUP
Universal	4.5	1105	25,500 CUP	5.1	1202	31,700 CUP
Titegroup	4.2	1082	25,400 CUP	4.8	1200	31,600 CUP
Titewad	3.8	1050	26,300 CUP	4.4	1136	31,200 CUP
Clays	3.6	1034	25,900 CUP	4.2	1132	32,100 CUP

Bullet: 125 GR. SIE FMJ Dia: .355″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.275″**
Lil'Gun	13.5	1317	27,600 CUP	14.0	1353	29,800 CUP
HS-6	7.5	1158	24,600 CUP	8.3	1271	32,100 CUP
Longshot	6.0	1109	24,600 CUP	6.9	1247	32,600 CUP
572	5.9	1171	27,700 PSI	6.7	1287	34,400 PSI
WSF	5.9	1153	29,100 PSI	6.5	1241	34,400 PSI
CFE Pistol	5.9	1162	25,500 CUP	6.4	1240	32,500 CUP
AutoComp	5.7	1067	26,200 CUP	6.2	1173	31,400 CUP
244	4.9	1092	26,100 PSI	5.8	1250	35,100 PSI
231	5.1	1098	26,500 CUP	5.7	1159	31,200 CUP
HP-38	5.1	1098	26,500 CUP	5.7	1159	31,200 CUP
Universal	4.9	1069	27,600 CUP	5.5	1179	32,300 CUP
Titegroup	4.4	1020	23,800 CUP	5.0	1124	31,800 CUP

Bullet: 130 GR. BER RN Dia: .355″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.270″**
Lil'Gun	10.5	1119	25,400 CUP	12.0C	1204	28,300 CUP
IMR Blue	9.7	1288	30,300 PSI	10.7	1385	34,300 PSI
HS-6	6.5	1010	26,000 CUP	7.5	1127	31,100 CUP
Longshot	5.5	1058	27,400 CUP	6.5	1166	32,300 CUP
WSF	5.7	1131	28,500 PSI	6.4	1203	33,800 PSI
AutoComp	5.3	1035	25,800 CUP	5.8	1109	31,100 CUP
244	5.0	1118	26,300 PSI	5.8	1214	34,500 PSI
Universal	4.4	984	23,000 CUP	4.9	1073	30,500 CUP

Bullet: 135 GR. LRN Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.275″**
Lil'Gun	11.7	1203	26,400 CUP	13.0C	1314	31,500 CUP
HS-6	7.2	1123	27,200 CUP	8.0	1190	32,000 CUP
Longshot	5.8	1087	26,600 CUP	6.5	1178	32,200 CUP
572	5.4	1133	26,300 PSI	6.1	1236	34,600 PSI
WSF	5.4	1111	27,500 PSI	5.9	1189	33,900 PSI
AutoComp	5.3	1065	25,400 CUP	5.8	1139	31,400 CUP
CFE Pistol	5.1	1068	25,600 CUP	5.7	1160	32,000 CUP
231	4.8	1045	27,600 CUP	5.4	1120	31,900 CUP
HP-38	4.8	1045	27,600 CUP	5.4	1120	31,900 CUP
244	4.6	1085	26,400 PSI	5.3	1190	34,300 PSI
Universal	4.5	1011	22,800 CUP	5.1	1108	30,900 CUP
Titegroup	4.1	1011	23,700 CUP	4.9	1123	31,700 CUP
Clays	3.5	928	25,600 CUP	4.2	998	32,500 CUP

Bullet: 147 GR. HDY XTP Dia: .355″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.260″**
Lil'Gun	10.0	1111	22,200 CUP	11.0	1207	28,100 CUP
IMR Blue	8.8	1193	30,200 PSI	9.7	1276	34,400 PSI
HS-6	6.3	997	24,500 CUP	7.0	1106	31,900 CUP
Longshot	5.4	1042	25,300 CUP	6.0	1119	30,900 CUP
572	5.2	1052	29,400 PSI	5.9	1147	34,700 PSI
WSF	5.1	989	27,600 PSI	5.7	1096	34,600 PSI
CFE Pistol	5.0	1000	23,600 CUP	5.5	1105	31,200 CUP
AutoComp	5.0	943	25,300 CUP	5.5	1056	32,900 CUP
244	4.4	982	26,700 PSI	5.1	1110	34,200 PSI
231	4.4	965	24,300 CUP	4.9	1032	31,800 CUP
HP-38	4.4	965	24,300 CUP	4.9	1032	31,800 CUP
Universal	4.3	960	26,900 CUP	4.8	1017	32,500 CUP
Titegroup	3.9	976	25,600 CUP	4.4	1066	31,700 CUP

Bullet: 147 GR. LC RN Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.270″**
No. 7	8.3	1170	32,500 PSI	9.2	1300	36,100 PSI
No. 5	6.4	1099	32,000 PSI	7.1	1221	35,600 PSI
True Blue	6.0	1063	31,900 PSI	6.7	1181	35,400 PSI
Silhouette	6.0	1096	32,400 PSI	6.7	1218	36,000 PSI
No. 2	4.6	1026	30,900 PSI	5.4	1112	36,200 PSI

Bullet: 147 GR. SPR TMJ Dia: .355″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.270″**
No. 7	8.1	1114	32,200 PSI	9.0	1238	35,800 PSI
No. 5	6.6	1072	32,000 PSI	7.3	1191	35,600 PSI
True Blue	6.3	1043	32,100 PSI	7.0	1159	35,700 PSI
Silhouette	6.1	1067	32,200 PSI	6.8	1185	35,800 PSI

Bullet: 150 GR. ACME RN FB Dia: .357″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.280″**
HS-6	6.2	1055	27,400 PSI	6.9	1163	34,200 PSI
Longshot	5.3	1089	27,700 PSI	6.0	1172	33,900 PSI
572	4.9	1044	27,200 PSI	5.6	1146	34,800 PSI
CFE Pistol	4.8	1032	26,000 PSI	5.4	1124	34,000 PSI
Universal	4.6	1039	26,600 PSI	5.2	1128	33,000 PSI
244	4.0	977	26,400 PSI	4.7	1079	34,200 PSI
231	4.0	954	26,700 PSI	4.6	1060	34,200 PSI
HP-38	4.0	954	26,700 PSI	4.6	1060	34,200 PSI
Titegroup	3.8	985	27,200 PSI	4.3	1070	34,600 PSI

Bullet: 150 GR. CAST LRN Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.230″**
HS-6	6.4	1078	25,400 CUP	7.1	1175	30,900 CUP
Longshot	5.0	1076	27,200 CUP	6.2	1162	32,200 CUP
231	4.5	1026	26,000 CUP	5.1	1135	31,400 CUP
HP-38	4.5	1026	26,000 CUP	5.1	1135	31,400 CUP
Universal	4.5	1038	27,600 CUP	5.0	1111	32,000 CUP
Titegroup	4.3	1066	27,400 CUP	4.8	1131	31,800 CUP
244	3.9	967	26,700 PSI	4.5	1076	34,400 PSI

Bullet: 150 GR. SIE JFP Dia: .356″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Remington	**Primer: Remington 1 1/2, Small Pistol**					**Col: 1.265″**
Lil'Gun	10.0	1106	23,500 CUP	11.0	1206	29,700 CUP
HS-6	6.5	1029	26,000 CUP	7.2	1137	31,200 CUP
Longshot	5.5	1040	26,900 CUP	6.0	1126	31,800 CUP
231	4.5	968	26,000 CUP	5.0	1066	32,100 CUP
HP-38	4.5	968	26,000 CUP	5.0	1066	32,100 CUP
Universal	4.4	984	26,600 CUP	4.9	1059	32,100 CUP
Titegroup	4.0	976	27,000 CUP	4.6	1063	32,100 CUP

38 Special

Barrel: 7.7″ Twist: 1:18.75″ Trim: 1.145″

Bullet: 77 GR. PLY S ARX Dia: .357″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.475″**
572	6.1	1278	12,900 PSI	7.0	1473	17,000 PSI
CFE Pistol	6.0	1266	13,300 PSI	6.9	1472	16,800 PSI
AutoComp	6.3	1290	13,800 PSI	6.9	1429	16,900 PSI
Universal	5.5	1243	12,900 PSI	6.1	1431	16,400 PSI
244	4.6	1197	13,100 PSI	5.4	1359	16,900 PSI
HP-38	4.7	1171	13,200 PSI	5.3	1300	16,800 PSI
Titegroup	4.2	1193	13,000 PSI	5.0	1377	17,100 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Bullet: 84 GR. PLY S RNP Dia: .357″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.475″
572	6.9	1360	14,400 PSI	7.5	1470	16,700 PSI	
AutoComp	6.6	1247	12,900 PSI	7.3	1456	17,000 PSI	
CFE Pistol	6.6	1294	13,400 PSI	7.2	1451	16,700 PSI	
Universal	5.7	1289	13,600 PSI	6.4	1420	16,600 PSI	
HP-38	5.4	1230	13,600 PSI	6.0	1338	16,200 PSI	
244	5.2	1242	13,500 PSI	5.9	1392	16,700 PSI	
Titegroup	4.6	1224	13,300 PSI	5.4	1378	16,900 PSI	

Bullet: 90 GR. CAST LRNFP Dia: .359″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.325″
CFE Pistol	3.7	751	7,500 PSI	5.2	1077	10,800 PSI	
AutoComp	3.7	790	7,500 PSI	5.1	1089	10,800 PSI	
Titegroup	3.0	755	7,700 PSI	3.5	969	11,300 PSI	
Clays	2.5	705	7,900 PSI	3.0	938	11,400 PSI	

Bullet: 100 GR. LD XD Dia: .357″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.530″
HS-6	8.2	1070	15,600 PSI	9.0	1202	16,800 PSI	
Longshot	7.2	1116	14,900 PSI	7.5	1183	16,700 PSI	
AutoComp	6.5	1074	15,200 PSI	7.1	1188	17,000 PSI	
572	6.2	1015	14,800 PSI	6.8	1159	17,000 PSI	
CFE Pistol	6.2	1066	15,500 PSI	6.7	1151	16,600 PSI	
Universal	6.2	1054	15,300 PSI	6.7	1148	16,700 PSI	
244	5.0	919	13,900 PSI	5.6	1068	16,700 PSI	
Titegroup	4.8	970	15,400 PSI	5.2	1057	17,000 PSI	

Bullet: 105 GR. CEB RAPTOR Dia: .357″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.430″
IMR Blue	7.4	843	15,300 PSI	8.0	939	16,600 PSI	
HS-6	6.2	801	14,500 PSI	6.6	935	16,400 PSI	
Longshot	5.5	723	13,400 PSI	6.0	962	16,100 PSI	
572	5.1	689	13,100 PSI	5.6	944	16,200 PSI	
CFE Pistol	5.2	833	14,000 PSI	5.6	972	16,400 PSI	
AutoComp	5.1	732	13,300 PSI	5.5	943	16,500 PSI	
Universal	4.7	698	14,600 PSI	5.3	901	16,100 PSI	
WSF	5.0	618	12,700 PSI	5.2	886	16,000 PSI	
244	4.1	622	14,100 PSI	4.4	789	16,200 PSI	

Bullet: 110 GR. BAR TAC-XP Dia: .357″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.500″
HS-6	6.8	1007	14,000 PSI	7.3	1094	16,700 PSI	
Longshot	5.6	1016	14,700 PSI	6.2	1146	16,800 PSI	
AutoComp	5.2	992	13,900 PSI	5.9	1137	17,000 PSI	
572	5.0	973	14,200 PSI	5.7	1111	17,000 PSI	
Universal	5.0	884	14,200 PSI	5.7	1078	16,700 PSI	
CFE Pistol	5.0	995	14,400 PSI	5.6	1128	17,000 PSI	

Bullet: 110 GR. HDY XTP Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.450″
Silhouette	6.3	1159	14,800 PSI	6.9	1267	16,200 PSI	
True Blue	5.9	1066	14,700 PSI	6.6	1184	16,300 PSI	
ZIP	5.0	1013	15,100 PSI	5.5	1125	16,800 PSI	
Competition	3.6	949	14,800 PSI	4.0	1054	16,400 PSI	
HS-6	7.0	1071	14,500 CUP	7.8	1178	17,000 CUP	
CFE Pistol	6.5	1195	13,900 PSI	6.8	1283	17,300 PSI	
572	5.9	992	12,700 PSI	6.5	1163	16,300 PSI	
AutoComp	5.8	860	11,700 PSI	6.4	1101	16,000 PSI	
Universal	5.0	968	11,800 CUP	5.6	1143	16,700 CUP	
244	5.0	1070	12,700 PSI	5.6	1205	16,900 PSI	
231	4.6	948	12,600 CUP	5.5	1096	16,300 CUP	
HP-38	4.6	948	12,600 CUP	5.5	1096	16,300 CUP	
700-X	4.0	986	14,500 PSI	4.6	1078	16,500 PSI	
Clays	4.0	1002	14,400 CUP	4.2	1073	17,000 CUP	

Bullet: 110 GR. SIE JHC Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.435″
No. 5	6.4	1075	14,900 PSI	7.1	1181	16,600 PSI	
True Blue	6.0	1099	15,200 PSI	6.7	1187	16,900 PSI	
Silhouette	6.1	1122	15,500 PSI	6.7	1221	16,900 PSI	
No. 2	4.4	1023	15,000 PSI	4.9	1102	16,600 PSI	
Nitro 100 NF	3.3	909	15,200 PSI	3.6	978	16,800 PSI	

Bullet: 120 GR. LD XD Dia: .357″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.440″
HS-6	6.3	557	14,000 PSI	7.0	851	16,800 PSI	
Longshot	5.7	639	14,700 PSI	6.2	887	16,800 PSI	
AutoComp	4.9	575	14,300 PSI	5.4	803	16,700 PSI	
572	4.7	555	14,700 PSI	5.2	735	17,000 PSI	
CFE Pistol	4.8	645	14,800 PSI	5.2	800	16,500 PSI	
Universal	5.0	553	15,500 PSI	5.2	673	16,800 PSI	

Bullet: 125 GR. BAR TAC-XP Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.455″
No. 5	5.2	791	15,100 PSI	5.8	907	16,900 PSI	
True Blue	4.7	775	15,000 PSI	5.3	883	16,900 PSI	
No. 2	3.6	709	15,200 PSI	4.0	814	16,900 PSI	

Bullet: 125 GR. CAST LRNFP Dia: .358″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.445″
CFE Pistol	5.2	1044	13,500 PSI	6.2	1201	16,100 PSI	
AutoComp	5.7	1048	7,300 PSI	6.2	1139	10,800 PSI	
572	5.0	972	13,300 PSI	5.8	1112	16,000 PSI	
244	4.4	994	13,400 PSI	5.2	1142	16,600 PSI	
231	3.8	876	10,300 CUP	4.8	1071	16,900 CUP	
HP-38	3.8	876	10,300 CUP	4.8	1071	16,900 CUP	
Universal	4.3	872	8,700 CUP	4.7	1036	16,800 CUP	
700-X	3.7	982	14,500 PSI	4.2	1076	16,200 PSI	
Titegroup	3.2	856	8,400 CUP	3.8	985	12,000 CUP	
Clays	2.5	810	8,400 CUP	3.5	978	16,900 CUP	

Bullet: 125 GR. HDY XTP Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.455″
No. 5	6.1	981	14,900 PSI	6.8	1081	16,700 PSI	
True Blue	5.6	995	15,300 PSI	6.2	1081	16,900 PSI	
Silhouette	5.8	1039	15,600 PSI	6.2	1109	16,800 PSI	
No. 2	4.3	933	15,100 PSI	4.8	1017	16,900 PSI	
HS-6	6.5	931	13,100 CUP	7.2	1048	16,600 CUP	
CFE Pistol	5.4	995	12,600 PSI	6.3	1133	16,000 PSI	
AutoComp	5.7	985	13,600 PSI	6.2	1068	16,500 PSI	
572	5.4	960	14,300 PSI	5.9	1069	16,800 PSI	
Universal	4.7	918	12,600 CUP	5.2	1019	17,000 CUP	
244	4.7	951	14,000 PSI	5.2	1077	16,600 PSI	
231	4.3	826	13,300 CUP	4.9	934	16,300 CUP	
HP-38	4.3	826	13,300 CUP	4.9	934	16,300 CUP	
Titegroup	4.3	953	12,800 CUP	4.6	1010	15,600 CUP	
700-X	3.6	863	14,300 PSI	4.2	969	17,000 PSI	
Clays	3.5	843	12,400 CUP	3.9	937	16,100 CUP	

Bullet: 125 GR. LC FN Dia: .358″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.440″
True Blue	5.6	999	14,800 PSI	6.2	1110	16,500 PSI	
Silhouette	5.7	1066	14,800 PSI	6.2	1157	16,200 PSI	
ZIP	4.4	1001	15,100 PSI	4.9	1112	16,800 PSI	
Competition	3.2	903	15,100 PSI	3.6	1003	16,800 PSI	

Bullet: 125 GR. REM GSBR Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.530″
No. 5	6.4	1051	15,100 PSI	7.1	1134	16,800 PSI	
Silhouette	6.0	1070	15,300 PSI	6.5	1137	16,500 PSI	
True Blue	5.7	1018	14,900 PSI	6.4	1107	16,700 PSI	
No. 2	4.5	967	15,300 PSI	5.0	1051	16,900 PSI	

Bullet: 125 GR. SIE JHC Dia: .357″

Case: Starline	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.447″
No. 5	6.1	966	15,200 PSI	6.8	1055	17,000 PSI	
Silhouette	6.2	1105	15,400 PSI	6.7	1192	16,600 PSI	
True Blue	5.7	990	14,700 PSI	6.3	1100	16,300 PSI	
ZIP	4.8	988	15,000 PSI	5.3	1098	16,600 PSI	
Competition	3.5	878	14,800 PSI	3.9	975	16,400 PSI	

Bullet: 130 GR. MEI CAST L Dia: .358″

Case: Winchester	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure	Primer: Winchester SP, Small Pistol Col: 1.460″
CFE Pistol	5.3	1053	13,200 PSI	6.1	1175	17,100 PSI	
AutoComp	5.5	981	13,600 PSI	6.0	1072	15,800 PSI	
572	5.1	980	14,100 PSI	5.8	1103	17,000 PSI	
Universal	4.7	957	13,500 PSI	5.2	1056	16,000 PSI	
244	4.6	1035	14,000 PSI	5.1	1129	16,800 PSI	
HP-38	4.1	880	13,200 PSI	4.7	1008	16,100 PSI	
Titegroup	3.6	922	14,000 PSI	4.2	1018	15,900 PSI	
700-X	3.5	870	13,300 PSI	4.1	996	16,500 PSI	
Clays	3.0	828	12,500 PSI	3.5	924	16,100 PSI	

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 135 GR. CAST LRNFP Dia: .358″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.418″**
244	4.2	968	13,300 PSI	4.8	1067	15,900 PSI
231	3.7	872	12.500 CUP	4.7	1024	17,000 CUP
HP-38	3.7	872	12,500 CUP	4.7	1024	17,000 CUP
Universal	4.1	924	13,400 CUP	4.6	1025	16,900 CUP
Titegroup	3.1	824	9,600 CUP	3.6	927	12,900 CUP
Clays	2.6	767	11,400 CUP	3.3	910	16,200 CUP
Bullet: 140 GR. HDY COWBOY Dia: .358″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.450″**
HS-6	6.1	960	13,100 PSI	6.8	1091	16,300 PSI
CFE Pistol	5.0	940	13,000 PSI	5.8	1107	16,200 PSI
AutoComp	5.2	971	14,000 PSI	5.8	1055	16,100 PSI
572	4.2	846	13,400 PSI	5.0	996	16,200 PSI
Universal	4.4	889	12,800 PSI	4.9	1009	15,600 PSI
244	4.2	955	13,600 PSI	4.9	1072	16,800 PSI
231	4.1	861	12,400 PSI	4.6	980	16,100 PSI
HP-38	4.1	861	12,400 PSI	4.6	980	16,100 PSI
Titegroup	2.5	675	9,400 PSI	4.4	1010	16,500 PSI
700-X	2.5	693	10,000 PSI	4.3	993	16,400 PSI
WST	3.5	825	12,600 PSI	3.9	903	15,900 PSI
Clays	2.5	706	10,700 PSI	3.4	862	16,200 PSI
Bullet: 140 GR. HDY XTP Dia: .357″						
Case: Starline	**Primer: Winchester SP, Small Pistol**					**Col: 1.445″**
No. 5	5.5	889	14,800 PSI	6.2	976	16,600 PSI
True Blue	5.1	886	15,200 PSI	5.6	974	16,800 PSI
Silhouette	5.3	937	15,500 PSI	5.6	1003	16,500 PSI
ZIP	4.1	840	14,900 PSI	4.5	933	16,600 PSI
No. 2	3.9	802	14,600 PSI	4.3	897	16,200 PSI
Competition	3.2	748	15,000 PSI	3.5	831	16,700 PSI
HS-6	5.8	808	11,000 CUP	6.5	933	16,000 CUP
CFE Pistol	5.2	934	13,300 PSI	5.7	1008	16,300 PSI
572	4.8	816	13,900 PSI	5.5	958	16,900 PSI
AutoComp	5.0	880	14,400 PSI	5.5	989	16,600 PSI
Universal	4.3	832	12,400 CUP	4.8	939	15,400 CUP
231	4.2	809	13,900 CUP	4.6	861	15,800 CUP
HP-38	4.2	809	13,900 CUP	4.6	861	15,800 CUP
244	3.9	797	13,400 PSI	4.5	934	16,700 PSI
Titegroup	3.9	864	13,100 CUP	4.2	919	15,800 CUP
700-X	3.3	736	13,300 PSI	3.8	849	16,400 PSI
Clays	3.0	703	13,400 CUP	3.7	869	16,700 CUP
Bullet: 140 GR. LC FP Dia: .358″						
Case: Starline	**Primer: Winchester SP, Small Pistol**					**Col: 1.435″**
No. 5	5.6	960	15,200 PSI	6.2	1049	16,800 PSI
Silhouette	5.2	1004	15,500 PSI	5.6	1068	16,600 PSI
True Blue	4.9	949	14,900 PSI	5.4	1028	16,400 PSI
No. 2	3.8	903	15,100 PSI	4.2	979	16,800 PSI
Nitro 100 NF	2.7	829	15,300 PSI	3.0	884	17,000 PSI
Bullet: 140 GR. SIE JHP Dia: .357″						
Case: Starline	**Primer: Winchester SP, Small Pistol**					**Col: 1.445″**
No. 5	5.8	757	15,100 PSI	6.4	860	16,700 PSI
No. 2	4.2	781	14,900 PSI	4.7	888	16,700 PSI
Bullet: 146 GR. SPR JHP Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.370″**
H4227	9.6	908	12,600 CUP	10.7	979	15,700 CUP
HS-6	5.6	808	11,700 CUP	6.3	969	16,100 CUP
CFE Pistol	4.7	845	13,000 PSI	5.1	964	15,700 PSI
AutoComp	4.6	796	13,100 PSI	5.0	881	14,700 PSI
Universal	4.0	788	11,100 CUP	4.5	933	16,100 CUP
231	4.0	773	12,700 CUP	4.5	876	15,500 CUP
HP-38	4.0	773	12,700 CUP	4.5	876	15,500 CUP
244	3.6	791	14,400 PSI	4.1	898	16,800 PSI
Titegroup	3.5	808	12,800 CUP	4.0	914	16,000 CUP
700-X	3.2	724	13,800 PSI	3.6	815	16,000 PSI
Bullet: 148 GR. HDY LHBWC Dia: .358″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.160″**
HS-6	4.5	816	9,200 CUP	5.2	943	14,300 CUP
AutoComp	3.7	820	14,100 PSI	4.1	881	15,200 PSI
231	3.5	869	14,200 CUP	4.0	956	15,900 CUP
HP-38	3.5	869	14,200 CUP	4.0	956	15,900 CUP
CFE Pistol	3.5	849	14,000 PSI	3.9	914	15,700 PSI
Universal	2.9	709	7,400 CUP	3.8	940	15,600 CUP
572	2.6	668	13,400 PSI	3.3	799	16,100 PSI
Titegroup	2.7	771	7,700 CUP	3.3	908	11,800 CUP
244	2.5	736	13,400 PSI	2.8	817	15,900 PSI
WST	2.5	680	13,000 PSI	2.8	735	16,000 PSI
700-X	2.0	686	11,600 PSI	2.5	804	16,000 PSI
Bullet: 148 GR. LC WCDBB Dia: .358″						
Case: Starline	**Primer: Winchester SP, Small Pistol**					**Col: 1.231″**
Silhouette	4.5	925	15,600 PSI	4.9	1006	16,900 PSI
True Blue	4.2	849	14,900 PSI	4.7	943	16,600 PSI
No. 5	3.6	710	14,600 PSI	4.0	807	16,200 PSI
No. 2	2.6	634	13,900 PSI	2.9	720	15,500 PSI

38 SPECIAL +P

Barrel: 7.7″ Twist: 1:18.75″ Trim: 1.145″

Powder	Grs	Vel	Pressure	Grs	Vel	Pressure
Bullet: 77 GR. PLY S ARX Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.475″**
572				7.1	1514	18,100 PSI
CFE Pistol				7.0	1493	17,900 PSI
AutoComp				7.0	1486	18,500 PSI
Universal				6.2	1470	17,600 PSI
244				5.5	1389	17,800 PSI
HP-38				5.4	1355	17,600 PSI
Titegroup				5.1	1412	18,300 PSI
Bullet: 84 GR. PLY S RNP Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.475″**
572				7.6	1515	18,100 PSI
CFE Pistol				7.4	1516	18,100 PSI
AutoComp				7.5	1506	18,200 PSI
Universal				6.5	1469	18,100 PSI
244				6.0	1424	17,900 PSI
HP-38				6.1	1392	18,200 PSI
Titegroup				5.6	1416	17,800 PSI
Bullet: 100 GR. LD XD Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.530″**
HS-6				9.4	1267	18,300 PSI
Longshot				7.8	1268	17,900 PSI
AutoComp				7.3	1224	18,000 PSI
572				7.1	1205	17,600 PSI
CFE Pistol				7.0	1222	17,800 PSI
Universal				7.0	1222	18,200 PSI
244				5.9	1136	18,100 PSI
Titegroup				5.4	1110	18,500 PSI
Bullet: 105 GR. CEB RAPTOR Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.430″**
IMR Blue				8.3	1018	17,900 PSI
HS-6				6.9	1007	18,300 PSI
Longshot				6.5	1071	18,200 PSI
572				6.0	1042	18,300 PSI
CFE Pistol				5.9	1080	18,100 PSI
AutoComp				5.9	1049	17,900 PSI
WSF				5.7	1007	18,200 PSI
Universal				5.3	937	18,100 PSI
244				4.7	929	18,200 PSI
Bullet: 110 GR. BAR XPB Dia: .357″						
Case: Remington	**Primer: Winchester SP, Small Pistol**					**Col: 1.515″**
No. 7	7.3	1049	16,300 PSI	8.1	1165	18,100 PSI
No. 5	5.9	1026	16,100 PSI	6.6	1140	17,900 PSI
Silhouette	5.7	1049	16,400 PSI	6.3	1165	18,300 PSI
True Blue	5.6	973	16,300 PSI	6.2	1081	18,100 PSI
ZIP	4.4	917	16,300 PSI	4.9	1019	18,100 PSI
Bullet: 110 GR. BAR TAC-XP Dia: .357″						
Case: Winchester	**Primer: Winchester SP, Small Pistol**					**Col: 1.500″**
HS-6				7.8	1166	18,100 PSI
Longshot				6.6	1173	17,600 PSI
AutoComp				6.2	1169	18,200 PSI
572				6.0	1173	18,500 PSI
CFE Pistol				6.0	1199	18,500 PSI
Universal				6.0	1130	18,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 110 GR. HDY XTP				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.455″**
HS-6				8.4	1268	19,600 CUP
Longshot				7.6	1337	17,700 PSI
CFE Pistol				7.0	1303	18,400 PSI
AutoComp				7.0	1228	17,400 PSI
572				6.6	1216	18,400 PSI
244				6.2	1274	18,400 PSI
Universal				6.0	1204	18,700 CUP
HP-38				5.9	1155	18,700 CUP
Titegroup				5.2	1185	18,800 CUP
700-X				4.8	1140	17,700 PSI
Bullet: 110 GR. SIE JHC				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.435″**
No. 5	7.1	1172	17,800 PSI	7.9	1302	20,000 PSI
True Blue	6.7	1192	18,000 PSI	7.4	1279	19,800 PSI
Silhouette	6.7	1233	18,600 PSI	7.1	1304	19,800 PSI
No. 2	4.9	1112	18,400 PSI	5.3	1183	20,000 PSI
Nitro 100 NF	3.6	976	18,000 PSI	4.0	1053	20,000 PSI
Bullet: 120 GR. LD XD				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.440″**
HS-6				7.3	913	17,9000 PSI
Longshot				6.6	964	18,100 PSI
AutoComp				5.5	849	18,100 PSI
572				5.4	835	18,400 PSI
Universal				5.4	774	17,400 PSI
CFE Pistol				5.3	886	18,300 PSI
Bullet: 125 GR. BAR TAC-XP				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.455″**
No. 5	5.8	899	18,200 PSI	6.3	1014	20,000 PSI
True Blue	5.3	886	18,300 PSI	5.7	982	19,900 PSI
No. 2	4.0	804	18,200 PSI	4.3	907	20,000 PSI
Bullet: 125 GR. HDY HP/XTP				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.445″**
No. 5	6.8	1074	17,900 PSI	7.5	1184	19,800 PSI
True Blue	6.2	1078	18,000 PSI	6.9	1174	20,000 PSI
Silhouette	6.2	1102	18,400 PSI	6.7	1188	20,000 PSI
No. 2	4.8	1024	18,400 PSI	5.3	1098	19,900 PSI
Bullet: 125 GR. HDY XTP				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.455″**
HS-6				7.8	1138	19,500 CUP
Longshot				7.0	1228	18,300 PSI
CFE Pistol				6.4	1199	18,600 PSI
AutoComp				6.4	1073	17,600 PSI
572				6.1	1071	18,400 PSI
244				5.6	1124	18,400 PSI
Universal				5.4	1072	18,900 CUP
HP-38				5.3	1018	19,800 CUP
Titegroup				5.0	1069	18,700 CUP
700-X				4.4	1023	18,100 PSI
Bullet: 125 GR. REM GSBR				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.530″**
No. 5	7.1	1137	18,200 PSI	7.8	1219	20,000 PSI
Silhouette	6.5	1142	18,300 PSI	7.1	1226	19,800 PSI
True Blue	6.4	1111	18,200 PSI	7.0	1199	20,000 PSI
No. 2	5.0	1047	18,200 PSI	5.4	1119	19,800 PSI
Bullet: 140 GR. HDY XTP				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.455″**
H4227				12.4	1121	19,400 CUP
HS-6				7.0	992	18,300 CUP
Longshot				6.4	1126	17,700 PSI
CFE Pistol				6.0	1097	18,600 PSI
572				5.7	987	18,600 PSI
AutoComp				5.7	1031	18,000 PSI
Universal				5.1	1022	19,100 CUP
244				4.9	994	17,900 PSI
HP-38				4.9	892	18,600 CUP
Titegroup				4.6	984	19,300 CUP
700-X				4.1	913	18,200 PSI
Bullet: 140 GR. HDY HP/XTP				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.445″**
No. 5	6.2	974	17,900 PSI	6.8	1071	19,900 PSI
True Blue	5.6	972	18,000 PSI	6.3	1071	19,900 PSI
Silhouette	5.6	992	18,000 PSI	6.2	1095	20,000 PSI
No. 2	4.3	886	17,800 PSI	4.7	979	19,600 PSI
Bullet: 140 GR. LC FP				**Dia: .358″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.435″**
No. 5	6.2	1050	18,400 PSI	6.8	1128	20,000 PSI
Silhouette	5.6	1070	18,200 PSI	6.1	1150	19,800 PSI
True Blue	5.4	1028	17,900 PSI	6.0	1116	19,900 PSI
No. 2	4.2	971	18,000 PSI	4.7	1055	20,000 PSI
Nitro 100 NF	3.0	875	17,600 PSI	3.4	948	20,000 PSI
Bullet: 146 GR. SPR JHP				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.370″**
H4227				12.0	1085	18,400 CUP
HS-6				6.7	1035	18,400 CUP
Longshot				5.7	1036	17,400 PSI
CFE Pistol				5.5	1023	17,700 PSI
AutoComp				5.2	957	17,500 PSI
HP-38				4.9	975	17,700 CUP
Universal				4.7	987	18,100 CUP
Titegroup				4.4	981	19,300 CUP
244				4.3	924	18,200 PSI
700-X				3.8	854	17,400 PSI
Bullet: 148 GR. BER DEWC				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.140″**
No. 5	4.5	717	17,900 PSI	5.0	843	19,900 PSI
Silhouette	4.2	784	18,200 PSI	4.6	883	19,900 PSI
True Blue	4.0	712	18,000 PSI	4.4	818	19,900 PSI
Bullet: 158 GR. BER FP				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.430″**
No. 5	5.8	891	18,100 PSI	6.4	980	19,900 PSI
Silhouette	5.3	892	18,100 PSI	5.8	985	19,900 PSI
True Blue	5.2	846	18,300 PSI	5.7	920	19,900 PSI
No. 2	4.0	790	18,100 PSI	4.4	880	19,900 PSI
ZIP	3.9	743	18,100 PSI	4.3	849	19,900 PSI
Nitro 100 NF	2.9	605	17,600 PSI	3.3	712	20,000 PSI
Bullet: 158 GR. NOS HP				**Dia: .357″**		
Case: Remington			**Primer: Winchester SP, Small Pistol**			**Col: 1.430″**
No. 5	5.6	886	17,900 PSI	6.2	983	19,900 PSI
True Blue	5.1	886	18,000 PSI	5.7	978	20,000 PSI
Silhouette	5.2	913	18,300 PSI	5.6	1002	19,900 PSI
No. 2	4.0	810	18,300 PSI	4.3	889	19,900 PSI
Bullet: 158 GR. HDY XTP				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.455″**
H4227				11.0	964	17,600 CUP
IMR Blue				7.7	981	17,900 PSI
HS-6				6.6	926	18,700 CUP
Longshot				5.5	965	17,000 PSI
CFE Pistol				5.4	986	18,500 PSI
572				5.0	872	18,400 PSI
AutoComp				5.0	885	17,000 PSI
Universal				4.7	837	19,200 CUP
HP-38				4.6	807	18,100 CUP
Titegroup				4.3	905	19,300 CUP
244				4.0	815	17,800 PSI
700-X				4.0	866	18,500 PSI
Bullet: 170 GR. SIE JHC				**Dia: .357″**		
Case: Winchester			**Primer: Winchester SP, Small Pistol**			**Col: 1.450″**
H4227				10.6	950	17,600 CUP
HS-6				6.3	897	18,600 CUP
Longshot				5.3	939	17,800 PSI
AutoComp				4.8	844	18,200 PSI
HP-38				4.4	819	18,100 CUP
Universal				4.3	847	18,600 CUP
Titegroup				4.0	846	19,000 CUP
700-X				3.7	775	18,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

357 SIG

Barrel: 4″ Twist: 1:16″ Trim: .860″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 90 GR. CEB RAPTOR Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
HS-6	8.8	1411	29,900 PSI	10.1	1591	37,800 PSI
572	8.5	1513	30,000 PSI	9.5	1646	36,700 PSI
CFE Pistol	7.7	1475	29,900 PSI	8.7	1649	38,800 PSI
AutoComp	7.7	1426	27,600 PSI	8.7	1624	38,300 PSI
WSF	7.5	1445	31,900 PSI	8.6	1579	38,100 PSI
Universal	6.8	1420	30,100 PSI	7.8	1579	38,400 PSI
244	6.3	1374	30,000 PSI	7.4	1566	38,800 PSI
231	6.2	1325	29,600 PSI	7.3	1515	38,700 PSI
Titegroup	5.8	1362	29,600 PSI	6.9	1543	38,600 PSI
Bullet: 90 GR. HDY XTP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.135″**
HS-6	9.8	1484	28,200 PSI	10.8	1634	38,700 PSI
572	8.8	1526	28,300 PSI	10.3	1696	38,900 PSI
CFE Pistol	8.0	1401	27,600 PSI	9.5	1642	38,200 PSI
Universal	7.2	1428	27,000 PSI	8.1	1578	36,900 PSI
244	7.2	1468	27,000 PSI	8.1	1629	37,900 PSI
HP-38	6.6	1404	29,000 PSI	7.3	1509	37,500 PSI
Bullet: 95 GR. BAR TAC-XP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
HS-6	8.8	1410	29,400 PSI	10.1	1593	38,200 PSI
572	8.5	1521	30,900 PSI	9.5	1647	37,300 PSI
CFE Pistol	7.8	1449	27,600 PSI	8.9	1644	38,700 PSI
AutoComp	7.7	1463	29,300 PSI	8.8	1617	38,500 PSI
WSF	7.6	1430	30,000 PSI	8.7	1586	38,600 PSI
Universal	6.5	1398	28,900 PSI	7.5	1571	38,500 PSI
244	6.3	1378	29,200 PSI	7.3	1555	38,600 PSI
231	6.2	1354	29,600 PSI	7.2	1526	38,400 PSI
Titegroup	5.9	1381	30,300 PSI	6.9	1545	38,700 PSI
Bullet: 115 GR. BAR TAC-XP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
HS-6	7.7	1244	30,200 PSI	8.8	1415	39,000 PSI
Longshot	7.5	1333	30,300 PSI	8.5	1449	36,800 PSI
572	6.7	1268	29,100 PSI	7.7	1429	38,800 PSI
WSF	6.5	1242	30,200 PSI	7.4	1384	38,700 PSI
CFE Pistol	6.3	1260	29,200 PSI	7.2	1405	38,100 PSI
AutoComp	6.2	1233	28,400 PSI	7.1	1387	38,000 PSI
Universal	5.7	1238	30,400 PSI	6.7	1380	38,500 PSI
244	5.3	1185	29,300 PSI	6.3	1343	38,900 PSI
Titegroup	5.1	1193	30,100 PSI	6.1	1343	38,900 PSI
231	5.2	1162	30,000 PSI	6.0	1277	38,200 PSI
Bullet: 115 GR. HDY XTP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.135″**
Longshot	9.0	1339	35,200 PSI	10.0	1497	37,300 PSI
HS-6	8.7	1319	31,300 PSI	9.4	1412	38,800 PSI
572	7.6	1327	29,200 PSI	8.8	1482	39,000 PSI
CFE Pistol	7.2	1277	29,100 PSI	8.2	1431	38,400 PSI
Universal	6.5	1272	31,600 PSI	7.3	1375	39,200 PSI
244	6.1	1272	28,900 PSI	6.9	1387	38,300 PSI
Bullet: 115 GR. LC RN Dia: .356″						
Case: Winchester		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
No. 9	12.1	1258	35,000 PSI	13.5	1430	39,000 PSI
No. 7	9.9	1182	34,000 PSI	11.0	1344	37,800 PSI
No. 5	8.1	1160	34,700 PSI	9.0	1319	38,500 PSI
No. 2	5.6	1099	34,500 PSI	6.2	1249	38,200 PSI
Bullet: 115 GR. NOS JHP Dia: .355″						
Case: Winchester		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
No. 9	12.1	1261	33,100 PSI	13.5	1434	36,900 PSI
No. 5	8.4	1191	33,900 PSI	9.4	1354	37,900 PSI
True Blue	8.2	1217	31,900 PSI	9.1	1352	35,400 PSI
Silhouette	8.4	1343	33,800 PSI	8.8	1389	35,400 PSI
ZIP	6.1	1189	34,900 PSI	6.8	1321	38,900 PSI
No. 2	5.7	1122	34,400 PSI	6.4	1276	38,600 PSI
Bullet: 118 GR. LD XD Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.135″**
HS-6	7.9	1218	30,400 PSI	8.7	1362	38,300 PSI
Longshot	7.5	1276	29,700 PSI	8.5	1410	37,100 PSI
572	6.5	1198	26,700 PSI	7.5	1375	38,500 PSI
WSF	6.7	1212	31,300 PSI	7.4	1333	38,300 PSI
AutoComp	6.6	1215	29,200 PSI	7.3	1348	38,700 PSI
CFE Pistol	6.4	1221	28,100 PSI	7.2	1365	38,100 PSI
Universal	5.8	1160	30,000 PSI	6.8	1319	38,400 PSI
244	5.4	1139	28,800 PSI	6.5	1288	39,100 PSI
231	5.2	1058	28,100 PSI	6.2	1245	38,700 PSI
Titegroup	4.9	1111	29,400 PSI	5.9	1263	38,300 PSI
Bullet: 124 GR. HDY XTP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.135″**
Longshot	8.3	1344	33,500 PSI	9.3	1429	37,900 PSI
HS-6	8.0	1233	30,300 PSI	9.0	1339	38,700 PSI
572	7.0	1228	28,300 PSI	8.2	1400	38,600 PSI
CFE Pistol	6.6	1181	27,400 PSI	7.6	1342	37,800 PSI
244	6.0	1219	28,500 PSI	6.7	1331	38,700 PSI
Universal	5.2	1134	27,500 PSI	5.8	1235	38,500 PSI
Bullet: 125 GR. BAR TAC-XP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
HS-6	7.2	1168	30,600 PSI	8.1	1317	38,500 PSI
Longshot	7.0	1254	30,200 PSI	8.0	1351	35,800 PSI
572	5.9	1171	29,800 PSI	7.0	1318	38,500 PSI
AutoComp	5.7	1149	29,400 PSI	6.7	1276	38,400 PSI
CFE Pistol	5.7	1162	28,400 PSI	6.6	1297	38,900 PSI
244	4.8	1093	29,500 PSI	5.9	1245	38,700 PSI
Titegroup	4.5	1088	29,100 PSI	5.5	1226	39,000 PSI
Bullet: 125 GR. BAR XPB Dia: .355″						
Case: Winchester		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
No. 5	6.6	1069	37,000 PSI	7.3	1188	41,100 PSI
True Blue	5.9	1020	35,500 PSI	6.6	1133	39,500 PSI
Silhouette	5.8	1053	35,400 PSI	6.4	1170	39,300 PSI
Bullet: 125 GR. SIE FMJ Dia: .355″						
Case: Winchester		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
No. 9	11.7	1220	35,200 PSI	13.0	1387	39,100 PSI
No. 5	8.3	1166	35,700 PSI	9.2	1325	39,600 PSI
No. 2	5.4	1066	35,000 PSI	6.0	1212	38,900 PSI
Bullet: 125 GR. SIE JHP Dia: .355″						
Case: Winchester		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
True Blue	7.9	1164	33,100 PSI	8.8	1293	36,900 PSI
Silhouette	7.9	1261	35,000 PSI	8.3	1320	36,800 PSI
ZIP	5.8	1098	33,700 PSI	6.4	1220	37,200 PSI
Bullet: 125 GR. SPR GD-HP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.135″**
572	7.2	1149	28,300 PSI	8.4	1399	38,000 PSI
CFE Pistol	7.0	1222	29,700 PSI	8.0	1346	38,900 PSI
244	6.1	1196	27,400 PSI	7.0	1340	38,100 PSI
Bullet: 147 GR. HDY XTP Dia: .355″						
Case: Federal		**Primer: Winchester SP, Small Pistol**				**Col: 1.140″**
No. 9	9.4	1018	30,800 PSI	10.5	1158	34,400 PSI
No. 7	8.3	1020	34,800 PSI	9.2	1160	38,600 PSI
No. 5	7.1	1019	34,500 PSI	7.9	1159	38,400 PSI
HS-6	6.8	1069	27,800 PSI	7.6	1173	36,600 PSI
Longshot	6.5	1158	32,100 PSI	7.5	1254	38,700 PSI
572	6.1	1113	29,000 PSI	7.1	1213	38,100 PSI
WSF				7.1	1260	33,800 PSI
CFE Pistol	5.4	1029	27,600 PSI	6.3	1148	39,200 PSI
244	5.2	1070	28,400 PSI	5.9	1177	38,900 PSI
Universal	5.0	1026	29,200 PSI	5.6	1110	38,600 PSI
True Blue	6.8	1022	32,900 PSI	7.6	1135	36,700 PSI
Silhouette	6.5	1082	33,400 PSI	6.9	1128	35,500 PSI
No. 2	4.7	933	35,300 PSI	5.3	1061	39,800 PSI
ZIP	4.7	950	34,600 PSI	5.2	1056	38,300 PSI

357 MAGNUM - PISTOL

Barrel: 10″ Twist: 1:18.75″ Trim: 1.285″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 90 GR. CAST LRNFP Dia: .359″						
Case: Winchester		**Primer: Winchester SPM, Small Pistol Mag**				**Col: 1.560″**
Titegroup	3.0	850	6,300 CUP	4.0	1107	9,000 CUP
Clays	2.7	780	6,000 CUP	3.5	1106	12,500 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Bullet: 105 GR. CEB RAPTOR Dia: .357″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.570″
296	15.0	1460	22,800 PSI	18.0	1763	29,400 PSI
H110	15.0	1460	22,800 PSI	18.0	1763	29,400 PSI
Lil'Gun	16.0	1559	19,600 PSI	18.0	1663	22,100 PSI
IMR 4227	14.0	1124	23,500 PSI	17.0C	1449	31,000 PSI
HS-6	8.8	1234	22,100 PSI	10.4	1563	32,000 PSI
Longshot	7.8	1372	25,600 PSI	8.9	1562	32,700 PSI
AutoComp	7.1	1255	22,400 PSI	8.4	1504	31,800 PSI
572	7.0	1263	23,100 PSI	8.2	1534	31,800 PSI
CFE Pistol	6.8	1268	22,800 PSI	8.2	1526	32,500 PSI
Titegroup	5.1	1023	24,900 PSI	6.1	1295	33,100 PSI

Bullet: 110 GR. HDY XTP Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.590″
296	22.0	1992	32,400 CUP	23.0	2078	37,200 CUP
H110	22.0	1992	32,400 CUP	23.0	2078	37,200 CUP
H4227	18.9	1774	29,600 CUP	21.0	1900	35,500 CUP
No. 9	15.3	1478	30,900 PSI	16.9	1677	34,100 PSI
HS-6	10.3	1614	32,600 CUP	11.5	1776	42,300 CUP
True Blue	10.5	1699	29,700 PSI	11.5	1806	34,400 PSI
Longshot	9.5	1676	33,700 CUP	10.5	1800	42,400 CUP
572	8.1	1500	23,100 PSI	9.8	1744	33,100 PSI
231	8.0	1541	36,200 CUP	9.0	1652	42,500 CUP
HP-38	8.0	1541	36,200 CUP	9.0	1652	42,500 CUP
AutoComp	7.7	1483	23,900 PSI	8.6	1631	32.900 PSI
ZIP	7.7	1373	28,700 PSI	8.6	1525	32,100 PSI
CFE Pistol	7.3	1452	23,300 PSI	8.5	1641	33,000 PSI
No. 2	7.2	1227	29,600 PSI	8.4	1374	34,900 PSI
Universal	7.5	1465	35,100 CUP	8.0	1536	40,000 CUP
Titegroup	7.2	1509	35,000 CUP	8.0	1614	41,500 CUP
244	6.8	1413	25,500 PSI	7.9	1577	32,800 PSI
700-X	5.0	1254	18,600 PSI	7.0	1556	30,600 PSI

Bullet: 120 GR. LD XD Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.580″
Lil'Gun	17.0	1496	22,200 PSI	19.0	1660	24,100 PSI
296	16.0	1492	25,300 PSI	18.3	1736	33,300 PSI
H110	16.0	1492	25,300 PSI	18.3	1736	33,300 PSI
IMR 4227	15.0	1205	25,900 PSI	17.4	1452	33,200 PSI
HS-6	9.3	1242	23,800 PSI	10.8	1522	32,500 PSI
Longshot	7.5	1202	24,000 PSI	9.0	1492	33,000 PSI
572	6.8	1121	22,800 PSI	8.4	1428	32,000 PSI
CFE Pistol	6.8	1149	23,300 PSI	8.2	1419	33,000 PSI
Universal	6.2	1008	24,800 PSI	7.3	1278	32,700 PSI
244	5.5	996	22,400 PSI	6.8	1292	32,500 PSI
Titegroup	5.2	905	24,100 PSI	6.2	1159	32,800 PSI

Bullet: 125 GR. BAR XPB Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.585″
Lil'Gun	16.7	1539	24,600 PSI	19.4	1768	32,500 PSI
Enforcer	14.9	1575	31,100 PSI	16.5	1750	34,500 PSI
4100	14.7	1372	30,600 PSI	16.4	1525	34,000 PSI
296	13.0	1321	25,200 PSI	15.5	1582	32,600 PSI
H110	13.0	1321	25,200 PSI	15.5	1582	32,600 PSI
IMR 4227	12.5	1033	23,400 PSI	15.0	1349	33,000 PSI
No. 9	12.6	1399	30,000 PSI	14.0	1554	33,300 PSI
HS-6	8.8	1342	25,200 PSI	10.1	1552	32,900 PSI
No. 7	9.0	1220	30,600 PSI	10.0	1355	34,000 PSI
True Blue	8.0	1359	30,500 PSI	9.0	1480	34,800 PSI
Longshot	7.2	1332	24,600 PSI	8.5	1502	32,400 PSI
No. 5	7.5	1166	30,600 PSI	8.3	1295	34,000 PSI
AutoComp	6.2	1138	20,600 PSI	8.0	1466	33,200 PSI
572	6.5	1266	25,200 PSI	7.8	1465	33,000 PSI
CFE Pistol	6.2	1222	24,800 PSI	7.7	1454	33,300 PSI
Universal	6.0	1131	22,800 PSI	7.5	1420	33,200 PSI
244	5.2	1107	22,200 PSI	6.7	1363	33,300 PSI
Titegroup	5.0	936	24,900 PSI	5.8	1177	32,400 PSI

Bullet: 125 GR. CAST LRNFP Dia: .358″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.580″
Universal	4.8	1046	11,000 CUP	6.8	1401	34,200 CUP
231	4.6	1052	13,800 CUP	5.5	1185	18,800 CUP
HP-38	4.6	1052	13,800 CUP	5.5	1185	18,800 CUP
Titegroup	4.0	1055	13,800 CUP	5.4	1274	22,800 CUP
Clays	3.5	984	11,900 CUP	5.3	1260	33,000 CUP

Bullet: 125 GR. HDY XTP Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.590″
296	21.0	1881	38,400 CUP	22.0	1966	41,400 CUP
H110	21.0	1881	38,400 CUP	22.0	1966	41,400 CUP
H4227	18.0	1692	34,400 CUP	20.0	1839	42,000 CUP
Enforcer	16.2	1500	29,300 PSI	18.0	1667	32,600 PSI
4100	16.1	1485	28,900 PSI	17.9	1650	32,100 PSI
No. 7	10.9	1278	30,000 PSI	12.1	1453	33,300 PSI
HS-6	9.8	1493	34,400 CUP	10.9	1629	42,100 CUP
No. 5	9.6	1273	30,200 PSI	10.6	1446	33,400 PSI
True Blue	9.6	1535	28,800 PSI	10.5	1647	34,500 PSI
Longshot	8.7	1529	33,000 CUP	9.7	1647	42,000 CUP
572	7.7	1348	24,800 PSI	9.0	1526	33,100 PSI
231	7.3	1335	33,800 CUP	8.5	1514	42,700 CUP
HP-38	7.3	1335	33,800 CUP	8.5	1514	42,700 CUP
AutoComp	7.5	1352	26,900 PSI	8.2	1455	31,700 PSI
CFE Pistol	6.9	1340	24,200 PSI	8.0	1480	32,500 PSI
No. 2	6.8	1096	29,600 PSI	8.0	1248	34,900 PSI
Universal	7.1	1394	34,900 CUP	7.6	1453	39,600 CUP
244	6.8	1321	26,900 PSI	7.5	1394	33,300 PSI
Titegroup	6.8	1425	36,500 CUP	7.5	1497	41,200 CUP
700-X	4.5	1093	18,300 PSI	6.4	1399	30,400 PSI

Bullet: 125 GR. MEI CAST LEAD Dia: .358″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.580″
572	7.0	1352	19,900 PSI	8.0	1516	26,600 PSI
CFE Pistol	6.6	1375	22,400 PSI	7.6	1514	27,900 PSI
AutoComp	6.5	1311	20,600 PSI	7.5	1456	27,500 PSI
244	6.0	1308	21,100 PSI	7.0	1451	27,200 PSI
700-X	4.0	1069	13,500 PSI	5.5	1311	21,800 PSI

Bullet: 130 GR. MEI CAST LEAD Dia: .358″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.580″
572	6.4	1245	18,000 PSI	7.8	1464	26,900 PSI
CFE Pistol	6.3	1300	19,000 PSI	7.7	1497	26,700 PSI
AutoComp	6.0	1216	18,700 PSI	7.3	1392	25,000 PSI
244	5.5	1244	19,400 PSI	6.7	1421	27,400 PSI
700-X	4.0	1059	15,000 PSI	5.5	1299	24,800 PSI

Bullet: 135 GR. CAST LRNFP Dia: .358″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.580″
572	5.1	1042	13,100 PSI	7.0	1343	23,400 PSI
Universal	4.8	986	11,700 CUP	6.5	1314	27,800 CUP
244	4.7	1114	16,700 PSI	6.4	1360	26,400 PSI
231	4.1	946	11,700 CUP	5.3	1027	19,400 CUP
HP-38	4.1	946	11,700 CUP	5.3	1027	19,400 CUP
Titegroup	3.5	906	13,100 CUP	5.2	1186	24,500 CUP
Clays	3.4	914	12,200 CUP	5.1	1207	30,200 CUP

Bullet: 140 GR. BAR XPB Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.590″
Enforcer	13.1	1377	30,600 PSI	14.5	1530	34,000 PSI
4100	13.0	1199	30,100 PSI	14.4	1333	33,500 PSI
TCM	11.5	1075	29,600 PSI	13.5	1294	34,800 PSI
No. 9	11.3	1204	30,300 PSI	12.5	1338	33,700 PSI
No. 7	8.6	1060	31,100 PSI	9.5	1178	34,500 PSI
No. 5	6.9	1032	30,200 PSI	7.7	1147	33,600 PSI
No. 2	5.4	803	29,500 PSI	6.3	914	34,800 PSI

Bullet: 140 GR. HDY CBOY Dia: .358″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.550″
AutoComp	3.6	793	8,800 PSI	4.3	883	9,900 PSI
572	3.7	811	10,300 PSI	4.2	907	12,200 PSI
CFE Pistol	3.4	711	9,100 PSI	4.1	904	9,900 PSI
Universal	3.3	767	8,800 PSI	3.9	902	10,600 PSI
231	2.9	718	8,500 PSI	3.7	897	11,200 PSI
HP-38	2.9	718	8,500 PSI	3.7	897	11,200 PSI
244	2.7	745	10,500 PSI	3.5	902	12,900 PSI
Titegroup	2.7	782	8,900 PSI	3.2	899	10,800 PSI
700-X	2.6	769	8,800 PSI	3.2	892	11,900 PSI

Bullet: 140 GR. HDY FTX Dia: .357″

Case: Winchester	Primer: Winchester SPM, Small Pistol Mag					Col: 1.600″
H110	12.0	1405	27,800 PSI	14.5	1607	31,100 PSI
IMR 4227	11.0	1176	29,900 PSI	13.0	1320	33,000 PSI
HS-6	6.0	1046	22,500 PSI	7.7	1326	33,400 PSI
572	5.9	1144	23,200 PSI	7.2	1371	33,400 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Longshot	5.5	1091	22,000 PSI	7.0	1358	33,800 PSI
CFE Pistol	5.4	1110	19,400 PSI	6.6	1328	32,200 PSI
AutoComp	5.0	1038	22,500 PSI	6.3	1279	33,200 PSI
244	4.5	998	21,500 PSI	5.7	1249	32,900 PSI
Universal	4.0	922	19,700 PSI	5.3	1205	34,200 PSI
700-X	3.5	849	19,800 PSI	5.2	1205	31,900 PSI
Titegroup	3.5	895	20,700 PSI	5.0	1213	33,800 PSI

Bullet: 140 GR. HDY XTP Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.590″

296	17.1	1597	28,400 CUP	19.0	1762	40,900 CUP
H110	17.1	1597	28,400 CUP	19.0	1762	40,900 CUP
H4227	16.2	1541	33,100 CUP	18.0	1685	42,600 CUP
HS-6	9.5	1411	35,800 CUP	10.5	1539	43,000 CUP
Longshot	8.0	1396	31,300 CUP	9.1	1534	41,000 CUP
572	6.9	1210	24,000 PSI	8.5	1442	33,700 PSI
231	6.5	1219	30,800 CUP	7.7	1378	41,900 CUP
HP-38	6.5	1219	30,800 CUP	7.7	1378	41,900 CUP
AutoComp	6.5	1164	22,000 PSI	7.6	1346	32,400 PSI
CFE Pistol	6.1	1149	22,600 PSI	7.5	1347	33,000 PSI
No. 2	6.2	992	29,500 PSI	7.3	1126	34,700 PSI
244	6.3	1209	28,100 PSI	7.1	1323	33,200 PSI
Universal	6.5	1218	34,800 CUP	7.0	1299	40,200 CUP
Titegroup	6.3	1262	35,600 CUP	7.0	1376	41,900 CUP
700-X	4.0	927	17,000 PSI	6.0	1267	30,000 PSI

Bullet: 140 GR. LD XP Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.580″

Lil'Gun	15.5	1425	23,700 PSI	18.7	1639	27,500 PSI
296	14.4	1331	25,400 PSI	16.7	1571	32,500 PSI
H110	14.4	1331	25,400 PSI	16.7	1571	32,500 PSI
IMR 4227	13.4	1061	26,500 PSI	15.7	1288	32,400 PSI
HS-6	8.0	1029	21,100 PSI	9.8	1358	31,400 PSI
Longshot	7.2	1049	21,900 PSI	8.5	1377	32,800 PSI
CFE Pistol	6.5	1049	23,000 PSI	8.0	1318	33,500 PSI
AutoComp	6.6	1030	22,700 PSI	8.0	1304	32,600 PSI
572	6.5	1051	23,300 PSI	7.8	1314	33,400 PSI
Universal	6.2	960	25,200 PSI	7.2	1209	33,200 PSI
244	5.8	991	25,100 PSI	6.7	1177	33,300 PSI
Titegroup	5.0	799	25,200 PSI	6.0	1071	33,200 PSI

Bullet: 140 GR. SIE JHC Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.580″

Enforcer	14.4	1311	30,800 PSI	16.0	1457	34,200 PSI
4100	14.3	1298	30,300 PSI	15.9	1442	33,700 PSI
TCM	11.5	1216	28,800 PSI	13.6	1446	33,900 PSI
True Blue	9.0	1426	29,100 PSI	9.8	1540	34,600 PSI

Bullet: 140 GR. SIE JHP Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.575″

No. 9	12.8	1252	30,300 PSI	14.2	1422	33,600 PSI
No. 7	10.1	1178	30,700 PSI	11.2	1339	34,000 PSI
No. 5	9.1	1202	30,400 PSI	10.1	1366	33,700 PSI

Bullet: 146 GR. SPR JHP Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.535″

296	15.5	1512	29,200 CUP	17.2	1691	42,600 CUP
H110	15.5	1512	29,200 CUP	17.2	1691	42,600 CUP
H4227	14.5	1440	34,300 CUP	16.0	1566	42,700 CUP
HS-6	8.5	1330	32,900 CUP	9.5	1461	41,800 CUP
Longshot	7.5	1358	33,400 CUP	8.6	1483	42,600 CUP
572	6.5	1212	24,300 PSI	7.5	1394	33,100 PSI
AutoComp	6.4	1193	26,000 PSI	7.1	1288	32,300 PSI
231	6.0	1176	32,100 CUP	7.1	1330	42,200 CUP
HP-38	6.0	1176	32,100 CUP	7.1	1330	42,200 CUP
CFE Pistol	6.0	1157	23,200 PSI	6.9	1338	32,600 PSI
Titegroup	5.9	1223	34,600 CUP	6.6	1317	42,900 CUP
Universal	6.0	1160	33,500 CUP	6.5	1261	39,900 CUP
244	5.8	1158	24,900 PSI	6.5	1296	33,300 PSI
700-X	4.5	1025	21,500 PSI	5.7	1233	30,300 PSI

Bullet: 148 GR. HDY LHBWC Dia: .358″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.290″

AutoComp	4.0	943	18,000 PSI	4.7	1064	24,300 PSI
572	3.7	923	17,100 PSI	4.6	1064	22,900 PSI
CFE Pistol	3.6	927	17,300 PSI	4.5	1085	23,000 PSI
Universal	3.5	880	13,700 CUP	4.0	989	17,700 CUP
244	3.2	897	18,600 PSI	4.0	1032	23,900 PSI
700-X	3.0	892	17,600 PSI	3.5	989	22,300 PSI
231	3.0	845	14,300 CUP	3.4	908	17,600 CUP
HP-38	3.0	845	14,300 CUP	3.4	908	17,600 CUP
Titegroup	2.9	830	14,700 CUP	3.3	909	18,900 CUP

Bullet: 158 GR. CAST LSWC Dia: .358″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.590″

HS-6	6.0	990	12,900 CUP	7.0	1106	15,500 CUP
Universal	4.0	890	15,700 CUP	6.2	1247	33,400 CUP
231	3.4	796	12,600 CUP	5.0	1109	23,900 CUP

Bullet: 158 GR. HDY XTP Dia: .357″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.580″

Lil'Gun	16.0	1504	24,100 CUP	18.0	1577	25,800 CUP
296	15.0	1418	28,600 CUP	16.7	1591	40,700 CUP
H110	15.0	1418	28,600 CUP	16.7	1591	40,700 CUP
H4227	14.5	1402	34,600 CUP	16.0	1520	42,600 CUP
Enforcer	12.5	1206	30,400 PSI	14.0	1320	34,000 PSI
4100	12.5	1176	30,100 PSI	13.9	1307	33,500 PSI
No. 9	12.4	1202	31,500 PSI	13.8	1367	35,000 PSI
HS-6	8.0	1182	28,000 CUP	9.5	1375	41,900 CUP
Longshot	7.3	1258	31,700 CUP	8.4	1394	43,200 CUP
572	6.5	1092	26,800 PSI	7.4	1241	33,200 PSI
AutoComp	6.2	1058	25,700 PSI	7.0	1181	33,200 PSI
CFE Pistol	6.1	1107	26,100 PSI	6.9	1233	33,700 PSI
231	6.2	1108	33,700 CUP	6.9	1220	40,000 CUP
Universal	5.8	1026	32,100 CUP	6.3	1133	39,300 CUP
244	5.5	1061	26,200 PSI	6.2	1204	33,100 PSI

Bullet: 158 GR. MEI CAST LEAD Dia: .358″
Case: Winchester Primer: Winchester SPM, Small Pistol Mag Col: 1.590″

572	5.6	1112	18,600 PSI	6.7	1275	27,000 PSI
CFE Pistol	5.3	1123	18,100 PSI	6.6	1321	28,500 PSI
AutoComp	5.0	1025	17,600 PSI	6.5	1237	27,000 PSI
244	3.9	922	14,800 PSI	6.0	1250	27,800 PSI

9 x 18MM MAKAROV

Barrel: 4″ Twist: 1:10″ Trim: .708″

Bullet: 90 GR. SPR FP Dia: .364″
Case: Winchester Primer: Winchester SP, Small Pistol Col: .970″

HP-38	3.6	948	21,300 PSI	4.0	1031	24,000 PSI
Universal	3.5	885	17,900 PSI	3.9	1022	23,000 PSI
Titegroup	3.3	959	19,200 PSI	3.7	1053	22,900 PSI

Bullet: 95 GR. HDY XTP Dia: .364″
Case: Winchester Primer: Winchester SP, Small Pistol Col: .965″

Universal	3.6	923	20,100 PSI	4.0	1030	23,800 PSI
HP-38	3.4	900	20,500 PSI	3.8	990	24,000 PSI
Titegroup	3.2	926	18,500 PSI	3.6	1022	22,500 PSI

40 S&W

Barrel: 4″ Twist: 1:16″ Trim: .845″

Bullet: 88 GR. PLY S ARX Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.135″

572	9.1	1469	25,200 PSI	10.8	1673	33,200 PSI
CFE Pistol	8.0	1503	27,200 PSI	9.2	1668	33,200 PSI
AutoComp	8.0	1440	25,500 PSI	9.3	1652	32,700 PSI
Universal	6.6	1424	26,300 PSI	7.8	1607	32,400 PSI
244	5.8	1332	24,900 PSI	6.8	1520	33,200 PSI
HP-38	5.6	1307	25,800 PSI	6.6	1465	33,700 PSI
Titegroup	5.4	1360	26,000 PSI	6.3	1511	33,100 PSI

Bullet: 97 GR. PLY S RNP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.135″

572	9.0	1426	25,700 PSI	10.4	1626	33,800 PSI
AutoComp	7.6	1416	27,400 PSI	9.1	1575	33,100 PSI
CFE Pistol	7.5	1397	25,400 PSI	8.8	1597	33,900 PSI
Universal	6.5	1370	26,700 PSI	7.7	1540	32,100 PSI
244	5.6	1285	25,000 PSI	6.6	1458	33,200 PSI
HP-38	5.6	1240	24,300 PSI	6.6	1420	33,000 PSI
Titegroup	5.3	1295	24,700 PSI	6.3	1476	33,500 PSI

Bullet: 115 GR. LD XD Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

HS-6	8.2	1176	26,800 PSI	9.2	1307	32,100 PSI
Longshot	7.8	1245	24,200 PSI	8.5	1367	30,300 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
572	7.5	1293	28,500 PSI	8.2	1377	32,400 PSI
CFE Pistol	7.1	1240	25,300 PSI	8.0	1398	33,200 PSI
AutoComp	7.1	1219	26,200 PSI	8.0	1386	33,800 PSI
WSF	6.8	1177	25,900 PSI	7.7	1329	33,500 PSI
Universal	6.0	1157	24,700 PSI	6.8	1325	33,300 PSI
244	5.8	1173	27,200 PSI	6.6	1315	33,300 PSI
HP-38	5.5	1110	26,300 PSI	6.2	1240	33,200 PSI
Titegroup	5.3	1165	26,500 PSI	6.0	1301	33,300 PSI
Silhouette	7.0	1161	29,500 PSI	8.3	1297	34,700 PSI
No. 5	6.8	998	29,400 PSI	8.0	1164	34,600 PSI
True Blue	6.2	975	29,600 PSI	7.3	1147	34,800 PSI

Bullet: 120 GR. CEB RAPTOR Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.120″

Longshot	7.0	1135	26,000 PSI	8.5	1291	31,300 PSI
HS-6	6.7	925	23,600 PSI	7.9	1178	33,000 PSI
572	6.4	1168	28,600 PSI	7.2	1257	32,400 PSI
CFE Pistol	5.9	1107	26,800 PSI	6.7	1259	33,200 PSI
AutoComp	5.9	1048	25,100 PSI	6.7	1240	33,500 PSI
WSF	5.5	1027	26,200 PSI	6.2	1166	33,200 PSI
Universal	5.2	1024	25,600 PSI	5.9	1230	33,500 PSI
244	4.8	1035	26,900 PSI	5.4	1151	33,100 PSI
HP-38	4.5	951	26,700 PSI	5.1	1080	33,600 PSI
Titegroup	4.4	1019	27,500 PSI	4.9	1134	33,100 PSI

Bullet: 135 GR. NOS JHP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

Longshot	8.5	1241	25,100 PSI	11.5	1434	31,900 PSI
HS-6	9.0	1180	27,400 PSI	10.2	1321	33,600 PSI
CFE Pistol	8.0	1303	29,500 PSI	8.9	1392	33,800 PSI
AutoComp	8.0	1236	26,600 PSI	8.8	1342	32,700 PSI
572	7.3	1188	26,800 PSI	8.1	1302	33,200 PSI
WSF	7.1	1166	26,000 PSI	7.8	1273	32,200 PSI
231	6.3	1152	29,900 PSI	7.0	1244	33,100 PSI
HP-38	6.3	1152	29,900 PSI	7.0	1244	33,100 PSI
Universal	6.2	1109	22,000 PSI	6.8	1250	32,000 PSI
244	6.2	1180	26,000 PSI	6.8	1282	32,800 PSI
700-X	6.0	1172	27,500 PSI	6.6	1263	32,200 PSI
Titegroup	5.8	1155	27,300 PSI	6.4	1251	33,200 PSI
WST	5.5	1089	27,900 PSI	5.9	1143	31,200 PSI
Clays	4.0	940	22,600 PSI	4.5	1071	32,900 PSI
No. 7	10.1	1089	30,600 PSI	11.2	1237	33,900 PSI
True Blue	8.3	1149	29,100 PSI	9.2	1277	32,200 PSI
No. 2	6.8	1097	31,000 PSI	7.6	1247	34,700 PSI

Bullet: 140 GR. BAR XPB Dia: .400″
Case: Winchester Primer: Winchester SP, Small Pistol Col: 1.135″

Silhouette	5.5	918	29,600 PSI	6.5	1080	35,000 PSI
No. 5	5.7	873	29,300 PSI	6.3	970	32,500 PSI
True Blue	5.2	872	28,800 PSI	5.8	969	32,000 PSI

Bullet: 140 GR. BAR TAC-XP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.135″

HS-6	6.8	1025	28,500 PSI	7.2	1096	33,700 PSI
Longshot	6.4	1090	25,800 PSI	7.0	1185	31,400 PSI
AutoComp	5.9	1089	27,400 PSI	6.3	1154	33,000 PSI
WSF	5.3	995	26,700 PSI	6.2	1109	34,000 PSI
CFE Pistol	5.6	1095	28,600 PSI	6.1	1159	33,800 PSI
572	5.5	1033	27,900 PSI	6.0	1117	33,900 PSI
244	4.5	1016	26,100 PSI	5.0	1103	32,800 PSI
Universal	4.3	958	23,100 PSI	4.8	1070	31,200 PSI
231	4.4	965	27,300 PSI	4.8	1016	30,400 PSI
HP-38	4.4	965	27,300 PSI	4.8	1016	30,400 PSI
WST	3.6	819	28,200 PSI	4.0	863	31,200 PSI
Titegroup	3.5	848	27,800 PSI	4.0	937	32,900 PSI
700-X	3.3	820	26,900 PSI	3.9	933	32,900 PSI
Clays	2.6	713	24,800 PSI	3.0	783	31,900 PSI

Bullet: 150 GR. NOS JHP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

No. 7	9.2	1000	30,900 PSI	10.2	1136	34,300 PSI
Longshot	7.5	1184	26,400 PSI	9.3	1320	33,600 PSI
HS-6	7.8	1076	25,700 PSI	8.7	1201	32,500 PSI
CFE Pistol	7.0	1141	25,000 PSI	7.8	1267	33,500 PSI
572	6.5	1117	26,700 PSI	7.3	1194	33,000 PSI
AutoComp	6.6	1105	24,300 PSI	7.3	1220	32,100 PSI
WSF	6.6	1137	29,800 PSI	6.8	1185	33,300 PSI
244	5.6	1086	26,800 PSI	6.3	1183	32,600 PSI
Universal	5.4	1066	25,700 PSI	5.9	1165	32,900 PSI
231	5.2	1024	26,900 PSI	5.8	1116	33,500 PSI
HP-38	5.2	1024	26,900 PSI	5.8	1116	33,500 PSI
WST	5.5	1047	29,400 PSI	5.8	1088	32,300 PSI
Titegroup	5.1	1079	27,700 PSI	5.5	1147	32,600 PSI
700-X	5.2	1080	27,100 PSI	5.5	1143	32,600 PSI
Clays	3.8	923	28,400 PSI	4.0	960	31,700 PSI
No. 5	7.5	1030	31,600 PSI	8.3	1170	35,000 PSI
True Blue	7.3	1052	29,300 PSI	8.1	1169	32,500 PSI
No. 2	5.9	988	31,200 PSI	6.6	1098	34,900 PSI

Bullet: 155 GR. BAR XPB Dia: .400″
Case: Winchester Primer: Winchester SP, Small Pistol Col: 1.135″

No. 5	4.6	736	28,800 PSI	5.1	818	32,000 PSI
Silhouette	4.4	774	27,100 PSI	4.9	860	30,100 PSI
True Blue	4.2	730	29,300 PSI	4.7	811	32,500 PSI

Bullet: 155 GR. BER HBRN Dia: .400″
Case: Winchester Primer: Winchester SP, Small Pistol Col: 1.125″

No. 7	8.2	1005	29,400 PSI	9.6	1161	34,600 PSI
No. 5	7.0	975	29,700 PSI	8.2	1139	35,000 PSI
Silhouette	6.4	1008	29,500 PSI	7.6	1175	34,800 PSI
True Blue	6.4	979	29,700 PSI	7.5	1153	35,000 PSI
No. 2	5.0	953	29,700 PSI	5.9	1112	35,000 PSI
Competition	3.8	884	29,200 PSI	4.5	969	34,300 PSI
Nitro 100 NF	3.6	875	28,600 PSI	4.2	960	33,700 PSI

Bullet: 155 GR. BER RS Dia: .400″
Case: Winchester Primer: Winchester SP, Small Pistol Col: 1.125″

No. 2	5.6	968	31,600 PSI	6.2	1100	35,000 PSI
Competition	4.0	923	29,700 PSI	4.7	1015	35,000 PSI

Bullet: 155 GR. HDY XTP Dia: .400″
Case: Winchester Primer: Winchester SP, Small Pistol Col: 1.135″

No. 7	9.0	995	31,100 PSI	10.0	1124	34,500 PSI
No. 5	7.2	1010	31,300 PSI	8.0	1128	34,800 PSI
Silhouette	6.9	1100	31,200 PSI	7.4	1170	33,500 PSI
No. 2	5.9	966	31,200 PSI	6.5	1073	34,400 PSI
ZIP	5.4	1008	29,300 PSI	6.0	1120	32,500 PSI

Bullet: 155 GR. BAR TAC-XP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.135″

Longshot	5.9	1042	28,500 PSI	6.6	1090	32,500 PSI
HS-6	5.7	877	26,100 PSI	6.3	984	33,000 PSI
572	5.1	973	26,800 PSI	5.6	1065	33,400 PSI
CFE Pistol	4.8	956	25,700 PSI	5.3	1065	33,300 PSI
AutoComp	4.8	945	25,900 PSI	5.3	1028	32,800 PSI
WSF	4.7	892	26,300 PSI	5.2	987	33,100 PSI
Universal	4.3	921	27,100 PSI	4.8	1028	32,800 PSI
244	3.8	863	26,400 PSI	4.3	955	33,300 PSI
HP-38	3.7	825	26,300 PSI	4.2	909	32,700 PSI
Titegroup	3.5	850	25,700 PSI	4.0	967	32,800 PSI

Bullet: 155 GR. BER FP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

HS-6	7.8	1054	24,300 PSI	8.8	1200	32,600 PSI
CFE Pistol	7.2	1162	26,400 PSI	7.8	1232	31,900 PSI
AutoComp	6.7	1091	24,800 PSI	7.3	1200	31,600 PSI
572	6.5	1087	25,900 PSI	7.2	1174	32,700 PSI
WSF	6.2	1030	23,500 PSI	7.1	1164	32,300 PSI
244	5.5	1058	25,700 PSI	6.2	1156	32,500 PSI
Universal	5.5	1049	26,000 PSI	6.0	1145	33,500 PSI
231	5.1	979	24,100 PSI	6.0	1130	33,900 PSI
HP-38	5.1	979	24,100 PSI	6.0	1130	33,900 PSI
WST	5.1	996	27,400 PSI	5.9	1091	33,400 PSI
Titegroup	5.1	1051	26,200 PSI	5.7	1151	33,600 PSI
700-X	4.9	1010	23,300 PSI	5.5	1134	32,700 PSI
Clays	3.7	879	23,500 PSI	4.1	959	31,300 PSI

Bullet: 155 GR. HDY XTP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

Longshot	7.5	1129	24,900 PSI	9.3	1283	31,900 PSI
HS-6	7.7	1035	26,500 PSI	8.5	1137	33,200 PSI
AutoComp	7.0	1109	25,800 PSI	7.8	1223	33,800 PSI
CFE Pistol	6.6	1103	25,800 PSI	7.4	1219	32,600 PSI
572	6.0	1034	26,000 PSI	6.9	1161	33,000 PSI
WSF	6.2	1070	26,100 PSI	6.8	1159	32,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Universal	5.7	1056	23,900 PSI	6.2	1138	31,800 PSI
244	5.1	1032	24,800 PSI	6.0	1155	33,100 PSI
231	5.0	937	22,900 PSI	6.0	1103	33,000 PSI
HP-38	5.0	937	22,900 PSI	6.0	1103	33,000 PSI
Titegroup	5.4	1058	28,400 PSI	5.9	1139	31,700 PSI
700-X	5.2	1054	26,600 PSI	5.8	1138	33,700 PSI
WST	4.6	957	25,400 PSI	5.3	1039	32,500 PSI
Clays	3.6	854	23,300 PSI	4.0	942	30,900 PSI

Bullet: 165 GR. BER FP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

HS-6	7.4	1027	26,900 PSI	8.1	1108	31,300 PSI
Longshot	6.9	1091	24,500 PSI	7.8	1199	32,300 PSI
CFE Pistol	6.9	1124	28,000 PSI	7.5	1205	33,900 PSI
AutoComp	6.3	1051	25,900 PSI	7.0	1171	33,300 PSI
572	6.0	1016	25,500 PSI	6.7	1124	33,100 PSI
WSF	6.1	1034	27,600 PSI	6.5	1081	31,000 PSI
244	5.0	986	25,400 PSI	5.7	1101	33,000 PSI
Universal	4.8	951	24,200 PSI	5.4	1051	30,500 PSI
231	4.7	933	25,200 PSI	5.4	1049	33,400 PSI
HP-38	4.7	933	25,200 PSI	5.4	1049	33,400 PSI

Bullet: 165 GR. SIE JHP Dia: .400″
Case: Hornady Primer: Winchester SP, Small Pistol Col: 1.125″

No. 7	7.5	940	29,400 PSI	8.8	1086	34,600 PSI
HS-6	7.3	1013	28,700 PSI	8.0	1098	32,700 PSI
Longshot	7.3	1139	29,600 PSI	7.8	1185	33,400 PSI
AutoComp	6.5	1037	25,600 PSI	7.1	1124	31,500 PSI
CFE Pistol	6.0	1038	25,500 PSI	6.8	1149	32,400 PSI
WSF	6.3	1055	28,100 PSI	6.7	1115	32,700 PSI
572	5.5	976	26,100 PSI	6.2	1111	32,900 PSI
Universal	5.1	976	26,800 PSI	5.6	1061	32,900 PSI
244	4.9	994	26,100 PSI	5.5	1092	32,600 PSI
231	4.8	946	28,100 PSI	5.3	1001	32,500 PSI
HP-38	4.8	946	28,100 PSI	5.3	1001	32,500 PSI
No. 5	6.2	886	29,200 PSI	7.3	1049	34,400 PSI
True Blue	5.8	891	29,600 PSI	6.8	1033	34,800 PSI
ZIP	5.1	925	26,000 PSI	5.7	1028	29,100 PSI

10MM AUTO

Barrel: 5″ Twist: 1:16″ Trim: .987″

Bullet: 120 GR. CEB RAPTOR Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.250″

Longshot	9.7	1402	27,700 PSI	10.5	1447	29,800 PSI
HS-6	8.7	1163	27,700 PSI	9.8	1345	35,700 PSI
572	7.0	1165	25,400 PSI	8.5	1443	35,700 PSI
AutoComp	7.2	1200	28,000 PSI	8.1	1377	35,800 PSI
CFE Pistol	7.1	1201	26,900 PSI	8.0	1386	35,100 PSI
WSF	6.9	1122	25,000 PSI	8.0	1338	34,700 PSI
Universal	6.2	1139	26,500 PSI	7.0	1328	35,600 PSI
244	6.0	1163	28,100 PSI	6.8	1323	36,100 PSI
231	5.7	1074	27,000 PSI	6.5	1251	36,100 PSI
Titegroup	5.5	1141	28,300 PSI	6.2	1289	34,800 PSI

Bullet: 135 GR. NOS JHP Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.250″

No. 7	12.2	1299	31,300 PSI	13.6	1476	34,900 PSI
HS-6	10.0	1318	31,300 PSI	11.2	1435	36,900 PSI
CFE Pistol	9.0	1404	26,900 PSI	10.2	1551	35,900 PSI
AutoComp	8.7	1372	28,400 PSI	9.5	1476	34,500 PSI
Universal	7.0	1284	30,200 PSI	8.0	1416	36,100 PSI
Titegroup	7.2	1362	28,300 PSI	8.0	1459	35,800 PSI

Bullet: 140 GR. LC TCBB Dia: .401″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.250″

No. 7	10.8	1203	30,300 PSI	12.0	1367	33,700 PSI
No. 5	8.7	1190	30,000 PSI	9.7	1352	33,400 PSI

Bullet: 140 GR. BAR TAC-XP Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.260″

HS-6	8.2	1191	27,800 PSI	9.3	1327	35,700 PSI
CFE Pistol	6.6	1225	26,800 PSI	7.6	1339	34,100 PSI
WSF	6.6	1162	27,800 PSI	7.5	1284	35,300 PSI
244	5.6	1157	27,000 PSI	6.5	1281	35,300 PSI
231	5.4	1074	26,400 PSI	6.2	1211	35,300 PSI
HP-38	5.4	1074	26,400 PSI	6.2	1211	35,300 PSI
Universal	5.6	1171	29,500 PSI	6.1	1232	36,000 PSI
Titegroup	5.0	1114	26,400 PSI	6.0	1265	35,600 PSI

Bullet: 150 GR. LD XD Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.250″

HS-6	7.8	1001	26,900 PSI	9.1	1186	35,200 PSI
Longshot	7.0	1069	28,000 PSI	8.6	1268	36,200 PSI
AutoComp	6.7	1059	29,100 PSI	7.5	1213	36,300 PSI
572	6.6	1048	28,700 PSI	7.4	1179	35,700 PSI
CFE Pistol	6.5	1049	27,900 PSI	7.3	1210	35,900 PSI
WSF	6.2	981	28,500 PSI	7.2	1151	35,900 PSI
Universal	5.5	956	25,400 PSI	6.4	1122	35,300 PSI
244	5.7	1030	29,300 PSI	6.3	1138	35,500 PSI
231	5.3	933	29,000 PSI	6.0	1084	36,100 PSI
Titegroup	5.0	960	27,500 PSI	5.8	1146	36,400 PSI

Bullet: 155 GR. ACME RNSWC-CTD Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.260″

HS-6	9.8	1230	26,100 PSI	10.9	1391	36,200 PSI
Longshot	8.5	1270	26,600 PSI	9.5	1407	36,300 PSI
AutoComp	8.3	1270	28,200 PSI	9.3	1384	36,200 PSI
CFE Pistol	8.0	1239	26,100 PSI	8.9	1372	36,000 PSI
True Blue	7.8	1188	29,100 PSI	8.8	1294	35,900 PSI
WSF	7.8	1213	26,500 PSI	8.7	1344	36,500 PSI
Universal	7.1	1238	27,900 PSI	7.9	1339	34,700 PSI
244	6.7	1186	27,400 PSI	7.5	1313	35,700 PSI
231	6.5	1170	29,000 PSI	7.3	1282	36,100 PSI
HP-38	6.5	1170	29,000 PSI	7.3	1282	36,100 PSI
Titegroup	6.3	1211	29,200 PSI	7.0	1303	36,100 PSI

Bullet: 155 GR. BAR TAC-XP Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.260″

Longshot	7.3	1160	28,700 PSI	8.3	1269	35,000 PSI
HS-6	7.3	1044	27,100 PSI	8.3	1183	36,000 PSI
True Blue	6.2	1016	28,500 PSI	7.2	1134	36,100 PSI
AutoComp	6.1	1076	26,900 PSI	7.0	1194	36,100 PSI
WSF	6.0	1058	28,800 PSI	7.0	1168	36,800 PSI
572	6.1	1076	27,100 PSI	6.9	1191	34,600 PSI
CFE Pistol	5.9	1069	26,900 PSI	6.8	1209	36,000 PSI
Universal	5.2	1018	25,200 PSI	6.2	1178	36,200 PSI
244	4.9	1011	27,000 PSI	5.9	1150	36,000 PSI
231	4.7	967	26,800 PSI	5.6	1104	36,300 PSI
Titegroup	4.6	1026	28,000 PSI	5.5	1140	35,900 PSI

Bullet: 155 GR. HDY XTP Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.260″

No. 9	14.3	1244	29,400 PSI	15.9	1414	32,700 PSI
No. 7	11.4	1214	33,700 PSI	12.7	1379	37,500 PSI
HS-6	8.8	1095	22,400 PSI	11.0	1350	35,000 PSI
No. 5	9.0	1174	31,800 PSI	10.0	1334	35,300 PSI
Silhouette	8.8	1255	32,100 PSI	9.7	1355	35,400 PSI
Longshot	7.8	1147	24,200 PSI	9.4	1358	35,600 PSI
CFE Pistol	8.2	1269	26,300 PSI	9.2	1409	34,900 PSI
True Blue	7.9	1161	29,800 PSI	9.1	1303	36,300 PSI
AutoComp	8.0	1254	29,000 PSI	8.9	1362	35,700 PSI
WSF	6.8	1100	23,000 PSI	8.4	1320	35,600 PSI
Universal	6.5	1135	22,600 PSI	7.5	1279	35,200 PSI
244	6.6	1192	27,800 PSI	7.5	1325	34,900 PSI
231	5.8	1030	23,000 PSI	7.3	1253	35,700 PSI
HP-38	5.8	1030	23,000 PSI	7.3	1253	35,700 PSI
Titegroup	6.4	1211	26,800 PSI	7.2	1315	35,700 PSI

Bullet: 165 GR. SIE JHP Dia: .400″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.250″

No. 9	13.5	1180	30,700 PSI	15.0	1341	34,100 PSI
No. 7	10.8	1148	33,800 PSI	12.0	1305	37,500 PSI
HS-6	8.8	1139	27,200 PSI	10.2	1302	36,900 PSI
No. 5	8.7	1122	32,500 PSI	9.7	1275	36,200 PSI
Longshot	8.0	1199	28,100 PSI	9.2	1337	36,700 PSI
True Blue	7.7	1105	27,800 PSI	9.2	1267	36,800 PSI
CFE Pistol	7.2	1180	28,400 PSI	8.3	1301	37,100 PSI
AutoComp	7.2	1180	28,400 PSI	8.3	1301	37,100 PSI
WSF	7.0	1091	27,100 PSI	8.2	1263	37,000 PSI
Universal	6.5	1110	26,000 PSI	7.5	1274	36,700 PSI
244	5.8	1094	28,500 PSI	6.8	1243	36,900 PSI
231	5.6	1041	29,400 PSI	6.7	1186	37,000 PSI
HP-38	5.6	1041	29,400 PSI	6.7	1186	37,000 PSI
Titegroup	5.3	1045	26,700 PSI	6.2	1194	36,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Bullet: 180 GR. ACME FP-NLG CT Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.260″
HS-6	8.8	1132	27,500 PSI	9.8	1238	34,900 PSI
Longshot	7.5	1147	28,800 PSI	8.4	1249	35,100 PSI
AutoComp	7.2	1126	28,200 PSI	8.0	1217	35,300 PSI
True Blue	6.7	1045	27,700 PSI	7.9	1181	35,400 PSI
WSF	7.0	1102	28,200 PSI	7.8	1196	35,200 PSI
CFE Pistol	6.7	1099	27,500 PSI	7.7	1210	36,500 PSI
Universal	6.3	1092	26,000 PSI	7.0	1213	35,500 PSI
244	6.1	1096	29,200 PSI	6.8	1187	36,200 PSI
231	5.8	1041	26,200 PSI	6.5	1143	36,200 PSI
HP-38	5.8	1041	26,200 PSI	6.5	1143	36,200 PSI
Titegroup	5.4	1073	29,500 PSI	6.0	1154	36,400 PSI

Bullet: 180 GR. HDY XTP Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.250″
No. 9	12.2	1093	30,800 PSI	13.5	1242	34,100 PSI
No. 7	9.6	1041	31,700 PSI	10.7	1183	35,300 PSI
No. 5	7.8	1053	33,000 PSI	8.7	1197	36,800 PSI

Bullet: 180 GR. SIE JHC Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.260″
HS-6	7.4	940	22,000 PSI	9.4	1127	35,800 PSI
Longshot	7.0	1087	29,200 PSI	8.2	1205	36,100 PSI
AutoComp	7.0	1119	29,800 PSI	7.7	1199	36,000 PSI
True Blue	6.7	1005	28,600 PSI	7.7	1129	35,400 PSI
CFE Pistol	6.7	1082	25,600 PSI	7.6	1208	34,000 PSI
WSF	5.7	950	25,000 PSI	7.1	1150	35,600 PSI
244	5.5	1019	26,800 PSI	6.5	1157	35,100 PSI
Universal	5.4	965	22,300 PSI	6.4	1122	32,200 PSI
Titegroup	5.4	1051	27,400 PSI	6.0	1141	34,300 PSI
231	5.2	944	29,700 PSI	5.8	1061	34,900 PSI
HP-38	5.2	944	29,700 PSI	5.8	1061	34,900 PSI

Bullet: 185 GR. LC RNSWC Dia: .401″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.245″
No. 9	11.7	1098	31,200 PSI	13.0	1248	34,700 PSI
No. 7	9.2	1032	31,100 PSI	10.2	1173	34,500 PSI

Bullet: 190 GR. SIE FPJ Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.250″
No. 7	10.1	1054	32,500 PSI	11.2	1198	36,000 PSI
Silhouette	7.4	1100	30,900 PSI	8.3	1185	34,700 PSI

Bullet: 200 GR. ACME RN-LNG CT Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.260″
True Blue	6.0	945	27,800 PSI	7.0	1069	34,600 PSI
HS-6	7.6	1021	27,900 PSI	8.5	1131	36,400 PSI
Longshot	6.7	1060	29,900 PSI	7.5	1141	36,300 PSI
CFE Pistol	6.1	1022	29,300 PSI	6.8	1096	35,600 PSI
AutoComp	6.1	1000	27,800 PSI	6.8	1100	35,400 PSI
WSF	6.0	990	27,500 PSI	6.7	1085	36,100 PSI
Universal	5.5	977	24,700 PSI	6.2	1100	35,600 PSI
244	5.2	995	30,400 PSI	5.8	1059	36,100 PSI
231	5.0	936	28,400 PSI	5.6	1026	35,400 PSI
HP-38	5.0	936	28,400 PSI	5.6	1026	35,400 PSI
Titegroup	4.6	948	27,700 PSI	5.2	1050	36,200 PSI

Bullet: 200 GR. HDY FMJ Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.260″
HS-6	7.5	957	26,000 PSI	8.6	1089	35,900 PSI
Longshot	7.0	1034	23,900 PSI	8.2	1172	35,000 PSI
True Blue	6.2	928	28,700 PSI	7.2	1061	35,600 PSI
CFE Pistol	6.1	1007	26,200 PSI	7.1	1123	35,600 PSI
AutoComp	6.0	959	25,900 PSI	7.0	1100	36,100 PSI
WSF	5.2	880	26,200 PSI	6.2	1020	35,600 PSI
244	5.1	946	25,900 PSI	6.0	1068	35,700 PSI
Universal	4.9	846	24,300 PSI	5.9	1015	36,900 PSI
231	4.6	827	24,200 PSI	5.6	1011	35,700 PSI
HP-38	4.6	827	24,200 PSI	5.6	1011	35,700 PSI
Titegroup	4.8	946	28,900 PSI	5.3	1024	36,100 PSI

Bullet: 200 GR. HDY XTP Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.250″
No. 9	11.3	1030	33,400 PSI	12.5	1170	37,000 PSI
No. 7	8.8	960	32,800 PSI	9.8	1091	36,500 PSI
Silhouette	6.9	1025	31,600 PSI	7.8	1115	35,700 PSI

Bullet: 220 GR. RRO LEAD FP Dia: .400″

Case: Winchester	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.260″
CFE Pistol	4.9	878	27,700 PSI	5.8	983	36,800 PSI
True Blue	5.0	823	26,900 PSI	5.8	935	35,300 PSI
572	5.0	886	27,300 PSI	5.7	987	36,100 PSI
Universal	4.8	891	28,400 PSI	5.2	961	36,200 PSI
244	4.2	842	28,100 PSI	5.0	941	36,800 PSI

41 REMINGTON MAGNUM

Barrel: 10.125″ Twist: 1:18.75″ Trim: 1.280″

Bullet: 170 GR. SIE JHC Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Federal 155, Large Pistol Mag					Col: 1.575″
296	23.5	1669	21,400 CUP	26.5	1887	37,400 CUP
H110	23.5	1669	21,400 CUP	26.5	1887	37,400 CUP
Enforcer	22.5	1760	31,100 PSI	25.0	1910	34,500 PSI
TCM	17.8	1594	29,100 PSI	20.9	1838	34,300 PSI
No. 9	16.6	1425	30,600 PSI	18.5	1620	34,100 PSI
No. 7	13.2	1300	29,400 PSI	14.6	1477	32,600 PSI
True Blue	10.0	1150	27,400 PSI	12.5	1390	34,200 PSI
No. 5	10.2	1248	30,100 PSI	11.3	1418	33,400 PSI
H4227	22.5	1582	26,100 CUP	24.9	1745	35,600 CUP
HS-6	12.2	1447	28,100 CUP	13.7	1597	37,200 CUP
Longshot	11.0	1504	29,400 CUP	12.5	1646	38,700 CUP
Universal	8.0	1229	21,600 CUP	10.3	1488	38,700 CUP
HP-38	8.8	1326	29,500 CUP	9.8	1440	38,300 CUP
Titegroup	8.2	1361	29,800 CUP	9.2	1470	37,700 CUP
700-X				8.4	1375	39,800 CUP

Bullet: 180 GR. BAR XPB Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Federal 155, Large Pistol Mag					Col: 1.590″
Enforcer	18.5	1520	30,500 PSI	20.5	1689	33,800 PSI
No. 9	15.8	1369	32,100 PSI	17.6	1521	35,700 PSI
No. 7	11.4	1260	31,700 PSI	12.7	1400	35,300 PSI

Bullet: 180 GR. BAR XPB FB Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.590″
IMR 4227	16.6	1141	26,300 CUP	18.5C	1364	37,800 CUP
296	17.0	1335	23,000 CUP	19.0	1543	39,400 CUP
H110	17.0	1335	23,000 CUP	19.0	1543	39,400 CUP
Lil'Gun	17.2	1430	23,600 CUP	19.0	1591	30,600 CUP
HS-6	10.1	1188	28,600 CUP	11.7	1410	39,100 CUP
Longshot	9.0	1247	30,100 CUP	10.4	1415	39,600 CUP
CFE Pistol	8.2	1230	31,900 CUP	9.0	1319	39,800 CUP
Universal	6.9	873	29,800 CUP	8.0	1151	39,700 CUP
Titegroup	6.8	1001	31,700 CUP	7.4	1207	39,200 CUP

Bullet: 200 GR. MCB LSWCBB Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Federal 155, Large Pistol Mag					Col: 1.675″
No. 9	15.2	1322	30,600 PSI	16.9	1503	34,000 PSI
No. 7	12.3	1206	29,400 PSI	13.6	1370	32,500 PSI
No. 5	10.6	1201	29,000 PSI	11.8	1364	32,300 PSI

Bullet: 200 GR. CAST LFP Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Winchester LP, Large Pistol					Col: 1.550″
Titegroup	4.5	897	11,400 CUP	5.5	1030	15,300 CUP
Clays	4.0	854	13,400 CUP	5.2	997	21,200 CUP

Bullet: 210 GR. NOS JHP Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Federal 155, Large Pistol Mag					Col: 1.580″
5744	20.7	1321	31,900 PSI	23.0	1468	35,400 PSI
No. 11FS	18.8	1398	29,000 PSI	22.1	1659	34,200 PSI
Enforcer	19.1	1492	32,200 PSI	21.2	1658	35,800 PSI
4100	18.9	1477	31,600 PSI	21.1	1641	35,300 PSI
TCM	15.0	1346	28,800 PSI	17.6	1545	33,900 PSI

Bullet: 210 GR. HDY XTP Dia: .410″

Case: Remington	Starting Grs	Starting Vel	Starting Pressure	Maximum Grs	Maximum Vel	Maximum Pressure
	Primer: Federal 155, Large Pistol Mag					Col: 1.570″
No. 9	15.2	1271	31,700 PSI	16.9	1445	35,200 PSI
No. 7	12.0	1153	31,300 PSI	13.3	1310	34,700 PSI
True Blue	9.0	1050	26,200 PSI	11.0	1200	32,000 PSI
No. 5	9.8	1105	31,300 PSI	10.8	1256	34,500 PSI
Lil'Gun	20.5	1505	23,500 CUP	22.5	1626	29,900 CUP
296	19.8	1465	25,600 CUP	22.0	1631	36,400 CUP
H110	19.8	1465	25,600 CUP	22.0	1631	36,400 CUP
H4227	19.3	1379	28,000 CUP	21.5	1518	38,000 CUP
HS-6	10.6	1186	27,300 CUP	11.8	1321	35,700 CUP
Longshot	10.0	1316	31,600 CUP	11.0	1410	38,200 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
CFE Pistol	9.0	1245	26,100 CUP	10.1	1359	36,500 CUP
AutoComp	9.1	1216	30,500 CUP	9.9	1303	38,200 CUP
Universal	6.9	971	17,700 CUP	8.9	1243	37,700 CUP
HP-38	8.0	1089	27,800 CUP	8.6	1200	39,800 CUP
700-X				7.6	1185	39,000 CUP
Titegroup	6.5	1053	24,300 CUP	7.4	1173	33,200 CUP

Bullet: 215 GR. LC SWC Dia: .412″

Case: Remington	Primer: Federal 155, Large Pistol Mag					Col: 1.600″
No. 11FS	18.2	1411	25,700 PSI	21.4	1643	30,300 PSI
Enforcer	19.0	1450	32,000 PSI	21.1	1601	35,500 PSI
4100	19.0	1450	32,000 PSI	21.1	1601	35,500 PSI
TCM	15.5	1435	29,400 PSI	18.3	1633	34,600 PSI
No. 9	14.4	1265	30,100 PSI	16.0	1422	33,500 PSI
No. 7	12.2	1156	30,300 PSI	13.5	1335	33,500 PSI
No. 5	10.4	1175	30,300 PSI	11.5	1325	33,500 PSI

Bullet: 215 GR. CAST LFP Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.585″
CFE Pistol	7.1	1102	17,500 CUP	8.2	1229	23,200 CUP
AutoComp	7.0	1052	18,100 CUP	8.0	1158	23,600 CUP
Titegroup	4.5	882	12,800 CUP	5.5	1004	17,400 CUP
Clays	4.0	825	24,600 CUP	5.2	979	26,700 CUP

Bullet: 220 GR. SPR JSP Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.580″
Lil'Gun	18.0	1431	24,300 CUP	20.5	1563	31,200 CUP
H4227	18.0	1296	29,700 CUP	20.0	1433	37,500 CUP
296	18.0	1352	23,000 CUP	20.0	1529	34,000 CUP
H110	18.0	1352	23,000 CUP	20.0	1529	34,000 CUP
HS-6	10.0	1159	28,800 CUP	11.3	1271	36,700 CUP
Longshot	9.0	1208	29,300 CUP	10.1	1311	37,700 CUP
CFE Pistol	8.4	1198	28,400 CUP	9.3	1272	36,600 CUP
AutoComp	8.3	1154	32,500 CUP	9.1	1221	38,300 CUP
Universal	6.5	921	18,900 CUP	8.5	1178	38,600 CUP
HP-38	7.2	1031	30,100 CUP	8.0	1125	36,700 CUP
Titegroup	6.4	997	25,300 CUP	7.3	1127	33,700 CUP

Bullet: 240 GR. LY RN Dia: .410″

Case: Remington	Primer: Federal 155, Large Pistol Mag					Col: 1.710″
Enforcer	18.6	1395	31,400 PSI	20.7	1575	35,000 PSI
4100	18.6	1395	31,400 PSI	20.7	1575	35,000 PSI
No. 9	14.0	1235	30,900 PSI	15.6	1375	34,500 PSI
No. 7	11.8	1137	29,700 PSI	13.2	1292	33,300 PSI
No. 5	10.2	1134	31,700 PSI	11.3	1289	35,100 PSI

Bullet: 245 GR. LD WFN Dia: .410″

Case: Remington	Primer: Federal 155, Large Pistol Mag					Col: 1.600″
Enforcer	13.0	961	29,000 PSI	15.3	1166	34,100 PSI
4100	12.9	954	28,300 PSI	15.2	1159	33,400 PSI
No. 9	11.9	975	29,300 PSI	14.0	1168	34,500 PSI

Bullet: 245 GR. CAST LSWC Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.630″
296	18.5	1372	22,800 CUP	21.0	1563	37,400 CUP
H110	18.5	1372	22,800 CUP	21.0	1563	37,400 CUP
H4227	18.0	1272	27,000 CUP	20.0	1444	37,700 CUP
Longshot	9.0	1208	29,200 CUP	10.0	1293	37,900 CUP
AutoComp	8.3	1123	26,300 CUP	9.5	1232	36,200 CUP
Universal	6.3	1001	21,200 CUP	8.0	1164	36,000 CUP
Titegroup	6.5	1075	28,800 CUP	7.8	1202	39,500 CUP

Bullet: 250 GR. CPB LWFNPB Dia: .410″

Case: Remington	Primer: Federal 155, Large Pistol Mag					Col: 1.674″
No. 11FS	17.6	1330	29,700 PSI	20.7	1539	34,900 PSI
Enforcer	18.3	1379	31,200 PSI	20.3	1532	34,700 PSI
4100	18.1	1365	30,600 PSI	20.2	1517	34,100 PSI
TCM	13.8	1273	29,400 PSI	16.3	1451	34,600 PSI

Bullet: 250 GR. WFN C Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.540″
296	17.4	1391	29,400 CUP	18.5	1479	38,700 CUP
H110	17.4	1391	29,400 CUP	18.5	1479	38,700 CUP
H4227	17.0	1302	33,600 CUP	18.4	1398	39,700 CUP
Lil'Gun	17.2	1399	30,300 CUP	18.3	1474	36,700 CUP
CFE Pistol	7.6	1126	30,800 CUP	8.6	1222	38,700 CUP
AutoComp	7.5	1075	29,600 CUP	8.5	1163	37,600 CUP
Titegroup	6.0	1018	30,400 CUP	6.7	1083	38,600 CUP

Bullet: 255 GR. CPB LWFNGC Dia: .410″

Case: Remington	Primer: Federal 155, Large Pistol Mag					Col: 1.662″
No. 11FS	17.7	1321	29,700 PSI	20.8	1535	35,000 PSI
Enforcer	17.9	1366	32,400 PSI	19.9	1518	36,000 PSI
4100	17.8	1353	31,800 PSI	19.8	1503	35,400 PSI
TCM	13.9	1270	29,600 PSI	16.4	1443	34,900 PSI

Bullet: 255 GR. WFN C Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.660″
H4227	18.8	1378	33,900 CUP	20.0	1446	38,800 CUP
Lil'Gun	18.8	1424	26,600 CUP	20.0	1500	32,800 CUP
296	18.0	1327	21,000 CUP	19.5	1491	37,200 CUP
H110	18.0	1327	21,000 CUP	19.5	1491	37,200 CUP
CFE Pistol	8.1	1123	26,900 CUP	9.1	1224	36,800 CUP
AutoComp	7.7	1044	25,300 CUP	8.7	1141	36,000 CUP
Titegroup	7.0	1062	33,300 CUP	7.6	1124	38,600 CUP

Bullet: 265 GR. WLN C Dia: .410″

Case: Remington	Primer: Winchester LP, Large Pistol					Col: 1.710″
Lil'Gun	20.0	1479	28,700 CUP	21.3	1558	35,400 CUP
296	19.5	1410	24,400 CUP	20.8	1540	37,600 CUP
H110	19.5	1410	24,400 CUP	20.8	1540	37,600 CUP
H4227	18.6	1366	31,900 CUP	19.8	1429	35,700 CUP
CFE Pistol	8.2	1132	27,700 CUP	9.2	1220	35,800 CUP
AutoComp	7.7	1040	26,300 CUP	8.7	1132	35,700 CUP
Titegroup	7.0	1064	32,200 CUP	7.6	1116	37,900 CUP

44 S&W SPECIAL

Barrel: 8″ Twist: 1:20″ Trim: 1.155″

Bullet: 165 GR. CAST LRNFP Dia: .430″

Case: Starline	Primer: Winchester LP, Large Pistol					Col: 1.365″
CFE Pistol	7.4	1046	10,800 CUP	8.0	1118	12,900 CUP
AutoComp	7.4	1028	8,800 CUP	8.0	1112	13,400 CUP
244	5.7	982	8,900 CUP	6.5	1118	13,600 CUP
Universal	5.5	851	5,700 CUP	6.3	1042	10,900 CUP
HP-38	4.9	893	8,200 CUP	6.0	1040	12,000 CUP
Titegroup	4.5	865	7,100 CUP	5.8	1035	13,400 CUP
Clays	3.6	836	6,000 CUP	4.6	1009	13,400 CUP

Bullet: 180 GR. SIE JHC Dia: .429″

Case: Remington	Primer: Remington 2 1/2, Large Pistol					Col: 1.480″
True Blue	8.0	900	12,300 PSI	9.4	1040	14,400 PSI
ZIP	5.8	850	12,100 PSI	6.8	970	14,200 PSI

Bullet: 180 GR. HDY JHP Dia: .429″

Case: Remington	Primer: Remington 2 1/2, Large Pistol					Col: 1.485″
No. 5	7.8	878	12,600 PSI	8.7	1000	14,000 PSI
No. 2	5.3	802	12,500 PSI	5.9	911	13,900 PSI

Bullet: 185 GR. CAST LRNFP Dia: .430″

Case: Starline	Primer: Winchester LP, Large Pistol					Col: 1.400″
Universal	5.4	823	7,700 CUP	6.4	1031	13,900 CUP
HP-38	4.4	810	8,000 CUP	5.6	953	12,500 CUP
Titegroup	4.0	819	6,600 CUP	5.5	1025	11,600 CUP
700-X	4.8	929	11,800 CUP	5.4	1013	13,500 CUP
Clays	3.5	810	7,800 CUP	4.2	930	13,200 CUP

Bullet: 200 GR. BAR XPB Dia: .429″

Case: Remington	Primer: Remington 2 1/2, Large Pistol					Col: 1.610″
No. 5	7.7	854	13,600 PSI	8.5	949	15,100 PSI
Silhouette	7.2	863	13,500 PSI	8.0	959	15,000 PSI
True Blue	6.9	824	13,500 PSI	7.7	916	15,000 PSI
No. 2	5.2	796	13,900 PSI	5.8	884	15,400 PSI

Bullet: 200 GR. CAST LRNFP Dia: .430″

Case: Starline	Primer: Winchester LP, Large Pistol					Col: 1.450″
H4227	13.0	879	8,600 CUP	15.0	1051	13,100 CUP
HS-6	8.0	856	7,100 CUP	9.5	1035	12,400 CUP
572	6.3	903	9,400 CUP	7.3	1015	13,300 CUP
CFE Pistol	6.3	863	8,200 CUP	7.1	990	12,800 CUP
AutoComp	6.4	880	9,900 CUP	6.9	944	12,000 CUP
Universal	5.5	802	8,200 CUP	6.5	960	12,900 CUP
244	5.4	902	9,900 CUP	6.1	1001	13,700 CUP
HP-38	4.5	743	8,300 CUP	5.6	918	12,500 CUP
Titegroup	4.5	846	8,600 CUP	5.4	973	13,100 CUP
700-X	4.1	831	9,400 CUP	5.0	943	13,400 CUP
Clays	3.5	748	7,800 CUP	4.5	891	14,000 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 200 GR. NOS JHP Dia: .429″						
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.470″						
True Blue	7.0	800	11,900 PSI	8.3	930	14,100 PSI
No. 5	7.2	766	11,700 PSI	8.0	871	13,000 PSI
ZIP	5.0	760	11,300 PSI	6.0	870	13,500 PSI
No. 2	4.9	708	12,600 PSI	5.4	805	13,900 PSI
H4227	13.0	848	9,100 CUP	15.0	1021	13,100 CUP
HS-6	8.0	851	8,500 CUP	9.0	960	12,500 CUP
572	6.4	856	9,800 CUP	7.3	984	13,800 CUP
CFE Pistol	6.3	824	9,800 CUP	7.1	938	13,100 CUP
AutoComp	6.5	849	9,500 CUP	7.1	937	12,300 CUP
Universal	6.0	834	9,000 CUP	6.8	967	12,900 CUP
244	5.4	833	9,100 CUP	6.1	933	13,400 CUP
HP-38	5.5	806	10,100 CUP	6.0	898	13,100 CUP
Titegroup	5.0	849	11,000 CUP	5.4	904	12,700 CUP
700-X	4.7	824	11,000 CUP	5.3	902	13,500 CUP
Bullet: 220 GR. MCB LRNFP Dia: .429″						
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.535″						
No. 5	7.0	844	12,600 PSI	7.8	959	14,000 PSI
No. 2	4.8	790	12,700 PSI	5.3	900	14,000 PSI
Bullet: 220 GR. BER FP Dia: .430″						
Case: Starline Primer: Winchester LP, Large Pistol Col: 1.460″						
HS-6	7.2	750	8,500 CUP	8.7	941	13,700 CUP
572	6.3	809	8,900 CUP	7.3	952	13,200 CUP
AutoComp	6.4	828	8,900 CUP	7.3	937	13,300 CUP
Universal	5.7	748	8,700 CUP	6.5	918	13,700 CUP
244	5.2	712	8,700 CUP	6.1	874	13,500 CUP
231	4.8	695	8,200 CUP	5.8	845	13,000 CUP
HP-38	4.8	695	8,200 CUP	5.8	845	13,000 CUP
Titegroup	4.7	772	9,600 CUP	5.4	875	13,300 CUP
700-X	4.5	777	9,700 CUP	5.2	872	13,200 CUP
Clays	3.7	638	7,800 CUP	4.4	774	13,600 CUP
Bullet: 240 GR. HDY HP XTP Dia: .429″						
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.480″						
True Blue	6.0	710	11,700 PSI	7.0	815	13,700 PSI
ZIP	4.0	640	10,400 PSI	5.0	760	13,000 PSI
Bullet: 240 GR. LC RNFP Dia: .431″						
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.480″						
No. 5	6.1	757	12,600 PSI	6.8	860	14,000 PSI
No. 2	4.2	721	12,500 PSI	4.7	819	14,000 PSI
Bullet: 240 GR. SIE JHC Dia: .429″						
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.485″						
No. 5	5.8	640	12,500 PSI	6.5	730	14,000 PSI
No. 2	4.1	532	12,700 PSI	4.5	604	13,900 PSI
Bullet: 240 GR. CAST LSWC Dia: .430″						
Case: Starline Primer: Winchester LP, Large Pistol Col: 1.450″						
HS-6	6.5	761	7,500 CUP	8.0	917	13,000 CUP
CFE Pistol	5.6	784	9,800 CUP	6.6	898	13,800 CUP
AutoComp	5.5	769	8,400 CUP	6.5	903	13,400 CUP
572	5.3	799	8,700 CUP	6.3	913	13,100 CUP
Universal	4.9	721	8,000 CUP	5.6	873	13,300 CUP
244	4.4	775	9,200 CUP	5.2	870	13,600 CUP
HP-38	4.2	717	8,400 CUP	5.2	858	13,200 CUP
700-X	4.3	811	11,700 CUP	4.9	869	13,800 CUP
Titegroup	4.0	758	9,400 CUP	4.8	862	13,100 CUP
Clays	3.2	669	9,000 CUP	4.0	771	13,500 CUP

44-40 Winchester - Pistol

Barrel: 6″ Twist: 1:36″ Trim: 1.295″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 160 GR. CAST LFP Dia: .430″						
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.600″						
Titegroup	4.5	750	7,700 PSI	6.2	983	12,200 PSI
Clays	4.2	747	7,400 PSI	5.5	916	12,700 PSI
Bullet: 200 GR. CAST LRNFP Dia: .430″						
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.600″						
Universal	6.6	722	10,000 PSI	7.3	777	11,100 PSI
HP-38	5.5	711	9,800 PSI	6.5	820	12,400 PSI
Titegroup	5.0	758	8,400 PSI	6.2	901	12,900 PSI
700-X	5.0	788	7,100 CUP	5.6	860	11,400 CUP
Clays	4.2	648	8,200 PSI	5.0	765	11,700 PSI

44 Remington Magnum - Pistol

Barrel: 8.275″ Twist: 1:20″ Trim: 1.280″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 165 GR. LEAD LRNFP Dia: .430″						
Case: Winchester Primer: Remington 2 1/2, Large Pistol Col: 1.500″						
CFE Pistol	8.4	1057	13,900 PSI	9.6	1221	18,400 PSI
AutoComp	8.0	1072	13,100 PSI	9.0	1185	15,300 PSI
244	6.5	1064	13,700 PSI	7.2	1158	15,500 PSI
231	6.0	963	10,100 CUP	7.0	1088	13,900 CUP
Bullet: 180 GR. HDY XTP Dia: .430″						
Case: Winchester Primer: Remington 2 1/2, Large Pistol Col: 1.600″						
296	29.0	1714	21,800 CUP	31.5	1896	29,900 CUP
H110	29.0	1714	21,800 CUP	31.5	1896	29,900 CUP
Lil'Gun	29.0	1749	27,400 CUP	31.5	1859	32,300 CUP
IMR 4227	27.5	1575	24,000 CUP	29.0	1708	31,200 CUP
HS-6	15.0	1463	26,400 CUP	17.0	1642	37,700 CUP
Longshot	13.5	1499	29,400 PSI	14.8	1604	34,600 PSI
CFE Pistol	12.6	1466	27,400 PSI	14.0	1595	34,300 PSI
572	12.5	1474	27,800 PSI	13.8	1606	33,800 PSI
AutoComp	12.6	1419	26,800 PSI	13.8	1527	31,700 PSI
244	11.2	1490	28,900 PSI	12.6	1618	34,100 PSI
231	10.0	1327	26,500 CUP	12.0	1509	37,300 CUP
HP-38	10.0	1327	26,500 CUP	12.0	1509	37,300 CUP
Titegroup	10.3	1459	32,700 CUP	11.5	1544	38,400 CUP
Universal	9.0	1209	19,000 CUP	11.3	1463	36,900 CUP
No. 11FS	25.4	1632	29,600 PSI	29.9	1909	34,900 PSI
No. 9	21.6	1455	30,400 PSI	24.0	1675	33,800 PSI
Bullet: 180 GR. SIE JHC Dia: .429″						
Case: Remington Primer: Winchester LP, Large Pistol Col: 1.600″						
Enforcer	24.3	1683	29,300 PSI	27.0	1870	32,500 PSI
4100	24.3	1683	29,000 PSI	26.8	1851	32,000 PSI
No. 7	17.2	1382	31,400 PSI	19.1	1570	34,800 PSI
True Blue	14.9	1476	30,500 PSI	16.5	1640	33,800 PSI
Bullet: 185 GR. LRN P CAST Dia: .430″						
Case: Winchester Primer: Remington 2 1/2, Large Pistol Col: 1.540″						
Universal	6.4	919	8,400 CUP	7.4	1070	12,600 CUP
231	5.9	906	9,400 CUP	7.2	1058	14,700 CUP
HP-38	5.9	906	9,400 CUP	7.2	1058	14,700 CUP
Titegroup	5.3	902	9,500 CUP	6.6	1082	16,500 CUP
Clays	4.2	839	8,900 CUP	6.0	1043	18,400 CUP
Bullet: 200 GR. BAR XPB Dia: .429″						
Case: Remington Primer: Winchester LP, Large Pistol Col: 1.591″						
Enforcer	20.3	1428	29,400 PSI	22.5	1587	32,700 PSI
4100	20.1	1414	29,000 PSI	22.3	1571	32,200 PSI
No. 11FS	18.6	1351	30,000 PSI	21.8	1593	35,300 PSI
No. 9	18.9	1382	32,000 PSI	21.0	1535	35,500 PSI
Bullet: 200 GR. HDY XTP Dia: .429″						
Case: Remington Primer: Winchester LP, Large Pistol Col: 1.595″						
Enforcer	22.5	1550	31,100 PSI	25.0	1740	34,500 PSI
True Blue	14.0	1368	31,200 PSI	15.5	1520	34,500 PSI
Bullet: 200 GR. LRN P CAST Dia: .430″						
Case: Winchester Primer: Remington 2 1/2, Large Pistol Col: 1.570″						
CFE Pistol	7.1	914	14,000 PSI	8.2	1051	16,500 PSI
AutoComp	7.0	939	13,200 PSI	8.0	1038	15,400 PSI
572	6.8	900	13,100 PSI	7.8	1031	15,700 PSI
Universal	6.8	897	10,500 CUP	7.8	1045	15,400 PSI
231	5.8	875	10,800 CUP	7.4	1039	16,700 CUP
HP-38	5.8	875	10,800 CUP	7.4	1039	16,700 CUP
244	6.2	951	13,300 PSI	7.3	1095	16,600 PSI
Titegroup	5.0	878	11,000 CUP	6.6	1061	17,300 CUP
Clays	4.2	785	8,500 CUP	6.4	1028	20,200 CUP
700-X				4.3	818	11,700 CUP
Bullet: 200 GR. NOS JHP Dia: .429″						
Case: Winchester Primer: Remington 2 1/2, Large Pistol Col: 1.600″						
Lil'Gun	27.5	1667	27,500 CUP	29.5	1794	36,200 CUP
296	27.5	1708	29,000 CUP	28.5	1806	37,800 CUP
H110	27.5	1708	29,000 CUP	28.5	1806	37,800 CUP
IMR 4227	25.0	1553	29,800 CUP	27.0	1686	37,800 CUP
HS-6	15.0	1440	30,300 CUP	16.7	1569	37,700 CUP
Longshot	13.0	1440	30,000 PSI	14.3	1534	34,600 PSI
572	11.7	1376	27,500 PSI	13.4	1498	33,400 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
CFE Pistol	12.0	1343	26,500 PSI	13.4	1499	35,000 PSI
AutoComp	12.0	1348	27,000 PSI	13.2	1429	32,500 PSI
244	10.8	1389	28,200 PSI	12.0	1501	34,500 PSI
231	10.0	1277	28,000 CUP	11.9	1444	37,400 CUP
HP-38	10.0	1277	28,000 CUP	11.9	1444	37,400 CUP
Universal	10.0	1303	30,700 CUP	11.1	1398	38,300 CUP
Titegroup	9.7	1331	31,300 CUP	10.8	1433	38,400 CUP
700-X				10.1	1300	40,000 CUP
No. 11FS	23.2	1479	29,700 PSI	27.3	1777	35,000 PSI
No. 9	20.9	1357	29,600 PSI	23.3	1542	32,900 PSI
No. 7	15.6	1245	29,300 PSI	17.4	1415	32,600 PSI

Bullet: 210 GR. SIE JHC Dia: .430″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.600″		
Lil'Gun	26.0	1660	35,500 CUP	27.7	1749	37,900 CUP
IMR 4227	25.0	1458	29,200 CUP	27.0	1624	37,600 CUP
296	26.0	1615	29,900 CUP	27.0	1665	31,100 CUP
H110	26.0	1615	29,900 CUP	27.0	1665	31,100 CUP
HS-6	13.0	1254	21,900 CUP	16.2	1538	37,900 CUP
Longshot	12.0	1358	28,500 PSI	13.3	1457	35,400 PSI
572	11.4	1311	26,700 PSI	12.7	1434	35,000 PSI
CFE Pistol	11.4	1331	29,200 PSI	12.5	1430	35,200 PSI
AutoComp	11.5	1341	27,700 PSI	12.5	1414	34,600 PSI
231	7.5	985	17,300 CUP	11.7	1398	37,500 CUP
HP-38	7.5	985	17,300 CUP	11.7	1398	37,500 CUP
244	10.1	1333	30,000 PSI	11.4	1421	35,300 PSI
Universal	9.0	1190	26,000 CUP	11.0	1365	37,600 CUP
Titegroup	9.6	1309	33,500 CUP	10.7	1411	38,500 CUP

Bullet: 220 GR. BER FP Dia: .430″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.610″		
HS-6	10.2	925	12,900 PSI	13.5	1194	19,900 PSI
Longshot	9.0	894	12,300 PSI	11.8	1189	20,300 PSI
CFE Pistol	8.5	948	16,700 PSI	10.9	1197	23,300 PSI
572	8.2	940	14,300 PSI	10.8	1205	23,200 PSI
AutoComp	8.3	878	12,700 PSI	10.6	1127	19,900 PSI
244	7.3	972	17,200 PSI	9.4	1204	22,800 PSI
231	6.8	811	12,600 PSI	9.4	1104	20,700 PSI
HP-38	6.8	811	12,600 PSI	9.4	1104	20,700 PSI
Universal	7.3	839	12,200 PSI	9.0	1104	21,200 PSI
700-X	5.0	717	11,400 PSI	8.4	1085	20,700 PSI
Titegroup	5.8	807	12,300 PSI	8.0	1066	20,600 PSI

Bullet: 220 GR. BSC LRNFP Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.577″		
Enforcer	22.6	1527	29,900 PSI	26.6	1781	35,200 PSI
4100	22.5	1519	29,500 PSI	26.5	1771	34,800 PSI

Bullet: 220 GR. LD XP Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.600″		
No. 11FS	19.3	1255	29,600 PSI	22.7	1502	34,800 PSI
Enforcer	18.3	1260	30,000 PSI	21.6	1482	35,300 PSI
4100	18.2	1252	29,500 PSI	21.4	1472	34,700 PSI
No. 9	16.1	1237	30,000 PSI	19.0	1439	35,200 PSI

Bullet: 225 GR. BAR XPB Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.604″		
Enforcer	18.0	1274	32,200 PSI	20.0	1416	35,700 PSI
4100	17.9	1262	31,700 PSI	19.9	1402	35,200 PSI
No. 11FS	16.4	1207	29,700 PSI	19.2	1411	35,000 PSI
No. 9	16.2	1184	32,000 PSI	18.0	1315	35,600 PSI

Bullet: 225 GR. HDY FTX Dia: .430″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.665″		
IMR 4227	19.8	1130	26,800 PSI	22.0	1307	34,500 PSI
296	19.4	1338	26,700 PSI	21.5	1482	33,400 PSI
H110	19.4	1338	26,700 PSI	21.5	1482	33,400 PSI
Lil'Gun	18.6	1358	26,600 PSI	20.7	1530	34,300 PSI

Bullet: 225 GR. SPR JHP Dia: .429″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.575″		
IMR 4227	23.0	1383	27,400 CUP	25.5	1537	35,700 CUP
296	23.0	1468	25,600 CUP	25.0	1617	36,300 CUP
H110	23.0	1468	25,600 CUP	25.0	1617	36,300 CUP
Lil'Gun	22.5	1508	31,600 CUP	24.7	1623	37,700 CUP
HS-6	11.5	1103	20,100 CUP	15.5	1434	38,000 CUP
Longshot	11.2	1291	29,300 PSI	12.5	1402	35,200 PSI
AutoComp	10.8	1266	28,300 PSI	11.8	1352	34,200 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
572	10.4	1254	28,700 PSI	11.6	1357	33,600 PSI
CFE Pistol	10.5	1248	29,600 PSI	11.6	1333	34,800 PSI
231	8.4	1101	23,900 CUP	11.0	1344	38,200 CUP
HP-38	8.4	1101	23,900 CUP	11.0	1344	38,200 CUP
Universal	8.0	1041	18,900 CUP	10.5	1291	37,300 CUP
Titegroup	9.3	1262	31,900 CUP	10.4	1360	38,100 CUP
244	8.7	1205	27,900 PSI	10.3	1290	34,800 PSI
700-X				9.8	1235	40,000 CUP

Bullet: 240 GR. HDY XTP Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.580″		
5744	21.6	1243	31,500 PSI	24.0	1413	35,000 PSI
4100	20.3	1303	32,300 PSI	22.5	1472	35,800 PSI
No. 9	18.5	1256	31,100 PSI	20.5	1425	34,500 PSI
No. 7	14.5	1145	31,400 PSI	16.1	1302	34,800 PSI

Bullet: 240 GR. LC SWC Dia: .431″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.560″		
5744	21.6	1272	31,100 PSI	24.0	1446	34,500 PSI
Enforcer	19.3	1287	31,700 PSI	21.4	1407	35,200 PSI
4100	19.3	1287	31,700 PSI	21.4	1407	35,200 PSI
No. 9	18.1	1255	31,000 PSI	20.2	1426	34,500 PSI
True Blue	11.5	1152	32,100 PSI	12.8	1259	35,800 PSI

Bullet: 240 GR. LSW CAST Dia: .430″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.620″		
IMR 4227				22.0C	1310	33,300 CUP
CFE Pistol	9.9	1171	24,400 PSI	11.7	1299	33,900 PSI
AutoComp	9.8	1162	24,500 PSI	11.6	1303	34,300 PSI
572	9.5	1168	23,500 PSI	11.4	1327	33,700 PSI
231	5.5	800	12,000 CUP	11.0	1334	38,100 CUP
HP-38	5.5	800	12,000 CUP	11.0	1334	38,100 CUP
Universal	6.5	852	11,700 CUP	10.2	1276	37,500 CUP
244	8.5	1176	24,800 PSI	10.2	1327	34,400 PSI
Titegroup	4.7	801	11,100 CUP	10.0	1288	38,400 CUP
700-X				9.5	1185	40,000 CUP
Clays	4.3	759	14,000 CUP	6.2	940	21,800 CUP

Bullet: 240 GR. NOS JHP Dia: .429″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.600″		
Lil'Gun	22.5	1465	30,100 CUP	24.5	1582	38,100 CUP
IMR 4227	22.0	1301	28,400 CUP	24.0	1458	36,100 CUP
296	23.0	1413	25,200 CUP	24.0	1522	36,200 CUP
H110	23.0	1413	25,200 CUP	24.0	1522	36,200 CUP
HS-6	12.0	1144	22,800 CUP	15.1	1417	38,200 CUP
Longshot	11.0	1249	29,400 PSI	12.1	1331	34,500 PSI
CFE Pistol	10.2	1164	25,700 PSI	12.0	1304	35,000 PSI
572	10.0	1177	24,400 PSI	11.9	1331	34,900 PSI
AutoComp	10.0	1129	26,000 PSI	11.5	1250	34,100 PSI
231	8.0	1021	23,800 CUP	11.0	1272	37,800 CUP
HP-38	8.0	1021	23,800 CUP	11.0	1272	37,800 CUP
244	8.8	1173	25,600 PSI	10.5	1294	34,800 PSI
Universal	8.0	1018	21,900 CUP	10.2	1246	38,200 CUP
Titegroup	9.0	1219	33,500 CUP	10.0	1292	37,700 CUP

Bullet: 240 GR. NOS JSP Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.590″		
Enforcer	19.8	1368	32,000 PSI	22.0	1520	35,600 PSI
4100	19.8	1368	31,800 PSI	21.8	1505	35,100 PSI
True Blue	11.9	1188	30,800 PSI	13.2	1320	34,200 PSI

Bullet: 240 GR. SIE JHC Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.590″		
No. 11FS	19.2	1321	30,400 PSI	22.6	1554	35,700 PSI
No. 9	17.8	1214	31,200 PSI	19.8	1380	34,800 PSI

Bullet: 270 GR. SPR GDSP Dia: .429″

Case: Remington	Primer: Winchester LP, Large Pistol			Col: 1.585″		
5744	18.9	1218	31,400 PSI	21.0	1370	34,900 PSI
4100	18.5	1265	32,400 PSI	20.5	1374	35,900 PSI
Enforcer	17.1	1265	32,000 PSI	19.0	1395	35,500 PSI
No. 9	15.8	1203	32,500 PSI	17.5	1305	36,000 PSI
No. 7	14.0	1025	32,400 PSI	15.5	1200	35,900 PSI

Bullet: 270 GR. SPR GDSP Dia: .429″

Case: Winchester	Primer: Remington 2 1/2, Large Pistol			Col: 1.600″		
IMR 4227	20.5	1275	28,400 CUP	22.5	1425	37,400 CUP
296	19.5	1295	29,300 CUP	21.5	1421	37,700 CUP

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H110	19.5	1295	29,300 CUP	21.5	1421	37,700 CUP
Lil'Gun	19.0	1305	31,800 CUP	21.5	1439	38,300 CUP
HS-6	11.0	1036	22,200 CUP	14.0	1305	36,900 CUP
Longshot	9.8	1112	27,900 PSI	11.0	1213	34,100 PSI
AutoComp	9.7	1106	28,000 PSI	10.8	1199	34,600 PSI
CFE Pistol	9.4	1081	29,100 PSI	10.5	1181	35,300 PSI
572	9.1	1075	27,400 PSI	10.3	1185	33,600 PSI
231	8.0	992	26,000 CUP	10.2	1194	37,400 CUP
HP-38	8.0	992	26,000 CUP	10.2	1194	37,400 CUP
Titegroup	8.6	1100	33,100 CUP	9.6	1175	37,700 CUP
Universal	8.5	1049	32,100 CUP	9.5	1128	36,700 CUP
244	8.1	1067	29,000 PSI	9.3	1183	34,900 PSI
Bullet: 275 GR. CPB LWFNPB			**Dia: .429″**			
Case: Remington			**Primer: Winchester LP, Large Pistol**			**Col: 1.650″**
No. 11FS	19.4	1284	30,000 PSI	22.8	1502	35,300 PSI
No. 9	15.9	1106	31,300 PSI	17.7	1242	34,800 PSI
True Blue	10.8	1076	29,900 PSI	12.0	1195	33,200 PSI
Bullet: 280 GR. SFT JHP			**Dia: .430″**			
Case: Winchester			**Primer: Remington 2 1/2, Large Pistol**			**Col: 1.700″**
IMR 4227	20.0	1215	27,600 CUP	22.0	1373	37,800 CUP
Lil'Gun	18.5	1278	34,300 CUP	20.8	1384	38,400 CUP
296	18.5	1214	27,000 CUP	20.5	1342	36,100 CUP
H110	18.5	1214	27,000 CUP	20.5	1342	36,100 CUP
HS-6	11.0	1006	23,800 CUP	14.0	1251	37,400 CUP
Longshot	9.8	1076	28,400 PSI	11.0	1189	34,600 PSI
572	9.3	1034	27,200 PSI	10.6	1167	33,500 PSI
AutoComp	9.0	1005	26,600 PSI	10.2	1115	32,500 PSI
231	8.0	918	26,100 CUP	10.0	1115	37,300 CUP
HP-38	8.0	918	26,100 CUP	10.0	1115	37,300 CUP
CFE Pistol	8.7	981	28,600 PSI	9.9	1085	35,100 PSI
Universal	8.0	917	27,400 CUP	9.7	1090	38,200 CUP
Titegroup	8.6	1059	32,100 CUP	9.6	1152	37,000 CUP
244	8.0	994	26,000 PSI	9.4	1136	34,800 PSI
Bullet: 300 GR. CPB LWFNGC			**Dia: .429″**			
Case: Remington			**Primer: Winchester LP, Large Pistol**			**Col: 1.590″**
Enforcer	16.7	1225	29,600 PSI	18.5	1361	32,800 PSI
4100	16.7	1225	29,300 PSI	18.4	1347	32,300 PSI
Bullet: 300 GR. HDY XTP			**Dia: .430″**			
Case: Winchester			**Primer: Remington 2 1/2, Large Pistol**			**Col: 1.600″**
IMR 4227	18.0	1180	30,600 CUP	20.0	1312	38,600 CUP
296	18.0	1266	35,100 CUP	19.0	1325	38,800 CUP
H110	18.0	1266	35,100 CUP	19.0	1325	38,800 CUP
Lil'Gun	15.5	1168	29,600 CUP	17.7	1280	37,600 CUP
HS-6	11.0	1048	28,400 CUP	13.0	1214	37,900 CUP
231	8.0	966	29,400 CUP	10.0	1149	38,100 CUP
HP-38	8.0	966	29,400 CUP	10.0	1149	38,100 CUP
Universal	8.0	972	31,200 CUP	9.6	1113	38,200 CUP
Longshot	8.5	983	28,600 PSI	9.5	1071	34,700 PSI
AutoComp	8.0	866	26,300 PSI	9.0	927	33,500 PSI
572	7.7	930	27,200 PSI	8.9	1042	34,300 PSI
CFE Pistol	7.6	876	27,600 PSI	8.7	987	34,800 PSI
244	6.7	882	28,300 PSI	7.8	991	34,900 PSI
5744	18.0	1048	28,300 PSI	20.0	1191	31,400 PSI
Enforcer	16.2	1170	32,000 PSI	18.0	1300	35,500 PSI
4100	16.2	1170	31,700 PSI	17.9	1287	35,000 PSI
No. 9	14.8	1031	29,900 PSI	16.5	1172	33,300 PSI
No. 7	12.2	963	29,900 PSI	13.5	1095	33,100 PSI
Bullet: 300 GR. LC TC			**Dia: .431″**			
Case: Remington			**Primer: Winchester LP, Large Pistol**			**Col: 1.605″**
No. 11FS	15.4	1125	30,100 PSI	18.1	1306	35,400 PSI
True Blue	10.1	1031	29,300 PSI	11.2	1145	32,500 PSI
Bullet: 300 GR. SIE JSP			**Dia: .429″**			
Case: Remington			**Primer: Winchester LP, Large Pistol**			**Col: 1.735″**
No. 9	15.9	1018	31,300 PSI	17.7	1156	34,800 PSI
No. 7	13.6	988	31,400 PSI	15.1	1123	34,800 PSI

45 S&W (Schofield)

Barrel: 5″ Twist: 1:16″ Trim: 1.095″

Bullet: 200 GR. LRN P			**Dia: .452″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 1.430″**
Universal	6.0	773	9,100 CUP	7.0	938	13,100 CUP
231	5.2	745	8,800 CUP	6.2	877	13,000 CUP
HP-38	5.2	745	8,800 CUP	6.2	877	13,000 CUP
Titegroup	4.5	715	6,700 CUP	6.0	925	12,100 CUP
Clays	4.0	733	8,300 CUP	5.0	845	13,100 CUP
Bullet: 230 GR. LRN P			**Dia: .452″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 1.430″**
Universal	5.5	738	9,400 CUP	6.0	816	11,400 CUP
Titegroup	4.5	702	7,800 CUP	5.8	866	12,300 CUP
231	5.0	719	9,900 CUP	5.7	816	12,700 CUP
HP-38	5.0	719	9,900 CUP	5.7	816	12,700 CUP
Clays	4.0	697	9,400 CUP	4.7	783	13,600 CUP
Bullet: 250 GR. LRN P			**Dia: .452″**			
Case: Starline			**Primer: Winchester LP, Large Pistol**			**Col: 1.430″**
Universal	6.0	724	9,900 CUP	6.3	830	13,800 CUP
Titegroup	4.5	716	7,900 CUP	5.3	811	11,600 CUP
231	4.5	664	10,100 CUP	5.2	741	12,100 CUP
HP-38	4.5	664	10,100 CUP	5.2	741	12,100 CUP
Clays	4.0	674	11,000 CUP	4.2	710	12,500 CUP

45 ACP

Barrel: 5″ Twist: 1:16″ Trim: .893″

Bullet: 118 GR. PLY S ARX			**Dia: .452″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.260″**
572	8.8	1242	16,600 PSI	9.7	1349	20,200 PSI
CFE Pistol	8.4	1206	15,200 PSI	9.3	1352	20,200 PSI
AutoComp	8.2	1157	14,400 PSI	9.2	1303	20,000 PSI
Universal	7.1	1157	16,000 PSI	8.1	1291	20,200 PSI
244	6.4	1135	14,600 PSI	7.1	1260	20,100 PSI
HP-38	6.3	1105	15,200 PSI	7.0	1207	20,000 PSI
Titegroup	5.6	1126	14,100 PSI	6.5	1255	20,000 PSI
Bullet: 120 GR. LD XP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.230″**
No. 5	10.3	1135	18,900 PSI	11.5	1283	21,000 PSI
Silhouette	9.8	1181	18,900 PSI	10.9	1351	20,900 PSI
True Blue	9.2	1127	18,800 PSI	10.2	1255	20,900 PSI
Bullet: 120 GR. LD XD			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.230″**
HS-6	11.0	1132	15,300 PSI	12.8	1346	20,100 PSI
Longshot	8.8	1126	15,400 PSI	10.6	1315	20,200 PSI
AutoComp	8.8	1148	15,600 PSI	10.0	1307	19,800 PSI
572	8.0	1118	15,900 PSI	9.8	1326	20,100 PSI
CFE Pistol	7.8	1106	15,100 PSI	9.6	1304	19,500 PSI
Universal	7.8	1084	15,600 PSI	9.3	1341	20,200 PSI
231	7.0	1063	16,400 PSI	8.2	1259	20,000 PSI
244	7.0	1113	15,600 PSI	8.1	1266	19,500 PSI
Titegroup	6.0	1047	15,600 PSI	7.3	1258	19,600 PSI
Bullet: 135 GR. PLY S RNP			**Dia: .452″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.260″**
572	8.5	1177	15,700 PSI	9.4	1294	20,300 PSI
CFE Pistol	8.2	1163	15,400 PSI	9.1	1288	20,300 PSI
AutoComp	8.2	1133	15,600 PSI	9.1	1250	20,400 PSI
Universal	7.0	1059	14,400 PSI	7.9	1242	20,100 PSI
244	6.1	1043	13,700 PSI	7.0	1200	20,300 PSI
HP-38	6.0	1020	15,100 PSI	6.9	1169	20,300 PSI
Titegroup	5.6	1074	14,900 PSI	6.5	1204	20,100 PSI
Bullet: 150 GR. CEB RAPTOR			**Dia: .4515″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.200″**
HS-6	8.8	902	16,200 PSI	9.8	1038	20,100 PSI
Longshot	8.0	976	16,000 PSI	8.9	1127	19,900 PSI
572	7.3	967	15,900 PSI	8.3	1124	20,000 PSI
AutoComp	7.4	949	15,700 PSI	8.3	1091	20,000 PSI
CFE Pistol	7.2	959	15,400 PSI	8.0	1119	19,700 PSI
WSF	6.9	909	16,400 PSI	7.7	1035	20,100 PSI
Universal	6.3	856	15,000 PSI	7.0	1040	20,100 PSI
244	5.8	883	15,800 PSI	6.5	1013	20,000 PSI
HP-38	5.6	823	16,300 PSI	6.2	965	20,100 PSI
Titegroup	5.0	832	15,800 PSI	5.6	961	19,900 PSI
Bullet: 155 GR. LC SWC			**Dia: .452″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.240″**
No. 7	12.0	1076	18,200 PSI	13.3	1223	20,200 PSI
No. 5	9.0	1046	16,700 PSI	10.0	1189	18,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
True Blue	8.4	1049	18,000 PSI	9.3	1165	20,000 PSI
Silhouette	7.5	1058	17,600 PSI	8.9	1230	20,700 PSI
ZIP	6.5	1060	18,800 PSI	7.2	1178	20,900 PSI
No. 2	5.8	1004	17,600 PSI	6.8	1138	20,600 PSI
Competition	4.5	950	17,300 PSI	5.0	1056	19,200 PSI
Bullet: 155 GR. CAST LSWC			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.230″**
HS-6	9.0	988	12,000 CUP	10.0	1126	16,300 CUP
CFE Pistol	7.9	1081	14,900 PSI	8.6	1187	19,200 PSI
AutoComp	7.6	1006	13,700 CUP	8.2	1079	16,600 CUP
WSF	7.1	934	11,600 CUP	7.9	1064	15,900 CUP
244	6.5	1062	15,200 PSI	7.2	1166	19,200 PSI
Universal	6.5	1015	13,000 CUP	7.0	1135	16,700 CUP
231	6.0	998	13,400 CUP	6.7	1112	17,100 CUP
HP-38	6.0	998	13,400 CUP	6.7	1112	17,100 CUP
Titegroup	5.7	1039	14,300 CUP	6.2	1132	17,000 CUP
700-X	5.4	1004	13,500 CUP	6.0	1076	16,400 CUP
WST	4.9	919	13,100 CUP	5.4	1017	16,700 CUP
Clays	4.9	1040	16,100 CUP	5.2	1082	17,700 CUP
Titewad	4.6	1015	15,800 PSI	5.0	1082	18,800 PSI
Bullet: 160 GR. BAR TAC-XP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.256″**
No. 7	8.8	934	17,600 PSI	10.4	1082	20,700 PSI
No. 5	7.3	946	17,300 PSI	8.5	1086	20,300 PSI
HS-6	7.6	951	17,200 PSI	8.5	1048	20,000 PSI
True Blue	6.8	948	17,300 PSI	7.9	1081	20,400 PSI
Silhouette	6.7	961	17,400 PSI	7.9	1125	20,400 PSI
CFE Pistol	6.7	1034	16,900 PSI	7.6	1154	20,000 PSI
572	6.2	929	15,400 PSI	7.2	1085	19,400 PSI
AutoComp	6.7	1036	18,400 PSI	7.2	1105	20,100 PSI
WSF	6.2	972	17,400 PSI	6.8	1043	20,100 PSI
Universal	5.4	938	17,100 PSI	5.9	1047	19,500 PSI
244	5.1	971	16,700 PSI	5.5	1034	19,500 PSI
No. 2	4.7	923	17,600 PSI	5.5	1016	20,700 PSI
231	5.0	940	17,900 PSI	5.4	992	20,100 PSI
HP-38	5.0	940	17,900 PSI	5.4	992	20,100 PSI
Titegroup	4.7	970	17,100 PSI	5.1	1040	19,900 PSI
700-X	4.3	913	16,600 PSI	4.7	982	19,700 PSI
WST	4.2	895	17,200 PSI	4.6	946	19,700 PSI
Clays	3.4	833	17,100 PSI	3.9	906	20,000 PSI
Bullet: 170 GR. LD CF			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.235″**
No. 5	7.5	892	18,800 PSI	8.3	990	20,900 PSI
Silhouette	7.0	919	18,600 PSI	7.7	1040	20,700 PSI
True Blue	6.7	865	18,700 PSI	7.4	962	20,700 PSI
Bullet: 170 GR. MCB LSWC			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.130″**
No. 7	11.3	1031	18,800 PSI	12.5	1172	20,800 PSI
No. 5	8.1	945	16,000 PSI	9.0	1074	17,800 PSI
No. 2	5.9	950	17,600 PSI	6.5	1079	19,400 PSI
Bullet: 185 GR. BAR TAC-XP			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.235″**
No. 7	8.1	827	18,100 PSI	9.0	919	20,200 PSI
HS-6	7.1	862	15,600 PSI	8.0	971	20,100 PSI
Silhouette	6.2	870	17,300 PSI	7.3	1017	20,400 PSI
No. 5	6.5	813	18,300 PSI	7.2	903	20,400 PSI
True Blue	5.9	857	17,200 PSI	7.0	965	20,200 PSI
Longshot	6.0	848	13,400 PSI	7.0	991	17,400 PSI
AutoComp	5.8	871	14,700 PSI	6.6	1008	20,400 PSI
572	5.4	841	13,600 PSI	6.4	1012	20,200 PSI
CFE Pistol	5.5	860	14,000 PSI	6.3	1005	19,900 PSI
Universal	5.4	839	15,000 PSI	6.1	997	20,100 PSI
244	4.7	836	16,300 PSI	5.3	931	20,200 PSI
ZIP	4.8	803	18,000 PSI	5.3	892	20,000 PSI
231	4.4	773	14,000 PSI	5.1	870	19,800 PSI
Titegroup	4.3	815	15,100 PSI	5.0	940	19,800 PSI
No. 2	4.5	770	18,200 PSI	5.0	856	20,300 PSI
Bullet: 185 GR. MBC LSWC			**Dia: .452″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.230″**
No. 7	10.3	969	15,300 PSI	11.6	1090	19,400 PSI
HS-6	8.5	926	14,600 PSI	9.7	1071	19,400 PSI
No. 5	8.6	944	14,700 PSI	9.7	1059	19,400 PSI
Longshot	8.0	1019	15,100 PSI	9.1	1147	19,700 PSI
Silhouette	8.1	999	14,900 PSI	9.1	1124	19,400 PSI
572	7.6	1014	15,400 PSI	8.6	1140	20,000 PSI
True Blue	7.6	943	15,500 PSI	8.5	1039	19,800 PSI
CFE Pistol	7.3	993	15,100 PSI	8.3	1118	19,500 PSI
AutoComp	7.3	979	15,100 PSI	8.3	1116	19,900 PSI
WSF	6.9	914	14,000 PSI	7.8	1052	19,700 PSI
Universal	6.4	956	14,400 PSI	7.3	1108	19,800 PSI
ZIP	6.2	931	14,600 PSI	7.0	1051	19,500 PSI
244	5.8	938	14,900 PSI	6.7	1057	19,500 PSI
231	5.6	897	15,400 PSI	6.3	1001	19,600 PSI
HP-38	5.6	897	15,400 PSI	6.3	1001	19,600 PSI
No. 2	5.2	878	14,700 PSI	6.0	998	20,200 PSI
Titegroup	5.3	935	15,500 PSI	6.0	1039	19,900 PSI
700-X	5.1	918	15,800 PSI	5.9	1024	19,900 PSI
Clays	4.6	887	14,100 PSI	5.3	1004	19,600 PSI
WST	4.5	851	15,500 PSI	5.1	932	19,700 PSI
Bullet: 185 GR. REM GSBR			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.225″**
No. 7	10.1	929	17,600 PSI	11.9	1095	20,700 PSI
No. 5	8.1	929	17,400 PSI	9.5	1088	20,500 PSI
True Blue	7.6	947	17,700 PSI	9.0	1087	20,800 PSI
Silhouette	7.6	972	17,600 PSI	8.9	1118	20,700 PSI
ZIP	6.2	948	17,500 PSI	7.3	1078	20,600 PSI
No. 2	5.5	871	17,700 PSI	6.4	1018	20,900 PSI
Bullet: 200 GR. BER FP			**Dia: .452″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.205″**
No. 7	9.9	887	17,400 PSI	11.6	1054	20,500 PSI
No. 5	7.9	870	17,500 PSI	9.3	1024	20,600 PSI
True Blue	7.7	919	17,700 PSI	9.1	1065	20,800 PSI
Silhouette	7.4	878	17,300 PSI	8.7	1034	20,300 PSI
ZIP	6.0	904	17,700 PSI	7.1	1039	20,800 PSI
No. 2	5.4	844	17,200 PSI	6.3	958	20,200 PSI
Competition	4.2	813	17,800 PSI	4.9	915	20,900 PSI
Nitro 100 NF	3.9	813	17,500 PSI	4.5	901	20,600 PSI
Bullet: 200 GR. BER HP			**Dia: .452″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.205″**
No. 7	9.4	868	17,400 PSI	11.0	1031	20,500 PSI
No. 5	7.7	892	17,000 PSI	9.1	1022	20,100 PSI
True Blue	7.4	893	17,700 PSI	8.7	1038	20,800 PSI
Silhouette	7.2	885	17,300 PSI	8.5	1034	20,300 PSI
ZIP	5.7	863	17,500 PSI	6.7	1012	20,600 PSI
No. 2	5.3	846	17,500 PSI	6.3	962	20,600 PSI
Competition	4.0	810	17,400 PSI	4.7	902	20,500 PSI
Nitro 100 NF	3.8	790	17,800 PSI	4.5	893	20,900 PSI
Bullet: 200 GR. CAST LSWC			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.225″**
HS-6	8.2	860	14,400 CUP	8.4	907	16,300 CUP
CFE Pistol	7.4	1042	15,000 PSI	8.2	1142	19,600 PSI
572	6.4	897	15,900 PSI	7.2	1018	19,600 PSI
AutoComp	6.5	843	11,500 CUP	7.2	914	15,100 CUP
WSF	6.0	870	15,200 PSI	6.7	970	19,400 PSI
Universal	5.8	889	13,900 CUP	6.3	962	16,800 CUP
244	5.1	880	15,500 PSI	5.8	992	19,800 PSI
231	4.4	771	11,000 CUP	5.6	914	16,900 CUP
HP-38	4.4	771	11,000 CUP	5.6	914	16,900 CUP
Titegroup	4.8	877	13,400 CUP	5.4	957	16,800 CUP
700-X	4.6	821	12,100 CUP	5.3	921	16,300 CUP
WST	4.4	830	15,400 PSI	5.1	910	19,900 PSI
Titewad	3.6	816	15,400 PSI	4.5	940	20,000 PSI
Clays	3.6	759	11,800 CUP	4.3	888	17,000 CUP
Bullet: 200 GR. SPR JHP			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.155″**
HS-6	8.2	868	14,000 CUP	9.0	948	16,400 CUP
Longshot	7.0	918	13,300 CUP	7.8	1013	16,900 CUP
572	6.4	859	16,500 PSI	7.4	992	20,200 PSI
CFE Pistol	6.3	877	14,900 PSI	7.2	1010	20,200 PSI
AutoComp	6.4	856	12,600 CUP	7.0	930	16,000 CUP
WSF	6.1	807	12,500 CUP	6.8	929	16,700 CUP
Universal	5.8	889	15,100 CUP	6.2	949	17,200 CUP
244	5.2	862	15,300 PSI	5.9	957	19,700 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
231	5.2	794	12,700 CUP	5.9	906	16,700 CUP
HP-38	5.2	794	12,700 CUP	5.9	906	16,700 CUP
700-X	4.8	844	14,400 CUP	5.3	911	16,700 CUP
Titegroup	4.7	812	13,700 CUP	5.2	884	16,900 CUP
WST	4.6	789	15,900 CUP	5.1	898	17,500 CUP
Clays	3.9	714	15,200 CUP	4.3	785	17,700 CUP
Titewad	3.4	680	15,200 PSI	4.0	834	19,500 PSI
Bullet: 230 GR. BER RN			**Dia: .452″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.237″**
No. 7	8.6	800	17,700 PSI	10.1	945	20,800 PSI
No. 5	7.1	784	17,100 PSI	8.3	929	20,100 PSI
True Blue	6.6	820	17,500 PSI	7.8	933	20,600 PSI
Silhouette	6.6	811	17,800 PSI	7.8	957	20,900 PSI
ZIP	5.1	778	17,500 PSI	6.0	899	20,500 PSI
No. 2	4.6	730	17,400 PSI	5.4	842	20,400 PSI
Nitro 100 NF	3.7	753	17,800 PSI	4.4	829	20,900 PSI
Bullet: 230 GR. CAST RN			**Dia: .452″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.200″**
HS-6	7.0	751	12,900 CUP	8.0	859	16,600 CUP
Longshot	6.0	747	12,000 CUP	6.8	875	16,800 CUP
AutoComp	6.1	832	13,700 CUP	6.6	896	16,400 CUP
572	5.6	846	16,200 PSI	6.4	935	20,100 PSI
WSF	5.8	832	14,500 CUP	6.3	892	16,800 CUP
CFE Pistol	5.4	816	14,600 PSI	6.2	942	20,100 PSI
Universal	4.5	703	11,400 CUP	5.4	857	16,800 CUP
231	4.3	699	12,200 CUP	5.3	834	16,900 CUP
HP-38	4.3	699	12,200 CUP	5.3	834	16,900 CUP
700-X	4.5	831	14,500 CUP	5.0	893	17,700 CUP
244	4.1	761	15,100 PSI	4.9	868	20,100 PSI
Titegroup	4.0	751	12,500 CUP	4.8	855	17,000 CUP
WST	4.0	776	14,300 CUP	4.3	812	16,400 CUP
Clays	3.5	716	13,700 CUP	4.0	793	16,800 CUP
Titewad	2.8	684	14,700 PSI	3.3	767	19,400 PSI
Bullet: 230 GR. HDY FMJ FP			**Dia: .451″**			
Case: Winchester			**Primer: Federal 150, Large Pistol**			**Col: 1.200″**
HS-6	8.0	790	14,400 CUP	8.2	825	15,400 CUP
Longshot	6.3	848	14,100 CUP	6.8	908	17,200 CUP
572	6.0	775	16,500 PSI	6.8	875	19,700 PSI
CFE Pistol	6.0	815	16,000 PSI	6.8	934	19,800 PSI
AutoComp	6.0	789	13,800 CUP	6.6	871	17,100 CUP
WSF	5.7	766	12,100 CUP	6.4	851	15,700 CUP
Universal	5.1	716	11,800 CUP	5.6	844	16,800 CUP
244	5.1	793	15,300 PSI	5.6	885	19,700 PSI
231	4.2	751	13,800 CUP	5.3	832	16,800 CUP
HP-38	4.2	751	13,800 CUP	5.3	832	16,800 CUP
WST	4.1	733	13,900 CUP	4.9	848	16,100 CUP
700-X	4.4	758	12,700 CUP	4.9	842	16,600 CUP
Titegroup	4.4	744	15,000 CUP	4.8	818	16,700 CUP
Clays	3.7	670	15,900 CUP	4.0	732	17,000 CUP
Bullet: 230 GR. REM GSBR			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.225″**
No. 7	8.5	822	17,800 PSI	10.0	943	21,000 PSI
No. 5	7.0	810	17,600 PSI	8.2	935	20,700 PSI
Silhouette	6.5	838	17,500 PSI	7.6	966	20,500 PSI
True Blue	6.2	810	17,100 PSI	7.3	909	20,100 PSI
ZIP	4.8	773	17,400 PSI	5.7	873	20,500 PSI
No. 2	4.5	742	17,400 PSI	5.3	853	20,500 PSI
Competition	3.6	716	17,700 PSI	4.2	792	20,800 PSI
Bullet: 230 GR. SIE FMJ			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.270″**
No. 5	7.4	814	17,800 PSI	8.7	939	20,900 PSI
Silhouette	7.3	868	17,800 PSI	8.1	964	19,700 PSI
True Blue	6.8	800	17,700 PSI	7.6	889	19,700 PSI
ZIP	5.6	814	18,600 PSI	6.2	904	20,700 PSI
No. 2	4.6	769	17,700 PSI	5.4	881	20,800 PSI
Competition	3.8	691	17,400 PSI	4.5	793	20,700 PSI
Bullet: 250 GR. BER FP			**Dia: .452″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.200″**
No. 7	7.3	744	17,600 PSI	8.6	845	20,700 PSI
No. 5	6.0	718	17,400 PSI	7.1	838	20,500 PSI
True Blue	5.7	731	17,800 PSI	6.7	839	20,900 PSI
Silhouette	5.6	741	17,300 PSI	6.6	866	20,400 PSI
No. 2	3.9	645	17,200 PSI	4.6	749	20,200 PSI

45 ACP +P

Barrel: 5″ Twist: 1:16″ Trim: .893″

Bullet: 160 GR. BAR TAC-XP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.256″**
No. 7	10.4	1080	21,500 PSI	10.8	1122	22,400 PSI
No. 5	8.5	1084	21,400 PSI	9.1	1144	22,800 PSI
True Blue	7.9	1078	21,600 PSI	8.4	1135	23,000 PSI
Silhouette	7.9	1123	21,200 PSI	8.3	1181	22,300 PSI
No. 2	5.5	1010	21,200 PSI	5.9	1056	22,800 PSI
Bullet: 185 GR. BER HBRN			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.270″**
No. 7	12.7	1110	21,600 PSI	13.2	1164	22,500 PSI
No. 5	10.3	1089	21,300 PSI	11.0	1163	22,700 PSI
True Blue	9.6	1098	21,500 PSI	10.2	1157	22,800 PSI
Silhouette	9.7	1123	21,700 PSI	10.2	1193	22,800 PSI
ZIP	7.6	1086	21,100 PSI	8.2	1158	22,700 PSI
No. 2	7.0	1013	21,200 PSI	7.5	1081	22,800 PSI
Competition	5.4	977	21,100 PSI	5.9	1038	22,900 PSI
Nitro 100 NF	5.3	968	21,300 PSI	5.7	1018	22,900 PSI
Bullet: 185 GR. REM GSBR			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.225″**
No. 7	11.9	1101	22,000 PSI	12.4	1148	22,900 PSI
No. 5	9.5	1084	21,300 PSI	10.1	1152	22,700 PSI
True Blue	9.0	1093	21,700 PSI	9.4	1132	22,600 PSI
Silhouette	8.9	1110	21,500 PSI	9.3	1161	22,600 PSI
ZIP	7.3	1081	21,600 PSI	7.6	1119	22,500 PSI
No. 2	6.4	1014	21,400 PSI	6.7	1066	22,500 PSI
Competition	5.1	968	21,200 PSI	5.5	1014	22,800 PSI
Nitro 100 NF	4.9	928	21,000 PSI	5.2	968	22,300 PSI
Bullet: 200 GR. BER FP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.205″**
No. 7	11.6	1052	21,700 PSI	12.2	1112	22,800 PSI
No. 5	9.3	1022	21,100 PSI	10.0	1101	22,700 PSI
True Blue	9.1	1066	22,000 PSI	9.5	1111	23,000 PSI
Silhouette	8.7	1038	21,400 PSI	9.2	1093	22,500 PSI
ZIP	7.1	1040	22,100 PSI	7.4	1078	23,000 PSI
No. 2	6.3	955	20,600 PSI	6.9	1023	22,400 PSI
Competition	4.9	918	21,500 PSI	5.2	962	22,900 PSI
Nitro 100 NF	4.5	901	21,200 PSI	4.9	945	22,800 PSI
Bullet: 230 GR. HDY XTP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.210″**
No. 7	9.2	897	21,900 PSI	9.6	940	22,800 PSI
No. 5	7.7	868	21,700 PSI	8.1	909	22,900 PSI
Silhouette	7.3	917	21,800 PSI	7.7	963	23,000 PSI
True Blue	6.8	847	21,700 PSI	7.1	883	22,600 PSI
ZIP	5.3	814	21,400 PSI	5.7	862	22,800 PSI
No. 2	5.1	797	21,600 PSI	5.3	833	22,800 PSI
Competition	3.9	749	21,500 PSI	4.2	781	22,900 PSI
Nitro 100 NF	3.8	739	21,100 PSI	4.1	783	23,000 PSI
Bullet: 250 GR. BER FP			**Dia: .451″**			
Case: Remington			**Primer: Federal 150, Large Pistol**			**Col: 1.200″**
No. 7	8.6	845	21,500 PSI	9.1	889	22,900 PSI
No. 5	7.1	833	21,600 PSI	7.5	884	23,000 PSI
Silhouette	6.6	873	21,800 PSI	7.0	918	23,000 PSI
No. 2	4.6	752	21,300 PSI	4.9	805	23,000 PSI

45 Colt

Barrel: 7.25″ Twist: 1:16″ Trim: 1.280″

Bullet: 160 GR. CAST LRNFP			**Dia: .452″**			
Case: Winchester			**Primer: Winchester LP, Large Pistol**			**Col: 1.500″**
572	8.9	1021	9,900 PSI	10.5	1192	13,600 PSI
CFE Pistol	8.9	1040	8,500 PSI	10.5	1199	11,600 PSI
Universal	6.5	798	7,400 CUP	9.5	1197	12,900 CUP
244	7.0	976	8,200 PSI	9.3	1236	12,800 PSI
231	6.5	917	7,700 CUP	9.0	1177	13,800 CUP
HP-38	6.5	917	7,700 CUP	9.0	1177	13,800 CUP
Titegroup	6.0	932	6,000 CUP	7.0	1051	9,100 CUP
700-X	4.8	857	8,000 PSI	7.0	1142	13,600 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Pistol Data

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Clays	5.0	907	7,500 CUP	6.4	1083	13,500 CUP
Bullet: 180 GR. CAST LRNFP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.540″**
572	8.5	844	7,600 PSI	10.3	1157	13,400 PSI
CFE Pistol	8.5	996	9,000 PSI	10.2	1200	13,700 PSI
Universal	6.5	791	7,100 CUP	9.2	1161	13,900 CUP
244	6.8	914	8,100 PSI	9.1	1201	13,500 PSI
231	6.0	838	6,500 CUP	8.2	1087	13,900 CUP
HP-38	6.0	838	6,500 CUP	8.2	1087	13,900 CUP
Titegroup	6.0	918	8,600 CUP	6.9	1020	10,900 CUP
700-X	5.0	850	9,100 PSI	6.5	1014	12,600 PSI
Clays	4.8	840	7,900 CUP	6.0	1016	13,800 CUP
Bullet: 200 GR. LC RNFP Dia: .452″						
Case: Remington		**Primer: Remington 2 1/2, Large Pistol**				**Col: 1.586″**
ZIP	7.2	925	11,900 PSI	8.4	1044	13,900 PSI
No. 2	6.8	898	11,800 PSI	8.0	1012	13,800 PSI
Competition	5.2	893	11,800 PSI	6.1	972	13,900 PSI
Nitro 100 NF	4.9	887	11,700 PSI	5.8	963	13,800 PSI
Bullet: 200 GR. CAST LRNFP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.600″**
572	8.3	886	9,200 PSI	9.8	1080	13,300 PSI
244	6.7	883	7,600 PSI	9.0	1150	12,900 PSI
Universal	6.4	749	5,700 CUP	8.8	1067	13,600 CUP
231	5.9	761	5,800 CUP	8.0	1002	13,800 CUP
HP-38	5.9	761	5,800 CUP	8.0	1002	13,800 CUP
Titegroup	6.5	933	9,300 CUP	7.7	1050	12,700 CUP
700-X	5.0	822	8,800 PSI	6.2	933	12,400 PSI
Clays	4.6	777	5,900 CUP	5.9	931	13,100 CUP
Bullet: 200 GR. HDY XTP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.600″**
HS-6	11.7	994	9,700 CUP	13.0	1111	13,900 CUP
CFE Pistol	8.6	927	9,300 PSI	10.0	1065	13,300 PSI
572	7.6	804	8,800 PSI	9.3	1021	13,700 PSI
Universal	8.0	915	9,600 CUP	9.0	1068	13,900 CUP
231	7.8	956	11,000 CUP	8.7	1048	14,000 CUP
HP-38	7.8	956	11,000 CUP	8.7	1048	14,000 CUP
244	7.3	915	9,400 PSI	8.5	1079	12,900 PSI
Titegroup	6.7	899	9,600 CUP	7.5	989	12,700 CUP
700-X	5.0	795	10,500 PSI	6.3	940	13,400 PSI
Bullet: 215 GR. CAST LRNFP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.650″**
CFE Pistol	8.2	919	10,100 PSI	9.5	1037	12,400 PSI
572	7.8	854	9,400 PSI	9.1	1013	13,400 PSI
Universal	6.8	777	6,300 CUP	8.6	1001	13,800 CUP
244	6.5	839	7,700 PSI	8.6	1091	13,200 PSI
231	5.9	758	5,900 CUP	7.8	965	13,500 CUP
HP-38	5.9	758	5,900 CUP	7.8	965	13,500 CUP
Titegroup	6.2	881	8,600 CUP	7.2	983	12,100 CUP
700-X	4.7	752	8,500 PSI	6.2	921	12,800 PSI
Clays	4.6	754	6,400 CUP	5.7	889	13,400 CUP
Bullet: 225 GR. CAST DEWC Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.390″**
HS-6	7.0	684	9,900 PSI	9.3	919	13,200 PSI
No. 5	7.0	684	9,900 PSI	9.3	919	13,200 PSI
Silhouette	7.0	715	9,300 PSI	9.0	959	13,800 PSI
True Blue	6.2	742	10,700 PSI	8.6	962	13,800 PSI
572	6.4	710	8,800 PSI	8.1	912	13,400 PSI
CFE Pistol	6.4	708	9,000 PSI	8.0	931	13,900 PSI
AutoComp	6.4	708	9,000 PSI	8.0	931	13,900 PSI
Universal	6.0	743	10,500 PSI	7.8	986	13,800 PSI
ZIP	5.5	689	10,000 PSI	7.5	934	13,800 PSI
244	5.2	738	10,500 PSI	7.2	971	13,800 PSI
231	5.1	677	9,500 PSI	6.9	917	13,600 PSI
HP-38	5.1	677	9,500 PSI	6.9	917	13,600 PSI
No. 2	4.9	700	10,800 PSI	6.4	899	13,900 PSI
Titegroup	4.4	708	10,200 PSI	6.0	914	13,800 PSI
700-X	4.5	699	10,500 PSI	6.0	901	13,500 PSI
Clays	4.2	706	10,000 PSI	5.5	877	13,100 PSI
Competition	4.2	721	11,100 PSI	5.1	849	13,700 PSI
Nitro 100 NF	3.9	705	11,100 PSI	4.8	836	13,700 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 225 GR. HDY FTX Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.600″**
HS-6	8.8	790	9200 PSI	10.8	987	13,200 PSI
AutoComp	7.1	750	8700 PSI	8.9	973	13,600 PSI
Universal	6.4	684	7800 PSI	8.2	916	13,200 PSI
231	5.7	663	9000 PSI	7.5	897	13,200 PSI
HP-38	5.7	663	9000 PSI	7.5	897	13,200 PSI
Titegroup	5.1	670	9700 PSI	6.4	863	13,200 PSI
700-X	5.1	738	10,200 PSI	6.4	885	13,400 PSI
Clays	4.4	538	9400 PSI	5.5	761	13,600 PSI
Bullet: 230 GR. CAST LRNFP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.580″**
Universal	6.5	761	7,600 CUP	8.1	975	13,800 CUP
244	6.0	849	9,000 PSI	7.7	1044	13,500 PSI
231	5.8	738	7,300 CUP	7.3	941	13,700 CUP
HP-38	5.8	738	7,300 CUP	7.3	941	13,700 CUP
Titegroup	5.8	857	10,300 CUP	6.5	934	13,000 CUP
700-X	4.7	771	10,100 PSI	6.0	904	13,500 PSI
Clays	4.4	734	7,600 CUP	5.4	865	13,900 CUP
Bullet: 250 GR. CAST LRNFP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.600″**
HS-6	9.0	787	7,800 CUP	10.5	946	13,300 CUP
CFE Pistol	8.4	930	10,300 PSI	9.2	1014	13,000 PSI
AutoComp	7.8	867	12,600 PSI	8.5	923	13,200 PSI
Universal	6.5	742	9,200 CUP	7.8	941	13,000 CUP
572	7.1	851	11,800 PSI	7.6	898	13,600 PSI
244	6.1	807	9,400 PSI	7.4	972	13,400 PSI
231	5.8	785	9,100 CUP	7.1	916	13,900 CUP
HP-38	5.8	785	9,100 CUP	7.1	916	13,900 CUP
Titegroup	5.0	716	7,600 CUP	6.2	881	13,000 CUP
700-X	4.8	765	11,300 PSI	5.7	856	13,200 PSI
Clays	4.2	713	8,500 CUP	5.1	817	13,400 CUP
Bullet: 250 GR. HDY XTP Dia: .452″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.595″**
HS-6	9.7	743	9,700 CUP	10.8	862	13,500 CUP
CFE Pistol	8.0	832	10,400 PSI	8.8	915	13,300 PSI
Universal	7.5	705	10,300 CUP	8.5	856	14,000 CUP
AutoComp	7.7	757	12,200 PSI	8.4	839	13,500 PSI
231	6.5	692	10,500 CUP	7.3	797	14,000 CUP
HP-38	6.5	692	10,500 CUP	7.3	797	14,000 CUP
572	6.7	692	11,900 PSI	7.1	742	13,400 PSI
244	6.5	737	11,400 PSI	7.1	845	13,300 PSI
Titegroup	5.5	739	9,700 CUP	6.3	830	12,700 CUP
700-X	4.0	539	10,200 PSI	5.2	710	13,200 PSI
Bullet: 255 GR. LC SWC Dia: .452″						
Case: Remington		**Primer: Remington 2 1/2, Large Pistol**				**Col: 1.600″**
5744	17.6	922	12,600 PSI	19.5	1011	14,000 PSI
No. 5	8.2	818	11,400 PSI	9.6	936	13,400 PSI
Silhouette	8.1	826	11,900 PSI	9.5	953	14,000 PSI
True Blue	7.5	852	11,900 PSI	8.8	954	14,000 PSI
ZIP	6.0	796	11,800 PSI	7.1	898	13,900 PSI
No. 2	5.9	790	11,600 PSI	7.0	888	13,800 PSI
Competition	4.3	749	11,500 PSI	5.1	820	13,700 PSI
Nitro 100 NF	4.1	730	11,500 PSI	4.9	802	13,800 PSI
Bullet: 260 GR. SPR JHP Dia: .451″						
Case: Winchester		**Primer: Winchester LP, Large Pistol**				**Col: 1.595″**
HS-6	9.7	759	10,600 CUP	10.7	865	14,000 CUP
CFE Pistol	8.1	832	10,900 PSI	8.8	916	13,200 PSI
AutoComp	7.4	728	11,800 PSI	8.0	770	13,500 PSI
Universal	7.0	661	9,400 CUP	8.0	813	14,000 CUP
231	6.5	722	12,000 CUP	7.1	787	14,000 CUP
HP-38	6.5	722	12,000 CUP	7.1	787	14,000 CUP
244	6.3	737	10,600 PSI	7.0	798	13,300 PSI
Titegroup	5.5	661	8,300 CUP	6.3	797	12,500 CUP
700-X	4.0	523	10,000 PSI	5.2	714	12,500 PSI
Bullet: 300 GR. LC FP Dia: .452″						
Case: Remington		**Primer: Remington 2 1/2, Large Pistol**				**Col: 1.566″**
5744	13.4	741	11,700 PSI	15.8	853	13,800 PSI
Silhouette	6.7	729	11,800 PSI	7.9	835	13,900 PSI
No. 5	6.6	723	11,200 PSI	7.8	818	13,200 PSI
True Blue	6.3	751	11,900 PSI	7.4	838	14,000 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
ZIP	4.9	675	11,400 PSI	5.7	759	13,300 PSI
No. 2	4.7	670	11,700 PSI	5.6	749	14,000 PSI
Competition	3.4	629	11,500 PSI	4.0	685	13,500 PSI
Nitro 100 NF	3.3	602	11,400 PSI	3.8	662	13,100 PSI

Bullet: 300 GR. SIE JFP Dia: .452″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.670″

HS-6	9.0	616	9,600 CUP	10.0	730	13,700 CUP
572	6.8	548	11,500 PSI	7.5	689	12,800 PSI
AutoComp	6.9	598	10,000 PSI	7.3	663	12,700 PSI
Universal	6.6	593	11,200 CUP	7.3	700	13,700 CUP
CFE Pistol	6.2	579	11,600 PSI	7.2	710	13,800 PSI
244	5.6	535	10,300 PSI	6.3	664	13,200 PSI
Titegroup	5.2	578	11,300 CUP	5.8	682	12,900 CUP

45 COLT (RUGER, FREEDOM ARMS & T/C ONLY)

Barrel: 7.25″ Twist: 1:16″ Trim: 1.280″

Bullet: 225 GR. BAR XPB Dia: .451″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.600″

IMR 4227	20.9	1077	19,900 CUP	24.9	1312	29,800 CUP
296	23.1	1344	26,200 CUP	24.0	1410	29,300 CUP
H110	23.1	1344	26,200 CUP	24.0	1410	29,300 CUP
Lil'Gun	22.3	1377	22,900 CUP	23.7	1476	30,200 CUP
Longshot	10.5	1140	21,800 CUP	12.2	1305	30,500 CUP
Titegroup	7.0	1011	19,400 CUP	9.0	1207	29,800 CUP

Bullet: 225 GR. HDY FTX Dia: .452″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.700″

Lil'Gun	26.5	1551	28,500 PSI	27.5	1594	30,100 PSI
296	26.2	1493	26,600 PSI	27.2	1542	29,900 PSI
H110	26.2	1493	26,600 PSI	27.2	1542	29,900 PSI
IMR 4227	20.6	1146	20,200 PSI	25.7	1383	30,400 PSI
Longshot	11.7	1221	21,400 PSI	13.2	1351	28,400 PSI
Titegroup	7.8	1058	19,700 PSI	9.8	1242	29,400 PSI

Bullet: 240 GR. SIE JHC Dia: .452″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.600″

H110	27.2	1483	27,900 CUP	28.0	1532	30,000 CUP
Lil'Gun	27.0	1431	23,800 CUP	27.8	1489	29,200 CUP
H4227	20.0	1169	20,100 CUP	26.0	1413	30,000 CUP
Longshot	12.3	1179	21,900 CUP	13.7	1292	29,200 CUP
Titegroup	8.0	1028	19,000 CUP	10.0	1157	29,100 CUP

Bullet: 250 GR. HDY XTP Dia: .452″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.600″

H110	25.7	1398	27,000 CUP	26.5	1455	29,800 CUP
Lil'Gun	23.5	1331	25,800 CUP	25.5	1410	29,800 CUP
H4227	20.0	1150	23,500 CUP	24.6	1343	30,300 CUP
Longshot	12.0	1129	22,100 CUP	13.4	1252	29,900 CUP
Titegroup	8.0	983	21,100 CUP	9.5	1124	29,100 CUP

Bullet: 260 GR. NOS PART Dia: .451″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.650″

H110	23.5	1351	27,700 CUP	24.0	1374	30,100 CUP
Lil'Gun	19.0	1196	24,500 CUP	21.0	1312	30,000 CUP
Longshot	11.5	1068	24,500 CUP	12.7	1188	30,000 CUP
Titegroup	8.0	945	21,900 CUP	9.3	1065	28,800 CUP

Bullet: 300 GR. SPR JFP Dia: .451″
Case: Winchester Primer: Winchester LP, Large Pistol Col: 1.650″

H4227	19.0	1051	23,600 CUP	22.3	1202	29,900 CUP
H110	21.8	1191	26,700 CUP	22.2	1198	30,100 CUP
Lil'Gun	18.0	1140	24,500 CUP	20.2	1203	29,800 CUP
Longshot	11.2	1005	21,100 CUP	12.5	1136	29,200 CUP
Titegroup	7.5	851	20,400 CUP	9.0	1004	28,500 CUP

Bullet: 300 GR. LC FP Dia: .452″
Case: Remington Primer: Remington 2 1/2, Large Pistol Col: 1.566″

5744	19.4	1021	24,700 PSI	22.8	1182	29,000 PSI
No. 11FS	19.4	1146	25,000 PSI	22.8	1353	29,400 PSI
Enforcer	17.9	1105	24,700 PSI	21.0	1322	29,000 PSI
4100	17.9	1105	24,900 PSI	20.8	1307	29,000 PSI
No. 9	16.0	1127	24,700 PSI	18.8	1281	29,000 PSI
TCM	15.6	1093	24,100 PSI	18.4	1277	28,400 PSI
No. 7	12.1	1007	24,200 PSI	14.3	1164	28,600 PSI
No. 5	10.1	999	25,200 PSI	11.8	1141	29,400 PSI
True Blue	9.4	992	25,300 PSI	11.1	1120	29,900 PSI
Silhouette	9.4	965	24,900 PSI	11.0	1111	29,100 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
ZIP	7.6	936	24,600 PSI	8.9	1063	28,800 PSI
No. 2	7.2	899	25,200 PSI	8.5	1016	29,700 PSI
Competition	5.5	824	25,300 PSI	6.5	914	29,900 PSI
Nitro 100 NF	5.5	835	25,300 PSI	6.5	935	29,900 PSI

454 CASULL

Barrel: 9.375″ Twist: 1:24″ Trim: 1.380″

Bullet: 240 GR. FA HP Dia: .452″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.765″

296	36.0	1923	38,800 CUP	38.2	2065	51,300 CUP
H110	36.0	1923	38,800 CUP	38.2	2065	51,300 CUP
Lil'Gun	35.0	1952	39,800 CUP	38.0	2033	43,100 CUP
H4227	29.0	1512	22,300 CUP	34.0C	1834	43,300 CUP

Bullet: 240 GR. SIE JHC Dia: .452″
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.735″

No. 9	28.8	1678	42,400 PSI	32.0	1884	47,100 PSI
Enforcer	28.8	1656	38,900 PSI	32.0	1840	43,300 PSI
No. 11FS	28.6	1639	38,300 PSI	31.8	1822	42,600 PSI
5744	27.9	1363	27,700 PSI	31.0	1484	30,800 PSI
True Blue	19.8	1496	47,900 PSI	22.0	1662	53,200 PSI
HS-6	15.5	1360	27,100 CUP	17.5	1508	36,600 CUP
Longshot	14.0	1375	23,800 CUP	16.0	1541	36,200 CUP
Universal	10.2	1212	24,400 CUP	11.5	1325	37,500 CUP
Titegroup	10.0	1214	24,500 CUP	11.0	1309	34,700 CUP

Bullet: 250 GR. BAR X Dia: .451″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.780″

H4227	26.0	1580	40,800 CUP	28.5C	1685	50,000 CUP
296	27.5	1725	45,100 CUP	28.5	1785	52,300 CUP
H110	27.5	1725	45,100 CUP	28.5	1785	52,300 CUP
Lil'Gun	26.0	1620	30,100 CUP	28.0	1738	41,700 CUP

Bullet: 250 GR. NOS JHP Dia: .451″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.700″

HS-6	15.0	1295	25,400 CUP	17.0	1428	34,600 CUP
Longshot	14.5	1377	26,400 CUP	15.5	1492	36,100 CUP
Universal	10.8	1221	25,700 CUP	12.0	1290	35,300 CUP
Titegroup	9.7	1193	24,600 CUP	11.2	1298	36,000 CUP

Bullet: 260 GR. FA FP Dia: .452″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.765″

296	34.0	1817	37,100 CUP	36.0	1954	51,600 CUP
H110	34.0	1817	37,100 CUP	36.0	1954	51,600 CUP
Lil'Gun	33.4	1744	28,800 CUP	35.5	1895	37,900 CUP
H4227	28.0	1421	19,000 CUP	33.0C	1762	42,100 CUP

Bullet: 260 GR. NOS PART Dia: .452″
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.735″

Enforcer	27.0	1575	48,200 PSI	30.0	1750	53,500 PSI
No. 11FS	26.8	1559	47,400 PSI	29.8	1733	52,700 PSI

Bullet: 260 GR. SPR JHP Dia: .451″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.675″

HS-6	14.5	1252	25,000 CUP	16.8	1420	36,400 CUP
Longshot	14.0	1353	28,200 CUP	15.0	1443	36,600 CUP
Universal	10.3	1157	25,500 CUP	11.5	1245	34,900 CUP
Titegroup	9.5	1159	25,200 CUP	11.0	1270	35,900 CUP

Bullet: 300 GR. FA FP Dia: .452″
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.775″

H4227	27.0	1541	41,100 CUP	31.0C	1702	52,400 CUP
Lil'Gun	29.0	1666	39,800 CUP	31.0	1746	45,000 CUP
296	28.5	1618	44,200 CUP	30.0	1716	53,700 CUP
H110	28.5	1618	44,200 CUP	30.0	1716	53,700 CUP

Bullet: 300 GR. HDY XTP Dia: .452″
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.765″

1680	30.2	1403	44,700 PSI	33.5	1594	49,600 PSI
No. 9	24.8	1494	50,000 PSI	27.5	1691	55,400 PSI
5744	23.4	1134	29,400 PSI	26.0	1275	32,600 PSI
True Blue	16.7	1278	48,400 PSI	18.5	1420	53,600 PSI

Bullet: 300 GR. NOS PART Dia: .452″
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.750″

Enforcer	25.2	1463	46,300 PSI	28.0	1625	51,400 PSI
No. 11FS	25.0	1448	45,600 PSI	27.8	1609	50,600 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 325 GR. CPB LFN PB Dia: .452″						
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.760″						
296	25.2	1345	19,700 CUP	26.0	1511	34,300 CUP
H110	25.2	1345	19,700 CUP	26.0	1511	34,300 CUP
H4227	24.7	1389	30,300 CUP	25.5C	1452	36,900 CUP
Lil'Gun	23.2	1468	33,200 CUP	24.0	1526	38,900 CUP
Bullet: 325 GR. SFT HP Dia: .451″						
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.750″						
296	23.0	1379	36,800 CUP	26.0	1545	52,600 CUP
H110	23.0	1379	36,800 CUP	26.0	1545	52,600 CUP
H4227	23.0	1323	42,600 CUP	25.5	1460	52,600 CUP
Lil'Gun	21.0	1395	41,400 CUP	24.0	1558	52,600 CUP
Bullet: 335 GR. CPB LFN GC Dia: .452″						
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.770″						
296	23.0	1321	22,200 CUP	26.0	1531	41,600 CUP
H110	23.0	1321	22,200 CUP	26.0	1531	41,600 CUP
H4227	23.0	1306	30,000 CUP	25.5	1460	42,800 CUP
Lil'Gun	21.0	1377	34,000 CUP	24.0	1517	44,200 CUP
Bullet: 335 GR. CPB LWLNGC Dia: .452″						
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.760″						
Enforcer	23.4	1377	48,000 PSI	26.0	1530	53,400 PSI
No. 11FS	23.2	1363	47,300 PSI	25.8	1515	52,600 PSI
True Blue	16.2	1256	48,100 PSI	18.0	1395	53,400 PSI
Bullet: 360 GR. CPB LFN GC Dia: .452″						
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.760″						
H4227	21.0	1205	31,000 CUP	24.0	1406	48,300 CUP
296	21.0	1265	24,000 CUP	24.0	1447	43,400 CUP
H110	21.0	1265	24,000 CUP	24.0	1447	43,400 CUP
Lil'Gun	20.0	1330	38,000 CUP	23.0	1477	48,200 CUP
Bullet: 360 GR. CPB LWLNGC Dia: .452″						
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.770″						
No. 11FS	22.5	1299	42,700 PSI	26.4	1525	50,200 PSI
True Blue	12.5	1075	37,100 PSI	16.0	1262	47,500 PSI
Bullet: 395 GR. CPB LFN GC Dia: .452″						
Case: Freedom Arms Primer: Winchester SR, Small Rifle Col: 1.770″						
H4227	18.0	1076	29,600 CUP	21.0	1269	48,300 CUP
296	18.5	1169	27,200 CUP	21.0	1309	43,200 CUP
H110	18.5	1169	27,200 CUP	21.0	1309	43,200 CUP
Lil'Gun	17.5	1212	40,100 CUP	20.0	1331	47,100 CUP
Bullet: 395 GR. CPB LWLNGC Dia: .452″						
Case: Hornady Primer: CCI 400, Small Rifle Col: 1.770″						
No. 11FS	19.4	1180	41,600 PSI	22.9	1364	49,000 PSI
Enforcer	19.8	1193	43,500 PSI	22.0	1325	48,300 PSI

460 S&W MAGNUM

Barrel: 10.743″ Twist: 1:20″ Trim: 1.790″

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
Bullet: 225 GR. BAR X Dia: .451″						
Case: Starline Primer: Winchester LRM Col: 2.110″						
296	39.0	2045	39,400 PSI	42.0	2243	51,800 PSI
H110	39.0	2045	39,400 PSI	42.0	2243	51,800 PSI
H4227	37.0	2007	42,100 PSI	41.0C	2191	54,400 PSI
Bullet: 240 GR. HDY XTP MAG Dia: .452″						
Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.188″						
1680	45.0	1713	48,000 PSI	50.0	1985	53,300 PSI
296	45.0	2084	43,600 PSI	48.5	2254	52,100 PSI
H110	45.0	2084	43,600 PSI	48.5	2254	52,100 PSI
Enforcer	42.0	1936	53,200 PSI	47.0	2195	59,500 PSI
4100	41.4	1895	52,800 PSI	46.0	2145	58,700 PSI
5744	40.0	1836	52,900 PSI	44.0	2035	58,200 PSI
H4227	40.0	2018	43,200 PSI	45.0C	2198	51,800 PSI
No. 9	34.0	1820	53,100 PSI	38.0	2000	59,300 PSI
Bullet: 250 GR. BAR X Dia: .451″						
Case: Starline Primer: Winchester LRM Col: 2.200″						
Lil'Gun	39.0	1945	41,400 PSI	42.0	2044	43,600 PSI
296	39.0	1985	43,500 PSI	41.5	2133	56,800 PSI
H110	39.0	1985	43,500 PSI	41.5	2133	56,800 PSI
H4227	36.0	1938	45,700 PSI	40.0C	2074	57,200 PSI
Bullet: 260 GR. NOS PART Dia: .451″						
Case: Starline Primer: Winchester LRM Col: 2.175″						
296	41.0	1959	41,600 PSI	46.0	2178	54,000 PSI
H110	41.0	1959	41,600 PSI	46.0	2178	54,000 PSI
Lil'Gun	43.0	1971	39,200 PSI	46.0	2080	43,400 PSI
1680	41.5	1628	46,500 PSI	46.0	1860	51,500 PSI
H4227	38.0	1939	45,000 PSI	43.0C	2098	51,300 PSI
Enforcer	38.3	1895	52,200 PSI	42.5	2092	57,900 PSI
4100	36.9	1843	52,400 PSI	41.0	2048	58,200 PSI
5744	36.0	1685	49,500 PSI	40.0	1880	55,000 PSI
No. 9	31.5	1740	53,100 PSI	35.0	1895	59,000 PSI
Bullet: 265 GR. SFT HP Dia: .451″						
Case: Starline Primer: Winchester LRM Col: 2.180″						
296	41.0	1932	43,300 PSI	46.5	2183	56,400 PSI
H110	41.0	1932	43,300 PSI	46.5	2183	56,400 PSI
Lil'Gun	43.0	1988	40,800 PSI	46.5	2118	45,900 PSI
H4227	38.0	1940	44,800 PSI	43.5C	2109	53,100 PSI
Bullet: 300 GR. HDY XTP MAG Dia: .452″						
Case: Starline Primer: Winchester LRM Col: 2.160″						
CFE BLK	45.2	1682	30,600 PSI	50.0C	1874	40,900 PSI
Lil'Gun	40.0	1970	46,300 PSI	44.0	2067	53,600 PSI
296	38.0	1825	43,200 PSI	42.5	2034	56,100 PSI
H110	38.0	1825	43,200 PSI	42.5	2034	56,100 PSI
H4227	36.0	1852	49,000 PSI	40.0C	1988	57,000 PSI
Bullet: 300 GR. NOS PART Dia: .452″						
Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.187″						
Enforcer	35.6	1855	49,500 PSI	39.8	2042	55,400 PSI
4100	35.1	1820	52,000 PSI	39.0	2042	57,800 PSI
Bullet: 300 GR. SIE JSP Dia: .452″						
Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.208″						
1680	40.5	1590	51,300 PSI	45.0	1810	57,000 PSI
5744	34.0	1590	51,700 PSI	38.0	1785	57,800 PSI
No. 9	30.0	1620	53,800 PSI	34.0	1790	61,000 PSI
Bullet: 325 GR. SFT HP Dia: .452″						
Case: Starline Primer: Winchester LRM Col: 2.175″						
CFE BLK	42.8	1672	33,600 PSI	47.0C	1810	40,600 PSI
H4198	37.0	1556	36,200 PSI	41.0C	1695	42,500 PSI
Lil'Gun	36.0	1769	44,500 PSI	41.0	1955	55,600 PSI
296	35.0	1749	46,300 PSI	39.0	1907	56,800 PSI
H110	35.0	1749	46,300 PSI	39.0	1907	56,800 PSI
H4227	33.0	1716	46,700 PSI	37.0	1859	57,300 PSI
Bullet: 335 GR. CPB LWLNGC Dia: .452″						
Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.181″						
1680	38.0	1500	54,000 PSI	42.0	1684	59,700 PSI
No. 11FS	33.3	1572	51,000 PSI	39.2	1863	60,000 PSI
5744	32.0	1500	52,300 PSI	36.5	1710	59,600 PSI
4100	31.0	1520	53,900 PSI	34.5	1675	60,000 PSI
No. 9	28.0	1510	54,200 PSI	31.5	1660	61,000 PSI
Bullet: 335 GR. CPB WLN GC Dia: .452″						
Case: Starline Primer: Winchester LRM Col: 2.180″						
CFE BLK	44.1	1673	30,300 PSI	49.0C	1883	39,800 PSI
Lil'Gun	39.0	1834	45,000 PSI	41.5	1919	49,300 PSI
296	38.0	1790	46,100 PSI	41.0	1917	55,800 PSI
H110	38.0	1790	46,100 PSI	41.0	1917	55,800 PSI
H4227	33.0	1719	50,000 PSI	37.5	1849	55,700 PSI
Titegroup	15.0	1333	46,800 PSI	17.5	1446	55,800 PSI
Bullet: 360 GR. CPB LWLNGC Dia: .452″						
Case: Hornady Primer: Winchester LR, Large Rifle Col: 2.199″						
1680	36.0	1400	52,400 PSI	39.5	1600	57,500 PSI
No. 11FS	31.5	1533	50,900 PSI	37.1	1775	59,900 PSI
5744	31.5	1480	53,800 PSI	35.0	1640	59,800 PSI
4100	29.7	1450	53,200 PSI	33.0	1595	59,100 PSI
No. 9	27.0	1450	54,400 PSI	30.0	1580	60,400 PSI
Bullet: 360 GR. CPB WLN GC Dia: .452″						
Case: Starline Primer: Winchester LRM Col: 2.190″						
CFE BLK	41.8	1599	30,000 PSI	46.0C	1803	39,600 PSI
H4198	37.0	1531	38,200 PSI	40.0C	1644	43,200 PSI
Lil'Gun	36.0	1752	45,100 PSI	40.0	1882	52,600 PSI
296	35.0	1713	47,600 PSI	38.0	1836	56,900 PSI
IMR 4198	34.0	1433	34,600 PSI	37.0C	1538	38,800 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
H110	35.0	1713	47,600 PSI	38.0	1836	56,900 PSI
H4227	31.0	1632	49,500 PSI	35.5	1776	56,500 PSI
Titegroup	13.0	1208	40,300 PSI	15.6	1340	55,700 PSI

Bullet: 395 GR. CPB WLN GC Dia: .452″
Case: Starline Primer: Winchester LRM Col: 2.185″

CFE BLK	40.1	1631	35,700 PSI	44.0C	1747	42,200 PSI
H4198	35.0	1484	40,000 PSI	38.0C	1596	46,600 PSI
Lil'Gun	33.0	1665	47,200 PSI	36.8	1796	56,400 PSI
IMR 4198	32.0	1372	35,200 PSI	35.0C	1486	41,500 PSI
296	30.0	1553	45,300 PSI	34.0	1693	55,700 PSI
H110	30.0	1553	45,300 PSI	34.0	1693	55,700 PSI
H4227	28.0	1516	48,700 PSI	32.0	1647	56,600 PSI
Titegroup	12.0	1138	41,000 PSI	14.6	1255	55,200 PSI

480 RUGER

Barrel: 7.5″ Twist: 1:18″ Trim: 1.275″

Bullet: 275 GR. BAR XPB Dia: .475″
Case: Starline Primer: Winchester LP, Large Pistol Col: 1.695″

Enforcer	23.4	1364	32,600 PSI	26.0	1515	36,200 PSI
No. 9	22.5	1360	36,500 PSI	25.0	1511	40,600 PSI
No. 7	17.1	1290	41,800 PSI	19.0	1433	46,400 PSI

Bullet: 275 GR. SPR GDHP Dia: .475″
Case: Starline Primer: Winchester LP, Large Pistol Col: 1.640″

Enforcer	26.7	1267	39,300 PSI	29.7	1385	43,800 PSI
4100	26.7	1267	39,400 PSI	29.6	1379	43,600 PSI
No. 9	23.4	1260	40,500 PSI	26.0	1377	45,000 PSI

Bullet: 325 GR. HDY XTP Dia: .475″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.620″

H4227	24.0	1295	32,600 PSI	27.2	1477	45,600 PSI
296	25.0	1416	37,300 PSI	27.0	1518	44,900 PSI
H110	25.0	1416	37,300 PSI	27.0	1518	44,900 PSI
Lil'Gun	22.5	1416	39,300 PSI	25.1	1525	45,200 PSI
Enforcer	22.9	1372	39,000 PSI	25.4	1524	43,300 PSI
4100	22.7	1358	38,400 PSI	25.2	1509	42,600 PSI
No. 9	21.5	1300	41,500 PSI	23.5	1450	45,400 PSI
No. 7	17.0	1280	40,600 PSI	19.0	1430	45,400 PSI
Longshot	13.0	1217	38,800 PSI	14.5	1330	47,000 PSI
Titegroup	9.0	1016	34,900 PSI	10.7	1158	46,200 PSI

Bullet: 355 GR. BTB LFN GC Dia: .476″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.630″

IMR 4227	25.0	1363	38,500 PSI	28.0C	1485	46,500 PSI
296	26.0	1415	34,700 PSI	27.0	1464	38,400 PSI
H110	26.0	1415	34,700 PSI	27.0	1464	38,400 PSI
Lil'Gun	24.0	1395	34,400 PSI	26.5	1531	44,300 PSI

Bullet: 370 GR. CPB LFNPB Dia: .475″
Case: Starline Primer: Winchester LP, Large Pistol Col: 1.660″

Enforcer	21.3	1284	38,100 PSI	23.7	1427	42,400 PSI
4100	21.2	1271	37,600 PSI	23.5	1413	41,800 PSI
No. 9	19.0	1220	40,600 PSI	21.0	1320	44,900 PSI
No. 7	15.2	1180	40,700 PSI	17.2	1300	46,000 PSI

Bullet: 370 GR. CPB LFP Dia: .475″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.640″

H4227	22.5	1248	32,800 PSI	26.0C	1427	45,900 PSI
296	24.0	1348	33,400 PSI	26.0	1454	41,500 PSI
H110	24.0	1348	33,400 PSI	26.0	1454	41,500 PSI
Lil'Gun	22.0	1354	34,300 PSI	26.0	1539	46,800 PSI
Longshot	12.0	1162	36,300 PSI	13.8	1272	45,800 PSI
Titegroup	9.0	1047	36,300 PSI	10.3	1137	45,800 PSI

Bullet: 400 GR. HDY XTP Dia: .475″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.620″

H4227	18.0	1026	31,600 PSI	21.0	1211	46,100 PSI
296	18.0	1115	34,400 PSI	20.5	1258	46,600 PSI
H110	18.0	1115	34,400 PSI	20.5	1258	46,600 PSI
Enforcer	18.5	1158	39,900 PSI	20.5	1265	44,300 PSI
4100	18.5	1158	39,900 PSI	20.5	1265	44,300 PSI
Lil'Gun	15.0	1067	34,200 PSI	18.0	1229	45,600 PSI
No. 9	17.0	1130	39,900 PSI	19.0	1240	44,600 PSI
No. 7	13.0	1050	39,200 PSI	15.0	1180	45,200 PSI
Longshot	9.5	965	37,900 PSI	11.0	1082	46,900 PSI
Titegroup	7.0	816	35,000 PSI	8.5	959	46,800 PSI

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure

Bullet: 420 GR. BTB LFN GC Dia: .476″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.640″

H4227	19.5	1125	39,100 PSI	21.3C	1214	46,400 PSI
296	19.0	1145	34,200 PSI	20.0	1203	38,700 PSI
H110	19.0	1145	34,200 PSI	20.0	1203	38,700 PSI
Lil'Gun	18.0	1157	37,000 PSI	20.0	1267	46,000 PSI
Longshot	9.8	994	37,500 PSI	11.0	1080	46,600 PSI
Titegroup	7.0	862	34,100 PSI	8.3	962	46,100 PSI

500 S&W MAGNUM

Barrel: 10″ Twist: 1:18″ Trim: 1.615″

Bullet: 275 GR. BAR XPB Dia: .500″
Case: Starline Primer: Winchester LRM Col: 2.085″

CFE BLK	46.0	1616	22,500 PSI	54.0C	1861	31,000 PSI
296	42.0	1965	43,900 PSI	45.0	2082	49,300 PSI
H110	42.0	1965	43,900 PSI	45.0	2082	49,300 PSI
H4227	40.0	1891	41,000 PSI	44.0	2047	48,400 PSI
Lil'Gun	40.5	1977	41,100 PSI	44.0	2137	50,800 PSI
Longshot	20.0	1594	35,000 PSI	24.5	1824	48,900 PSI
Titegroup	11.0	1170	22,800 PSI	20.0	1707	50,300 PSI

Bullet: 300 GR. HDY FTX Dia: .500″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 2.175″

1680	48.5	1661	31,500 PSI	53.9	1852	35,000 PSI
No. 11FS	43.1	1849	47,900 PSI	49.6	2095	55,100 PSI
Enforcer	41.4	1829	46,900 PSI	48.7	2130	55,200 PSI
4100	41.3	1826	46,500 PSI	48.6	2127	54,700 PSI
5744	40.8	1576	36,800 PSI	48.0	1847	43,200 PSI
No. 9	38.6	1815	47,100 PSI	45.4	2099	55,400 PSI

Bullet: 325 GR. BAR XPB Dia: .500″
Case: Starline Primer: Winchester LRM Col: 2.290″

CFE BLK	46.9	1540	22,800 PSI	54.0C	1793	31,200 PSI
296	42.0	1813	40,000 PSI	45.3	1951	48,900 PSI
H110	42.0	1813	40,000 PSI	45.3	1951	48,900 PSI
Lil'Gun	40.0	1862	43,700 PSI	44.5	2002	49,100 PSI
H4227	40.0	1788	40,700 PSI	43.0	1920	49,200 PSI
Longshot	22.5	1599	43,300 PSI	24.5	1684	49,500 PSI
Titegroup	12.0	1144	25,600 PSI	20.0	1575	50,700 PSI

Bullet: 350 GR. HDY XTP Dia: .500″
Case: Starline Primer: Winchester LRM Col: 1.985″

CFE BLK	46.0	1528	24,600 PSI	54.0C	1836	35,700 PSI
296	39.0	1712	41,500 PSI	43.0	1877	50,600 PSI
H110	39.0	1712	41,500 PSI	43.0	1877	50,600 PSI
H4227	38.0	1675	41,400 PSI	42.5	1863	49,900 PSI
Lil'Gun	35.0	1697	41,500 PSI	42.0	1912	48,100 PSI
Longshot	21.0	1482	41,400 PSI	23.0	1602	50,000 PSI
Titegroup	11.0	1032	23,100 PSI	18.5	1461	50,000 PSI

Bullet: 350 GR. SIE JHP Dia: .500″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 2.050″

1680	50.1	1651	38,800 PSI	55.7	1849	43,200 PSI
5744	43.3	1620	46,400 PSI	51.0	1892	54,600 PSI
Enforcer	39.6	1686	46,500 PSI	46.5	1916	54,600 PSI
No. 11FS	40.3	1661	47,900 PSI	46.3	1882	55,000 PSI
4100	39.3	1677	45,700 PSI	46.2	1904	53,700 PSI
No. 9	38.1	1726	49,300 PSI	42.3	1868	54,700 PSI

Bullet: 370 GR. CPB LWFNGC Dia: .501″
Case: Hornady Primer: Winchester LP, Large Pistol Col: 1.995″

1680	47.4	1628	37,400 PSI	52.7	1826	41,600 PSI
5744	41.3	1573	46,100 PSI	48.6	1833	54,200 PSI
Enforcer	37.8	1670	46,900 PSI	44.4	1898	55,100 PSI
4100	37.5	1662	46,000 PSI	44.2	1888	54,200 PSI
No. 9	35.2	1656	47,300 PSI	41.5	1874	55,800 PSI

Bullet: 375 GR. BAR XPB Dia: .500″
Case: Starline Primer: Winchester LRM Col: 2.290″

CFE BLK	41.6	1431	24,900 PSI	49.0C	1641	35,300 PSI
1680	38.0	1250	33,000 PSI	42.0	1450	36,500 PSI
No. 11FS	36.0	1544	51,000 PSI	39.9	1695	56,700 PSI
Enforcer	33.0	1475	50,200 PSI	37.5	1665	57,000 PSI
H4227	33.0	1550	38,000 PSI	36.8	1717	50,500 PSI
Lil'Gun	31.0	1605	39,700 PSI	34.0	1738	49,900 PSI
Longshot	18.0	1347	38,300 PSI	21.0	1487	49,600 PSI
Titegroup	14.0	1213	37,000 PSI	17.0	1375	50,500 PSI

NEVER EXCEED MAXIMUM LOADS

*Max loads that show an asterisk following the "C" for compressed load will not fit with standard IMR 7828. Reduce by 4%.

Powder	Starting Loads Grs	Vel	Pressure	Maximum Loads Grs	Vel	Pressure
4100	33.0	1475	50,200 PSI	37.5	1665	57,000 PSI
No. 9	29.0	1460	50,900 PSI	32.5	1650	57,000 PSI
Bullet: 400 GR. SIE JSP			**Dia: .500″**			
Case: Starline			**Primer: Winchester LRM**			**Col: 2.050″**
CFE BLK	44.2	1481	27,500 PSI	52.0C	1759	40,900 PSI
1680	45.0	1506	39,400 PSI	50.0	1699	43,800 PSI
5744	39.7	1484	46,100 PSI	46.7	1743	54,300 PSI
Enforcer	38.3	1632	49,600 PSI	42.0	1749	54,400 PSI
4100	35.5	1554	45,400 PSI	41.8	1738	53,500 PSI
296	34.0	1514	38,000 PSI	40.0	1721	49,700 PSI
H110	34.0	1514	38,000 PSI	40.0	1721	49,700 PSI
H4227	36.5	1585	42,000 PSI	39.5	1698	49,100 PSI
Lil'Gun	31.0	1520	38,500 PSI	37.0	1725	49,300 PSI
Longshot	18.0	1274	36,500 PSI	22.0	1458	49,000 PSI
Titegroup	15.0	1208	39,700 PSI	17.5	1335	49,900 PSI
No. 9	31.5	1527	45,200 PSI	37.0	1669	53,100 PSI
Bullet: 410 GR. MBW LLFNGC			**Dia: .501″**			
Case: Hornady			**Primer: Winchester LP, Large Pistol**			**Col: 2.085″**
1680	47.5	1637	43,900 PSI	52.8	1813	48,800 PSI
5744	40.1	1508	46,500 PSI	47.2	1753	54,700 PSI
No. 11FS	37.1	1521	47,100 PSI	43.7	1759	55,400 PSI
Enforcer	35.1	1531	46,700 PSI	41.3	1744	54,900 PSI
4100	35.0	1527	46,400 PSI	41.1	1739	54,500 PSI
No. 9	34.9	1604	48,700 PSI	38.8	1718	54,100 PSI
Bullet: 440 GR. CPB LWFNGC			**Dia: .501″**			
Case: Hornady			**Primer: Winchester LP, Large Pistol**			**Col: 2.005″**
1680	42.7	1540	42,900 PSI	47.5	1701	47,700 PSI
5744	36.3	1425	47,100 PSI	42.7	1655	55,400 PSI
Enforcer	32.0	1512	47,700 PSI	37.6	1676	56,000 PSI
4100	31.6	1500	46,600 PSI	37.1	1661	54,700 PSI
No. 9	28.1	1463	46,700 PSI	33.0	1602	54,900 PSI
Bullet: 440 GR. CPB LGC			**Dia: .500″**			
Case: Starline			**Primer: Winchester LRM**			**Col: 2.025″**
CFE BLK	41.6	1473	28,300 PSI	49.0C	1672	36,600 PSI
H4227	34.0	1496	41,900 PSI	37.0	1609	49,400 PSI
296	34.0	1509	40,700 PSI	38.0	1654	49,900 PSI
H110	34.0	1509	40,700 PSI	38.0	1654	49,900 PSI
Lil'Gun	30.0	1483	40,200 PSI	35.0	1653	50,500 PSI
Longshot	18.5	1300	41,900 PSI	20.7	1393	50,500 PSI
Titegroup	14.5	1191	42,700 PSI	16.5	1278	50,600 PSI
Bullet: 450 GR. MBW LLFNGC			**Dia: .501″**			
Case: Hornady			**Primer: Winchester LP, Large Pistol**			**Col: 1.995″**
1680	39.4	1441	40,300 PSI	43.7	1619	44,700 PSI
5744	34.8	1374	43,600 PSI	40.9	1596	51,300 PSI
No. 11FS	33.7	1461	48,700 PSI	38.7	1661	56,000 PSI
Enforcer	31.7	1486	46,600 PSI	37.2	1661	54,700 PSI
4100	31.4	1478	45,600 PSI	36.9	1649	53,600 PSI
No. 9	27.9	1420	46,200 PSI	32.8	1592	54,300 PSI
Bullet: 500 GR. HDY SP			**Dia: .500″**			
Case: Starline			**Primer: Winchester LRM**			**Col: 2.065″**
CFE BLK	40.8	1444	36,700 PSI	48.0C	1628	51,100 PSI
H4227	30.0	1360	42,300 PSI	32.2	1436	49,300 PSI
296	31.0	1400	34,400 PSI	33.0	1482	51,900 PSI
H110	31.0	1400	34,400 PSI	33.0	1482	51,900 PSI
Lil'Gun	27.0	1356	41,700 PSI	30.0	1463	50,100 PSI
Longshot	16.0	1115	39,200 PSI	18.5	1222	50,400 PSI
Titegroup	13.0	1020	40,200 PSI	15.0	1111	50,000 PSI
Bullet: 500 GR. HDY XTP			**Dia: .500″**			
Case: Hornady			**Primer: Winchester LP, Large Pistol**			**Col: 2.070″**
1680	39.4	1405	49,300 PSI	43.7	1533	54,700 PSI
5744	33.9	1276	44,500 PSI	39.9	1503	52,300 PSI
Enforcer	28.3	1306	44,600 PSI	33.2	1466	52,300 PSI
4100	28.1	1301	43,600 PSI	33.0	1458	51,200 PSI
No. 11FS	29.6	1307	50,900 PSI	32.9	1441	56,600 PSI
No. 9	25.3	1257	43,200 PSI	29.7	1403	50,700 PSI

SHOTSHELL data

Shotshell loading data is shown in a format that provides convenient indexing of the load components and performance. Loads are listed in the following sequence:

- Gauge – largest to smallest
- Length – shortest to longest hull length
- Alphabetical order listing by hull manufacturer
- Shot Weight – lightest to heaviest
- Alphabetical order listing by primer manufacturer

For every load component set, multiple velocity levels are shown. Factory standard velocities are given to allow the handloader to duplicate their favorite offerings. Additional velocity levels may also be listed so the handloader can adjust load performance faster or slower than the standard factory loads.

A common concern with shotshell is recoil. Recoil can be controlled significantly through the use of lower shot weights and lower velocity levels. This shotshell loading data contains a number of such loads for those who want reduced recoil. Note that lower recoil loads may not function semi-automatic shotguns.

Primarily, the data for this edition was developed through the use of pressure barrels. All loads for standard U.S. cartridges adhere to the guidelines provided by the Sporting Arms and Ammunition Manufacturers' Institute (S.A.A.M.I).

Wad Chart

The following chart shows wads designed to perform as replacements for current popular models as listed in the ensuing data.

DR 16	WAA16	CB 0100-16
DR PURPLE DUSTER / DRXXL PINK	WAA12L	CB 0178-12
DR Red Duster	WAA28 - OLD	CB 1034-28
DR ORANGE DUSTER	WAA20	CB 1078-20
DR XL-1 / JAMMER XL-1 / DRA12-PINK / DR Green Duster	WAA12SL	CB 1100-12
DRA-12 / DR-XL-1 1/8 / DR118 / DR Blue Duster	WAA12	CB 1118-12
DRA-12-YELLOW	WAA12F114	CB 1114-12
	WAA12R	CB 1138-12
DRF0 / DRHF0 / DRXXL ORANGE	FED 12S0	CB 2100-12
DRF3 / DRHF3	FED 12S3	CB 2118-12
DRRT12 / DRHRT12	REM TGT 12	CB 8100-12
DRRF8 / DRHF8	REM FIG 8	CB 3118-12A
	FED 12C1	CB 3118-12AR
	LIGHTNING	CB 4100-12B
DR WJRPL	WINDJAMMER	CB 4118-12B
	WAA28HS - NEW	CB 5034-28HS
	WAA410HS	CB 5050-410HS
	WT12	CB 0118-12
DRV-12	Versalite 12G	
DRV-20	Versalite 20G	

Notes on Recoil

In physics we learned that for every force there is an equal and opposite force. In a firearm, the gases generated by burning powder push the ejecta (shot and wad) down the barrel and in turn push the shotgun in the opposite direction creating what we call recoil. According to physics, the momentum of a free recoiling firearm is equal and opposite in direction to the momentum of the ejecta and powder charge. The formula for free recoil of a firearm is:

$$\text{Recoil Energy in ft. lbs.} = \frac{(Bw\ Mv + 4700\ Pw)2}{64.348\ Gw}$$

Where Gw = the weight of the gun in pounds
Bw = weight of the ejecta (shot and wad) in pounds
Pw = powder weight in pounds
Mv = muzzle velocity in feet per second

Example: Our shooter has an 8 lb. target gun with a load using 18.0 grs. of Clays, a wad weighing 33.0 gr., shot charge of 1 1/8 oz. and giving 1200 f/s muzzle velocity. First, we must convert the ejecta weight to lbs. (1 1/8 oz. = 492.0 gr.) Dividing grains by 7000 converts to pounds.

Gw = 8 lb.
Bw = 492.0 + 33.0 = 525 = .075 lb.
7000 7000
Pw = 18 = .003 lb.
7000
Mv = 1200 ft/sec

Substituting the numbers in the formula we find the

$$\text{Recoil energy of the shooters load} = \frac{[(.075 \times 1200) + (4700 \times .003)]2}{64.348 \times 8} = 21.05\ \text{ft/lbs}$$

Unfortunately, too many shooters think that pressure has an effect on recoil. In truth, it doesn't. It is not included in the formula for calculating recoil as noted in our example. However, there are factors that effect our perception of recoil. A major factor is muzzle blast. Clean burning powders help limit muzzle blast, are quieter, and therefore seem lower in recoil.

Some people think slow burning powders produce less recoil. What they are perceiving is the longer time it takes the powder to reach peak pressure, which gives the same recoil as a faster burning powder, just over a longer period of time. Others like the faster burning powders which peak quicker, although still the same recoil, just a shorter period of recoil. Perception can be everything to a shooter, so he should shoot what he "feels" is the most comfortable. That is why Hodgdon has a complete range of powders to cover all perceptions and needs.

The only real way to lessen recoil is to lower velocities, or lessen shot charge, or both.

Q - What is a Bushing Chart?

A – Modern shotshell loaders use powder bushings to measure the desired amount of powder for a given load. A Bushing Chart shows the relationship between a powder bushing (measuring volume) and the corresponding weight of a specific smokeless powder.

Q – How are Bushing Charts produced?

A – Generating a Bushing Chart is a 2-step process:

Step #1 The internal volume of each bushing is calculated using bushing dimensions provided by the Loader manufacturer. Using the nominal density for each specific powder (provided by the powder manufacturer), volumes and corresponding charge weights are calculated.

Step #2 Using multiple powder throws, the calculated charge weights are checked and verified at set intervals with specific bushings.

Notes on Using Bushing Charts and Loading Shotshell

- **Verify Charge Weights** – The charges weights shown in Bushing Charts are guidelines – verify the charge weight of a specific bushing and powder combination on a powder scale before you start loading.
- **Powder Density** – Hodgdon Powder Bushing Charts are based on the nominal density for each specific powder. The density for each specific smokeless powder may vary from lot to lot.
- **Grain Size** – Larger grain sizes will tend to throw lighter charges while smaller grain sizes will tend to throw heavier charges.
- **Consistency** – Be consistent in the loading process. Establish a loading process and stick to it as you load.
- **Single Stage vs Progressive** – Single stage machines tend to throw heavier charge weights than progressive machines.
- **Press Attachment** – Make sure your loading machine is solidly mounted to the loading surface.
- **Research** – Hodgdon has thousands of shotshell loads available online at hodgdonreloading.com where you can identify the correct powder for your specific application.
- **Powder Hoppers** – Do not leave powder in the loader hopper for long periods of time. Powder left inside the hopper can either lose or gain moisture over time.
- **Powder Dippers** – While there are several tools available on the market today that are used to scoop powder and measure it by volume, Hodgdon does not recommend the use of these tools. Hodgdon recommends that all smokeless powder be weighed on a scale.

Lee

BUSHING #	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
0.095	12.4	16.9	12.4	12.4	10.7	10.9	18.4	18.4	12.1	17.4	12.3	19.2	15.2	18.1	21.9	19.1	23.5	22.5
0.100	13.0	17.8	13.0	13.0	11.3	11.5	19.2	19.2	12.7	18.3	13.0	20.2	16.0	19.0	23.0	20.1	24.7	23.7
0.105	13.7	18.7	13.7	13.7	11.8	12.0	20.0	20.0	13.4	19.2	13.7	21.2	16.8	20.0	24.2	21.1	26.0	24.9
0.110	14.3	19.6	14.3	14.3	12.4	12.6	20.8	20.8	14.0	20.1	14.3	22.2	17.6	21.0	25.3	22.1	27.2	26.1
0.116	15.1	20.7	15.1	15.1	13.0	13.3	21.7	21.7	14.8	21.3	15.1	23.5	18.5	22.1	26.7	23.3	28.7	27.5
0.122	15.9	21.7	15.9	15.9	13.7	14.0	22.9	22.9	15.6	22.4	15.9	24.7	19.5	23.2	28.1	24.5	30.2	28.9
0.128	16.7	22.8	16.7	16.7	14.4	14.7	24.1	24.1	16.3	23.5	16.6	25.9	20.4	24.4	29.4	25.7	31.7	30.3
0.134	17.5	23.9	17.5	17.5	15.0	15.4	25.3	25.3	17.1	24.6	17.5	27.1	21.4	25.5	30.8	26.9	33.1	31.8
0.141	18.4	25.1	18.4	18.4	15.8	16.0	26.5	26.5	18.1	25.9	18.4	28.5	22.5	26.9	32.4	28.3	34.9	33.4
0.148	19.3		19.3	19.3	16.6	16.7			19.0	27.2	19.3		23.6	28.2	34.0	29.8	36.5	35.1
0.151	19.7		19.7	19.7	16.7	17.1			19.4	27.7	19.6		24.0	28.8		30.4	37.2	
0.155	20.4		20.4	20.4	17.3	17.5			19.9	28.5	20.1		24.7	29.6	35.7	31.1	38.2	36.7
0.163	21.4		21.4	21.4	18.2	18.4			21.0	30.0	21.1		25.9	31.2	37.5	32.7	40.2	38.6
0.171	22.5		22.5	22.5	19.1	19.3			22.0	31.5	22.0		27.1	32.9	39.3	34.2	42.1	40.5
0.180	23.6		23.6	23.6	20.1	20.4			23.2	33.2	23.1		28.5	34.4	41.4	36.1	44.4	42.7
0.189					21.2	21.4			24.3	34.8	24.1		29.9	36.2	43.5	37.9	46.6	44.8
0.198	26.0		26.0	26.0	22.1	22.4			25.5	36.5	25.2		31.3	37.7	45.5	39.7	48.8	46.9

INTERNATIONAL---INTER LONGSHOT---LGSH PERFECT PATTERN---PRF PATT
TITEGROUP---TITE GRP UNIVERSAL---UNIV

Ponsness Warren

BUSHING #	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
1AX		8.8										9.9					12.0	
2AX		9.0										10.3					12.7	
3AX		9.3										10.6					13.1	
1A		9.9										11.2						13.7
2A		11.4										12.9						14.8
3A		11.5								11.8		13.1			15.3	13.0	15.0	15.6

BUSH-ING #	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
A		13.4								13.5		15.2			16.8	15.0	17.8	17.5
B		13.5					14.5	14.5		13.8		15.4			17.6	15.5	18.1	
C		14.6					15.0	15.0		14.8		16.6	12.5		18.5	16.5	19.6	
C1		15.0					16.0	16.0		15.5		17.0	13.0	16.4	19.6	17.0	20.1	
D		15.5					16.3	16.3		15.7		17.6	13.2	16.6	20.4	17.3	21.4	
D1		16.2					17.0	17.0	12.6	17.0		18.4	14.0	17.7	21.3	18.2	22.4	
E		18.1					19.4	19.4	14.1	19.0		20.6	15.7	20.1	23.5	20.7	25.2	
E1		18.8					20.0	20.0	14.6	19.8		21.3	16.2	20.8	24.0	21.6	26.5	
E2	14.7	19.8	14.7	14.7		12.9	21.3	21.3	15.2	20.9		22.5	17.2	21.9	26.1	22.8	27.0	
F	15.6	20.9	15.6	15.6		13.9	22.7	22.7	16.4	22.1		23.7	18.1	23.2	27.5	24.2	27.9	
F1	15.8	21.2	15.8	15.8		14.0	22.9	22.9	16.5	22.2		24.0	18.3	23.4	28.3	24.4		
F2	16.4	22.1	16.4	16.4		14.6	23.5	23.5	16.9	23.1		25.0		24.2		25.3		
F6		23.9										27.1	18.9					
G	17.4	24.2	17.4	17.4		15.6	24.7	24.7	18.1	23.3		27.5	20.2	25.7	31.2	26.8		
G1	17.7		17.7	17.7		15.9			18.5	24.0			20.6	26.0	32.7	27.1		
H	18.9		18.9	18.9	16.0	17.1			19.7		18.5		22.0	28.0	34.0	29.0		
I	19.6		19.6	19.6	16.7	17.6			20.3		19.3		22.8	29.0	34.4	30.0		
J	20.3		20.3	20.3	17.2	18.4			20.9		19.8		23.9	30.2	35.5	31.2		
J1	21.0		21.0	21.0	17.6	19.2			21.7		20.3		24.5	31.1	36.9	32.0		
K	21.3		21.3	21.3	17.8	19.5			22.0		20.6		24.8	31.8	37.1	32.5		
L	22.2		22.2	22.2	18.7	20.1			23.1		21.6		25.7		39.5	34.0		
M	23.4		23.4	23.4	19.7	21.5			24.6		22.5		26.8		41.2	35.7		
N	25.2		25.2	25.2	20.8	22.9					23.7		28.2			38.0		
O					21.0						24.0		28.5			38.5		
P					21.5						24.5					39.9		
Q					21.9						25.0					40.1		
R																41.8		
S																42.5		
T																45.4		

INTERNATIONAL---INTER
TITEGROUP---TITE GRP

LONGSHOT---LGSH
UNIVERSAL---UNIV

PERFECT PATTERN---PRF PATT

Hornady/Spolar

GRS	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
12.0		291							333	300	348	272					250	
13.0		300							348		363		330				259	256
13.5		309							354	309		291					266	
14.0		318							360	318	375	300	342			300	272	266
14.7							318	318	372	321								
15.0	384	327	384	384		408	324	324	378	324	390	309	354			309		
16.0	396	336	396	396	429	420	330	330	387	336	402	318	366			318	291	
16.5	402	345	402	402	435	423	336	336	393	339	408		372	330		327	300	
17.0	408		408	408	441	429	342	342	399	342	414	327	378	336	300	330		
17.4	414	354	414	414	447	435	345	345	405	348	417	330	384	339		336	303	
18.0	420	360	420	420	456	441	351	351	411	354	423	336	390	345	309	339	309	
18.5	426	366	426	426	462	447	357	357	417	360	429		393	348		345		
19.0	432	369	432	432	468	450	360	360	423	363	435	345	402	354	318	348		
19.4	435	372	435	435	474	459	363	363	426	369	438		405	357		354	318	
20.0	441	375	441	441	483	465	369	369	432	372	447	354	411	363	327	357		
20.6	450	381	450	450	489	468	375	375	441	375	453	360	417	369		363	330	
21.0	453	390	453	453	495	471	378	378	444	381	459	366	420	372	336	366		
21.5	459	393	459	459	501	474	381	381	450	384	465	369	423	378		369	333	
22.0	462	396	462	462	507	486	387	387	456	390	471	372	429	381	345	372		
22.5	468	402	468	468			390	390	459	396	477	375	432	387		378	345	
23.0	474	408	474	474			396	396	465	399	483	381	438	390	351	381		
23.5							399	399	468	405	489		441	396		384	351	
24.0	486	414	486	486			405	405	474	408	495	390	447	399	360	390	354	
24.5	489	417	489	489					477		501	393	450	402		393		
25.0	492		492	492					483		507	396	456	408	366	396	366	
26.0													468	417	375	405	372	
27.0													480	423	381	414	381	
28.0													489	429	387	423		
29.0													501	438	393	429		
30.0														444	402	435		
31.0														450	408	444		
32.0														456	414	450		
33.0														459	423	459		
34.0															429	465		

GRS	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
35.0															435	471		
36.0															441	480		
37.0															444	486		
38.0															450	492		

INTERNATIONAL---INTER
TITEGROUP---TITE GRP
LONGSHOT---LGSH
UNIVERSAL---UNIV
PERFECT PATTERN---PRF PATT

Mec

BUSH-ING #	NITRO 100 NF	PERF PATT	TITE-WAD	COMP	CLAYS	700-X	HIGH GUN	TITE-GROUP	WST	SUPER HDCP	INT'L	WIN 244	UNIV	WSF	HS-6	W572 & LSHOT	LIL'GUN	H110
7																	11.0	
8																	12.5	
9																	12.9	
10												11.1				11.0	13.4	13.5
11												11.8				11.7	13.8	14.4
12												12.5				12.4	14.8	15.4
12A												13.3			15.5	13.2	15.9	16.4
13		13.0								12.3		14.1			16.1	13.9	16.4	17.0
14		13.7					13.8	13.8		13.6		15.5			17.9	15.4	18.6	
15		14.2					14.5	14.5		14.6		16.1	12.0		18.8	16.1	19.4	
16		15.2					15.4	15.4		15.4	10.8	17.2	12.9	16.2	19.8	17.0	20.7	
17		15.8					16.2	16.2	11.9	16.1	11.4	17.8	13.5	17.0	20.7	17.8	21.4	
18		16.4					17.1	17.1	12.5	17.0	11.8	18.6	14.0	17.8	21.6	18.7	22.6	
19		17.2					18.1	18.1	13.1	17.6	12.3	19.5	14.6	18.6	22.6	19.5	23.6	
20	13.3	17.8	13.3	13.3			19.0	19.0	13.8	18.6	12.9	20.1	15.5	19.6	23.7	20.3	25.0	
21	13.9	18.7	13.9	13.9			19.7	19.7	14.3	19.3	13.3	21.2	16.0	20.4	24.7	21.2	25.9	
22	14.5	19.6	14.5	14.5		12.5	20.2	20.2	14.9	20.4	14.3	22.2	16.8	21.3	25.8	22.1	27.2	
23	15.2	20.4	15.2	15.2		13.1	21.1	21.1	15.5	21.2	14.6	23.1	17.4	22.1	26.8	23.1	28.1	
24	15.8	21.2	15.8	15.8		13.7	21.9	21.9	16.2	22.1	15.5	24.0	18.3	23.0	27.9	24.0		
25	16.2	21.9	16.2	16.2		14.3	22.7	22.7	16.8	22.8	16.0	24.8	18.9	23.8	28.9	24.8		
26	16.9	23.5	16.9	16.9		15.0	23.7	23.7	17.6	23.8	16.6	26.6	19.1	24.9	30.3	25.9		
27	17.6	23.8	17.6	17.6	14.6	15.6	24.7	24.7	18.2		17.1	27.0	20.2	25.7	31.2	26.9		
28	18.3	24.8	18.3	18.3	15.2	16.3	25.8	25.8	18.9		17.7	28.0	21.1	26.6	32.6	28.0		
29	19.0	25.6	19.0	19.0	15.9	16.9			19.5		18.3	29.0	21.7	27.6	33.6	29.0		
30	19.7	26.7	19.7	19.7	16.3	17.6			20.4		19.1	30.2	22.7	29.0	35.0	30.1		
31	20.4		20.4	20.4	16.9	18.3			21.0		19.9		23.4	30.0	36.2	31.1		
32	21.4		21.4	21.4	17.5	19.3			21.8		20.6		24.4	31.4	37.8	32.2		
33	22.2		22.2	22.2	18.2	19.7			22.6		21.2		25.2	32.4	39.0	33.3		
34	23.0		23.0	23.0	18.9	20.4			23.4		21.9		26.0		40.4	34.5		
35	23.4		23.4	23.4	19.4	21.2			24.2		22.6		26.7		41.1	35.6		
36	24.0		24.0	24.0	20.1	21.9			25.2		23.4		27.6		43.0	36.7		
37	25.3		25.3	25.3	20.7	22.7					24.2		28.7		44.4	38.0		
38					21.4						25.1		29.7		46.2	39.3		
38A					22.0						26.0					40.6		
39					22.8						26.9				47.6	42.0		
39A																		
40																		

INTERNATIONAL---INTER
TITEGROUP---TITE GRP
LONGSHOT---LGSH
UNIVERSAL---UNIV
PERFECT PATTERN---PRF PATT

12G - 2 3/4″ CHEDDITE PLASTIC SHELLS - 1 oz. Lead Shot

Powder	Primer	Wad	1180 fps Charge/Pressure	1235 fps Charge/Pressure	1290 fps Charge/Pressure	1345 fps Charge/Pressure
Nitro 100 NF	Ched. 209	GU 1225	16.8/ 8,300 PSI	18.2/ 9,700 PSI	19.5/10,900 PSI	–
Nitro 100 NF	Fio. 616	GU 1225	16.6/ 8,600 PSI	18.1/10,100 PSI	19.5/11,500 PSI	–
Perfect Pattern	CCI 209	CB 6100-12	16.6/ 5,800 PSI	17.8/ 7,000 PSI	19.1/ 8,200 PSI	20.4/ 9,400 PSI
Perfect Pattern	CCI 209	DRF0	16.6/ 6,200 PSI	18.0/ 7,400 PSI	19.4/ 8,600 PSI	20.8/ 9,800 PSI
Perfect Pattern	CCI 209	WAA12L	16.4/ 6,400 PSI	17.7/ 7,900 PSI	18.9/ 9,500 PSI	20.1/11,000 PSI
Perfect Pattern	Ched. 209	BP Spitfire	15.3/ 7,200 PSI	16.7/ 8,600 PSI	18.0/10,000 PSI	19.4/11,400 PSI
Perfect Pattern	Ched. 209	CB 6100-12	16.4/ 5,800 PSI	17.6/ 7,100 PSI	18.7/ 8,400 PSI	19.9/ 9,800 PSI
Perfect Pattern	Ched. 209	DRF0	16.1/ 6,200 PSI	17.4/ 7,500 PSI	18.8/ 8,800 PSI	20.2/10,100 PSI
Perfect Pattern	Ched. 209	WAA12L	16.0/ 6,300 PSI	17.2/ 7,900 PSI	18.5/ 9,400 PSI	19.8/11,000 PSI
Perfect Pattern	Fed. 209A	CB 6100-12	15.3/ 6,100 PSI	16.8/ 7,400 PSI	18.2/ 8,700 PSI	19.7/10,000 PSI
Perfect Pattern	Fed. 209A	DRF0	15.8/ 6,400 PSI	17.2/ 7,600 PSI	18.5/ 8,800 PSI	19.9/10,000 PSI
Perfect Pattern	Fed. 209A	WAA12L	16.5/ 6,300 PSI	17.7/ 7,900 PSI	18.9/ 9,500 PSI	20.1/11,000 PSI
Perfect Pattern	Fio. 616	BP Spitfire	15.5/ 6,900 PSI	16.9/ 8,300 PSI	18.3/ 9,800 PSI	19.7/11,300 PSI
Perfect Pattern	Fio. 616	CB 6100-12	16.5/ 5,800 PSI	17.8/ 7,000 PSI	19.1/ 8,200 PSI	20.4/ 9,400 PSI
Perfect Pattern	Fio. 616	DRF0	16.6/ 6,200 PSI	17.8/ 7,300 PSI	19.1/ 8,500 PSI	20.4/ 9,600 PSI
Perfect Pattern	Fio. 616	WAA12L	16.5/ 6,600 PSI	17.7/ 7,800 PSI	19.0/ 9,100 PSI	20.2/10,300 PSI
Perfect Pattern	Win. 209	CB 6100-12	16.6/ 5,600 PSI	17.8/ 6,800 PSI	19.0/ 8,000 PSI	20.1/ 9,200 PSI
Perfect Pattern	Win. 209	DRF0	16.6/ 5,900 PSI	17.9/ 7,100 PSI	19.2/ 8,300 PSI	20.5/ 9,400 PSI
Perfect Pattern	Win. 209	WAA12L	16.3/ 6,400 PSI	17.6/ 7,800 PSI	18.8/ 9,200 PSI	20.1/10,700 PSI
Titewad	Ched. 209	GU 1225	16.8/ 8,300 PSI	18.2/ 9,700 PSI	19.5/10,900 PSI	–
Titewad	Fio. 616	GU 1225	16.6/ 8,600 PSI	18.1/10,100 PSI	19.5/11,500 PSI	–
Clays	Ched. 209	GU 1225	18.1/ 7,200 PSI	19.3/ 8,800 PSI	20.6/10,600 PSI	–
Clays	Fio. 616	GU 1225	17.4/ 8,000 PSI	19.1/ 9,200 PSI	20.7/10,400 PSI	–
High Gun	CCI 209	CB 6100-12	17.9/ 4,900 PSI	19.2/ 5,900 PSI	20.5/ 6,800 PSI	21.8/ 7,800 PSI
High Gun	CCI 209	DRXXL ORANGE	17.2/ 5,900 PSI	18.6/ 7,100 PSI	19.9/ 8,300 PSI	21.2/ 9,500 PSI
High Gun	Ched. 209	CB 6100-12	18.4/ 4,700 PSI	19.6/ 5,600 PSI	20.8/ 6,600 PSI	21.8/ 7,400 PSI
High Gun	Ched. 209	DRXXL ORANGE	17.6/ 5,500 PSI	19.0/ 6,500 PSI	20.5/ 7,400 PSI	21.8/ 8,300 PSI
High Gun	Fed. 209A	CB 6100-12	17.8/ 5,200 PSI	19.1/ 6,000 PSI	20.4/ 6,900 PSI	21.6/ 7,600 PSI
High Gun	Fed. 209A	DRXXL ORANGE	17.1/ 6,300 PSI	18.5/ 7,500 PSI	19.9/ 8,600 PSI	21.1/ 9,700 PSI
High Gun	Fio. 616	CB 6100-12	19.4/ 4,300 PSI	20.6/ 5,200 PSI	21.9/ 6,100 PSI	23.0/ 7,000 PSI
High Gun	Fio. 616	DRXXL ORANGE	18.2/ 5,200 PSI	19.3/ 6,300 PSI	20.5/ 7,400 PSI	21.6/ 8,400 PSI
High Gun	Win. 209	CB 6100-12	18.8/ 4,200 PSI	19.9/ 5,100 PSI	21.1/ 6,100 PSI	22.1/ 6,900 PSI
High Gun	Win. 209	DRXXL ORANGE	18.1/ 5,700 PSI	19.3/ 6,900 PSI	20.5/ 8,100 PSI	21.5/ 9,200 PSI
244	Ched. 209	CB 6100-12	–	–	21.9/ 7,200 PSI	23.3/ 8,100 PSI
244	Ched. 209	DRF0	18.6/ 8,300 PSI	19.9/ 7,300 PSI	21.2/ 8,300 PSI	22.5/ 9,300 PSI
244	Ched. 209	DRXXL ORANGE	–	20.3/ 7,000 PSI	21.5/ 8,000 PSI	22.8/ 9,000 PSI
244	Fed. 209A	CB 6100-12	–	20.0/ 6,500 PSI	21.4/ 7,500 PSI	22.7/ 8,400 PSI
244	Fed. 209A	DRF0	–	19.9/ 7,400 PSI	21.2/ 8,500 PSI	22.4/ 9,600 PSI
244	Fed. 209A	DRXXL ORANGE	–	19.3/ 7,500 PSI	20.6/ 8,600 PSI	22.0/ 9,700 PSI
244	Fio. 616	CB 6100-12	–	–	23.2/ 6,500 PSI	24.2/ 7,400 PSI
244	Fio. 616	DRF0	–	21.2/ 6,600 PSI	22.4/ 7,500 PSI	23.6/ 8,400 PSI
244	Fio. 616	DRXXL ORANGE	–	–	22.5/ 7,500 PSI	23.5/ 8,500 PSI
244	Win. 209	CB 6100-12	–	20.5/ 6,500 PSI	21.6/ 7,500 PSI	22.7/ 8,500 PSI
244	Win. 209	DRF0	–	19.8/ 7,100 PSI	21.2/ 8,200 PSI	22.5/ 9,400 PSI
244	Win. 209	DRXXL ORANGE	–	19.5/ 7,100 PSI	20.7/ 8,100 PSI	21.9/ 9,100 PSI

12G - 2 3/4″ CHEDDITE PLASTIC SHELLS - 1 1/8 oz. Lead Shot

Powder	Primer	Wad	1090 fps Charge/Pressure	1145 fps Charge/Pressure	1200 fps Charge/Pressure	1255 fps Charge/Pressure
Nitro 100 NF	Ched. 209	Fed. 12S3	16.5/ 7,400 PSI	17.0/ 9,000 PSI	18.0/10,100 PSI	–
Nitro 100 NF	Ched. 209	Rem. FIG 8	–	16.5/ 8,800 PSI	18.0/10,400 PSI	–
Nitro 100 NF	Ched. 209	WAA12SL	16.5/ 7,300 PSI	17.0/ 8,500 PSI	18.0/ 9,800 PSI	–
Perfect Pattern	CCI 209	CB 3118-12-AR	15.5/ 7,200 PSI	16.5/ 8,300 PSI	17.6/ 9,400 PSI	18.7/10,500 PSI
Perfect Pattern	CCI 209	CB 6118-12	15.6/ 7,100 PSI	16.7/ 8,200 PSI	17.8/ 9,400 PSI	18.9/10,500 PSI
Perfect Pattern	CCI 209	DRF0	15.3/ 7,400 PSI	16.5/ 8,600 PSI	17.7/ 9,700 PSI	18.9/10,900 PSI
Perfect Pattern	Ched. 209	CB 3118-12-AR	15.4/ 7,100 PSI	16.5/ 8,200 PSI	17.6/ 9,400 PSI	18.7/10,500 PSI
Perfect Pattern	Ched. 209	CB 6118-12	16.0/ 6,600 PSI	17.0/ 8,000 PSI	18.0/ 9,300 PSI	18.9/10,600 PSI
Perfect Pattern	Ched. 209	DRF0	15.1/ 7,500 PSI	16.3/ 8,900 PSI	17.4/10,300 PSI	–
Perfect Pattern	Fed. 209A	CB 3118-12-AR	14.8/ 7,000 PSI	16.1/ 8,600 PSI	17.3/10,200 PSI	–
Perfect Pattern	Fed. 209A	CB 6118-12	15.4/ 7,500 PSI	16.5/ 8,700 PSI	17.6/ 9,900 PSI	18.8/11,200 PSI

12G - 2 3/4″ CHEDDITE PLASTIC SHELLS - 1 1/8 oz. Lead Shot—cont.

Powder	Primer	Wad	1090 fps Charge/Pressure	1145 fps Charge/Pressure	1200 fps Charge/Pressure	1255 fps Charge/Pressure
Perfect Pattern	Fed. 209A	DRF0	15.2/ 7,700 PSI	16.5/ 9,000 PSI	17.7/10,300 PSI	–
Perfect Pattern	Fio. 616	CB 3118-12-AR	15.8/ 6,700 PSI	16.9/ 8,100 PSI	18.0/ 9,500 PSI	19.1/10,800 PSI
Perfect Pattern	Fio. 616	CB 6118-12	16.0/ 6,600 PSI	17.2/ 7,900 PSI	18.4/ 9,300 PSI	19.6/10,700 PSI

NEVER EXCEED MAXIMUM LOADS

Shotshell Data

Powder	Primer	Wad	Charge/Pressure			
Perfect Pattern	Fio. 616	DRF0	15.0/ 6,700 PSI	16.3/ 8,900 PSI	17.7/ 9,800 PSI	19.0/11,300 PSI
Perfect Pattern	Win. 209	CB 3118-12-AR	15.5/ 7,000 PSI	16.7/ 8,300 PSI	17.8/ 9,600 PSI	18.9/10,900 PSI
Perfect Pattern	Win. 209	CB 6118-12	16.0/ 6,500 PSI	17.1/ 7,900 PSI	18.2/ 9,300 PSI	19.3/10,700 PSI
Perfect Pattern	Win. 209	DRF0	15.6/ 7,100 PSI	16.8/ 8,500 PSI	18.0/ 9,900 PSI	19.2/11,300 PSI
Titewad	Ched. 209	Fed. 12S3	16.5/ 7,400 PSI	17.0/ 9,000 PSI	18.0/10,100 PSI	–
Titewad	Ched. 209	Rem. FIG 8	–	16.5/ 8,800 PSI	18.0/10,400 PSI	–
Titewad	Ched. 209	WAA12SL	16.5/ 7,300 PSI	17.0/ 8,500 PSI	18.0/ 9,800 PSI	–
Clays	Ched. 209	Fed. 12S3	16.3/ 7,700 PSI	17.5/ 8,500 PSI	18.7/ 9,700 PSI	20.5/11,400 PSI
Clays	Ched. 209	WAA12	16.3/ 7,700 PSI	17.3/ 8,500 PSI	18.5/10,000 PSI	20.5/11,500 PSI
244	Ched. 209	CB 2118-12	–	–	20.6/ 7,200 PSI	21.7/ 8,100 PSI
244	Ched. 209	CB 4118-12B	–	–	–	22.2/ 7,200 PSI
244	Ched. 209	DRV-12	–	–	20.1/ 7,300 PSI	21.3/ 8,400 PSI
244	Ched. 209	Rem. FIG 8	–	–	21.1/ 6,700 PSI	22.2/ 7,400 PSI
244	Fed. 209A	CB 2118-12	–	18.9/ 7,100 PSI	20.1/ 7,900 PSI	21.3/ 8,800 PSI
244	Fed. 209A	CB 4118-12B	–	–	20.0/ 7,200 PSI	21.1/ 8,200 PSI
244	Fed. 209A	DRV-12	–	18.2/ 7,100 PSI	19.4/ 8,000 PSI	20.6/ 9,000 PSI
244	Fed. 209A	Rem. FIG 8	–	19.0/ 6,700 PSI	20.2/ 7,400 PSI	21.4/ 8,200 PSI
244	Fio. 616	CB 2118-12	–	–	20.9/ 7,100 PSI	21.9/ 7,900 PSI
244	Fio. 616	CB 4118-12B	–	–	–	22.2/ 7,100 PSI
244	Fio. 616	DRV-12	–	–	20.9/ 7,000 PSI	21.9/ 7,700 PSI
244	Fio. 616	Rem. FIG 8	–	–	20.6/ 6,900 PSI	21.7/ 7,600 PSI
244	Win. 209	CB 2118-12	–	19.4/ 6,800 PSI	20.5/ 7,800 PSI	21.6/ 8,900 PSI
244	Win. 209	CB 4118-12B	–	–	20.8/ 6,800 PSI	21.8/ 7,600 PSI
244	Win. 209	DRV-12	–	18.9/ 7,000 PSI	20.1/ 7,900 PSI	21.2/ 8,900 PSI
244	Win. 209	Rem. FIG 8	–	–	20.6/ 7,100 PSI	21.7/ 7,900 PSI
High Gun	CCI 209	CB 4100-12B	–	–	19.2/ 7,200 PSI	20.5/ 8,500 PSI
High Gun	CCI 209	DRF0	17.2/ 5,700 PSI	18.4/ 6,700 PSI	19.6/ 7,700 PSI	20.8/ 8,600 PSI
High Gun	CCI 209	Rem. TGT 12	16.8/ 5,800 PSI	18.0/ 6,700 PSI	19.2/ 7,600 PSI	20.4/ 8,500 PSI
High Gun	Ched. 209	BP Spitfire	–	17.7/ 7,800 PSI	19.1/ 8,900 PSI	20.4/10,000 PSI
High Gun	Ched. 209	CB 4100-12B	16.7/ 5,600 PSI	17.9/ 6,500 PSI	19.1/ 7,400 PSI	20.3/ 8,300 PSI
High Gun	Ched. 209	DRF0	17.0/ 5,800 PSI	18.2/ 6,800 PSI	19.3/ 7,900 PSI	20.9/ 8,900 PSI
High Gun	Ched. 209	Rem. TGT 12	16.9/ 6,100 PSI	18.1/ 6,900 PSI	19.3/ 7,800 PSI	20.5/ 8,700 PSI
High Gun	Fed. 209A	CB 4100-12B	16.2/ 5,400 PSI	17.5/ 6,500 PSI	18.9/ 7,600 PSI	20.2/ 8,700 PSI
High Gun	Fed. 209A	DRF0	17.2/ 5,800 PSI	18.4/ 6,800 PSI	19.7/ 7,900 PSI	20.9/ 8,900 PSI
High Gun	Fed. 209A	Rem. TGT 12	15.0/ 4,800 PSI	16.6/ 6,100 PSI	18.1/ 7,300 PSI	19.7/ 8,500 PSI
High Gun	Fio. 616	BP Spitfire	–	17.6/ 8,200 PSI	18.8/ 9,300 PSI	20.0/10,400 PSI
High Gun	Fio. 616	CB 4100-12B	17.7/ 5,600 PSI	18.7/ 6,600 PSI	19.7/ 7,500 PSI	20.7/ 8,500 PSI
High Gun	Fio. 616	DRF0	18.2/ 5,500 PSI	19.2/ 6,600 PSI	20.3/ 7,600 PSI	21.3/ 8,600 PSI
High Gun	Fio. 616	Rem. TGT 12	16.9/ 5,800 PSI	18.1/ 6,600 PSI	19.4/ 7,500 PSI	20.7/ 8,300 PSI
High Gun	Win. 209	CB 4100-12B	16.3/ 4,600 PSI	17.9/ 5,700 PSI	19.4/ 6,800 PSI	20.9/ 7,900 PSI
High Gun	Win. 209	DRF0	17.3/ 5,400 PSI	18.5/ 6,500 PSI	19.7/ 7,600 PSI	20.9/ 8,800 PSI
High Gun	Win. 209	Rem. TGT 12	16.4/ 4,800 PSI	17.7/ 6,000 PSI	19.1/ 7,100 PSI	20.4/ 8,300 PSI

12G - 2 3/4″ CHEDDITE PLASTIC SHELLS - 1 1/8 oz. Lead Shot - High Velocity

			1420 fps	1475 fps	1530 fps	1585 fps
Longshot	Ched. 209	Fed. 12S3	33.6/ 7,100 PSI	35.2/ 8,200 PSI	36.8/ 9,200 PSI	38.4/10,300 PSI
Longshot	Ched. 209	Windjammer	34.7/ 7,400 PSI	36.1/ 8,000 PSI	37.5/ 8,700 PSI	38.9/ 9,400 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 oz. Lead Shot

			1180 fps	1235 fps	1290 fps	1345 fps
Nitro 100 NF	CCI 209	Fed. 12SO	17.6/ 8,400 PSI	18.6/ 9,700 PSI	19.6/11,000 PSI	–
Nitro 100 NF	CCI 209	G/BP SF12	16.3/ 9,200 PSI	17.7/10,600 PSI	–	–
Nitro 100 NF	CCI 209	Rem. TGT12	16.9/ 7,700 PSI	18.4/ 8,900 PSI	19.8/10,200 PSI	21.2/11,400 PSI
Nitro 100 NF	CCI 209	WAA12L	17.2/ 7,900 PSI	18.5/ 9,200 PSI	19.8/10,400 PSI	21.1/11,300 PSI
Nitro 100 NF	Ched. 209	CB 6100-12	17.6/ 7,400 PSI	18.7/ 8,300 PSI	19.8/ 9,300 PSI	–
Nitro 100 NF	Ched. 209	Fed. 12SO	17.1/ 8,800 PSI	18.2/10,200 PSI	–	–

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 oz. Lead Shot—cont.

			1180 fps	1235 fps	1290 fps	1345 fps
Nitro 100 NF	Ched. 209	Rem. TGT 12	17.3/ 7,800 PSI	18.4/ 9,000 PSI	19.5/10,200 PSI	–
Nitro 100 NF	Ched. 209	WAA12SL	16.4/ 7,400 PSI	17.8/ 8,800 PSI	19.2/10,200 PSI	–
Nitro 100 NF	Fed. 209A	Fed. 12SO	17.8/ 7,100 PSI	19.3/ 8,500 PSI	20.8/ 9,600 PSI	21.7/11,300 PSI
Nitro 100 NF	Fed. 209A	Rem. TGT12	17.0/ 7,500 PSI	18.4/ 8,700 PSI	19.7/ 9,800 PSI	21.0/11,000 PSI
Nitro 100 NF	Fed. 209A	WAA12L	17.0/ 7,400 PSI	18.4/ 9,000 PSI	19.9/10,700 PSI	–
Nitro 100 NF	Fio. 616	CB 6100-12	17.2/ 6,300 PSI	18.4/ 7,800 PSI	19.5/ 9,200 PSI	–
Nitro 100 NF	Fio. 616	Fed. 12SO	17.6/ 8,100 PSI	18.8/ 9,400 PSI	20.0/10,600 PSI	–
Nitro 100 NF	Fio. 616	Rem. TGT 12	16.9/ 7,700 PSI	18.2/ 8,900 PSI	19.6/10,100 PSI	20.9/11,300 PSI

Powder	Primer	Wad	Charge/Pressure			
Nitro 100 NF	Fio. 616	WAA12L	17.2/ 7,200 PSI	18.5/ 8,700 PSI	19.8/10,200 PSI	21.0/11,400 PSI
Nitro 100 NF	Win. 209	Fed. 12SO	18.0/ 7,100 PSI	19.1/ 8,600 PSI	20.3/10,300 PSI	22.0/11,300 PSI
Nitro 100 NF	Win. 209	Rem. TGT12	17.3/ 7,100 PSI	18.7/ 8,500 PSI	20.0/ 9,700 PSI	21.3/11,000 PSI
Nitro 100 NF	Win. 209	WAA12L	17.4/ 6,900 PSI	18.8/ 8,300 PSI	20.3/ 9,800 PSI	21.7/11,200 PSI
Perfect Pattern	CCI 209	CB 6100-12	15.8/ 6,900 PSI	17.1/ 8,300 PSI	18.4/ 9,700 PSI	19.8/11,100 PSI
Perfect Pattern	CCI 209	DRF0	16.0/ 7,200 PSI	17.3/ 8,600 PSI	18.6/10,000 PSI	19.8/11,300 PSI
Perfect Pattern	CCI 209	WAA12L	15.5/ 7,500 PSI	16.8/ 9,200 PSI	18.1/10,800 PSI	–
Perfect Pattern	Ched. 209	BP Spitfire	15.0/ 8,200 PSI	16.5/ 9,700 PSI	18.0/11,100 PSI	–
Perfect Pattern	Ched. 209	CB 6100-12	15.8/ 7,400 PSI	17.0/ 8,900 PSI	18.3/10,300 PSI	–
Perfect Pattern	Ched. 209	DRF0	15.8/ 7,400 PSI	17.0/ 8,800 PSI	18.1/10,200 PSI	–
Perfect Pattern	Ched. 209	WAA12L	15.5/ 8,500 PSI	16.9/ 9,900 PSI	18.3/11,300 PSI	–
Perfect Pattern	Fed. 209A	CB 6100-12	15.3/ 7,700 PSI	16.7/ 90,0 PSI	18.2/10,400 PSI	–
Perfect Pattern	Fed. 209A	DRF0	15.4/ 7,800 PSI	16.7/ 9,200 PSI	18.1/10,500 PSI	–
Perfect Pattern	Fed. 209A	WAA12L	14.9/ 8,500 PSI	16.3/ 9,900 PSI	17.8/11,200 PSI	–
Perfect Pattern	Fio. 616	BP Spitfire	15.1/ 8,200 PSI	16.3/ 9,700 PSI	17.6/11,100 PSI	–
Perfect Pattern	Fio. 616	CB 6100-12	16.1/ 6,500 PSI	17.4/ 7,700 PSI	18.7/ 8,900 PSI	20.1/10,100 PSI
Perfect Pattern	Fio. 616	DRF0	16.3/ 6,800 PSI	17.6/ 8,100 PSI	18.8/ 9,400 PSI	20.1/10,700 PSI
Perfect Pattern	Fio. 616	WAA12L	15.9/ 7,300 PSI	17.1/ 8,700 PSI	18.4/10,100 PSI	–
Perfect Pattern	Win. 209	CB 6100-12	15.5/ 6,800 PSI	16.9/ 8,100 PSI	18.2/ 9,300 PSI	19.6/10,500 PSI
Perfect Pattern	Win. 209	DRF0	16.3/ 7,000 PSI	17.5/ 8,300 PSI	18.7/ 9,600 PSI	19.9/10,900 PSI
Perfect Pattern	Win. 209	WAA12L	15.6/ 7,600 PSI	16.8/ 9,000 PSI	18.1/10,400 PSI	–
Titewad	CCI 209	Fed. 12SO	17.6/ 8,400 PSI	18.6/ 9,700 PSI	19.6/11,000 PSI	–
Titewad	CCI 209	G/BP SF12	16.3/ 9,200 PSI	17.7/10,600 PSI	–	–
Titewad	CCI 209	Rem. TGT12	16.9/ 7,700 PSI	18.4/ 8,900 PSI	19.8/10,200 PSI	21.2/11,400 PSI
Titewad	CCI 209	WAA12L	17.2/ 7,900 PSI	18.5/ 9,200 PSI	19.8/10,400 PSI	21.1/11,300 PSI
Titewad	Ched. 209	CB 6100-12	17.6/ 7,400 PSI	18.7/ 8,300 PSI	19.8/ 9,300 PSI	–
Titewad	Ched. 209	Fed. 12SO	17.1/ 8,800 PSI	18.2/10,200 PSI	–	–
Titewad	Ched. 209	Rem. TGT 12	17.3/ 7,800 PSI	18.4/ 9,000 PSI	19.5/10,200 PSI	–
Titewad	Ched. 209	WAA12SL	16.4/ 7,400 PSI	17.8/ 8,800 PSI	19.2/10,200 PSI	–
Titewad	Fed. 209A	Fed. 12SO	17.8/ 7,100 PSI	19.3/ 8,500 PSI	20.8/ 9,600 PSI	21.7/11,300 PSI
Titewad	Fed. 209A	Rem. TGT12	17.0/ 7,500 PSI	18.4/ 8,700 PSI	19.7/ 9,800 PSI	21.0/11,000 PSI
Titewad	Fed. 209A	WAA12L	17.0/ 7,400 PSI	18.4/ 9,000 PSI	19.9/10,700 PSI	–
Titewad	Fio. 616	CB 6100-12	17.2/ 6,300 PSI	18.4/ 7,800 PSI	19.5/ 9,200 PSI	–
Titewad	Fio. 616	Fed. 12SO	17.6/ 8,100 PSI	18.8/ 9,400 PSI	20.4/11,200 PSI	–
Titewad	Fio. 616	Rem. TGT 12	17.6/ 7,600 PSI	18.9/ 9,000 PSI	20.2/10,400 PSI	20.9/11,300 PSI
Titewad	Fio. 616	WAA12L	17.2/ 7,200 PSI	18.5/ 8,700 PSI	19.8/10,200 PSI	21.0/11,400 PSI
Titewad	Fio. 616	WAA12SL	17.6/ 7,300 PSI	18.9/ 8,600 PSI	20.2/10,000 PSI	–
Titewad	Win. 209	Fed. 12SO	18.0/ 7,100 PSI	19.1/ 8,600 PSI	20.3/10,300 PSI	22.0/11,300 PSI
Titewad	Win. 209	Rem. TGT12	17.3/ 7,100 PSI	18.7/ 8,500 PSI	20.0/ 9,700 PSI	21.3/11,000 PSI
Titewad	Win. 209	WAA12L	17.4/ 6,900 PSI	18.8/ 8,300 PSI	20.3/ 9,800 PSI	21.7/11,200 PSI
Competition	Ched. 209	CB 6100-12	18.2/ 6,800 PSI	19.3/ 7,800 PSI	20.4/ 8,900 PSI	–
Competition	Ched. 209	Fed. 12SO	17.2/ 7,200 PSI	18.6/ 8,700 PSI	20.1/10,300 PSI	–
Competition	Ched. 209	Rem. TGT 12	18.1/ 7,100 PSI	19.3/ 8,100 PSI	20.4/ 9,200 PSI	–
Competition	Ched. 209	WAA12SL	18.2/ 6,900 PSI	19.4/ 7,900 PSI	20.6/ 8,900 PSI	–
Competition	Fed. 209A	CB 6100-12	18.2/ 7,400 PSI	19.2/ 8,500 PSI	20.3/ 9,600 PSI	–
Competition	Fed. 209A	Fed. 12SO	18.2/ 8,100 PSI	19.4/ 9,300 PSI	20.6/10,600 PSI	–
Competition	Fed. 209A	Rem. TGT 12	18.2/ 8,000 PSI	19.2/ 9,100 PSI	20.2/10,300 PSI	–
Competition	Fed. 209A	WAA12SL	18.5/ 6,900 PSI	19.6/ 8,000 PSI	20.6/ 9,100 PSI	–
Competition	Fio. 616	CB 6100-12	20.0/ 6,600 PSI	21.3/ 7,600 PSI	–	–
Competition	Fio. 616	Fed. 12SO	–	19.7/ 7,700 PSI	20.9/ 9,600 PSI	–
Competition	Fio. 616	Rem. TGT 12	–	19.7/ 7,100 PSI	21.0/ 8,600 PSI	–

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
Competition	Fio. 616	WAA12SL	–	20.1/ 6,700 PSI	21.4/ 8,100 PSI	–
Competition	Win. 209	CB 6100-12	19.0/ 6,700 PSI	19.8/ 7,800 PSI	20.6/ 8,900 PSI	–
Competition	Win. 209	Fed. 12SO	18.3/ 8,500 PSI	19.2/ 9,600 PSI	–	–
Competition	Win. 209	Rem. TGT 12	17.8/ 6,700 PSI	19.0/ 8,000 PSI	20.2/ 9,200 PSI	–
Competition	Win. 209	WAA12SL	18.2/ 7,700 PSI	19.4/ 8,700 PSI	20.5/ 9,800 PSI	–
Clays	CCI 209	Fed. 12SO	18.1/ 7,300 PSI	19.6/ 8,900 PSI	21.0/10,500 PSI	–
Clays	CCI 209	Rem. TGT12	–	19.7/ 7,600 PSI	20.9/ 8,800 PSI	22.2/10,100 PSI
Clays	CCI 209	WAA12SL	19.6/ 7,100 PSI	20.2/ 8,100 PSI	20.9/ 9,200 PSI	22.0/10,200 PSI
Clays	Ched. 209	CB 6100-12	16.9/ 7,200 PSI	17.9/ 8,100 PSI	19.0/ 9,000 PSI	–
Clays	Ched. 209	Fed. 12SO	16.6/ 8,100 PSI	17.8/ 9,000 PSI	18.9/ 9,900 PSI	–
Clays	Ched. 209	Rem. TGT 12	16.8/ 7,700 PSI	17.9/ 8,500 PSI	19.0/ 9,400 PSI	–
Clays	Ched. 209	WAA12SL	16.4/ 7,900 PSI	17.6/ 8,900 PSI	18.8/ 9,800 PSI	–
Clays	Fed. 209A	Fed. 12SO	17.9/ 7,700 PSI	19.3/ 9,200 PSI	20.3/10,800 PSI	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
Clays	Fed. 209A	Rem. TGT12	17.2/ 7,400 PSI	18.7/ 8,900 PSI	20.0/10,200 PSI	–
Clays	Fed. 209A	WAA12SL	17.2/ 7,700 PSI	18.6/ 9,200 PSI	19.9/10,500 PSI	–
Clays	Fio. 616	CB 6100-12	17.3/ 6,900 PSI	18.3/ 7,800 PSI	19.3/ 8,600 PSI	–
Clays	Fio. 616	Fed. 12SO	18.0/ 7,700 PSI	19.1/ 9,200 PSI	20.3/10,800 PSI	–
Clays	Fio. 616	Rem. TGT12	17.9/ 7,100 PSI	19.1/ 8,500 PSI	20.4/10,000 PSI	21.7/11,300 PSI
Clays	Fio. 616	WAA12SL	18.0/ 7,000 PSI	19.0/ 8,300 PSI	20.3/10,000 PSI	–
Clays	Win. 209	Fed. 12SO	18.5/ 7,900 PSI	19.7/ 9,100 PSI	21.0/10,400 PSI	–
Clays	Win. 209	G/BP SF12	18.2/ 7,200 PSI	19.4/ 8,800 PSI	20.1/ 9,700 PSI	–
Clays	Win. 209	Rem. TGT12	–	19.5/ 7,600 PSI	20.9/ 9,000 PSI	22.2/10,300 PSI
Clays	Win. 209	WAA12SL	18.2/7,000 LUP	19.1/7,600 LUP	20.0/8,300 LUP	–
700-X	Ched. 209	CB 6100-12	17.1/ 6,700 PSI	18.0/ 7,500 PSI	19.0/ 8,200 PSI	–
700-X	Ched. 209	Fed. 12SO	17.1/ 8,600 PSI	18.0/ 9,600 PSI	19.0/10,600 PSI	–
700-X	Ched. 209	Rem. TGT 12	17.3/ 6,800 PSI	18.4/ 7,600 PSI	19.5/ 8,400 PSI	–
700-X	Ched. 209	WAA12SL	17.2/ 8,000 PSI	18.2/ 8,900 PSI	19.3/ 9,700 PSI	–
700-X	Fed. 209A	CB 2100-12	16.6/ 7,000 PSI	17.7/ 7,700 PSI	18.8/ 8,400 PSI	–
700-X	Fed. 209A	Fed. 12SO	16.9/ 7,200 PSI	18.2/ 8,000 PSI	19.4/ 8,800 PSI	–
700-X	Fed. 209A	Rem. TGT12	16.9/ 7,100 PSI	18.2/ 7,900 PSI	19.4/ 8,700 PSI	–
700-X	Fed. 209A	WAA12SL	16.9/ 7,300 PSI	18.2/ 8,200 PSI	19.4/ 9,200 PSI	–
700-X	Win. 209	CB 2100-12	17.4/ 7,100 PSI	18.6/ 7,900 PSI	19.9/ 8,700 PSI	–
700-X	Win. 209	Fed. 12SO	17.1/ 6,900 PSI	18.2/ 7,600 PSI	19.3/ 8,300 PSI	–
700-X	Win. 209	Rem. TGT12	17.1/ 6,900 PSI	18.2/ 7,600 PSI	19.3/ 8,300 PSI	–
700-X	Win. 209	WAA12SL	17.1/ 7,300 PSI	18.2/ 8,200 PSI	19.3/ 9,200 PSI	–
High Gun	CCI 209	CB 6100-12	17.4/ 5,800 PSI	18.8/ 6,800 PSI	20.1/ 7,900 PSI	21.5/ 8,900 PSI
High Gun	CCI 209	DRXXL ORANGE	16.3/ 7,300 PSI	17.7/ 8,600 PSI	19.1/ 9,800 PSI	20.4/11,100 PSI
High Gun	Ched. 209	CB 6100-12	17.5/ 5,700 PSI	18.7/ 6,900 PSI	19.9/ 8,100 PSI	21.0/ 9,100 PSI
High Gun	Ched. 209	DRXXL ORANGE	17.2/ 6,600 PSI	18.5/ 7,900 PSI	19.7/ 9,300 PSI	20.8/10,500 PSI
High Gun	Fed. 209A	CB 6100-12	17.3/ 5,700 PSI	18.5/ 6,800 PSI	19.8/ 7,900 PSI	20.9/ 8,900 PSI
High Gun	Fed. 209A	DRXXL ORANGE	16.5/ 7,500 PSI	17.9/ 8,800 PSI	19.2/10,000 PSI	20.4/11,100 PSI
High Gun	Fio. 616	CB 6100-12	18.1/ 5,200 PSI	19.2/ 6,200 PSI	20.4/ 7,200 PSI	21.4/ 8,100 PSI
High Gun	Fio. 616	DRXXL ORANGE	17.4/ 6,200 PSI	18.7/ 7,500 PSI	19.9/ 8,700 PSI	21.1/ 9,800 PSI
High Gun	Win. 209	CB 6100-12	17.6/ 5,200 PSI	18.9/ 6,200 PSI	20.1/ 7,300 PSI	21.3/ 8,200 PSI
High Gun	Win. 209	DRXXL ORANGE	17.0/ 6,400 PSI	18.3/ 7,700 PSI	19.6/ 9,100 PSI	20.8/10,300 PSI
WST	CCI 209	Fed. 12SO	–	21.0/ 8,500 PSI	22.5/ 9,500 PSI	–
WST	Ched. 209	CB 6100-12	19.4/ 6,100 PSI	21.0/ 7,000 PSI	22.5/ 7,900 PSI	–
WST	Ched. 209	Fed. 12SO	19.5/ 7,400 PSI	21.0/ 8,700 PSI	22.5/10,000 PSI	–
WST	Ched. 209	Rem. TGT 12	19.2/ 7,000 PSI	20.8/ 8,000 PSI	22.3/ 9,100 PSI	–
WST	Ched. 209	WAA12SL	19.2/ 6,600 PSI	20.9/ 7,400 PSI	22.5/ 8,200 PSI	–
WST	Fio. 616	CB 6100-12	21.5/ 7,000 PSI	22.6/ 7,800 PSI	23.7/ 8,700 PSI	–
WST	Fio. 616	Fed. 12SO	20.7/ 6,000 PSI	22.2/ 8,300 PSI	23.7/10,600 PSI	–
WST	Fio. 616	Rem. TGT 12	19.7/ 6,600 PSI	21.1/ 7,600 PSI	22.5/ 8,600 PSI	–
WST	Fio. 616	WAA12SL	19.9/ 7,200 PSI	21.3/ 7,900 PSI	22.6/ 8,600 PSI	–
WST	Win. 209	Fed. 12SO	20.5/ 7,400 PSI	22.0/ 8,500 PSI	23.0/ 9,300 PSI	–
Super Hcp	Ched. 209	WAA12L	19.6/ 5,500 PSI	20.8/ 6,500 PSI	22.0/ 7,500 PSI	23.3/ 8,500 PSI
Super Hcp	Fed. 209A	WAA12L	19.5/ 5,700 PSI	20.9/ 6,600 PSI	22.3/ 7,500 PSI	23.8/ 8,600 PSI
Super Hcp	Fio. 616	Fed. 12SO	–	22.2/ 6,500 PSI	23.3/ 7,800 PSI	24.3/ 9,100 PSI
Super Hcp	Win. 209	WAA12L	20.6/ 4,800 PSI	21.7/ 5,900 PSI	22.8/ 7,000 PSI	23.9/ 8,100 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 oz. Lead Shot—cont.

			1180 fps	1235 fps	1290 fps	1345 fps
244	Ched. 209	CB 6100-12	–	19.5/ 7,000 PSI	20.8/ 7,900 PSI	22.1/ 8,900 PSI
244	Ched. 209	DRF0	18.3/ 6,900 PSI	19.6/ 8,000 PSI	20.9/ 9,200 PSI	22.1/10,300 PSI
244	Ched. 209	DRXXL ORANGE	18.2/ 6,600 PSI	19.5/ 7,900 PSI	20.8/ 9,100 PSI	22.0/10,400 PSI
244	Fed. 209A	CB 6100-12	18.0/ 6,600 PSI	19.4/ 7,600 PSI	20.7/ 8,600 PSI	22.0/ 9,600 PSI
244	Fed. 209A	DRF0	17.9/ 7,300 PSI	19.2/ 8,400 PSI	20.5/ 9,600 PSI	21.7/10,700 PSI
244	Fed. 209A	DRXXL ORANGE	17.2/ 7,200 PSI	18.6/ 8,500 PSI	20.0/ 9,700 PSI	21.4/11,000 PSI
244	Fio. 616	CB 6100-12	–	20.2/ 6,700 PSI	21.4/ 7,500 PSI	22.7/ 8,300 PSI
244	Fio. 616	DRF0	18.7/ 6,700 PSI	19.9/ 7,800 PSI	21.2/ 8,800 PSI	22.4/ 9,900 PSI
244	Fio. 616	DRXXL ORANGE	18.4/ 6,700 PSI	19.7/ 7,700 PSI	21.0/ 8,800 PSI	22.3/ 9,900 PSI
244	Win. 209	CB 6100-12	18.3/ 6,500 PSI	19.5/ 7,500 PSI	20.7/ 8,400 PSI	22.0/ 9,400 PSI
244	Win. 209	DRF0	17.9/ 7,300 PSI	19.3/ 8,600 PSI	20.7/ 9,800 PSI	22.1/11,000 PSI
244	Win. 209	DRXXL ORANGE	17.6/ 7,500 PSI	18.9/ 8,600 PSI	20.2/ 9,700 PSI	21.5/10,800 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 1/8 oz. Lead Shot

			1090 fps	1145 fps	1200 fps	1255 fps
Nitro 100 NF	Ched. 209	CB 6118-12	15.8/ 8,700 PSI	16.7/ 9,800 PSI	17.7/10,800 PSI	–
Nitro 100 NF	Ched. 209	DR XL 1	15.7/ 8,600 PSI	16.7/ 9,900 PSI	–	–
Nitro 100 NF	Ched. 209	DR-XL-1 1/8	15.7/ 8,600 PSI	16.7/ 9,900 PSI	–	–

Powder	Primer	Wad	Charge/Pressure			
Nitro 100 NF	Ched. 209	Fed. 12S3	15.4/ 9,100 PSI	16.7/10,300 PSI	–	–
Nitro 100 NF	Ched. 209	Rem. FIG 8	15.4/ 8,800 PSI	16.7/ 9,900 PSI	18.1/11,100 PSI	–
Nitro 100 NF	Ched. 209	Windjammer	16.0/ 8,100 PSI	17.2/ 9,400 PSI	18.5/10,900 PSI	–
Nitro 100 NF	Fed. 209A	Fed. 12S3	16.3/ 8,300 PSI	17.3/ 8,900 PSI	18.8/10,300 PSI	–
Nitro 100 NF	Fed. 209A	Rem. FIG 8	15.8/ 8,000 PSI	16.9/ 9,600 PSI	18.1/11,300 PSI	–
Nitro 100 NF	Fed. 209A	WAA12	15.4/ 8,200 PSI	16.8/ 9,800 PSI	18.0/11,100 PSI	–
Nitro 100 NF	Fio. 616	CB 6118-12	15.9/ 7,600 PSI	17.1/ 9,000 PSI	18.3/10,500 PSI	–
Nitro 100 NF	Fio. 616	Fed. 12S3	16.8/ 7,900 PSI	18.0/ 9,500 PSI	19.1/11,100 PSI	–
Nitro 100 NF	Fio. 616	Rem. FIG 8	16.7/ 7,300 PSI	18.1/ 8,800 PSI	19.5/10,400 PSI	–
Nitro 100 NF	Fio. 616	WAA12	16.7/ 7,300 PSI	18.0/ 8,900 PSI	19.4/10,700 PSI	–
Nitro 100 NF	Win. 209	Fed. 12S3	16.0/ 7,300 PSI	17.2/ 9,000 PSI	18.4/10,600 PSI	–
Nitro 100 NF	Win. 209	G/BP 072	15.5/ 9,300 PSI	16.7/10,500 PSI	18.0/11,300 PSI	–
Nitro 100 NF	Win. 209	Rem. TGT12	15.9/ 7,500 PSI	17.1/ 9,100 PSI	18.2/10,600 PSI	–
Nitro 100 NF	Win. 209	WAA12SL	16.5/ 7,900 PSI	17.5/ 9,100 PSI	18.2/ 9,800 PSI	–
Perfect Pattern	CCI 209	CB 3118-12-AR	14.8/ 8,200 PSI	15.9/ 9,600 PSI	17.1/11,000 PSI	–
Perfect Pattern	CCI 209	CB 6118-12	14.8/ 8,100 PSI	16.0/ 9,400 PSI	17.1/10,700 PSI	–
Perfect Pattern	CCI 209	DRF0	14.9/ 8,300 PSI	16.0/ 9,700 PSI	17.1/11,000 PSI	–
Perfect Pattern	Ched. 209	CB 3118-12-AR	15.0/ 8,500 PSI	16.0/ 9,800 PSI	17.0/11,000 PSI	–
Perfect Pattern	Ched. 209	CB 6118-12	14.8/ 8,300 PSI	15.9/ 9,500 PSI	16.9/10,700 PSI	–
Perfect Pattern	Ched. 209	DRF0	14.9/ 8,400 PSI	16.0/ 9,700 PSI	17.1/11,000 PSI	–
Perfect Pattern	Fed. 209A	CB 3118-12-AR	14.4/ 8,900 PSI	15.4/10,200 PSI	16.5/11,400 PSI	–
Perfect Pattern	Fed. 209A	CB 6118-12	14.8/ 8,500 PSI	15.8/ 9,800 PSI	16.9/11,200 PSI	–
Perfect Pattern	Fed. 209A	DRF0	14.6/ 8,600 PSI	15.6/ 9,800 PSI	16.5/11,000 PSI	–
Perfect Pattern	Fio. 616	CB 3118-12-AR	15.4/ 7,400 PSI	16.4/ 8,800 PSI	17.4/10,200 PSI	18.5/11,500 PSI
Perfect Pattern	Fio. 616	CB 6118-12	15.7/ 7,000 PSI	16.6/ 8,500 PSI	17.5/ 9,900 PSI	18.5/11,400 PSI
Perfect Pattern	Fio. 616	DRF0	15.3/ 7,900 PSI	16.4/ 9,200 PSI	17.5/10,500 PSI	–
Perfect Pattern	Win. 209	CB 3118-12-AR	14.8/ 7,500 PSI	15.9/ 9,100 PSI	17.0/10,600 PSI	–
Perfect Pattern	Win. 209	CB 6118-12	15.0/ 7,100 PSI	16.1/ 8,700 PSI	17.2/10,300 PSI	–
Perfect Pattern	Win. 209	DRF0	14.6/ 7,500 PSI	15.8/ 8,900 PSI	17.0/10,400 PSI	–
Titewad	Ched. 209	CB 6118-12	15.8/ 8,700 PSI	16.7/ 9,800 PSI	17.7/10,800 PSI	–
Titewad	Ched. 209	DR XL 1	15.7/ 8,600 PSI	16.7/ 9,900 PSI	–	–
Titewad	Ched. 209	DR-XL-1 1/8	15.7/ 8,600 PSI	16.7/ 9,900 PSI	–	–
Titewad	Ched. 209	Fed. 12S3	15.4/ 9,100 PSI	16.7/10,300 PSI	–	–
Titewad	Ched. 209	Rem. FIG 8	15.4/ 8,800 PSI	16.7/ 9,900 PSI	18.1/11,100 PSI	–
Titewad	Ched. 209	Windjammer	16.0/ 8,100 PSI	17.2/ 9,400 PSI	18.5/10,900 PSI	–
Titewad	Fed. 209A	Fed. 12S3	16.3/ 8,300 PSI	17.3/ 8,900 PSI	18.8/10,300 PSI	–
Titewad	Fed. 209A	Rem. FIG 8	15.8/ 8,000 PSI	16.9/ 9,600 PSI	18.1/11,300 PSI	–
Titewad	Fed. 209A	WAA12	15.4/ 8,200 PSI	16.8/ 9,800 PSI	18.0/11,100 PSI	–
Titewad	Fio. 616	CB 6118-12	15.9/ 7,600 PSI	17.1/ 9,000 PSI	18.3/10,500 PSI	–
Titewad	Fio. 616	Fed. 12S3	16.8/ 7,900 PSI	18.0/ 9,500 PSI	19.1/11,100 PSI	–
Titewad	Fio. 616	Rem. FIG 8	16.7/ 7,300 PSI	18.1/ 8,800 PSI	19.5/10,400 PSI	–

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
Titewad	Fio. 616	WAA12	16.7/ 7,300 PSI	18.0/ 8,900 PSI	19.4/10,700 PSI	–
Titewad	Win. 209	Fed. 12S3	16.0/ 7,300 PSI	17.2/ 9,000 PSI	18.4/10,600 PSI	–
Titewad	Win. 209	G/BP 072	15.5/ 9,300 PSI	16.7/10,500 PSI	18.0/11,300 PSI	–
Titewad	Win. 209	Rem. TGT12	15.9/ 7,500 PSI	17.1/ 9,100 PSI	18.2/10,600 PSI	–
Titewad	Win. 209	WAA12SL	16.5/ 7,900 PSI	17.5/ 9,100 PSI	18.2/ 9,800 PSI	–
Competition	Ched. 209	CB 6118-12	16.5/ 7,200 PSI	17.9/ 8,500 PSI	19.4/ 9,800 PSI	20.8/11,100 PSI
Competition	Ched. 209	DR XL 1	–	–	19.4/ 9,600 PSI	20.8/10,800 PSI
Competition	Ched. 209	DR-XL-1 1/8	16.7/ 7,200 PSI	18.0/ 8,400 PSI	–	–
Competition	Ched. 209	Fed. 12S3	16.8/ 7,300 PSI	18.2/ 8,700 PSI	19.5/10,100 PSI	–
Competition	Ched. 209	Rem. FIG 8	17.3/ 6,900 PSI	18.5/ 8,100 PSI	19.7/ 9,400 PSI	20.9/10,600 PSI
Competition	Fed. 209A	CB 6118-12	17.3/ 7,400 PSI	18.4/ 8,600 PSI	19.5/ 9,800 PSI	20.6/11,000 PSI
Competition	Fed. 209A	DR XL 1	16.7/ 7,300 PSI	18.0/ 8,500 PSI	19.4/ 9,800 PSI	20.7/11,000 PSI
Competition	Fed. 209A	Fed. 12S3	17.0/ 7,100 PSI	18.2/ 8,500 PSI	19.4/ 9,800 PSI	20.6/11,100 PSI
Competition	Fed. 209A	Rem. FIG 8	17.1/ 7,000 PSI	18.2/ 8,300 PSI	19.4/ 9,600 PSI	20.6/10,800 PSI
Competition	Fio. 616	CB 6118-12	16.9/ 7,300 PSI	18.2/ 8,600 PSI	19.4/ 9,800 PSI	20.6/11,000 PSI
Competition	Fio. 616	DR XL 1	17.4/ 6,700 PSI	18.6/ 7,900 PSI	19.8/ 9,100 PSI	21.0/10,400 PSI
Competition	Fio. 616	DR-XL-1 1/8	17.4/ 6,700 PSI	18.6/ 7,900 PSI	19.8/ 9,100 PSI	21.0/10,400 PSI
Competition	Fio. 616	Fed. 12S3	17.0/ 7,300 PSI	17.9/ 8,600 PSI	18.9/ 9,900 PSI	19.9/11,200 PSI
Competition	Fio. 616	Rem. FIG 8	17.0/ 7,100 PSI	18.2/ 8,400 PSI	19.4/ 9,800 PSI	20.6/11,100 PSI
Competition	Win. 209	CB 6118-12	17.5/ 6,500 PSI	18.6/ 7,900 PSI	19.6/ 9,300 PSI	20.6/10,700 PSI
Competition	Win. 209	DR XL 1	17.9/ 6,800 PSI	18.9/ 7,900 PSI	19.9/ 9,000 PSI	20.9/10,100 PSI
Competition	Win. 209	Fed. 12S3	17.2/ 7,400 PSI	18.3/ 8,500 PSI	19.5/ 9,700 PSI	20.6/10,800 PSI
Competition	Win. 209	Rem. FIG 8	17.3/ 6,900 PSI	18.5/ 8,100 PSI	19.7/ 9,300 PSI	20.9/10,500 PSI

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
Clays	CCI 209	Fed. 12S3	16.7/ 7,600 PSI	17.8/ 9,200 PSI	19.1/11,100 PSI	–
Clays	CCI 209	Hor. Versalite	17.3/6,500 LUP	18.5/7,300 LUP	19.7/8,100 LUP	–
Clays	CCI 209	Red PC	16.8/ 7,200 PSI	18.0/ 8,500 PSI	19.2/ 9,800 PSI	20.5/11,200 PSI
Clays	CCI 209	Rem. FIG 8	16.6/ 7,000 PSI	18.0/ 8,100 PSI	19.5/ 9,400 PSI	–
Clays	CCI 209	WAA12	16.5/ 7,000 PSI	17.7/ 8,300 PSI	19.1/ 9,900 PSI	20.5/11,400 PSI
Clays	CCI 209	Windjammer	17.2/ 7,000 PSI	18.2/ 7,900 PSI	19.6/ 9,200 PSI	20.9/10,500 PSI
Clays	Ched. 209	CB 6118-12	15.0/ 6,900 PSI	16.5/ 7,900 PSI	18.0/ 9,000 PSI	19.4/10,100 PSI
Clays	Ched. 209	DR XL 1	14.8/ 6,400 PSI	16.3/ 7,700 PSI	17.8/ 8,900 PSI	19.3/10,200 PSI
Clays	Ched. 209	Fed. 12S3	16.8/ 8,000 PSI	18.0/ 9,500 PSI	19.2/10,900 PSI	–
Clays	Ched. 209	Rem. FIG 8	16.5/ 7,600 PSI	17.9/ 9,000 PSI	19.3/10,500 PSI	–
Clays	Ched. 209	Windjammer	16.9/ 7,000 PSI	18.2/ 8,400 PSI	19.5/ 9,900 PSI	20.9/11,400 PSI
Clays	Fed. 209A	Fed. 12S3	16.8/ 7,900 PSI	17.1/ 8,600 PSI	19.0/10,400 PSI	–
Clays	Fed. 209A	G/BP Z21	15.9/ 8,900 PSI	17.1/10,300 PSI	–	–
Clays	Fed. 209A	Rem. FIG 8	17.0/ 7,400 PSI	17.5/ 7,900 PSI	19.0/ 9,600 PSI	–
Clays	Fed. 209A	WAA12	16.5/ 7,700 PSI	17.0/ 8,100 PSI	18.5/10,300 PSI	–
Clays	Fed. 209A	Windjammer	16.5/ 7,400 PSI	17.6/ 8,700 PSI	18.8/10,100 PSI	–
Clays	Fio. 616	CB 6118-12	16.2/ 7,100 PSI	17.3/ 8,000 PSI	18.4/ 8,800 PSI	19.5/ 9,700 PSI
Clays	Fio. 616	Fed. 12S3	17.0/ 8,100 PSI	18.2/10,400 PSI	–	–
Clays	Fio. 616	Rem. FIG 8	16.4/ 7,400 PSI	18.3/ 8,800 PSI	19.8/10,900 PSI	–
Clays	Fio. 616	WAA12	16.3/ 7,500 PSI	17.4/ 9,100 PSI	18.4/10,600 PSI	–
Clays	Win. 209	Fed. 12S3	16.4/ 7,500 PSI	17.7/ 9,100 PSI	19.1/10,700 PSI	–
Clays	Win. 209	Rem. FIG 8	16.7/ 7,000 PSI	17.9/ 8,400 PSI	19.2/ 9,900 PSI	20.5/10,800 PSI
Clays	Win. 209	WAA12	16.5/ 7,300 PSI	17.3/ 8,300 PSI	18.6/ 9,700 PSI	19.9/11,000 PSI
Clays	Win. 209	Windjammer	17.3/6,300 LUP	18.3/7,200 LUP	19.4/8,100 LUP	–
700-X	Ched. 209	CB 6118-12	15.7/ 7,300 PSI	16.9/ 8,300 PSI	18.1/ 9,300 PSI	19.3/10,300 PSI
700-X	Ched. 209	DR XL 1	15.3/ 7,100 PSI	16.7/ 8,200 PSI	18.1/ 9,400 PSI	19.4/10,500 PSI
700-X	Ched. 209	Fed. 12S3	15.6/ 7,600 PSI	16.8/ 8,700 PSI	17.9/ 9,800 PSI	19.1/10,900 PSI
700-X	Ched. 209	Rem. FIG 8	15.7/ 7,100 PSI	16.9/ 8,100 PSI	18.1/ 9,000 PSI	19.3/10,000 PSI
700-X	Fed. 209A	CB 2118-12	15.0/ 7,700 PSI	17.1/ 8,800 PSI	18.3/ 9,800 PSI	19.0/10,900 PSI
700-X	Fed. 209A	Fed. 12S3	15.7/ 7,700 PSI	17.2/ 8,600 PSI	18.7/ 9,600 PSI	20.0/10,500 PSI
700-X	Fed. 209A	Rem. TGT12	15.8/ 7,000 PSI	17.1/ 8,300 PSI	18.3/ 9,500 PSI	19.0/10,600 PSI
700-X	Fed. 209A	WAA12SL	15.8/ 7,700 PSI	17.1/ 8,700 PSI	18.3/ 9,700 PSI	19.0/10,700 PSI
700-X	Win. 209	CB 2118-12	15.8/ 7,000 PSI	17.1/ 8,000 PSI	18.3/ 9,100 PSI	19.6/10,100 PSI
700-X	Win. 209	Fed. 12S3	15.8/ 7,600 PSI	17.1/ 8,700 PSI	18.3/ 9,700 PSI	19.6/10,800 PSI
700-X	Win. 209	Rem. TGT12	15.8/ 6,600 PSI	17.1/ 7,600 PSI	18.3/ 8,700 PSI	19.6/ 9,700 PSI
700-X	Win. 209	WAA12SL	15.8/ 7,000 PSI	17.1/ 8,000 PSI	18.3/ 9,000 PSI	19.6/10,000 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
High Gun	CCI 209	CB 4100-12B	16.6/ 6,600 PSI	17.7/ 7,600 PSI	18.8/ 8,500 PSI	19.9/ 9,500 PSI
High Gun	CCI 209	DR XL 1	15.2/ 8,000 PSI	16.3/ 9,400 PSI	17.3/10,700 PSI	–
High Gun	CCI 209	DRF0	16.6/ 6,200 PSI	17.8/ 7,400 PSI	19.0/ 8,700 PSI	20.1/ 9,900 PSI
High Gun	CCI 209	Rem. TGT 12	16.8/ 6,500 PSI	17.9/ 7,600 PSI	19.0/ 8,800 PSI	20.1/ 9,900 PSI
High Gun	Ched. 209	BP Spitfire	–	17.2/ 9,100 PSI	18.4/10,300 PSI	19.5/11,500 PSI
High Gun	Ched. 209	CB 4100-12B	16.0/ 6,300 PSI	17.1/ 7,400 PSI	18.3/ 8,500 PSI	19.5/ 9,500 PSI
High Gun	Ched. 209	DR XL 1	16.1/ 6,600 PSI	17.2/ 8,000 PSI	18.3/ 9,300 PSI	19.4/10,600 PSI
High Gun	Ched. 209	DRF0	16.9/ 6,600 PSI	17.9/ 7,700 PSI	18.9/ 8,900 PSI	19.9/10,100 PSI
High Gun	Ched. 209	Rem. TGT 12	16.1/ 6,400 PSI	17.4/ 7,500 PSI	18.7/ 8,500 PSI	20.0/ 9,600 PSI
High Gun	Fed. 209A	CB 2118-12	–	17.4/ 8,200 PSI	18.7/ 9,300 PSI	20.0/10,300 PSI
High Gun	Fed. 209A	CB 4100-12B	16.3/ 6,500 PSI	17.5/ 7,600 PSI	18.6/ 8,800 PSI	19.8/ 9,900 PSI
High Gun	Fed. 209A	DR XL 1	16.0/ 7,300 PSI	17.2/ 8,500 PSI	18.4/ 9,700 PSI	19.5/11,000 PSI
High Gun	Fed. 209A	DRF0	16.6/ 6,800 PSI	17.7/ 8,100 PSI	18.8/ 9,300 PSI	19.8/10,500 PSI
High Gun	Fed. 209A	Rem. TGT 12	16.1/ 6,600 PSI	17.3/ 7,600 PSI	18.5/ 8,600 PSI	19.7/ 9,700 PSI
High Gun	Fio. 616	BP Spitfire	–	16.8/ 9,000 PSI	18.1/10,100 PSI	19.5/11,100 PSI
High Gun	Fio. 616	CB 4100-12B	16.3/ 6,200 PSI	17.5/ 7,200 PSI	18.6/ 8,300 PSI	19.7/ 9,300 PSI
High Gun	Fio. 616	DR XL 1	16.2/ 6,500 PSI	17.3/ 7,800 PSI	18.4/ 9,100 PSI	19.5/10,400 PSI
High Gun	Fio. 616	DRF0	17.5/ 5,800 PSI	18.5/ 6,800 PSI	19.6/ 7,900 PSI	20.7/ 8,900 PSI
High Gun	Fio. 616	Rem. TGT 12	16.7/ 6,600 PSI	17.9/ 7,600 PSI	19.1/ 8,700 PSI	20.2/ 9,700 PSI
High Gun	Win. 209	CB 4100-12B	17.1/ 6,000 PSI	18.2/ 7,000 PSI	19.3/ 8,000 PSI	20.3/ 8,900 PSI
High Gun	Win. 209	DR XL 1	16.6/ 6,200 PSI	17.7/ 7,400 PSI	18.8/ 8,600 PSI	19.9/ 9,800 PSI
High Gun	Win. 209	DRF0	16.7/ 6,000 PSI	17.9/ 7,300 PSI	19.0/ 8,500 PSI	20.2/ 9,700 PSI
High Gun	Win. 209	Rem. TGT 12	16.4/ 6,300 PSI	17.6/ 7,400 PSI	18.9/ 8,400 PSI	20.1/ 9,500 PSI
WST	CCI 209	Fed. 12S3	–	19.5/ 8,500 PSI	21.0/10,300 PSI	–
WST	Ched. 209	CB 6118-12	18.6/ 7,000 PSI	19.8/ 8,000 PSI	21.0/ 9,000 PSI	22.2/ 9,900 PSI
WST	Ched. 209	DR XL 1	18.5/ 6,600 PSI	19.8/ 7,400 PSI	21.2/ 8,200 PSI	22.6/ 9,000 PSI
WST	Ched. 209	Fed. 12S3	18.1/ 7,300 PSI	19.5/ 8,300 PSI	21.0/ 9,300 PSI	22.4/10,200 PSI
WST	Ched. 209	Rem. FIG 8	18.6/ 6,900 PSI	19.9/ 7,800 PSI	21.2/ 8,700 PSI	22.6/ 9,500 PSI

Powder	Primer	Wad	Charge/Pressure			
WST	Fio. 616	CB 6118-12	18.8/ 7,100 PSI	20.1/ 8,000 PSI	21.4/ 8,900 PSI	22.7/ 9,900 PSI
WST	Fio. 616	Fed. 12S3	–	20.5/ 7,600 PSI	22.1/ 9,900 PSI	–
WST	Fio. 616	Rem. FIG 8	–	20.6/ 7,600 PSI	22.0/ 9,800 PSI	23.5/10,400 PSI
WST	Fio. 616	WAA12	–	20.5/ 7,500 PSI	21.9/ 8,900 PSI	23.5/10,500 PSI
WST	Win. 209	Fed. 12S3	–	–	21.0/ 9,500 PSI	–
Super Hcp	Ched. 209	Fed. 12SO	–	19.4/ 6,400 PSI	20.9/ 7,800 PSI	23.4/10,200 PSI
Super Hcp	Ched. 209	Rem. TGT12	–	–	20.5/ 7,000 PSI	22.0/ 8,100 PSI
Super Hcp	Ched. 209	WAA12SL	–	–	21.1/ 6,900 PSI	22.3/ 8,200 PSI
Super Hcp	Fed. 209A	Fed. 12SO	–	18.8/ 6,600 PSI	20.5/ 7,800 PSI	21.3/ 8,400 PSI
Super Hcp	Fed. 209A	J-XL-1	–	–	20.7/ 7,500 PSI	22.3/ 8,600 PSI
Super Hcp	Fed. 209A	Rem. TGT12	–	–	21.0/ 7,400 PSI	22.2/ 8,500 PSI
Super Hcp	Fed. 209A	WAA12SL	–	19.0/ 6,600 PSI	20.5/ 7,800 PSI	22.0/ 8,900 PSI
Super Hcp	Fio. 616	Fed. 12SO	–	–	21.2/ 7,700 PSI	23.0/ 9,400 PSI
Super Hcp	Fio. 616	Rem. TGT 12	–	–	21.0/ 7,600 PSI	22.2/ 8,700 PSI
Super Hcp	Fio. 616	WAA12SL	–	–	21.1/ 7,300 PSI	22.5/ 8,400 PSI
Super Hcp	Win. 209	Fed. 12SO	–	20.5/ 5,700 PSI	21.9/ 7,200 PSI	23.3/ 8,700 PSI
Super Hcp	Win. 209	Rem. TGT12	–	–	21.6/ 7,100 PSI	23.0/ 8,100 PSI
Super Hcp	Win. 209	WAA12SL	–	19.7/ 5,800 PSI	21.4/ 7,100 PSI	23.0/ 8,300 PSI
244	Ched. 209	CB 2118-12	17.5/ 6,500 PSI	18.5/ 7,300 PSI	19.6/ 8,100 PSI	20.6/ 9,000 PSI
244	Ched. 209	CB 4118-12B	–	18.7/ 6,700 PSI	19.7/ 7,500 PSI	20.7/ 8,200 PSI
244	Ched. 209	DRV-12	17.4/ 6,600 PSI	18.4/ 7,400 PSI	19.5/ 8,200 PSI	20.6/ 9,100 PSI
244	Ched. 209	Rem. FIG 8	–	18.6/ 6,600 PSI	19.6/ 7,300 PSI	20.7/ 8,000 PSI
244	Fed. 209A	CB 2118-12	17.1/ 6,800 PSI	18.2/ 7,900 PSI	19.3/ 9,000 PSI	20.4/10,100 PSI
244	Fed. 209A	CB 4118-12B	17.2/ 6,500 PSI	18.3/ 7,300 PSI	19.5/ 8,100 PSI	20.7/ 8,900 PSI
244	Fed. 209A	DRV-12	16.8/ 7,300 PSI	17.9/ 8,200 PSI	19.1/ 9,200 PSI	20.2/10,200 PSI
244	Fed. 209A	Rem. FIG 8	17.2/ 6,700 PSI	18.3/ 7,600 PSI	19.4/ 8,400 PSI	20.6/ 9,300 PSI
244	Fio. 616	CB 2118-12	–	19.2/ 6,700 PSI	20.2/ 7,700 PSI	21.2/ 8,800 PSI
244	Fio. 616	CB 4118-12B	–	–	20.4/ 6,900 PSI	21.4/ 7,700 PSI
244	Fio. 616	DRV-12	–	19.2/ 6,900 PSI	20.3/ 7,700 PSI	21.3/ 8,500 PSI
244	Fio. 616	Rem. FIG 8	–	–	20.8/ 7,000 PSI	21.7/ 7,800 PSI
244	Win. 209	CB 2118-12	–	19.1/ 7,400 PSI	20.1/ 8,500 PSI	21.1/ 9,600 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 1/8 oz. Lead Shot—cont.

			1090 fps	1145 fps	1200 fps	1255 fps
244	Win. 209	CB 4118-12B	–	19.1/ 7,000 PSI	20.1/ 7,800 PSI	21.1/ 8,700 PSI
244	Win. 209	DRV-12	–	18.0/ 7,100 PSI	19.1/ 8,400 PSI	20.3/ 9,700 PSI
244	Win. 209	Rem. FIG 8	–	19.0/ 7,000 PSI	20.0/ 7,900 PSI	21.1/ 8,700 PSI

12G - 2 3/4″ FEDERAL GOLD MEDAL PLASTIC SHELLS - 1 1/8 oz. Lead Shot - High Velocity

			1420 fps	1475 fps	1530 fps	1585 fps
Longshot	CCI 209M	Fed. 12S3	32.2/ 8,400 PSI	33.6/ 9,500 PSI	34.9/10,600 PSI	–
Longshot	CCI 209M	Hor. Versalite	31.6/ 8,700 PSI	33.2/ 9,500 PSI	34.8/10,300 PSI	36.4/11,200 PSI
Longshot	CCI 209M	Rem. FIG 8	32.2/ 8,500 PSI	33.8/ 9,400 PSI	35.5/10,400 PSI	37.1/11,400 PSI
Longshot	CCI 209M	WAA12	31.4/ 8,800 PSI	33.2/ 9,500 PSI	35.0/10,300 PSI	36.8/11,000 PSI
Longshot	Fed. 209A	Fed. 12S3	32.0/ 9,000 PSI	33.3/10,000 PSI	34.6/11,500 PSI	–
Longshot	Fed. 209A	Hor. Versalite	31.7/ 8,800 PSI	33.2/ 9,600 PSI	34.8/10,500 PSI	36.4/11,400 PSI
Longshot	Fed. 209A	Rem. FIG 8	32.2/ 8,600 PSI	33.6/ 9,500 PSI	35.0/10,500 PSI	36.4/11,400 PSI
Longshot	Fed. 209A	WAA12	31.7/ 8,900 PSI	33.1/ 9,700 PSI	34.6/10,700 PSI	36.0/11,500 PSI
Longshot	Fed. 209A	Windjammer	32.3/ 8,200 PSI	33.9/ 9,200 PSI	35.5/10,200 PSI	37.1/11,200 PSI
Longshot	Win. 209	Fed. 12S3	34.2/ 7,100 PSI	35.5/ 8,200 PSI	36.8/ 9,400 PSI	38.1/10,600 PSI
Longshot	Win. 209	Hor. Versalite	34.6/ 7,200 PSI	35.7/ 8,200 PSI	36.9/ 9,300 PSI	38.0/10,200 PSI
Longshot	Win. 209	Rem. FIG 8	34.9/ 7,100 PSI	36.0/ 8,100 PSI	37.1/ 9,100 PSI	38.2/10,000 PSI
Longshot	Win. 209	WAA12	34.0/ 7,600 PSI	35.2/ 8,500 PSI	36.4/ 9,400 PSI	37.8/10,400 PSI
Longshot	Win. 209	Windjammer	35.0/ 7,100 PSI	36.2/ 8,000 PSI	37.4/ 8,900 PSI	38.5/10,100 PSI

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 oz. Lead Shot

			1180 fps	1235 fps	1290 fps	1345 fps
Nitro 100 NF	CCI 209	12P1	15.8/10,600 PSI	–	–	–
Nitro 100 NF	CCI 209	WAA12L	16.8/ 9,000 PSI	17.8/10,500 PSI	–	–
Nitro 100 NF	Ched. 209	12P1	15.7/10,500 PSI	–	–	–
Nitro 100 NF	Ched. 209	CB 4100-12B	16.9/ 8,000 PSI	17.9/ 9,000 PSI	19.0/ 9,900 PSI	–
Nitro 100 NF	Ched. 209	Rem. TGT 12	16.7/ 8,800 PSI	17.8/ 9,900 PSI	18.9/10,900 PSI	–
Nitro 100 NF	Ched. 209	WAA12L	16.7/ 9,500 PSI	17.9/10,800 PSI	–	–
Nitro 100 NF	Fed. 209A	Fed. 12SO	17.2/ 7,900 PSI	18.5/10,000 PSI	19.7/11,200 PSI	–
Nitro 100 NF	Fed. 209A	Rem. TGT 12	16.5/ 8,800 PSI	17.8/10,000 PSI	–	–
Nitro 100 NF	Fed. 209A	WAA12SL	17.0/ 8,600 PSI	18.2/10,100 PSI	19.4/11,000 PSI	–
Nitro 100 NF	Fio. 616	12P1	15.7/10,700 PSI	–	–	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
Nitro 100 NF	Fio. 616	CB 4100-12B	17.0/ 8,100 PSI	18.1/ 9,000 PSI	19.1/ 9,800 PSI	–
Nitro 100 NF	Fio. 616	Rem. TGT 12	17.4/ 8,900 PSI	18.3/11,200 PSI	18.7/11,100 PSI	–
Nitro 100 NF	Fio. 616	WAA12L	15.9/ 8,800 PSI	17.5/10,800 PSI	–	–
Nitro 100 NF	Fio. 616	WAA12SL	17.0/ 8,300 PSI	18.0/ 9,700 PSI	19.3/11,300 PSI	–
Nitro 100 NF	Fio. 616	Windjammer	–	18.0/ 9,600 PSI	19.2/10,800 PSI	–
Nitro 100 NF	Win. 209	12P1	15.7/10,300 PSI	–	–	–
Nitro 100 NF	Win. 209	CB-4100-12	17.1/ 7,900 PSI	18.4/ 9,200 PSI	19.6/10,200 PSI	–
Nitro 100 NF	Win. 209	Rem. TGT 12	16.4/ 9,100 PSI	17.7/10,500 PSI	19.2/11,000 PSI	–
Nitro 100 NF	Win. 209	WAA12SL	16.5/ 8,900 PSI	18.0/11,000 PSI	–	–
Nitro 100 NF	Win. 209	Windjammer	17.6/ 8,300 PSI	18.8/ 9,500 PSI	20.0/10,700 PSI	–
Perfect Pattern	CCI 209	CB 4100-12B	15.1/ 8,000 PSI	16.3/ 9,600 PSI	17.6/11,200 PSI	–
Perfect Pattern	CCI 209	Rem. TGT 12	15.1/ 8,000 PSI	16.5/ 9,500 PSI	17.8/11,100 PSI	–
Perfect Pattern	CCI 209	WAA12SL	14.6/ 9,500 PSI	16.0/11,300 PSI	–	–
Perfect Pattern	Ched. 209	CB 4100-12B	15.5/ 8,300 PSI	16.6/ 9,900 PSI	17.7/11,400 PSI	–
Perfect Pattern	Ched. 209	Rem. TGT 12	15.2/ 9,000 PSI	16.4/10,300 PSI	–	–
Perfect Pattern	Ched. 209	WAA12SL	15.0/ 9,300 PSI	16.2/10,800 PSI	–	–
Perfect Pattern	Fed. 209A	CB 4100-12B	15.2/ 8,700 PSI	16.5/10,200 PSI	–	–
Perfect Pattern	Fed. 209A	Rem. TGT 12	15.0/ 9,200 PSI	16.2/10,500 PSI	–	–
Perfect Pattern	Fed. 209A	WAA12SL	15.6/ 9,300 PSI	16.5/11,000 PSI	–	–
Perfect Pattern	Fio. 616	CB 4100-12B	15.2/ 7,900 PSI	16.5/ 9,300 PSI	17.8/10,600 PSI	–
Perfect Pattern	Fio. 616	Rem. TGT 12	15.4/ 8,300 PSI	16.6/ 9,600 PSI	17.8/10,800 PSI	–
Perfect Pattern	Fio. 616	WAA12SL	15.3/ 8,700 PSI	16.5/10,500 PSI	–	–
Perfect Pattern	Win. 209	CB 4100-12B	15.4/ 8,200 PSI	16.4/ 9,600 PSI	17.5/10,900 PSI	–
Perfect Pattern	Win. 209	Rem. TGT 12	15.3/ 8,700 PSI	16.5/10,100 PSI	17.6/11,500 PSI	–
Perfect Pattern	Win. 209	WAA12SL	15.2/ 9,200 PSI	16.5/10,900 PSI	–	–
Titewad	CCI 209	12P1	15.8/10,600 PSI	–	–	–

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
Titewad	CCI 209	Rem. TGT 12	16.4/ 9,100 PSI	17.7/10,500 PSI	19.0/11,400 PSI	–
Titewad	CCI 209	WAA12L	16.8/ 9,000 PSI	17.8/10,500 PSI	–	–
Titewad	Ched. 209	12P1	15.7/10,500 PSI	–	–	–
Titewad	Ched. 209	CB 4100-12B	16.9/ 8,000 PSI	17.9/ 9,000 PSI	19.0/ 9,900 PSI	–
Titewad	Ched. 209	Rem. TGT 12	16.7/ 8,800 PSI	17.8/ 9,900 PSI	18.9/10,900 PSI	–
Titewad	Ched. 209	WAA12L	16.7/ 9,500 PSI	17.9/10,800 PSI	–	–
Titewad	Fed. 209A	Fed. 12SO	17.2/ 7,900 PSI	18.5/10,000 PSI	19.7/11,200 PSI	–
Titewad	Fed. 209A	Rem. TGT 12	16.5/ 8,800 PSI	17.8/10,000 PSI	–	–
Titewad	Fed. 209A	WAA12SL	17.0/ 8,600 PSI	18.2/10,100 PSI	19.4/11,000 PSI	–
Titewad	Fio. 616	12P1	15.7/10,700 PSI	–	–	–
Titewad	Fio. 616	CB 4100-12B	17.0/ 8,100 PSI	18.1/ 9,000 PSI	19.1/ 9,800 PSI	–
Titewad	Fio. 616	Rem. TGT 12	16.5/ 9,000 PSI	17.7/10,200 PSI	18.7/11,100 PSI	–
Titewad	Fio. 616	WAA12L	15.9/ 8,800 PSI	17.5/10,800 PSI	–	–
Titewad	Fio. 616	WAA12SL	17.0/ 8,300 PSI	18.0/ 9,700 PSI	19.3/11,300 PSI	–
Titewad	Fio. 616	Windjammer	–	18.0/ 9,600 PSI	19.2/10,800 PSI	–
Titewad	Win. 209	12P1	15.7/10,300 PSI	–	–	–
Titewad	Win. 209	CB-4100-12	17.1/ 7,900 PSI	18.4/ 9,200 PSI	19.6/10,200 PSI	–
Titewad	Win. 209	Rem. TGT 12	16.6/ 8,600 PSI	17.9/ 9,800 PSI	19.2/11,000 PSI	–
Titewad	Win. 209	WAA12SL	16.5/ 8,900 PSI	18.0/11,000 PSI	–	–
Titewad	Win. 209	Windjammer	17.6/ 8,300 PSI	18.8/ 9,500 PSI	20.0/10,700 PSI	–
Competition	CCI 209	12P1	16.6/ 9,100 PSI	17.8/10,100 PSI	–	–
Competition	Ched. 209	12P1	16.8/ 9,000 PSI	18.0/10,100 PSI	–	–
Competition	Ched. 209	CB 4100-12B	17.3/ 7,700 PSI	18.5/ 8,400 PSI	19.7/ 9,100 PSI	–
Competition	Ched. 209	Rem. TGT 12	17.3/ 8,100 PSI	18.6/ 9,100 PSI	19.8/10,000 PSI	–
Competition	Ched. 209	WAA12L	16.7/ 8,700 PSI	18.3/ 9,800 PSI	19.8/10,900 PSI	–
Competition	Fed. 209A	12P1	16.2/10,000 PSI	17.4/11,200 PSI	–	–
Competition	Fed. 209A	CB 4100-12B	17.5/ 8,100 PSI	18.5/ 9,000 PSI	19.5/ 9,800 PSI	–
Competition	Fed. 209A	Rem. TGT 12	16.7/ 8,300 PSI	18.3/ 9,900 PSI	19.9/11,500 PSI	–
Competition	Fed. 209A	WAA12L	16.7/ 8,500 PSI	18.1/10,200 PSI	–	–
Competition	Fio. 616	12P1	16.5/ 9,300 PSI	17.8/10,300 PSI	–	–
Competition	Fio. 616	CB 4100-12B	17.6/ 8,500 PSI	18.5/ 9,400 PSI	19.3/10,400 PSI	–
Competition	Fio. 616	Rem. TGT 12	16.9/ 8,100 PSI	18.3/ 9,300 PSI	19.6/10,400 PSI	–
Competition	Fio. 616	WAA12L	17.5/ 9,200 PSI	18.4/10,400 PSI	–	–
Competition	Win. 209	12P1	16.8/ 8,900 PSI	18.0/ 9,600 PSI	–	–
Competition	Win. 209	CB 4100-12B	17.4/ 7,300 PSI	18.6/ 8,100 PSI	19.8/ 8,900 PSI	–
Competition	Win. 209	Rem. TGT 12	17.4/ 8,900 PSI	18.6/10,200 PSI	19.9/11,400 PSI	–
Competition	Win. 209	WAA12L	17.2/ 9,100 PSI	18.5/10,300 PSI	19.8/11,500 PSI	–
Clays	CCI 209	12P1	15.8/ 9,000 PSI	17.0/10,000 PSI	18.2/11,000 PSI	–

Powder	Primer	Wad	Charge/Pressure			
Clays	CCI 209	Rem. TGT 12	16.6/ 9,600 PSI	18.2/11,400 PSI	–	–
Clays	CCI 209	WAA12SL	16.3/10,100 PSI	17.5/11,200 PSI	–	–
Clays	Ched. 209	12P1	15.9/ 8,800 PSI	17.1/ 9,800 PSI	18.3/10,800 PSI	–
Clays	Fed. 209A	12P1	15.5/ 9,000 PSI	16.7/10,200 PSI	18.0/11,400 PSI	–
Clays	Fed. 209A	Rem. TGT 12	16.7/ 9,900 PSI	18.0/11,500 PSI	–	–
Clays	Fed. 209A	WAA12SL	16.5/10,800 PSI	17.7/11,300 PSI	–	–
Clays	Fio. 616	12P1	15.9/ 8,900 PSI	17.1/ 9,900 PSI	18.3/10,900 PSI	–
Clays	Fio. 616	CB 4100-12B	16.9/ 8,700 PSI	17.9/ 9,700 PSI	19.0/10,800 PSI	–
Clays	Fio. 616	Rem. TGT 12	17.4/ 9,600 PSI	–	–	–
Clays	Fio. 616	WAA12SL	17.0/ 9,000 PSI	18.3/10,500 PSI	–	–
Clays	Win. 209	12P1	16.2/ 9,000 PSI	17.3/10,000 PSI	18.5/10,900 PSI	–
Clays	Win. 209	CB-4100-12	17.8/ 7,200 PSI	19.1/ 8,600 PSI	20.4/10,000 PSI	–
Clays	Win. 209	Rem. TGT 12	17.6/ 7,900 PSI	18.8/ 9,200 PSI	20.1/10,500 PSI	–
Clays	Win. 209	WAA12SL	17.0/8,200 LUP	18.4/9,500 LUP	19.8/10,700 LUP	–
Clays	Win. 209	Windjammer	18.4/ 7,100 PSI	19.5/ 8,600 PSI	20.6/10,200 PSI	–
700-X	CCI 209	12P1	16.0/ 9,300 PSI	17.1/10,400 PSI	–	–
700-X	Ched. 209	12P1	15.8/ 8,800 PSI	17.1/ 9,900 PSI	18.3/11,000 PSI	–
700-X	Fed. 209A	12P1	15.4/ 9,300 PSI	16.7/10,500 PSI	–	–
700-X	Fed. 209A	CB 1100-12	16.4/ 8,200 PSI	17.0/ 9,300 PSI	18.9/10,400 PSI	–
700-X	Fed. 209A	Fed. 12S3	16.4/ 9,700 PSI	17.7/10,900 PSI	–	–
700-X	Fed. 209A	Rem. TGT12	16.1/ 8,700 PSI	17.2/ 9,700 PSI	18.3/10,700 PSI	–

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 oz. LEAD SHOT—cont.

			1180 fps	1235 fps	1290 fps	1345 fps
700-X	Fed. 209A	WAA12SL	16.4/ 9,400 PSI	17.7/10,500 PSI	–	–
700-X	Fio. 616	12P1	15.9/ 9,000 PSI	16.9/10,000 PSI	–	–
700-X	Fio. 616	Rem. TGT 12	17.7/ 8,600 PSI	18.6/ 9,900 PSI	20.1/11,100 PSI	–
700-X	Fio. 616	WAA12SL	16.8/ 8,700 PSI	18.2/ 9,800 PSI	19.6/10,900 PSI	–
700-X	Win. 209	12P1	15.9/ 9,000 PSI	17.1/10,000 PSI	18.3/11,000 PSI	–
700-X	Win. 209	CB 1100-12	16.6/ 7,800 PSI	17.7/ 8,900 PSI	18.8/10,000 PSI	–
700-X	Win. 209	Fed. 12S3	16.4/ 9,600 PSI	17.7/10,800 PSI	–	–
700-X	Win. 209	Rem. TGT12	16.6/ 8,600 PSI	17.7/ 9,600 PSI	18.8/10,500 PSI	–
700-X	Win. 209	WAA12SL	16.6/ 8,900 PSI	17.7/10,000 PSI	18.8/11,100 PSI	–
High Gun	CCI 209	12P1	15.7/ 7,700 PSI	17.2/ 8,900 PSI	18.7/10,000 PSI	–
High Gun	CCI 209	CB 4100-12B	16.2/ 6,900 PSI	17.6/ 8,300 PSI	19.0/ 9,700 PSI	20.4/11,100 PSI
High Gun	CCI 209	Rem. TGT 12	16.6/ 7,300 PSI	17.9/ 8,600 PSI	19.2/10,000 PSI	20.5/11,300 PSI
High Gun	CCI 209	WAA12SL	16.0/ 7,800 PSI	17.4/ 9,200 PSI	18.9/10,700 PSI	–
High Gun	Ched. 209	12P1	16.2/ 8,200 PSI	17.3/ 9,100 PSI	18.4/10,000 PSI	–
High Gun	Ched. 209	CB 4100-12B	16.3/ 7,000 PSI	17.6/ 8,200 PSI	18.8/ 9,400 PSI	20.1/10,600 PSI
High Gun	Ched. 209	Rem. TGT 12	15.9/ 7,600 PSI	17.3/ 8,800 PSI	18.6/10,000 PSI	20.0/11,300 PSI
High Gun	Ched. 209	WAA12SL	15.8/ 7,500 PSI	17.2/ 8,800 PSI	18.6/10,200 PSI	20.0/11,500 PSI
High Gun	Fed. 209A	12P1	15.5/ 7,900 PSI	16.9/ 8,900 PSI	18.2/ 9,900 PSI	–
High Gun	Fed. 209A	CB 4100-12B	16.2/ 7,300 PSI	17.6/ 8,700 PSI	18.9/10,000 PSI	20.3/11,400 PSI
High Gun	Fed. 209A	Rem. TGT 12	16.1/ 7,500 PSI	17.5/ 8,800 PSI	18.9/10,100 PSI	20.3/11,400 PSI
High Gun	Fed. 209A	WAA12SL	16.2/ 7,900 PSI	18.3/ 9,300 PSI	20.3/10,700 PSI	–
High Gun	Fio. 616	12P1	15.9/ 8,400 PSI	17.2/ 9,400 PSI	18.5/10,300 PSI	–
High Gun	Fio. 616	CB 4100-12B	16.8/ 6,300 PSI	18.1/ 7,500 PSI	19.4/ 8,700 PSI	20.6/ 9,900 PSI
High Gun	Fio. 616	Rem. TGT 12	17.1/ 8,000 PSI	18.2/ 9,000 PSI	19.4/10,000 PSI	20.5/11,000 PSI
High Gun	Fio. 616	WAA12SL	16.2/ 7,000 PSI	17.6/ 8,100 PSI	18.9/ 9,200 PSI	20.3/10,300 PSI
High Gun	Win. 209	12P1	16.3/ 8,200 PSI	17.4/ 9,100 PSI	18.5/ 9,900 PSI	–
High Gun	Win. 209	CB 4100-12B	16.2/ 7,000 PSI	17.6/ 8,300 PSI	19.0/ 9,500 PSI	20.3/10,800 PSI
High Gun	Win. 209	Rem. TGT 12	16.0/ 7,700 PSI	17.5/ 8,900 PSI	18.9/10,000 PSI	20.3/11,000 PSI
High Gun	Win. 209	WAA12SL	16.3/ 8,100 PSI	17.6/ 9,100 PSI	18.9/10,200 PSI	20.5/11,300 PSI
WST	CCI 209	12P1	17.8/ 8,300 PSI	19.4/ 9,300 PSI	20.9/10,400 PSI	–
WST	CCI 209	Fed. 12SO	18.5/ 8,800 PSI	19.5/ 9,500 PSI	20.5/10,800 PSI	–
WST	CCI 209	WAA12L	–	–	21.0/10,100 PSI	–
WST	CCI 209	WAA12SL	19.0/ 8,000 PSI	20.0/ 9,000 PSI	20.5/10,800 PSI	–
WST	Ched. 209	12P1	18.6/ 8,400 PSI	19.9/ 9,400 PSI	21.2/10,400 PSI	–
WST	Ched. 209	CB 4100-12B	19.3/ 8,300 PSI	20.4/ 9,400 PSI	21.5/10,500 PSI	–
WST	Ched. 209	Rem. TGT 12	18.7/ 8,700 PSI	20.1/10,000 PSI	21.5/11,300 PSI	–
WST	Ched. 209	WAA12L	18.6/ 9,100 PSI	20.0/10,500 PSI	–	–
WST	Fed. 209A	12P1	18.2/ 8,800 PSI	19.7/ 9,700 PSI	21.1/10,700 PSI	–
WST	Fio. 616	12P1	18.1/ 8,900 PSI	19.4/10,000 PSI	20.6/11,000 PSI	–
WST	Fio. 616	CB 4100-12B	19.8/ 8,300 PSI	21.1/ 9,200 PSI	22.4/10,200 PSI	–
WST	Fio. 616	Rem. TGT 12	19.6/ 8,200 PSI	21.1/ 9,700 PSI	22.5/11,000 PSI	–
WST	Fio. 616	WAA12SL	19.6/ 8,300 PSI	21.1/ 9,400 PSI	22.7/10,600 PSI	–
WST	Win. 209	12P1	18.2/ 8,500 PSI	19.9/ 9,300 PSI	21.6/10,200 PSI	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
WST	Win. 209	Fed. 12SO	19.0/ 8,200 PSI	20.0/ 8,900 PSI	21.0/ 9,700 PSI	–
WST	Win. 209	WAA12SL	–	19.5/ 8,000 PSI	21.0/10,000 PSI	–
Super Hcp	CCI 209	12P1	17.9/ 7,200 PSI	19.0/ 8,100 PSI	20.2/ 9,000 PSI	–
Super Hcp	Ched. 209	12P1	18.1/ 7,200 PSI	19.2/ 8,000 PSI	20.2/ 8,800 PSI	–
Super Hcp	Ched. 209	CB 4100-12B	18.9/ 6,800 PSI	19.8/ 7,600 PSI	20.7/ 8,300 PSI	21.6/ 9,100 PSI
Super Hcp	Ched. 209	J-XL-1	18.1/ 6,800 PSI	19.6/ 8,100 PSI	21.0/ 9,200 PSI	22.5/10,400 PSI
Super Hcp	Ched. 209	Rem. TGT12	18.5/ 6,700 PSI	20.1/ 7,800 PSI	21.8/ 9,100 PSI	22.8/ 9,900 PSI
Super Hcp	Ched. 209	WAA12SL	18.6/ 6,900 PSI	19.9/ 8,000 PSI	21.2/ 9,000 PSI	22.6/10,100 PSI
Super Hcp	Fed. 209A	12P1	17.3/ 7,100 PSI	18.7/ 8,200 PSI	20.0/ 9,200 PSI	–
Super Hcp	Fed. 209A	J-XL-1	18.0/ 7,300 PSI	19.3/ 8,300 PSI	20.6/ 9,400 PSI	22.0/10,500 PSI
Super Hcp	Fed. 209A	Rem. TGT12	18.1/ 7,000 PSI	19.4/ 8,100 PSI	20.8/ 9,300 PSI	22.0/10,400 PSI
Super Hcp	Fed. 209A	WAA12SL	18.1/ 7,200 PSI	19.3/ 8,300 PSI	20.6/ 9,400 PSI	21.9/10,600 PSI
Super Hcp	Fio. 616	12P1	17.9/ 7,400 PSI	19.0/ 8,200 PSI	20.1/ 9,100 PSI	–
Super Hcp	Fio. 616	CB 4100-12B	19.5/ 6,300 PSI	20.6/ 7,000 PSI	21.6/ 7,600 PSI	22.6/ 8,300 PSI
Super Hcp	Fio. 616	Rem. TGT 12	–	20.1/ 7,900 PSI	21.4/ 9,100 PSI	22.7/10,300 PSI
Super Hcp	Fio. 616	WAA12SL	–	20.1/ 8,000 PSI	21.5/ 9,200 PSI	22.8/10,300 PSI

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
Super Hcp	Win. 209	12P1	17.8/ 7,100 PSI	19.0/ 7,900 PSI	20.2/ 8,700 PSI	–
Super Hcp	Win. 209	J-XL-1	19.0/ 6,200 PSI	20.3/ 7,500 PSI	21.5/ 8,700 PSI	22.8/10,000 PSI
Super Hcp	Win. 209	Rem. TGT12	20.0/ 6,400 PSI	20.7/ 7,300 PSI	21.7/ 8,500 PSI	22.9/ 9,900 PSI
Super Hcp	Win. 209	WAA12SL	19.2/ 6,100 PSI	20.5/ 7,400 PSI	21.7/ 8,600 PSI	23.0/ 9,900 PSI
244	CCI 209	12P1	17.6/ 7,700 PSI	18.7/ 8,600 PSI	19.8/ 9,500 PSI	–
244	Ched. 209	12P1	17.9/ 7,700 PSI	18.8/ 8,600 PSI	19.8/ 9,400 PSI	–
244	Ched. 209	CB 4100-12B	17.8/ 7,200 PSI	19.0/ 8,200 PSI	20.2/ 9,300 PSI	21.5/10,300 PSI
244	Ched. 209	DR XL 1	17.2/ 7,200 PSI	18.5/ 8,400 PSI	19.9/ 9,600 PSI	21.3/10,900 PSI
244	Ched. 209	Rem. TGT 12	17.2/ 7,200 PSI	18.6/ 8,400 PSI	20.1/ 9,600 PSI	21.5/10,800 PSI
244	Fed. 209A	12P1	17.4/ 7,900 PSI	18.5/ 8,800 PSI	19.6/ 9,700 PSI	–
244	Fed. 209A	CB 4100-12B	17.0/ 7,400 PSI	18.4/ 8,600 PSI	19.7/ 9,800 PSI	21.0/11,000 PSI
244	Fed. 209A	DR XL 1	16.8/ 8,200 PSI	18.2/ 9,300 PSI	19.6/10,400 PSI	21.0/11,500 PSI
244	Fed. 209A	Rem. TGT 12	16.8/ 7,900 PSI	18.2/ 9,100 PSI	19.6/10,300 PSI	20.9/11,400 PSI
244	Fio. 616	12P1	17.4/ 7,600 PSI	18.7/ 8,500 PSI	20.0/ 9,400 PSI	–
244	Fio. 616	CB 4100-12B	18.5/ 6,500 PSI	19.7/ 7,600 PSI	20.9/ 8,700 PSI	22.1/ 9,800 PSI
244	Fio. 616	DR XL 1	17.7/ 7,300 PSI	19.1/ 8,400 PSI	20.4/ 9,500 PSI	21.7/10,500 PSI
244	Fio. 616	Rem. TGT 12	18.0/ 6,800 PSI	19.2/ 8,000 PSI	20.5/ 9,100 PSI	21.7/10,200 PSI
244	Win. 209	12P1	17.4/ 7,700 PSI	18.5/ 8,600 PSI	19.6/ 9,500 PSI	–
244	Win. 209	CB 4100-12B	17.4/ 7,700 PSI	18.6/ 8,800 PSI	19.8/10,000 PSI	21.0/11,200 PSI
244	Win. 209	DR XL 1	16.8/ 7,800 PSI	18.2/ 9,000 PSI	19.5/10,200 PSI	20.9/11,400 PSI
244	Win. 209	Rem. TGT 12	16.9/ 7,700 PSI	18.2/ 8,800 PSI	19.5/10,000 PSI	20.8/11,100 PSI
572	CCI 209	12P1	21.1/ 5,700 PSI	22.2/ 6,300 PSI	23.3/ 6,900 PSI	–
572	Ched. 209	12P1	21.9/ 5,400 PSI	22.8/ 6,000 PSI	23.8/ 6,600 PSI	–
572	Fed. 209A	12P1	20.6/ 6,200 PSI	21.7/ 6,800 PSI	22.7/ 7,400 PSI	–
572	Fio. 616	12P1	21.2/ 5,800 PSI	22.2/ 6,400 PSI	23.2/ 6,900 PSI	–
572	Win. 209	12P1	22.0/ 5,500 PSI	23.0/ 6,000 PSI	23.9/ 6,600 PSI	–

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT

			1090 fps	1145 fps	1200 fps	1255 fps
Nitro 100 NF	CCI 209	12P18	14.7/10,600 PSI	15.5/11,200 PSI	–	–
Nitro 100 NF	CCI 209	Red PC	15.5/10,200 PSI	16.0/10,800 PSI	–	–
Nitro 100 NF	CCI 209	Rem. FIG 8	15.0/10,600 PSI	15.8/11,300 PSI	–	–
Nitro 100 NF	Ched. 209	12P18	14.7/10,100 PSI	15.2/10,900 PSI	–	–
Nitro 100 NF	Ched. 209	DR XL 1	14.9/ 9,800 PSI	16.1/11,100 PSI	–	–
Nitro 100 NF	Ched. 209	DRV-12	14.8/10,000 PSI	16.1/11,200 PSI	–	–
Nitro 100 NF	Ched. 209	Rem. FIG 8	15.3/10,400 PSI	16.2/11,000 PSI	–	–
Nitro 100 NF	Ched. 209	WAA12	15.0/10,400 PSI	15.8/11,400 PSI	–	–
Nitro 100 NF	Ched. 209	Windjammer	15.5/ 9,400 PSI	16.5/10,500 PSI	–	–
Nitro 100 NF	Fed. 209A	12P18	14.6/10,600 PSI	15.2/11,400 PSI	–	–
Nitro 100 NF	Fed. 209A	Fed. 12S3	15.4/ 9,200 PSI	16.7/10,300 PSI	17.5/11,300 PSI	–
Nitro 100 NF	Fed. 209A	Rem. FIG 8	15.2/ 9,600 PSI	16.3/10,700 PSI	–	–
Nitro 100 NF	Fed. 209A	WAA12	15.2/ 9,800 PSI	16.0/10,500 PSI	–	–
Nitro 100 NF	Fed. 209A	Windjammer	15.3/ 9,000 PSI	16.3/ 9,500 PSI	17.8/11,100 PSI	–
Nitro 100 NF	Fio. 616	12P18	14.9/ 9,900 PSI	15.8/10,600 PSI	–	–
Nitro 100 NF	Fio. 616	DR XL 1	15.3/ 9,100 PSI	16.4/10,600 PSI	–	–
Nitro 100 NF	Fio. 616	DRV-12	15.0/ 9,300 PSI	16.3/10,900 PSI	–	–
Nitro 100 NF	Fio. 616	Rem. FIG 8	15.0/10,000 PSI	17.0/10,500 PSI	–	–
Nitro 100 NF	Fio. 616	WAA12	15.0/ 9,400 PSI	16.0/10,600 PSI	–	–

Powder	Primer	Wad	Charge/Pressure			
Nitro 100 NF	Fio. 616	Windjammer	15.3/ 9,100 PSI	16.3/10,300 PSI	17.3/11,300 PSI	–
Nitro 100 NF	Win. 209	12P18	14.7/10,200 PSI	15.4/10,800 PSI	–	–
Nitro 100 NF	Win. 209	Fed. 12S3	16.0/ 9,600 PSI	17.0/10,900 PSI	–	–
Nitro 100 NF	Win. 209	Rem. FIG 8	15.8/ 9,200 PSI	16.8/10,400 PSI	17.8/11,300 PSI	–
Nitro 100 NF	Win. 209	Trapper	15.1/ 9,900 PSI	16.3/11,200 PSI	–	–
Nitro 100 NF	Win. 209	WAA12	15.4/ 8,700 PSI	16.7/10,000 PSI	17.9/11,400 PSI	–
Nitro 100 NF	Win. 209	Windjammer	16.1/ 9,100 PSI	17.2/10,400 PSI	18.5/11,500 PSI	–
Perfect Pattern	CCI 209	CB 4118-12B	14.4/ 8,700 PSI	15.5/ 9,900 PSI	16.6/11,200 PSI	–
Perfect Pattern	CCI 209	Rem. FIG 8	14.5/ 8,800 PSI	15.6/10,200 PSI	16.7/11,500 PSI	–
Perfect Pattern	CCI 209	WAA12	14.3/10,100 PSI	15.3/11,400 PSI	–	–
Perfect Pattern	Ched. 209	CB 4118-12B	14.4/ 8,500 PSI	15.4/ 9,800 PSI	16.4/11,000 PSI	–

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 oz. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
Perfect Pattern	Ched. 209	Rem. FIG 8	14.5/ 9,100 PSI	15.5/10,400 PSI	–	–
Perfect Pattern	Ched. 209	WAA12	14.2/ 9,600 PSI	15.1/11,200 PSI	–	–
Perfect Pattern	Fed. 209A	CB 4118-12B	14.1/ 9,300 PSI	15.2/10,400 PSI	–	–
Perfect Pattern	Fed. 209A	Rem. FIG 8	14.2/ 9,300 PSI	15.2/10,700 PSI	–	–
Perfect Pattern	Fed. 209A	WAA12	13.9/10,100 PSI	–	–	–
Perfect Pattern	Fio. 616	CB 4118-12B	14.5/ 8,300 PSI	15.6/ 9,700 PSI	16.6/11,100 PSI	–
Perfect Pattern	Fio. 616	Rem. FIG 8	14.6/ 8,300 PSI	15.7/ 9,900 PSI	16.9/11,500 PSI	–
Perfect Pattern	Fio. 616	WAA12	14.1/ 9,300 PSI	15.2/10,500 PSI	–	–
Perfect Pattern	Win. 209	CB 4118-12B	14.3/ 8,600 PSI	15.4/10,000 PSI	16.4/11,400 PSI	–
Perfect Pattern	Win. 209	Rem. FIG 8	14.5/ 8,700 PSI	15.6/10,100 PSI	16.8/11,500 PSI	–
Perfect Pattern	Win. 209	WAA12	14.1/ 9,800 PSI	15.2/11,200 PSI	–	–
Titewad	CCI 209	12P18	14.7/10,600 PSI	15.5/11,200 PSI	–	–
Titewad	CCI 209	Rem. FIG 8	15.0/10,600 PSI	15.8/11,300 PSI	–	–
Titewad	Ched. 209	12P18	14.7/10,100 PSI	15.2/10,900 PSI	–	–
Titewad	Ched. 209	DR XL 1	14.9/ 9,800 PSI	16.1/11,100 PSI	–	–
Titewad	Ched. 209	DRV-12	14.8/10,000 PSI	16.1/11,200 PSI	–	–
Titewad	Ched. 209	Rem. FIG 8	15.3/10,400 PSI	16.2/11,000 PSI	–	–
Titewad	Ched. 209	WAA12	15.0/10,400 PSI	15.8/11,400 PSI	–	–
Titewad	Ched. 209	Windjammer	15.5/ 9,400 PSI	16.5/10,500 PSI	–	–
Titewad	Fed. 209A	12P18	14.6/10,600 PSI	15.2/11,400 PSI	–	–
Titewad	Fed. 209A	Fed. 12S3	15.4/ 9,200 PSI	16.7/10,300 PSI	17.5/11,300 PSI	–
Titewad	Fed. 209A	Hor. Versalite	15.0/ 9,400 PSI	16.0/10,800 PSI	–	–
Titewad	Fed. 209A	Rem. FIG 8	15.2/ 9,600 PSI	16.3/10,700 PSI	–	–
Titewad	Fed. 209A	WAA12	15.2/ 9,800 PSI	16.0/10,500 PSI	–	–
Titewad	Fed. 209A	Windjammer	15.3/ 9,000 PSI	16.3/ 9,500 PSI	17.8/11,100 PSI	–
Titewad	Fio. 616	12P18	14.9/ 9,900 PSI	15.8/10,600 PSI	–	–
Titewad	Fio. 616	DR XL 1	15.3/ 9,100 PSI	16.4/10,600 PSI	–	–
Titewad	Fio. 616	DRV-12	15.0/ 9,300 PSI	16.3/10,900 PSI	–	–
Titewad	Fio. 616	Rem. FIG 8	15.8/ 8,800 PSI	17.0/10,500 PSI	–	–
Titewad	Fio. 616	WAA12	15.5/ 8,600 PSI	16.8/10,600 PSI	–	–
Titewad	Fio. 616	Windjammer	15.3/ 9,100 PSI	16.3/10,300 PSI	17.3/11,300 PSI	–
Titewad	Win. 209	12P18	14.7/10,200 PSI	15.4/10,800 PSI	–	–
Titewad	Win. 209	Fed. 12S3	16.0/ 9,600 PSI	17.0/10,900 PSI	–	–
Titewad	Win. 209	Rem. FIG 8	15.8/ 9,200 PSI	16.8/10,400 PSI	17.8/11,300 PSI	–
Titewad	Win. 209	Trapper	15.1/ 9,900 PSI	16.3/11,200 PSI	–	–
Titewad	Win. 209	WAA12	15.4/ 8,700 PSI	16.7/10,000 PSI	17.9/11,400 PSI	–
Titewad	Win. 209	Windjammer	16.1/ 9,100 PSI	17.2/10,400 PSI	18.5/11,500 PSI	–
Competition	CCI 209	12P18	15.6/ 9,500 PSI	16.7/10,500 PSI	–	–
Competition	Ched. 209	12P18	15.6/ 8,800 PSI	16.8/ 9,900 PSI	18.0/10,900 PSI	–
Competition	Ched. 209	CB 4118-12B	16.1/ 8,600 PSI	17.2/ 9,700 PSI	18.4/10,800 PSI	–
Competition	Ched. 209	DR XL 1	15.5/ 9,400 PSI	16.8/10,500 PSI	–	–
Competition	Ched. 209	DRV-12	15.6/ 9,100 PSI	16.9/10,100 PSI	18.3/11,200 PSI	–
Competition	Ched. 209	Rem. FIG 8	16.0/ 9,200 PSI	17.2/10,300 PSI	–	–
Competition	Ched. 209	WAA12	15.5/ 9,100 PSI	16.7/10,000 PSI	–	–
Competition	Fed. 209A	12P18	15.4/ 9,300 PSI	16.6/10,500 PSI	–	–
Competition	Fed. 209A	CB 4118-12B	15.5/ 8,600 PSI	16.5/10,000 PSI	–	–
Competition	Fed. 209A	DR XL 1	15.6/ 9,300 PSI	16.7/10,900 PSI	–	–
Competition	Fed. 209A	DRV-12	15.6/ 9,600 PSI	16.9/10,900 PSI	–	–
Competition	Fed. 209A	Rem. FIG 8	16.4/ 8,700 PSI	17.5/10,200 PSI	–	–
Competition	Fed. 209A	WAA12	15.6/ 9,500 PSI	16.7/10,500 PSI	–	–
Competition	Fio. 616	12P18	15.6/ 9,000 PSI	16.7/10,100 PSI	–	–
Competition	Fio. 616	CB 4118-12B	16.4/ 8,300 PSI	17.6/ 9,500 PSI	18.7/10,600 PSI	–
Competition	Fio. 616	DR XL 1	16.1/ 8,300 PSI	17.3/ 9,600 PSI	18.6/11,000 PSI	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
Competition	Fio. 616	DRV-12	16.1/ 8,100 PSI	17.4/ 9,500 PSI	18.6/10,800 PSI	–
Competition	Fio. 616	Rem. FIG 8	16.3/ 8,400 PSI	17.6/ 9,600 PSI	18.8/10,800 PSI	–
Competition	Fio. 616	WAA12	15.9/ 9,400 PSI	17.0/10,400 PSI	18.1/11,400 PSI	–
Competition	Fio. 616	WAA12114	–	17.0/10,400 PSI	–	–
Competition	Win. 209	12P18	15.6/ 8,800 PSI	16.8/10,000 PSI	18.1/11,300 PSI	–
Competition	Win. 209	CB 4118-12B	16.3/ 8,200 PSI	17.4/ 9,400 PSI	18.6/10,700 PSI	–

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
Competition	Win. 209	DR XL 1	16.0/ 8,600 PSI	17.0/10,000 PSI	18.0/11,400 PSI	–
Competition	Win. 209	DRV-12	15.6/ 8,800 PSI	16.8/10,100 PSI	18.0/11,300 PSI	–
Competition	Win. 209	Rem. FIG 8	16.4/ 8,600 PSI	17.4/ 9,800 PSI	18.5/11,100 PSI	–
Competition	Win. 209	WAA12	15.7/ 8,700 PSI	16.9/10,000 PSI	18.0/11,300 PSI	–
Clays	CCI 209	12P18	15.2/ 9,800 PSI	16.4/ 9,800 PSI	17.5/11,000 PSI	–
Clays	CCI 209	Fed. 12S3	16.0/ 9,300 PSI	17.2/10,600 PSI	–	–
Clays	CCI 209	Hor. Versalite	16.0/ 8,300 PSI	17.5/ 9,800 PSI	18.9/11,200 PSI	–
Clays	CCI 209	Rem. FIG 8	16.8/ 7,400 PSI	18.0/ 9,300 PSI	19.3/11,400 PSI	–
Clays	CCI 209	WAA12	15.9/ 8,500 PSI	17.2/10,300 PSI	18.2/11,500 PSI	–
Clays	CCI 209	Windjammer	16.6/6,400 LUP	18.0/7,500 LUP	19.4/8,600 LUP	–
Clays	Ched. 209	12P18	15.4/ 8,300 PSI	16.4/ 9,300 PSI	17.4/10,400 PSI	–
Clays	Ched. 209	DR XL 1	15.1/ 8,200 PSI	16.2/ 9,400 PSI	17.2/10,500 PSI	–
Clays	Ched. 209	DRV-12	15.1/ 8,200 PSI	16.2/ 9,600 PSI	17.2/11,000 PSI	–
Clays	Ched. 209	Rem. FIG 8	16.0/ 9,100 PSI	17.2/10,400 PSI	–	–
Clays	Ched. 209	WAA12	15.5/ 9,500 PSI	16.4/10,600 PSI	–	–
Clays	Ched. 209	Windjammer	15.7/ 8,100 PSI	17.0/ 9,500 PSI	18.3/10,800 PSI	–
Clays	Fed. 209A	12P18	15.4/ 8,300 PSI	16.4/ 9,300 PSI	17.4/10,400 PSI	–
Clays	Fed. 209A	Hor. Versalite	15.5/ 9,600 PSI	16.6/11,000 PSI	–	–
Clays	Fed. 209A	Rem. FIG 8	15.8/ 9,500 PSI	16.9/10,700 PSI	–	–
Clays	Fed. 209A	WAA12	15.5/ 9,900 PSI	16.6/11,200 PSI	–	–
Clays	Fed. 209A	Windjammer	16.2/ 8,500 PSI	17.3/10,000 PSI	18.4/11,400 PSI	–
Clays	Fio. 616	12P18	14.8/ 8,300 PSI	15.8/ 9,500 PSI	16.9/10,700 PSI	–
Clays	Fio. 616	DR XL 1	15.1/ 8,500 PSI	16.2/ 9,700 PSI	17.3/11,000 PSI	–
Clays	Fio. 616	DRV-12	14.8/ 8,600 PSI	16.0/ 9,800 PSI	17.2/11,000 PSI	–
Clays	Fio. 616	Rem. FIG 8	16.6/ 8,900 PSI	17.5/10,600 PSI	–	–
Clays	Fio. 616	WAA12	16.2/ 9,200 PSI	17.0/10,500 PSI	–	–
Clays	Fio. 616	Windjammer	17.0/ 7,900 PSI	18.1/10,000 PSI	18.4/10,800 PSI	–
Clays	Win. 209	12P18	15.4/ 8,300 PSI	16.4/ 9,300 PSI	17.4/10,400 PSI	–
Clays	Win. 209	Hor. Versalite	15.8/7,600 LUP	17.2/9,100 LUP	18.6/10,500 LUP	–
Clays	Win. 209	Rem. FIG 8	16.4/ 8,400 PSI	17.5/ 9,700 PSI	18.6/11,000 PSI	–
Clays	Win. 209	Trapper	16.2/ 9,200 PSI	17.3/10,500 PSI	–	–
Clays	Win. 209	WAA12	16.2/ 8,100 PSI	17.3/ 9,700 PSI	18.4/11,300 PSI	–
Clays	Win. 209	Windjammer	16.8/ 7,700 PSI	18.1/ 9,100 PSI	19.4/10,500 PSI	–
700-X	CCI 209	12P18	14.9/ 9,000 PSI	15.9/10,000 PSI	16.9/11,100 PSI	–
700-X	Ched. 209	12P18	15.2/ 8,300 PSI	16.3/ 9,500 PSI	17.5/10,700 PSI	–
700-X	Ched. 209	DR XL 1	15.2/ 8,300 PSI	16.2/ 9,600 PSI	17.3/10,800 PSI	–
700-X	Ched. 209	DRV-12	14.9/ 8,600 PSI	16.0/ 9,800 PSI	17.1/10,900 PSI	–
700-X	Fed. 209A	12P18	14.9/ 8,800 PSI	15.9/10,000 PSI	16.9/11,200 PSI	–
700-X	Fed. 209A	CB 1118-12	15.5/ 8,500 PSI	16.5/ 9,700 PSI	17.5/10,800 PSI	–
700-X	Fed. 209A	Fed. 12S3	15.0/ 9,300 PSI	16.0/10,200 PSI	17.5/11,500 PSI	–
700-X	Fed. 209A	Rem. FIG 8	15.5/ 8,900 PSI	16.5/10,000 PSI	17.5/11,000 PSI	–
700-X	Fed. 209A	WAA12	15.0/ 9,500 PSI	16.5/10,900 PSI	–	–
700-X	Fed. 209A	Windjammer	15.5/ 8,400 PSI	16.5/ 9,500 PSI	17.5/10,400 PSI	18.5/11,100 PSI
700-X	Fio. 616	12P18	15.2/ 8,000 PSI	16.1/ 9,300 PSI	17.1/10,700 PSI	–
700-X	Fio. 616	DR XL 1	15.1/ 7,800 PSI	16.4/ 9,000 PSI	17.7/10,300 PSI	19.0/11,500 PSI
700-X	Fio. 616	DRV-12	15.2/ 8,000 PSI	16.3/ 9,200 PSI	17.5/10,400 PSI	–
700-X	Fio. 616	Rem. FIG 8	15.7/ 8,300 PSI	16.9/ 9,300 PSI	18.0/10,200 PSI	–
700-X	Fio. 616	WAA12	15.5/ 8,400 PSI	16.5/ 9,400 PSI	17.7/10,600 PSI	–
700-X	Fio. 616	Windjammer	15.5/ 7,400 PSI	16.8/ 8,600 PSI	18.2/ 9,800 PSI	19.5/11,200 PSI
700-X	Win. 209	12P18	15.2/ 8,400 PSI	16.2/ 9,500 PSI	17.3/10,600 PSI	–
700-X	Win. 209	CB 1118-12	15.5/ 7,700 PSI	16.5/ 8,700 PSI	17.5/ 9,800 PSI	19.0/11,400 PSI
700-X	Win. 209	Fed. 12S3	15.5/ 9,000 PSI	16.5/ 9,800 PSI	17.5/10,900 PSI	–
700-X	Win. 209	Rem. FIG 8	15.5/ 8,500 PSI	16.5/ 9,400 PSI	18.0/10,800 PSI	–
700-X	Win. 209	WAA12	15.5/ 9,300 PSI	16.5/10,200 PSI	17.5/11,200 PSI	–
700-X	Win. 209	Windjammer	15.5/ 8,000 PSI	16.5/ 8,900 PSI	17.5/ 9,800 PSI	19.0/11,100 PSI
High Gun	CCI 209	12P18	15.1/ 8,400 PSI	16.2/ 9,600 PSI	17.3/10,800 PSI	–
High Gun	CCI 209	CB 4118-12B	15.8/ 7,200 PSI	17.0/ 8,300 PSI	18.1/ 9,500 PSI	19.3/10,600 PSI
High Gun	CCI 209	Rem. FIG 8	15.8/ 7,200 PSI	17.0/ 8,500 PSI	18.3/ 9,700 PSI	19.5/11,000 PSI

Powder	Primer	Wad	Charge/Pressure			
High Gun	CCI 209	WAA12	15.2/ 7,200 PSI	16.6/ 8,500 PSI	18.0/ 9,700 PSI	19.4/11,000 PSI

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
High Gun	Ched. 209	12P18	15.2/ 8,700 PSI	16.3/ 9,800 PSI	17.4/10,800 PSI	–
High Gun	Ched. 209	CB 4118-12B	16.0/ 7,300 PSI	17.1/ 8,400 PSI	18.2/ 9,500 PSI	19.4/10,700 PSI
High Gun	Ched. 209	Rem. FIG 8	15.5/ 8,000 PSI	16.6/ 9,100 PSI	17.7/10,100 PSI	18.8/11,200 PSI
High Gun	Ched. 209	WAA12	15.2/ 8,800 PSI	16.2/ 9,900 PSI	17.2/11,000 PSI	–
High Gun	Fed. 209A	12P18	14.9/ 8,700 PSI	16.1/ 9,700 PSI	17.3/10,800 PSI	–
High Gun	Fed. 209A	CB 4118-12B	15.5/ 7,400 PSI	16.7/ 8,600 PSI	17.8/ 9,800 PSI	19.0/11,000 PSI
High Gun	Fed. 209A	Rem. FIG 8	15.6/ 7,600 PSI	16.8/ 9,000 PSI	18.0/10,300 PSI	–
High Gun	Fed. 209A	WAA12	15.3/ 7,600 PSI	16.5/ 8,900 PSI	17.7/10,200 PSI	–
High Gun	Fio. 616	12P18	15.0/ 8,000 PSI	16.1/ 9,200 PSI	17.3/10,500 PSI	–
High Gun	Fio. 616	CB 4118-12B	16.9/ 6,500 PSI	17.9/ 7,700 PSI	18.9/ 8,900 PSI	19.9/10,100 PSI
High Gun	Fio. 616	Rem. FIG 8	15.8/ 7,600 PSI	17.0/ 8,700 PSI	18.1/ 9,800 PSI	19.3/10,900 PSI
High Gun	Fio. 616	WAA12	15.9/ 8,300 PSI	17.0/ 9,400 PSI	18.2/10,400 PSI	19.3/11,500 PSI
High Gun	Win. 209	12P18	15.0/ 8,600 PSI	16.2/ 9,600 PSI	17.3/10,700 PSI	–
High Gun	Win. 209	CB 4118-12B	15.9/ 6,600 PSI	17.1/ 7,900 PSI	18.3/ 9,100 PSI	19.4/10,400 PSI
High Gun	Win. 209	Rem. FIG 8	15.1/ 8,000 PSI	16.1/ 8,900 PSI	17.1/ 9,900 PSI	–
High Gun	Win. 209	WAA12	14.7/ 8,300 PSI	15.8/ 9,400 PSI	16.8/10,500 PSI	–
WST	CCI 209	12P18	16.9/ 8,000 PSI	18.4/ 9,300 PSI	19.9/10,600 PSI	–
WST	CCI 209	Rem. FIG 8	–	18.5/10,200 PSI	–	–
WST	CCI 209	WAA12	–	18.0/10,800 PSI	–	–
WST	Ched. 209	12P18	17.4/ 8,400 PSI	18.6/ 9,400 PSI	19.8/10,500 PSI	–
WST	Ched. 209	DR XL 1	17.5/ 8,400 PSI	18.8/ 9,600 PSI	20.1/10,800 PSI	–
WST	Ched. 209	DRV-12	17.5/ 8,500 PSI	18.8/ 9,800 PSI	20.2/11,100 PSI	–
WST	Ched. 209	Windjammer	17.4/ 8,100 PSI	18.8/ 9,400 PSI	20.2/10,700 PSI	–
WST	Fed. 209A	12P18	17.3/ 8,900 PSI	18.5/ 9,800 PSI	19.8/10,800 PSI	–
WST	Fio. 616	12P18	17.6/ 8,300 PSI	18.8/ 9,400 PSI	19.9/10,500 PSI	–
WST	Fio. 616	DR XL 1	18.3/ 7,400 PSI	19.7/ 8,700 PSI	21.0/10,000 PSI	22.4/11,400 PSI
WST	Fio. 616	DRV-12	17.7/ 7,400 PSI	19.2/ 8,600 PSI	20.8/ 9,900 PSI	–
WST	Fio. 616	Rem. FIG 8	18.0/ 7,500 PSI	19.4/ 9,000 PSI	20.7/10,300 PSI	–
WST	Fio. 616	WAA12	17.9/ 7,400 PSI	19.1/ 8,900 PSI	20.4/10,500 PSI	–
WST	Fio. 616	Windjammer	18.4/ 7,000 PSI	19.8/ 8,400 PSI	21.1/ 9,800 PSI	22.5/11,100 PSI
WST	Win. 209	12P18	17.4/ 8,500 PSI	18.6/ 9,500 PSI	19.9/10,500 PSI	–
WST	Win. 209	Rem. FIG 8	–	19.0/10,400 PSI	–	–
Super Hcp	CCI 209	12P18	16.7/ 7,000 PSI	17.8/ 8,000 PSI	18.9/ 8,900 PSI	20.0/ 9,800 PSI
Super Hcp	Ched. 209	12P18	16.6/ 7,100 PSI	17.8/ 8,200 PSI	19.0/ 9,300 PSI	20.2/10,400 PSI
Super Hcp	Ched. 209	DR XL 1	16.7/ 7,100 PSI	17.8/ 8,200 PSI	19.0/ 9,300 PSI	20.2/10,000 PSI
Super Hcp	Ched. 209	DRV-12	–	18.0/ 8,500 PSI	19.4/10,000 PSI	20.8/11,500 PSI
Super Hcp	Ched. 209	Rem. FIG 8	–	17.8/ 8,400 PSI	19.3/ 9,800 PSI	20.9/11,400 PSI
Super Hcp	Ched. 209	WAA12	–	17.9/ 8,300 PSI	19.3/ 9,800 PSI	20.8/11,300 PSI
Super Hcp	Ched. 209	WJ-12-RPL	–	18.0/ 7,200 PSI	19.5/ 8,400 PSI	21.1/ 9,900 PSI
Super Hcp	Fed. 209A	12P18	16.5/ 7,200 PSI	17.6/ 8,200 PSI	18.8/ 9,200 PSI	19.9/10,200 PSI
Super Hcp	Fed. 209A	DRV-12	–	17.8/ 9,200 PSI	19.3/10,600 PSI	–
Super Hcp	Fed. 209A	Rem. FIG 8	–	17.6/ 8,600 PSI	19.1/10,200 PSI	–
Super Hcp	Fed. 209A	WAA12	–	17.4/ 8,800 PSI	19.2/10,300 PSI	–
Super Hcp	Fed. 209A	WJ-12-RPL	–	18.0/ 7,500 PSI	19.3/ 8,600 PSI	20.6/ 9,900 PSI
Super Hcp	Fio. 616	12P18	16.8/ 6,800 PSI	17.9/ 7,800 PSI	19.0/ 8,800 PSI	20.2/ 9,800 PSI
Super Hcp	Fio. 616	DR XL 1	17.7/ 6,300 PSI	18.8/ 7,300 PSI	19.9/ 8,300 PSI	21.0/ 9,300 PSI
Super Hcp	Fio. 616	DRV-12	18.0/ 6,000 PSI	18.9/ 7,000 PSI	19.8/ 8,000 PSI	20.7/ 9,000 PSI
Super Hcp	Fio. 616	Rem. FIG 8	–	18.4/ 7,200 PSI	20.0/ 8,600 PSI	21.5/ 9,800 PSI
Super Hcp	Fio. 616	WAA12	–	18.2/ 7,000 PSI	19.6/ 8,500 PSI	21.0/10,000 PSI
Super Hcp	Fio. 616	Windjammer	–	18.6/ 7,000 PSI	20.8/ 8,100 PSI	21.3/ 9,400 PSI
Super Hcp	Win. 209	12P18	16.7/ 7,300 PSI	17.9/ 8,500 PSI	19.0/ 9,600 PSI	20.2/10,700 PSI
Super Hcp	Win. 209	DRV-12	–	18.5/ 8,600 PSI	19.8/10,000 PSI	21.0/11,300 PSI
Super Hcp	Win. 209	Rem. FIG 8	–	18.2/ 8,200 PSI	19.6/ 9,700 PSI	20.9/11,100 PSI
Super Hcp	Win. 209	WAA12	–	18.4/ 8,100 PSI	19.7/ 9,600 PSI	21.0/11,200 PSI
Super Hcp	Win. 209	WJ-12-RPL	–	18.0/ 6,700 PSI	19.8/ 8,100 PSI	21.5/ 9,500 PSI
244	CCI 209	12P18	16.1/ 8,000 PSI	17.3/ 9,200 PSI	18.5/10,400 PSI	–
244	Ched. 209	12P18	16.2/ 7,400 PSI	17.4/ 8,700 PSI	18.5/ 9,900 PSI	19.6/11,200 PSI
244	Ched. 209	CB 4118-12B	16.9/ 7,100 PSI	18.1/ 8,200 PSI	19.3/ 9,200 PSI	20.4/10,300 PSI
244	Ched. 209	DRV-12	16.5/ 7,700 PSI	17.6/ 8,800 PSI	18.7/ 9,900 PSI	19.8/10,900 PSI

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
244	Ched. 209	Rem. FIG 8	17.2/ 7,800 PSI	18.1/ 8,600 PSI	19.0/ 9,500 PSI	19.9/10,300 PSI

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
244	Ched. 209	WAA12	16.8/ 8,000 PSI	17.8/ 8,900 PSI	18.8/ 9,800 PSI	19.9/10,700 PSI
244	Fed. 209A	12P18	16.1/ 8,300 PSI	17.2/ 9,300 PSI	18.3/10,300 PSI	–
244	Fed. 209A	CB 4118-12B	16.6/ 6,900 PSI	17.7/ 7,800 PSI	18.9/ 8,700 PSI	20.0/ 9,600 PSI
244	Fed. 209A	DRV-12	16.1/ 7,700 PSI	17.3/ 8,700 PSI	18.5/ 9,800 PSI	19.7/10,800 PSI
244	Fed. 209A	Rem. FIG 8	16.3/ 7,400 PSI	17.5/ 8,400 PSI	18.7/ 9,500 PSI	19.9/10,500 PSI
244	Fed. 209A	WAA12	16.3/ 7,400 PSI	17.4/ 8,500 PSI	18.6/ 9,500 PSI	19.8/10,600 PSI
244	Fio. 616	12P18	16.1/ 8,000 PSI	17.3/ 9,100 PSI	18.5/10,200 PSI	19.6/11,300 PSI
244	Fio. 616	CB 4118-12B	17.2/ 7,000 PSI	18.4/ 7,900 PSI	19.6/ 8,800 PSI	20.7/ 9,700 PSI
244	Fio. 616	DRV-12	16.6/ 7,800 PSI	17.6/ 8,800 PSI	18.7/ 9,900 PSI	19.7/10,900 PSI
244	Fio. 616	Rem. FIG 8	17.9/ 6,900 PSI	18.8/ 8,100 PSI	19.7/ 9,200 PSI	20.5/10,400 PSI
244	Fio. 616	WAA12	17.1/ 7,600 PSI	18.2/ 8,700 PSI	19.3/ 9,700 PSI	20.4/10,800 PSI
244	Win. 209	12P18	16.4/ 8,100 PSI	17.5/ 9,200 PSI	18.6/10,300 PSI	19.7/11,400 PSI
244	Win. 209	CB 4118-12B	16.8/ 6,800 PSI	17.9/ 7,800 PSI	18.9/ 8,700 PSI	19.9/ 9,700 PSI
244	Win. 209	DRV-12	16.1/ 7,700 PSI	17.2/ 8,800 PSI	18.4/ 9,900 PSI	19.6/10,900 PSI
244	Win. 209	Rem. FIG 8	16.8/ 7,900 PSI	17.8/ 8,900 PSI	18.8/ 9,900 PSI	19.8/10,900 PSI
244	Win. 209	WAA12	15.9/ 8,100 PSI	17.2/ 9,200 PSI	18.5/10,300 PSI	19.8/11,400 PSI
572	CCI 209	12P18	19.2/ 6,100 PSI	20.4/ 6,900 PSI	21.6/ 7,600 PSI	22.8/ 8,400 PSI
572	Fed. 209A	12P18	18.6/ 6,600 PSI	20.0/ 7,400 PSI	21.3/ 8,200 PSI	22.7/ 9,000 PSI
572	Fio. 616	12P18	19.3/ 6,300 PSI	20.4/ 7,100 PSI	21.5/ 8,000 PSI	22.6/ 8,900 PSI
572	Win. 209	12P18	20.2/ 6,200 PSI	21.1/ 6,800 PSI	22.1/ 7,500 PSI	23.0/ 8,200 PSI

12G - 2 3/4″ REMINGTON STS, NITRO 27, OR GUN CLUB PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT - HIGH VELOCITY

			1420 fps	1475 fps	1530 fps	1585 fps
Longshot	CCI 209M	Fed. 12S3	30.6/10,000 PSI	31.9/11,000 PSI	–	–
Longshot	CCI 209M	WAA12	30.9/ 9,800 PSI	32.3/10,600 PSI	33.6/11,400 PSI	–
Longshot	CCI 209M	Windjammer	31.7/ 9,000 PSI	33.3/ 9,800 PSI	34.8/10,600 PSI	36.4/11,500 PSI
Longshot	Fed. 209A	Fed. 12S3	29.4/10,700 PSI	31.1/11,600 PSI	–	–
Longshot	Fed. 209A	WAA12	29.4/10,900 PSI	–	–	–
Longshot	Fed. 209A	Windjammer	30.6/ 9,300 PSI	32.1/10,300 PSI	33.6/11,300 PSI	–
Longshot	Win. 209	Fed. 12S3	31.9/ 8,500 PSI	33.0/ 9,800 PSI	34.2/11,100 PSI	–
Longshot	Win. 209	WAA12	31.7/ 9,100 PSI	32.8/10,100 PSI	33.5/11,200 PSI	–
Longshot	Win. 209	Windjammer	33.4/ 7,700 PSI	34.3/ 8,800 PSI	35.3/10,000 PSI	36.3/11,100 PSI

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 OZ. LEAD SHOT

			1180 fps	1235 fps	1290 fps	1345 fps
Nitro 100 NF	CCI 209	12P1	16.8/10,200 PSI	18.1/11,300 PSI	–	–
Nitro 100 NF	Ched. 209	12P1	16.3/10,200 PSI	17.5/11,400 PSI	–	–
Nitro 100 NF	Ched. 209	CB 4100-12B	16.3/ 9,000 PSI	17.5/10,100 PSI	–	–
Nitro 100 NF	Ched. 209	Rem. TGT 12	16.3/ 9,400 PSI	17.4/10,600 PSI	–	–
Nitro 100 NF	Ched. 209	WAA12SL	16.2/ 9,400 PSI	17.2/10,400 PSI	–	–
Nitro 100 NF	Fed. 209A	12P1	16.1/10,200 PSI	17.5/11,200 PSI	–	–
Nitro 100 NF	Fed. 209A	Fed. 12SO	17.2/ 9,000 PSI	18.6/10,400 PSI	–	–
Nitro 100 NF	Fed. 209A	Rem. TGT 12	17.3/ 8,800 PSI	18.1/10,000 PSI	19.4/11,200 PSI	–
Nitro 100 NF	Fed. 209A	WAA12SL	17.4/ 7,700 PSI	18.4/ 9,600 PSI	20.1/10,600 PSI	–
Nitro 100 NF	Fed. 209A	Windjammer	17.1/ 8,400 PSI	18.1/ 9,300 PSI	19.3/10,600 PSI	–
Nitro 100 NF	Fio. 616	12P1	16.3/ 9,700 PSI	17.5/10,700 PSI	–	–
Nitro 100 NF	Fio. 616	CB 4100-12B	16.3/ 9,300 PSI	17.4/10,300 PSI	–	–
Nitro 100 NF	Fio. 616	Rem. TGT 12	16.5/ 9,500 PSI	18.1/11,400 PSI	–	–
Nitro 100 NF	Fio. 616	WAA12SL	16.7/ 9,300 PSI	18.3/11,300 PSI	–	–
Nitro 100 NF	Fio. 616	Windjammer	16.6/ 8,300 PSI	18.2/ 9,600 PSI	19.5/10,700 PSI	–
Nitro 100 NF	Win. 209	12P1	16.1/10,200 PSI	17.4/11,500 PSI	–	–
Nitro 100 NF	Win. 209	Fed. 12SO	16.8/10,300 PSI	–	–	–
Nitro 100 NF	Win. 209	Rem. TGT 12	16.4/ 9,200 PSI	17.7/10,200 PSI	19.0/11,300 PSI	–
Nitro 100 NF	Win. 209	WAA12SL	17.1/ 8,000 PSI	18.5/ 9,600 PSI	19.5/11,200 PSI	–
Nitro 100 NF	Win. 209	Windjammer	16.6/ 8,400 PSI	17.6/ 9,800 PSI	19.2/10,700 PSI	–
Perfect Pattern	CCI 209	CB 4100-12B	15.3/ 8,800 PSI	16.4/10,300 PSI	–	–
Perfect Pattern	CCI 209	Rem. TGT 12	15.4/ 8,600 PSI	16.6/10,200 PSI	–	–
Perfect Pattern	CCI 209	WAA12SL	15.0/ 8,800 PSI	16.5/10,600 PSI	–	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
Perfect Pattern	Ched. 209	CB 4100-12B	14.7/ 8,900 PSI	16.0/10,400 PSI	–	–
Perfect Pattern	Ched. 209	Rem. TGT 12	14.9/ 9,100 PSI	16.0/10,800 PSI	–	–
Perfect Pattern	Ched. 209	WAA12SL	14.8/ 9,100 PSI	16.1/10,700 PSI	–	–
Perfect Pattern	Fed. 209A	CB 4100-12B	14.8/ 9,300 PSI	16.0/10,800 PSI	–	–
Perfect Pattern	Fed. 209A	Rem. TGT 12	14.7/ 9,600 PSI	16.1/11,000 PSI	–	–
Perfect Pattern	Fed. 209A	WAA12SL	14.9/ 9,500 PSI	16.1/11,100 PSI	–	–

Powder	Primer	Wad	Charge/Pressure			
Perfect Pattern	Fio. 616	Rem. TGT 12	15.0/ 8,800 PSI	16.1/10,400 PSI	–	–
Perfect Pattern	Fio. 616	WAA12SL	14.7/ 9,000 PSI	15.9/10,600 PSI	–	–
Perfect Pattern	Win. 209	CB 4100-12B	14.9/ 8,700 PSI	16.1/10,200 PSI	–	–
Perfect Pattern	Win. 209	Rem. TGT 12	15.0/ 8,700 PSI	16.3/10,200 PSI	–	–
Perfect Pattern	Win. 209	WAA12SL	15.1/ 9,100 PSI	16.4/10,600 PSI	–	–
Titewad	CCI 209	12P1	16.8/10,200 PSI	18.1/11,300 PSI	–	–
Titewad	Ched. 209	12P1	16.3/10,200 PSI	17.5/11,400 PSI	–	–
Titewad	Ched. 209	CB 4100-12B	16.3/ 9,000 PSI	17.5/10,100 PSI	–	–
Titewad	Ched. 209	Rem. TGT 12	16.3/ 9,400 PSI	17.4/10,600 PSI	–	–
Titewad	Ched. 209	WAA12SL	16.2/ 9,400 PSI	17.2/10,400 PSI	–	–
Titewad	Fed. 209A	12P1	16.1/10,200 PSI	17.5/11,200 PSI	–	–
Titewad	Fed. 209A	Fed. 12SO	17.2/ 9,000 PSI	18.6/10,400 PSI	–	–
Titewad	Fed. 209A	Rem. TGT 12	17.3/ 8,800 PSI	18.1/10,000 PSI	19.4/11,200 PSI	–
Titewad	Fed. 209A	WAA12SL	17.4/ 7,700 PSI	18.4/ 9,600 PSI	20.1/10,600 PSI	–
Titewad	Fed. 209A	Windjammer	17.1/ 8,400 PSI	18.1/ 9,300 PSI	19.3/10,600 PSI	–
Titewad	Fio. 616	12P1	16.3/ 9,700 PSI	17.5/10,700 PSI	–	–
Titewad	Fio. 616	CB 4100-12B	16.3/ 9,300 PSI	17.4/10,300 PSI	–	–
Titewad	Fio. 616	Rem. TGT 12	16.5/ 9,500 PSI	18.1/11,400 PSI	–	–
Titewad	Fio. 616	WAA12SL	16.7/ 9,300 PSI	18.3/11,300 PSI	–	–
Titewad	Fio. 616	Windjammer	16.6/ 8,300 PSI	18.2/ 9,600 PSI	19.5/10,700 PSI	–
Titewad	Win. 209	12P1	16.1/10,200 PSI	17.4/11,500 PSI	–	–
Titewad	Win. 209	Fed. 12SO	16.8/10,300 PSI	–	–	–
Titewad	Win. 209	Rem. TGT 12	16.4/ 9,200 PSI	17.7/10,200 PSI	19.0/11,300 PSI	–
Titewad	Win. 209	WAA12SL	17.1/ 8,000 PSI	18.5/ 9,600 PSI	19.5/11,200 PSI	–
Titewad	Win. 209	Windjammer	16.6/ 8,400 PSI	17.6/ 9,800 PSI	19.2/10,700 PSI	–
Competition	CCI 209	12P1	17.3/ 9,100 PSI	18.6/10,300 PSI	19.8/11,500 PSI	–
Competition	Ched. 209	12P1	17.3/ 9,300 PSI	18.5/10,500 PSI	–	–
Competition	Ched. 209	CB 4100-12B	17.6/ 9,000 PSI	18.9/10,100 PSI	20.1/11,200 PSI	–
Competition	Ched. 209	Rem. TGT 12	17.0/ 9,000 PSI	18.1/10,000 PSI	–	–
Competition	Ched. 209	WAA12SL	16.9/ 9,100 PSI	18.2/10,300 PSI	–	–
Competition	Fed. 209A	12P1	17.0/ 9,500 PSI	18.3/10,600 PSI	–	–
Competition	Fed. 209A	CB 4100-12B	16.9/ 8,800 PSI	18.0/ 9,900 PSI	–	–
Competition	Fed. 209A	Rem. TGT 12	16.8/ 9,500 PSI	17.9/10,600 PSI	–	–
Competition	Fed. 209A	WAA12SL	16.7/ 9,500 PSI	17.8/10,700 PSI	–	–
Competition	Fio. 616	12P1	17.0/ 9,600 PSI	18.2/10,800 PSI	–	–
Competition	Fio. 616	CB 4100-12B	17.1/ 9,100 PSI	18.2/10,300 PSI	–	–
Competition	Fio. 616	Rem. TGT 12	16.8/ 9,400 PSI	18.1/10,600 PSI	–	–
Competition	Fio. 616	WAA12SL	16.7/ 9,100 PSI	17.9/10,400 PSI	–	–
Competition	Win. 209	12P1	16.4/ 9,000 PSI	17.9/10,100 PSI	18.9/11,100 PSI	–
Competition	Win. 209	CB 4100-12B	17.1/ 8,600 PSI	18.3/ 9,700 PSI	19.5/10,800 PSI	–
Competition	Win. 209	Rem. TGT 12	17.2/ 8,800 PSI	18.4/10,000 PSI	19.5/11,100 PSI	–
Competition	Win. 209	WAA12SL	16.8/ 8,900 PSI	17.9/10,100 PSI	–	–
Clays	CCI 209	12P1	16.1/ 9,200 PSI	17.3/10,200 PSI	18.6/11,200 PSI	–
Clays	CCI 209	Fed. 12SO	17.0/10,500 PSI	–	–	–
Clays	CCI 209	Rem. TGT 12	17.7/7,700 LUP	18.7/8,500 LUP	19.8/9,500 LUP	–
Clays	CCI 209	WAA12SL	17.0/ 8,700 PSI	18.4/10,900 PSI	–	–
Clays	CCI 209	Windjammer	17.5/ 7,600 PSI	18.8/ 9,000 PSI	20.3/10,700 PSI	–
Clays	Ched. 209	12P1	16.2/ 8,800 PSI	17.4/ 9,800 PSI	18.7/10,800 PSI	–
Clays	Ched. 209	CB 4100-12B	15.8/ 8,600 PSI	17.0/ 9,700 PSI	18.3/10,800 PSI	–
Clays	Ched. 209	Rem. TGT 12	15.7/ 8,700 PSI	16.9/ 9,700 PSI	18.1/10,800 PSI	–
Clays	Ched. 209	WAA12SL	15.6/ 8,800 PSI	16.9/10,000 PSI	18.3/11,300 PSI	–
Clays	Fed. 209A	12P1	15.9/ 9,500 PSI	17.1/10,600 PSI	–	–
Clays	Fed. 209A	Rem. TGT 12	16.7/ 9,500 PSI	18.2/11,000 PSI	–	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
Clays	Fed. 209A	WAA12SL	16.9/ 9,000 PSI	18.4/10,900 PSI	–	–
Clays	Fed. 209A	Windjammer	16.8/ 9,200 PSI	18.2/11,200 PSI	–	–
Clays	Fio. 616	12P1	15.8/ 9,500 PSI	16.9/10,700 PSI	–	–
Clays	Fio. 616	CB 4100-12B	16.2/ 8,600 PSI	17.2/ 9,600 PSI	18.3/10,500 PSI	–
Clays	Fio. 616	Rem. TGT 12	15.8/ 9,200 PSI	17.0/10,200 PSI	18.1/11,200 PSI	–
Clays	Fio. 616	WAA12SL	15.7/ 8,700 PSI	17.0/10,000 PSI	18.2/11,200 PSI	–
Clays	Win. 209	12P1	16.0/ 9,000 PSI	17.1/10,100 PSI	18.1/11,100 PSI	–
Clays	Win. 209	Rem. TGT 12	16.8/ 8,500 PSI	18.2/10,300 PSI	–	–
Clays	Win. 209	WAA12SL	17.2/8,300 LUP	18.5/9,200 LUP	19.8/10,200 LUP	–
700-X	CCI 209	12P1	16.1/ 8,700 PSI	17.4/ 9,600 PSI	18.8/10,500 PSI	–
700-X	Ched. 209	12P1	16.5/ 9,200 PSI	17.7/10,100 PSI	18.9/11,000 PSI	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
700-X	Ched. 209	CB 4100-12B	16.2/ 9,000 PSI	17.3/10,000 PSI	18.4/11,000 PSI	–
700-X	Ched. 209	Rem. TGT 12	16.0/ 9,000 PSI	17.2/ 9,900 PSI	18.3/10,800 PSI	–
700-X	Ched. 209	WAA12SL	15.9/ 9,400 PSI	17.0/10,500 PSI	–	–
700-X	Fed. 209A	12P1	16.3/ 9,000 PSI	17.5/10,000 PSI	18.8/10,900 PSI	–
700-X	Fed. 209A	CB 1100-12	16.9/ 7,600 PSI	18.2/ 8,500 PSI	19.4/ 9,300 PSI	–
700-X	Fed. 209A	Fed. 12S3	16.4/ 9,400 PSI	17.7/10,400 PSI	18.9/11,400 PSI	–
700-X	Fed. 209A	Rem. TGT12	16.9/ 8,200 PSI	18.2/ 9,200 PSI	19.4/10,100 PSI	–
700-X	Fed. 209A	WAA12SL	16.9/ 8,600 PSI	18.2/ 9,500 PSI	19.4/10,300 PSI	–
700-X	Fio. 616	12P1	16.3/ 9,300 PSI	17.5/10,200 PSI	18.7/11,100 PSI	–
700-X	Fio. 616	Rem. TGT 12	16.6/ 8,800 PSI	17.7/ 9,800 PSI	18.8/10,800 PSI	–
700-X	Fio. 616	WAA12SL	16.6/ 9,000 PSI	17.9/10,200 PSI	19.1/11,400 PSI	–
700-X	Win. 209	12P1	16.5/ 9,200 PSI	17.7/10,100 PSI	18.9/11,000 PSI	–
700-X	Win. 209	CB 1100-12	16.4/ 8,000 PSI	17.7/ 9,000 PSI	18.9/10,000 PSI	–
700-X	Win. 209	Fed. 12S3	16.4/ 9,400 PSI	17.7/10,300 PSI	18.9/11,100 PSI	–
700-X	Win. 209	Rem. TGT12	16.4/ 8,100 PSI	17.7/ 9,100 PSI	18.9/10,100 PSI	–
700-X	Win. 209	WAA12SL	16.4/ 8,900 PSI	17.7/ 9,800 PSI	18.9/10,800 PSI	–
High Gun	CCI 209	12P1	16.7/ 8,600 PSI	17.8/ 9,400 PSI	18.8/10,200 PSI	–
High Gun	CCI 209	CB 4100-12B	16.3/ 7,100 PSI	17.7/ 8,500 PSI	19.1/10,000 PSI	20.4/11,400 PSI
High Gun	CCI 209	Rem. TGT 12	16.4/ 7,400 PSI	17.7/ 8,700 PSI	19.1/10,000 PSI	20.4/11,300 PSI
High Gun	CCI 209	WAA12SL	16.3/ 7,900 PSI	17.6/ 9,400 PSI	18.8/10,900 PSI	–
High Gun	Ched. 209	12P1	16.4/ 8,100 PSI	17.5/ 9,100 PSI	18.6/10,100 PSI	–
High Gun	Ched. 209	CB 4100-12B	16.2/ 6,900 PSI	17.5/ 8,200 PSI	18.7/ 9,500 PSI	20.0/10,800 PSI
High Gun	Ched. 209	Rem. TGT 12	15.4/ 7,600 PSI	16.8/ 9,000 PSI	18.1/10,300 PSI	–
High Gun	Ched. 209	WAA12SL	15.3/ 7,500 PSI	16.8/ 9,000 PSI	18.2/10,400 PSI	–
High Gun	Fed. 209A	12P1	16.1/ 8,300 PSI	17.2/ 9,400 PSI	18.4/10,600 PSI	–
High Gun	Fed. 209A	CB 4100-12B	16.0/ 7,400 PSI	17.3/ 8,800 PSI	18.7/10,200 PSI	–
High Gun	Fed. 209A	Rem. TGT 12	16.2/ 7,800 PSI	17.5/ 9,200 PSI	18.9/10,500 PSI	–
High Gun	Fed. 209A	WAA12SL	15.7/ 7,700 PSI	17.1/ 9,200 PSI	18.5/10,700 PSI	–
High Gun	Fio. 616	12P1	16.1/ 8,600 PSI	17.2/ 9,700 PSI	18.3/10,800 PSI	–
High Gun	Fio. 616	CB 4100-12B	16.2/ 6,400 PSI	17.6/ 7,700 PSI	18.9/ 9,000 PSI	20.3/10,400 PSI
High Gun	Fio. 616	Rem. TGT 12	15.9/ 7,900 PSI	17.2/ 9,100 PSI	18.5/10,300 PSI	19.8/11,500 PSI
High Gun	Fio. 616	WAA12SL	15.6/ 7,300 PSI	17.0/ 8,700 PSI	18.4/10,000 PSI	19.7/11,300 PSI
High Gun	Win. 209	12P1	16.5/ 8,400 PSI	17.6/ 9,500 PSI	18.6/10,500 PSI	–
High Gun	Win. 209	CB 4100-12B	16.1/ 6,400 PSI	17.5/ 7,900 PSI	18.8/ 9,400 PSI	20.2/10,800 PSI
High Gun	Win. 209	Rem. TGT 12	15.7/ 7,900 PSI	17.1/ 9,100 PSI	18.5/10,200 PSI	19.9/11,400 PSI
High Gun	Win. 209	WAA12SL	16.5/ 7,500 PSI	17.7/ 8,800 PSI	18.9/10,100 PSI	20.1/11,400 PSI
WST	CCI 209	12P1	19.3/ 8,400 PSI	20.7/ 9,700 PSI	22.0/10,900 PSI	–
WST	CCI 209	Fed. 12SO	19.0/ 8,300 PSI	20.5/ 9,500 PSI	21.5/10,700 PSI	–
WST	CCI 209	WAA12L	–	21.0/ 8,400 PSI	22.5/10,200 PSI	–
WST	CCI 209	WAA12SL	–	21.5/ 7,900 PSI	22.5/ 9,400 PSI	–
WST	Ched. 209	12P1	19.0/ 9,000 PSI	20.3/10,200 PSI	21.6/11,300 PSI	–
WST	Ched. 209	CB 4100-12B	18.5/ 8,500 PSI	19.6/ 9,700 PSI	20.7/10,900 PSI	–
WST	Ched. 209	Rem. TGT 12	19.1/ 8,500 PSI	20.3/ 9,500 PSI	21.6/10,600 PSI	–
WST	Ched. 209	WAA12SL	18.4/ 8,600 PSI	19.7/ 9,800 PSI	20.9/11,100 PSI	–
WST	Fed. 209A	12P1	19.0/ 9,100 PSI	20.2/10,200 PSI	21.4/11,400 PSI	–
WST	Fed. 209A	WAA12SL	19.0/ 7,900 PSI	20.0/ 8,900 PSI	21.0/ 9,800 PSI	–
WST	Fio. 616	12P1	18.7/ 9,000 PSI	20.1/10,100 PSI	21.5/11,200 PSI	–
WST	Fio. 616	CB 4100-12B	19.1/ 8,000 PSI	20.4/ 9,200 PSI	21.8/10,400 PSI	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 OZ. LEAD SHOT—CONT.

			1180 fps	1235 fps	1290 fps	1345 fps
WST	Fio. 616	Rem. TGT 12	19.4/ 7,300 PSI	20.8/ 8,700 PSI	22.3/10,200 PSI	–
WST	Fio. 616	WAA12SL	19.6/ 7,100 PSI	20.9/ 8,600 PSI	22.5/10,300 PSI	–
WST	Win. 209	12P1	19.0/ 8,900 PSI	20.3/10,100 PSI	21.6/11,300 PSI	–
WST	Win. 209	Fed. 12SO	19.0/ 8,000 PSI	20.5/ 9,500 PSI	22.0/10,900 PSI	–
WST	Win. 209	WAA12L	19.5/ 8,500 PSI	21.0/ 9,600 PSI	22.5/11,100 PSI	–
WST	Win. 209	WAA12SL	19.5/ 7,400 PSI	21.0/ 8,100 PSI	22.0/ 9,000 PSI	–
Super Hcp	CCI 209	12P1	18.2/ 7,500 PSI	19.2/ 8,300 PSI	20.3/ 9,100 PSI	–
Super Hcp	Ched. 209	12P1	18.3/ 7,500 PSI	19.3/ 8,200 PSI	20.3/ 9,000 PSI	–
Super Hcp	Ched. 209	CB 4100-12B	18.2/ 6,400 PSI	19.5/ 7,300 PSI	20.7/ 8,100 PSI	21.9/ 9,000 PSI
Super Hcp	Ched. 209	J-XL-1	18.9/ 7,300 PSI	19.8/ 8,400 PSI	20.8/ 9,600 PSI	21.7/10,700 PSI
Super Hcp	Ched. 209	Rem. TGT12	18.6/ 7,400 PSI	19.9/ 8,600 PSI	21.2/ 9,800 PSI	22.4/10,900 PSI
Super Hcp	Ched. 209	WAA12SL	18.6/ 7,400 PSI	19.8/ 8,600 PSI	21.0/ 9,900 PSI	22.2/11,200 PSI
Super Hcp	Fed. 209A	12P1	17.9/ 7,700 PSI	19.1/ 8,600 PSI	20.3/ 9,500 PSI	–
Super Hcp	Fed. 209A	J-XL-1	18.1/ 7,800 PSI	19.5/ 8,900 PSI	20.8/ 9,900 PSI	22.1/10,900 PSI
Super Hcp	Fed. 209A	Rem. TGT12	18.2/ 7,900 PSI	19.5/ 9,100 PSI	20.7/10,200 PSI	22.0/11,200 PSI
Super Hcp	Fed. 209A	WAA12SL	18.3/ 8,000 PSI	19.5/ 9,100 PSI	20.8/10,300 PSI	22.0/11,300 PSI

Powder	Primer	Wad	Charge/Pressure			
Super Hcp	Fio. 616	12P1	18.1/ 7,500 PSI	19.2/ 8,400 PSI	20.3/ 9,300 PSI	–
Super Hcp	Fio. 616	CB 4100-12B	18.5/ 6,700 PSI	19.6/ 7,600 PSI	20.8/ 8,400 PSI	21.9/ 9,300 PSI
Super Hcp	Fio. 616	Rem. TGT 12	–	19.7/ 7,400 PSI	21.0/ 8,400 PSI	22.5/ 9,600 PSI
Super Hcp	Fio. 616	WAA12SL	–	20.0/ 7,500 PSI	21.2/ 8,800 PSI	22.3/10,000 PSI
Super Hcp	Win. 209	12P1	18.2/ 7,500 PSI	19.3/ 8,400 PSI	20.3/ 9,200 PSI	–
Super Hcp	Win. 209	J-XL-1	19.3/ 7,000 PSI	20.3/ 8,100 PSI	21.2/ 9,000 PSI	22.1/10,100 PSI
Super Hcp	Win. 209	Rem. TGT12	18.2/ 7,100 PSI	19.6/ 8,500 PSI	20.9/ 9,900 PSI	22.2/11,200 PSI
Super Hcp	Win. 209	WAA12SL	18.5/ 7,400 PSI	19.7/ 8,600 PSI	20.8/ 9,800 PSI	22.0/11,000 PSI
244	CCI 209	12P1	17.4/ 7,900 PSI	18.5/ 8,900 PSI	19.6/ 9,800 PSI	–
244	Ched. 209	12P1	17.8/ 7,700 PSI	18.8/ 8,500 PSI	19.8/ 9,300 PSI	–
244	Ched. 209	CB 4100-12B	16.7/ 7,200 PSI	18.0/ 8,400 PSI	19.3/ 9,600 PSI	20.6/10,800 PSI
244	Ched. 209	DR XL 1	16.7/ 7,600 PSI	18.0/ 8,700 PSI	19.3/ 9,900 PSI	20.6/11,000 PSI
244	Ched. 209	Rem. TGT 12	16.6/ 7,400 PSI	18.0/ 8,700 PSI	19.4/ 9,900 PSI	20.8/11,100 PSI
244	Fed. 209A	12P1	17.5/ 8,000 PSI	18.6/ 9,000 PSI	19.8/10,100 PSI	–
244	Fed. 209A	CB 4100-12B	17.3/ 7,300 PSI	18.5/ 8,500 PSI	19.7/ 9,700 PSI	20.9/10,800 PSI
244	Fed. 209A	DR XL 1	16.5/ 7,700 PSI	18.0/ 8,900 PSI	19.4/10,000 PSI	20.9/11,200 PSI
244	Fed. 209A	Rem. TGT 12	16.5/ 7,500 PSI	17.9/ 8,700 PSI	19.3/ 9,900 PSI	20.7/11,100 PSI
244	Fio. 616	12P1	17.6/ 7,800 PSI	18.6/ 8,700 PSI	19.7/ 9,600 PSI	–
244	Fio. 616	CB 4100-12B	17.8/ 6,700 PSI	19.0/ 7,900 PSI	20.2/ 9,000 PSI	21.4/10,100 PSI
244	Fio. 616	DR XL 1	17.2/ 7,100 PSI	18.4/ 8,300 PSI	19.7/ 9,500 PSI	20.9/10,700 PSI
244	Fio. 616	Rem. TGT 12	17.2/ 7,200 PSI	18.5/ 8,300 PSI	19.9/ 9,400 PSI	21.2/10,600 PSI
244	Win. 209	12P1	17.9/ 7,800 PSI	18.9/ 8,600 PSI	19.9/ 9,400 PSI	–
244	Win. 209	CB 4100-12B	17.2/ 7,100 PSI	18.6/ 8,400 PSI	20.0/ 9,700 PSI	21.3/11,000 PSI
244	Win. 209	DR XL 1	17.0/ 7,600 PSI	18.4/ 8,800 PSI	19.8/10,100 PSI	21.3/11,300 PSI
244	Win. 209	Rem. TGT 12	17.2/ 7,400 PSI	18.5/ 8,600 PSI	19.8/ 9,900 PSI	21.1/11,200 PSI
572	CCI 209	12P1	22.8/ 5,700 PSI	24.1/ 6,200 PSI	25.4/ 6,600 PSI	–
572	Ched. 209	12P1	22.3/ 5,900 PSI	23.4/ 6,400 PSI	24.5/ 7,000 PSI	–
572	Fed. 209A	12P1	21.8/ 6,300 PSI	22.7/ 6,900 PSI	23.6/ 7,500 PSI	–
572	Fio. 616	12P1	21.4/ 5,800 PSI	22.7/ 6,300 PSI	23.9/ 6,800 PSI	–
572	Win. 209	12P1	22.7/ 5,900 PSI	23.6/ 6,400 PSI	24.5/ 6,900 PSI	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT

			1090 fps	1145 fps	1200 fps	1255 fps
Nitro 100 NF	CCI 209	12P18	15.2/10,400 PSI	15.9/11,400 PSI	–	–
Nitro 100 NF	CCI 209	Hor. Versalite	15.3/10,200 PSI	16.6/10,700 PSI	17.0/11,400 PSI	–
Nitro 100 NF	CCI 209	Rem. FIG 8	15.3/10,300 PSI	16.5/11,200 PSI	–	–
Nitro 100 NF	CCI 209	WAA12	15.3/10,300 PSI	16.0/10,900 PSI	–	–
Nitro 100 NF	CCI 209	Windjammer	15.3/ 8,600 PSI	16.6/ 9,400 PSI	17.8/10,900 PSI	–
Nitro 100 NF	Ched. 209	12P18	15.3/10,200 PSI	16.3/11,000 PSI	–	–
Nitro 100 NF	Ched. 209	DR XL 1	14.8/ 9,900 PSI	15.9/11,200 PSI	–	–
Nitro 100 NF	Ched. 209	DRV-12	14.6/10,200 PSI	15.7/11,200 PSI	–	–
Nitro 100 NF	Ched. 209	Rem. FIG 8	15.7/ 9,500 PSI	16.6/10,700 PSI	–	–
Nitro 100 NF	Ched. 209	WAA12	15.3/ 9,900 PSI	16.4/10,900 PSI	–	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
Nitro 100 NF	Ched. 209	Windjammer	15.9/ 8,700 PSI	16.8/10,100 PSI	–	–
Nitro 100 NF	Fed. 209A	12P18	15.1/10,700 PSI	–	–	–
Nitro 100 NF	Fed. 209A	Fed. 12S3	15.5/ 9,900 PSI	16.8/10,800 PSI	–	–
Nitro 100 NF	Fed. 209A	Hor. Versalite	15.3/10,600 PSI	16.3/11,400 PSI	–	–
Nitro 100 NF	Fed. 209A	Rem. FIG 8	15.6/10,000 PSI	16.6/10,600 PSI	–	–
Nitro 100 NF	Fed. 209A	WAA12	15.4/ 9,700 PSI	16.4/10,800 PSI	–	–
Nitro 100 NF	Fed. 209A	Windjammer	15.4/ 9,400 PSI	16.0/10,600 PSI	–	–
Nitro 100 NF	Fio. 616	12P18	15.0/11,100 PSI	–	–	–
Nitro 100 NF	Fio. 616	DR XL 1	14.5/ 9,900 PSI	15.4/10,600 PSI	–	–
Nitro 100 NF	Fio. 616	DRV-12	14.4/10,400 PSI	15.6/11,200 PSI	–	–
Nitro 100 NF	Fio. 616	Rem. FIG 8	15.5/ 8,800 PSI	16.6/10,000 PSI	–	–
Nitro 100 NF	Fio. 616	WAA12	14.8/ 9,200 PSI	16.0/10,800 PSI	–	–
Nitro 100 NF	Fio. 616	Windjammer	15.6/ 8,400 PSI	16.6/ 9,700 PSI	–	–
Nitro 100 NF	Win. 209	12P18	15.2/10,500 PSI	16.0/11,100 PSI	–	–
Nitro 100 NF	Win. 209	CB3118-12-AR	15.2/ 9,300 PSI	16.3/10,700 PSI	17.7/11,400 PSI	–
Nitro 100 NF	Win. 209	Hor. Versalite	15.0/10,100 PSI	15.5/10,500 PSI	–	–
Nitro 100 NF	Win. 209	Rem. FIG 8	15.2/ 9,000 PSI	16.2/ 9,700 PSI	17.5/11,100 PSI	–
Nitro 100 NF	Win. 209	WAA12	15.2/ 9,500 PSI	16.5/10,400 PSI	17.8/11,100 PSI	–
Nitro 100 NF	Win. 209	Windjammer	15.3/ 8,300 PSI	16.3/ 9,600 PSI	17.8/10,500 PSI	–
Perfect Pattern	CCI 209	CB 4118-12B	14.1/ 8,800 PSI	15.3/10,100 PSI	16.4/11,300 PSI	–
Perfect Pattern	CCI 209	Rem. FIG 8	14.4/ 9,600 PSI	15.4/10,700 PSI	–	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
Perfect Pattern	CCI 209	WAA12	14.2/ 8,800 PSI	15.2/10,300 PSI	–	–
Perfect Pattern	Ched. 209	CB 4118-12B	14.0/ 9,000 PSI	15.0/10,300 PSI	–	–
Perfect Pattern	Ched. 209	Rem. FIG 8	14.0/ 9,400 PSI	15.0/10,900 PSI	–	–
Perfect Pattern	Ched. 209	WAA12	14.2/ 9,200 PSI	15.1/10,600 PSI	–	–
Perfect Pattern	Fed. 209A	CB 4118-12B	14.1/ 9,400 PSI	15.0/10,700 PSI	–	–
Perfect Pattern	Fed. 209A	Rem. FIG 8	14.1/ 9,900 PSI	15.2/11,300 PSI	–	–
Perfect Pattern	Fed. 209A	WAA12	14.2/ 9,600 PSI	15.2/11,000 PSI	–	–
Perfect Pattern	Fio. 616	CB 4118-12B	14.2/ 8,800 PSI	15.3/10,300 PSI	–	–
Perfect Pattern	Fio. 616	Rem. FIG 8	14.1/ 9,000 PSI	15.1/10,400 PSI	–	–
Perfect Pattern	Fio. 616	WAA12	14.2/ 9,300 PSI	15.2/10,500 PSI	–	–
Perfect Pattern	Win. 209	CB 4118-12B	14.2/ 8,800 PSI	15.3/10,300 PSI	–	–
Perfect Pattern	Win. 209	Rem. FIG 8	14.2/ 9,500 PSI	15.2/10,900 PSI	–	–
Perfect Pattern	Win. 209	WAA12	13.9/ 9,600 PSI	15.0/11,000 PSI	–	–
Titewad	CCI 209	12P18	15.2/10,400 PSI	15.9/11,400 PSI	–	–
Titewad	CCI 209	Hor. Versalite	15.3/10,200 PSI	16.6/10,700 PSI	17.0/11,400 PSI	–
Titewad	CCI 209	Rem. FIG 8	15.3/10,300 PSI	16.5/11,200 PSI	–	–
Titewad	CCI 209	WAA12	15.3/10,300 PSI	16.0/10,900 PSI	–	–
Titewad	CCI 209	Windjammer	15.3/ 8,600 PSI	16.6/ 9,400 PSI	17.8/10,900 PSI	–
Titewad	Ched. 209	12P18	15.3/10,200 PSI	16.3/11,000 PSI	–	–
Titewad	Ched. 209	DR XL 1	14.8/ 9,900 PSI	15.9/11,200 PSI	–	–
Titewad	Ched. 209	DRV-12	14.6/10,200 PSI	15.7/11,200 PSI	–	–
Titewad	Ched. 209	Rem. FIG 8	15.7/ 9,500 PSI	16.6/10,700 PSI	–	–
Titewad	Ched. 209	WAA12	15.3/ 9,900 PSI	16.4/10,900 PSI	–	–
Titewad	Ched. 209	Windjammer	15.9/ 8,700 PSI	16.8/10,100 PSI	–	–
Titewad	Fed. 209A	12P18	15.1/10,700 PSI	–	–	–
Titewad	Fed. 209A	Fed. 12S3	15.5/ 9,900 PSI	16.8/10,800 PSI	–	–
Titewad	Fed. 209A	Hor. Versalite	15.3/10,600 PSI	16.3/11,400 PSI	–	–
Titewad	Fed. 209A	Rem. FIG 8	15.6/10,000 PSI	16.6/10,600 PSI	–	–
Titewad	Fed. 209A	WAA12	15.4/ 9,700 PSI	16.4/10,800 PSI	–	–
Titewad	Fed. 209A	Windjammer	15.4/ 9,400 PSI	16.0/10,600 PSI	–	–
Titewad	Fio. 616	12P18	15.0/11,100 PSI	–	–	–
Titewad	Fio. 616	DR XL 1	14.5/ 9,900 PSI	15.4/10,600 PSI	–	–
Titewad	Fio. 616	DRV-12	14.4/10,400 PSI	15.6/11,200 PSI	–	–
Titewad	Fio. 616	Rem. FIG 8	15.5/ 8,800 PSI	16.6/10,000 PSI	–	–
Titewad	Fio. 616	WAA12	14.8/ 9,200 PSI	16.0/10,800 PSI	–	–
Titewad	Fio. 616	Windjammer	15.6/ 8,400 PSI	16.6/ 9,700 PSI	–	–
Titewad	Win. 209	12P18	15.2/10,500 PSI	16.0/11,100 PSI	–	–
Titewad	Win. 209	CB3118-12-AR	15.2/ 9,300 PSI	16.3/10,700 PSI	17.7/11,400 PSI	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
Titewad	Win. 209	Hor. Versalite	15.0/10,100 PSI	15.5/10,500 PSI	–	–
Titewad	Win. 209	Rem. FIG 8	15.2/ 9,000 PSI	16.2/ 9,700 PSI	17.5/11,100 PSI	–
Titewad	Win. 209	WAA12	15.2/ 9,500 PSI	16.5/10,400 PSI	17.8/11,100 PSI	–
Titewad	Win. 209	Windjammer	15.3/ 8,300 PSI	16.3/ 9,600 PSI	17.8/10,500 PSI	–
Competition	CCI 209	12P18	16.7/ 9,300 PSI	17.8/10,600 PSI	–	–
Competition	Ched. 209	12P18	16.0/ 9,500 PSI	17.2/10,800 PSI	–	–
Competition	Ched. 209	CB 4118-12B	15.7/ 8,500 PSI	16.9/ 9,800 PSI	–	–
Competition	Ched. 209	DR XL 1	15.9/ 9,300 PSI	17.0/10,300 PSI	–	–
Competition	Ched. 209	DRV-12	15.5/ 9,000 PSI	16.5/10,300 PSI	–	–
Competition	Ched. 209	Rem. FIG 8	15.7/ 8,500 PSI	16.9/ 9,800 PSI	18.0/11,100 PSI	–
Competition	Ched. 209	WAA12	15.4/ 8,900 PSI	16.7/10,200 PSI	17.9/11,400 PSI	–
Competition	Fed. 209A	12P18	15.9/ 9,600 PSI	17.2/10,900 PSI	–	–
Competition	Fed. 209A	CB 4118-12B	15.7/ 8,500 PSI	16.9/ 9,800 PSI	18.2/11,200 PSI	–
Competition	Fed. 209A	DR XL 1	15.6/ 9,300 PSI	17.0/10,400 PSI	–	–
Competition	Fed. 209A	DRV-12	15.4/ 9,600 PSI	16.7/10,700 PSI	–	–
Competition	Fed. 209A	Rem. FIG 8	15.9/ 8,600 PSI	17.2/ 9,900 PSI	18.4/11,200 PSI	–
Competition	Fed. 209A	WAA12	15.4/ 9,200 PSI	16.5/10,700 PSI	–	–
Competition	Fio. 616	12P18	15.8/10,200 PSI	17.1/11,300 PSI	–	–
Competition	Fio. 616	CB 4118-12B	15.6/ 8,900 PSI	16.7/10,200 PSI	–	–
Competition	Fio. 616	DR XL 1	15.8/ 8,600 PSI	16.8/10,000 PSI	–	–
Competition	Fio. 616	DRV-12	15.6/ 8,500 PSI	16.7/10,000 PSI	–	–
Competition	Fio. 616	Rem. FIG 8	16.7/ 8,800 PSI	17.4/10,200 PSI	–	–
Competition	Fio. 616	WAA12	15.5/ 8,800 PSI	16.8/10,100 PSI	–	–
Competition	Win. 209	12P18	16.5/ 9,700 PSI	17.6/10,700 PSI	–	–
Competition	Win. 209	CB 4118-12B	15.9/ 7,800 PSI	17.2/ 9,200 PSI	18.4/10,600 PSI	–
Competition	Win. 209	DR XL 1	16.2/ 8,100 PSI	17.5/ 9,300 PSI	18.8/10,500 PSI	–

Powder	Primer	Wad	Charge/Pressure			
Competition	Win. 209	DRV-12	15.6/ 8,300 PSI	17.0/ 9,600 PSI	18.4/11,000 PSI	–
Competition	Win. 209	Rem. FIG 8	16.2/ 8,400 PSI	17.4/ 9,800 PSI	18.6/11,100 PSI	–
Competition	Win. 209	WAA12	15.7/ 8,800 PSI	16.9/10,000 PSI	18.1/11,200 PSI	–
Clays	CCI 209	12P18	15.0/ 9,300 PSI	16.2/10,300 PSI	17.4/11,400 PSI	–
Clays	CCI 209	Fed. 12S3	16.2/7,200 LUP	17.6/8,700 LUP	19.0/10,100 LUP	–
Clays	CCI 209	Hor. Versalite	15.8/ 9,900 PSI	16.8/10,400 PSI	–	–
Clays	CCI 209	Rem. FIG 8	16.0/ 8,700 PSI	16.8/ 9,600 PSI	–	–
Clays	CCI 209	WAA12	16.0/ 8,900 PSI	17.0/ 9,800 PSI	18.1/11,300 PSI	–
Clays	CCI 209	Windjammer	16.0/ 8,200 PSI	16.8/ 8,600 PSI	18.5/11,100 PSI	–
Clays	Ched. 209	12P18	15.1/ 9,000 PSI	16.0/ 9,900 PSI	16.8/10,700 PSI	–
Clays	Ched. 209	DR XL 1	14.8/ 8,400 PSI	16.0/ 9,600 PSI	17.1/10,800 PSI	–
Clays	Ched. 209	DRV-12	14.5/ 8,300 PSI	15.9/ 9,400 PSI	17.2/10,500 PSI	–
Clays	Ched. 209	Rem. FIG 8	16.4/ 8,800 PSI	17.5/10,200 PSI	–	–
Clays	Ched. 209	WAA12	15.8/ 9,400 PSI	17.2/10,700 PSI	–	–
Clays	Ched. 209	Windjammer	15.7/ 7,900 PSI	17.4/ 9,500 PSI	19.0/11,100 PSI	–
Clays	Fed. 209A	12P18	15.1/10,000 PSI	16.1/11,000 PSI	–	–
Clays	Fed. 209A	Rem. FIG 8	15.8/10,700 PSI	16.6/11,100 PSI	–	–
Clays	Fed. 209A	WAA12	15.0/ 9,700 PSI	16.0/10,800 PSI	–	–
Clays	Fed. 209A	Windjammer	16.0/ 9,100 PSI	16.7/10,300 PSI	18.0/11,400 PSI	–
Clays	Fio. 616	12P18	15.1/ 9,400 PSI	16.2/10,300 PSI	17.3/11,300 PSI	–
Clays	Fio. 616	DR XL 1	14.5/ 8,800 PSI	15.7/10,000 PSI	16.8/11,300 PSI	–
Clays	Fio. 616	DRV-12	14.7/ 8,700 PSI	15.7/10,000 PSI	16.7/11,200 PSI	–
Clays	Fio. 616	Rem. FIG 8	15.5/ 9,200 PSI	17.2/10,500 PSI	–	–
Clays	Fio. 616	WAA12	15.7/ 9,700 PSI	16.8/11,300 PSI	–	–
Clays	Fio. 616	Windjammer	16.1/ 8,200 PSI	17.2/10,000 PSI	17.7/11,200 PSI	–
Clays	Win. 209	12P18	14.9/10,000 PSI	16.0/11,100 PSI	–	–
Clays	Win. 209	Hor. Versalite	16.4/8,300 LUP	17.6/9,400 LUP	18.8/10,600 LUP	–
Clays	Win. 209	Rem. FIG 8	16.0/7,700 LUP	17.0/8,500 LUP	18.1/9,400 LUP	–
Clays	Win. 209	WAA12	16.1/7,700 LUP	17.3/8,800 LUP	18.2/9,800 LUP	–
Clays	Win. 209	Windjammer	–	17.3/10,100 PSI	18.2/10,900 PSI	–
700-X	CCI 209	12P18	15.3/ 9,900 PSI	16.1/10,700 PSI	16.9/11,500 PSI	–
700-X	Ched. 209	12P18	14.8/ 9,200 PSI	16.0/10,200 PSI	17.1/11,300 PSI	–
700-X	Ched. 209	CB 4118-12B	14.8/ 8,400 PSI	15.9/ 9,500 PSI	17.0/10,600 PSI	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
700-X	Ched. 209	DR XL 1	15.2/ 8,300 PSI	16.2/ 9,600 PSI	17.2/10,900 PSI	–
700-X	Ched. 209	DRV-12	14.3/ 8,700 PSI	15.5/10,000 PSI	16.7/11,200 PSI	–
700-X	Ched. 209	Rem. FIG 8	14.4/ 8,500 PSI	15.8/ 9,500 PSI	17.2/10,600 PSI	–
700-X	Ched. 209	WAA12	15.0/ 8,900 PSI	16.0/ 9,900 PSI	17.1/10,900 PSI	–
700-X	Fed. 209A	12P18	14.8/ 9,500 PSI	15.9/10,700 PSI	–	–
700-X	Fed. 209A	CB 1118-12	14.8/ 8,300 PSI	16.1/ 9,400 PSI	17.3/10,500 PSI	18.6/11,500 PSI
700-X	Fed. 209A	Fed. 12S3	15.2/ 8,800 PSI	16.6/10,000 PSI	18.0/11,200 PSI	–
700-X	Fed. 209A	Rem. FIG 8	15.3/ 8,700 PSI	16.6/ 9,600 PSI	17.8/10,400 PSI	19.1/11,300 PSI
700-X	Fed. 209A	WAA12	14.8/ 8,900 PSI	16.1/10,100 PSI	17.5/11,300 PSI	–
700-X	Fed. 209A	Windjammer	14.7/ 8,000 PSI	16.2/ 9,000 PSI	17.7/10,100 PSI	19.1/11,100 PSI
700-X	Fio. 616	12P18	14.7/ 9,300 PSI	16.1/10,200 PSI	17.4/11,000 PSI	–
700-X	Fio. 616	DR XL 1	14.7/ 9,300 PSI	16.1/10,200 PSI	17.4/11,000 PSI	–
700-X	Fio. 616	DRV-12	14.8/ 8,600 PSI	16.1/ 9,600 PSI	17.4/10,600 PSI	–
700-X	Fio. 616	Rem. FIG 8	16.0/ 8,000 PSI	17.5/ 9,200 PSI	19.0/10,400 PSI	–
700-X	Fio. 616	WAA12	15.5/ 8,400 PSI	17.0/ 9,500 PSI	18.4/10,700 PSI	–
700-X	Fio. 616	Windjammer	16.2/ 7,900 PSI	17.2/ 8,800 PSI	18.5/10,000 PSI	19.8/11,100 PSI
700-X	Win. 209	12P18	14.4/ 9,500 PSI	15.6/10,700 PSI	–	–
700-X	Win. 209	CB 1118-12	15.3/ 8,400 PSI	16.6/ 9,400 PSI	17.8/10,300 PSI	19.1/11,300 PSI
700-X	Win. 209	Fed. 12S3	15.3/ 9,300 PSI	16.4/10,200 PSI	17.5/11,100 PSI	–
700-X	Win. 209	Rem. FIG 8	15.2/ 8,100 PSI	16.7/ 9,200 PSI	18.2/10,400 PSI	–
700-X	Win. 209	WAA12	15.3/ 9,000 PSI	16.4/ 9,900 PSI	17.5/10,800 PSI	–
700-X	Win. 209	Windjammer	15.3/ 7,900 PSI	16.6/ 9,000 PSI	17.8/10,000 PSI	19.1/11,100 PSI
High Gun	CCI 209	12P18	15.6/ 8,500 PSI	16.6/ 9,700 PSI	17.7/10,900 PSI	–
High Gun	CCI 209	CB 4118-12B	15.4/ 7,700 PSI	16.6/ 8,900 PSI	17.8/10,200 PSI	19.0/11,400 PSI
High Gun	CCI 209	Rem. FIG 8	15.4/ 7,700 PSI	16.6/ 9,000 PSI	17.8/10,200 PSI	19.0/11,400 PSI
High Gun	CCI 209	WAA12	15.4/ 7,600 PSI	16.5/ 8,900 PSI	17.7/10,200 PSI	18.9/11,500 PSI
High Gun	Ched. 209	12P18	15.1/ 8,800 PSI	16.1/ 9,900 PSI	17.1/11,000 PSI	–
High Gun	Ched. 209	CB 4118-12B	15.4/ 7,000 PSI	16.5/ 8,400 PSI	17.6/ 9,700 PSI	18.7/11,100 PSI
High Gun	Ched. 209	Rem. FIG 8	15.5/ 8,200 PSI	16.6/ 9,300 PSI	17.7/10,400 PSI	18.8/11,500 PSI
High Gun	Ched. 209	WAA12	15.4/ 7,900 PSI	16.5/ 9,300 PSI	17.6/10,600 PSI	–
High Gun	Fed. 209A	12P18	15.1/ 8,800 PSI	16.2/ 9,900 PSI	17.3/11,000 PSI	–

NEVER EXCEED MAXIMUM LOADS

Powder	Primer	Wad	Charge/Pressure			
High Gun	Fed. 209A	CB 4118-12B	15.1/ 7,600 PSI	16.2/ 8,800 PSI	17.3/10,000 PSI	18.5/11,200 PSI
High Gun	Fed. 209A	Rem. FIG 8	15.0/ 8,300 PSI	16.2/ 9,500 PSI	17.4/10,700 PSI	–
High Gun	Fed. 209A	WAA12	15.2/ 8,200 PSI	16.3/ 9,400 PSI	17.5/10,600 PSI	–
High Gun	Fio. 616	12P18	15.6/ 8,700 PSI	16.6/ 9,700 PSI	17.6/10,700 PSI	–
High Gun	Fio. 616	CB 4118-12B	–	17.0/ 8,200 PSI	18.1/ 9,400 PSI	19.2/10,600 PSI
High Gun	Fio. 616	Rem. FIG 8	15.8/ 7,800 PSI	16.8/ 8,700 PSI	17.9/ 9,600 PSI	19.0/10,600 PSI
High Gun	Fio. 616	WAA12	15.5/ 7,900 PSI	16.6/ 9,100 PSI	17.7/10,200 PSI	18.8/11,400 PSI
High Gun	Win. 209	12P18	15.1/ 8,900 PSI	16.2/10,100 PSI	17.2/11,200 PSI	–
High Gun	Win. 209	CB 4118-12B	15.0/ 7,000 PSI	16.3/ 8,300 PSI	17.6/ 9,500 PSI	18.9/10,700 PSI
High Gun	Win. 209	Rem. FIG 8	14.9/ 8,200 PSI	15.9/ 9,200 PSI	16.9/10,200 PSI	–
High Gun	Win. 209	WAA12	14.9/ 7,900 PSI	15.9/ 9,000 PSI	17.4/10,400 PSI	18.4/11,400 PSI
WST	CCI 209	12P18	18.4/ 9,000 PSI	19.5/10,200 PSI	20.7/11,400 PSI	–
WST	CCI 209	Fed. 12S3	–	19.0/ 9,500 PSI	20.5/10,800 PSI	–
WST	CCI 209	Rem. FIG 8	–	19.0/ 9,000 PSI	20.5/10,000 PSI	–
WST	CCI 209	WAA12	–	19.0/ 9,100 PSI	20.5/10,300 PSI	–
WST	Ched. 209	12P18	17.3/ 8,500 PSI	18.7/ 9,800 PSI	20.1/11,100 PSI	–
WST	Ched. 209	CB 4118-12B	17.2/ 8,300 PSI	18.3/ 9,400 PSI	19.3/10,400 PSI	–
WST	Ched. 209	DR XL 1	17.2/ 8,500 PSI	18.4/ 9,600 PSI	19.6/10,600 PSI	–
WST	Ched. 209	DRV-12	17.3/ 8,500 PSI	18.5/ 9,800 PSI	19.6/11,000 PSI	–
WST	Ched. 209	Rem. FIG 8	17.3/ 8,700 PSI	18.6/ 9,600 PSI	19.9/10,600 PSI	–
WST	Ched. 209	WAA12	17.1/ 8,600 PSI	18.3/ 9,800 PSI	19.5/11,100 PSI	–
WST	Ched. 209	Windjammer	17.5/ 7,800 PSI	18.8/ 9,100 PSI	20.1/10,400 PSI	–
WST	Fed. 209A	12P18	17.9/ 9,300 PSI	18.8/10,400 PSI	19.7/11,400 PSI	–
WST	Fed. 209A	WAA12	18.5/10,700 PSI	–	–	–
WST	Fed. 209A	WAA12SL	21.5/ 7,200 PSI	–	–	–
WST	Fio. 616	12P18	17.7/ 8,600 PSI	18.8/10,100 PSI	–	–
WST	Fio. 616	DR XL 1	17.3/ 8,400 PSI	18.4/ 9,700 PSI	19.5/11,000 PSI	–
WST	Fio. 616	DRV-12	16.9/ 8,800 PSI	18.1/ 9,900 PSI	19.4/10,900 PSI	–

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
WST	Fio. 616	Rem. FIG 8	18.4/ 7,300 PSI	19.9/ 8,400 PSI	21.3/ 9,800 PSI	–
WST	Fio. 616	WAA12	18.1/ 6,300 PSI	19.4/ 8,400 PSI	20.8/10,100 PSI	–
WST	Fio. 616	Windjammer	18.5/ 6,300 PSI	19.8/ 7,700 PSI	21.2/ 9,200 PSI	22.6/10,700 PSI
WST	Win. 209	12P18	17.3/ 8,600 PSI	18.8/10,000 PSI	20.2/11,400 PSI	–
WST	Win. 209	Fed. 12S3	–	19.0/ 9,800 PSI	20.0/10,900 PSI	–
WST	Win. 209	Rem. FIG 8	–	19.0/ 8,400 PSI	20.5/10,000 PSI	–
WST	Win. 209	WAA12	–	18.5/ 8,600 PSI	20.0/ 9,800 PSI	–
Super Hcp	CCI 209	12P18	17.2/ 7,500 PSI	18.4/ 8,500 PSI	19.6/ 9,500 PSI	20.8/10,500 PSI
Super Hcp	Ched. 209	12P18	17.1/ 7,800 PSI	18.2/ 8,800 PSI	19.3/ 9,900 PSI	20.3/10,900 PSI
Super Hcp	Ched. 209	DR XL 1	–	17.4/ 8,200 PSI	18.6/ 9,400 PSI	19.8/10,600 PSI
Super Hcp	Ched. 209	DRV-12	–	18.1/ 7,800 PSI	19.4/ 9,600 PSI	20.7/11,400 PSI
Super Hcp	Ched. 209	Rem. FIG 8	–	18.5/ 8,500 PSI	19.7/ 9,700 PSI	21.0/11,100 PSI
Super Hcp	Ched. 209	WAA12	–	17.8/ 8,500 PSI	19.1/ 9,900 PSI	20.5/11,400 PSI
Super Hcp	Ched. 209	Windjammer	–	18.4/ 7,400 PSI	19.9/ 8,700 PSI	21.4/ 9,900 PSI
Super Hcp	Fed. 209A	12P18	16.8/ 7,700 PSI	17.9/ 8,800 PSI	19.1/ 9,900 PSI	20.2/11,000 PSI
Super Hcp	Fed. 209A	DRV-12	–	17.4/ 8,700 PSI	18.9/10,200 PSI	–
Super Hcp	Fed. 209A	Rem. FIG 8	–	18.1/ 8,300 PSI	19.5/ 9,800 PSI	20.9/11,200 PSI
Super Hcp	Fed. 209A	WAA12	–	17.4/ 8,800 PSI	18.9/10,300 PSI	–
Super Hcp	Fed. 209A	Windjammer	–	17.9/ 8,200 PSI	19.5/ 9,700 PSI	21.0/11,100 PSI
Super Hcp	Fio. 616	12P18	17.7/ 7,700 PSI	18.6/ 8,600 PSI	19.6/ 9,400 PSI	20.6/10,200 PSI
Super Hcp	Fio. 616	DR XL 1	–	17.2/ 7,700 PSI	18.5/ 9,000 PSI	19.8/10,300 PSI
Super Hcp	Fio. 616	DRV-12	–	16.5/ 7,700 PSI	18.1/ 9,000 PSI	19.7/10,400 PSI
Super Hcp	Fio. 616	Rem. FIG 8	–	19.2/ 6,900 PSI	20.5/ 8,400 PSI	21.8/10,000 PSI
Super Hcp	Fio. 616	WAA12	–	18.5/ 9,000 PSI	20.0/ 9,000 PSI	21.4/10,500 PSI
Super Hcp	Fio. 616	Windjammer	–	18.7/ 6,900 PSI	20.3/ 8,400 PSI	21.7/ 9,700 PSI
Super Hcp	Win. 209	12P18	17.2/ 8,100 PSI	18.3/ 9,000 PSI	19.3/ 9,900 PSI	20.4/10,800 PSI
Super Hcp	Win. 209	DRV-12	–	18.0/ 8,500 PSI	19.4/ 9,900 PSI	20.8/11,400 PSI
Super Hcp	Win. 209	Rem. FIG 8	–	18.4/ 7,200 PSI	19.7/ 8,800 PSI	21.0/10,400 PSI
Super Hcp	Win. 209	WAA12	–	18.1/ 8,200 PSI	19.5/ 9,700 PSI	20.9/11,300 PSI
Super Hcp	Win. 209	Windjammer	–	19.4/ 7,800 PSI	20.5/ 9,000 PSI	21.6/10,100 PSI
International	CCI 209	12P18	16.3/ 8,400 PSI	17.6/ 9,300 PSI	18.9/10,300 PSI	20.1/11,300 PSI
International	CCI 209	Fed. 12S3	–	19.2/7,900 LUP	20.0/8,300 LUP	21.6/10,200 LUP
International	CCI 209	Hor. Versalite	16.7/ 8,600 PSI	17.2/ 9,600 PSI	18.2/11,300 PSI	–
International	CCI 209	Rem. FIG 8	17.0/ 9,300 PSI	17.8/10,100 PSI	18.5/11,200 PSI	–
International	CCI 209	WAA12	17.0/ 9,700 PSI	17.4/10,500 PSI	18.2/11,400 PSI	–
International	CCI 209	Windjammer	17.0/ 8,300 PSI	17.7/ 8,800 PSI	19.5/ 9,800 PSI	20.5/11,500 PSI

Powder	Primer	Wad	Charge/Pressure			
International	Ched. 209	12P18	16.3/ 7,900 PSI	17.6/ 8,800 PSI	18.9/ 9,700 PSI	20.1/10,600 PSI
International	Ched. 209	DR XL 1	16.5/ 7,600 PSI	17.5/ 8,600 PSI	18.6/ 9,500 PSI	19.6/10,500 PSI
International	Ched. 209	DRV-12	16.3/ 7,600 PSI	17.5/ 8,600 PSI	18.6/ 9,700 PSI	19.8/10,800 PSI
International	Ched. 209	Rem. FIG 8	17.4/ 7,900 PSI	18.5/ 9,200 PSI	19.7/10,500 PSI	–
International	Ched. 209	WAA12	16.9/ 8,100 PSI	18.1/ 9,600 PSI	19.3/11,100 PSI	–
International	Ched. 209	Windjammer	17.9/ 8,000 PSI	18.9/ 9,200 PSI	19.8/10,300 PSI	20.8/11,500 PSI
International	Fed. 209A	12P18	17.0/ 8,300 PSI	18.0/ 9,200 PSI	19.0/10,200 PSI	19.9/11,200 PSI
International	Fed. 209A	Hor. Versalite	16.0/10,200 PSI	16.9/11,100 PSI	–	–
International	Fed. 209A	Rem. FIG 8	16.5/ 9,700 PSI	17.0/10,100 PSI	18.0/10,900 PSI	–
International	Fed. 209A	WAA12	16.0/ 9,500 PSI	16.8/10,300 PSI	17.5/10,900 PSI	–
International	Fed. 209A	Windjammer	17.4/ 6,900 PSI	18.0/ 7,700 PSI	19.5/ 9,500 PSI	21.3/11,200 PSI
International	Fio. 616	12P18	17.1/ 8,000 PSI	18.1/ 8,900 PSI	19.1/ 9,900 PSI	20.1/10,800 PSI
International	Fio. 616	DR XL 1	16.4/ 7,700 PSI	17.5/ 8,700 PSI	18.7/ 9,700 PSI	19.9/10,700 PSI
International	Fio. 616	DRV-12	16.6/ 7,600 PSI	17.6/ 8,600 PSI	18.5/ 9,600 PSI	19.6/10,600 PSI
International	Fio. 616	Rem. FIG 8	17.2/ 6,700 PSI	18.4/ 8,200 PSI	19.5/ 9,600 PSI	–
International	Fio. 616	WAA12	16.9/ 7,300 PSI	18.0/ 8,700 PSI	19.0/ 9,900 PSI	–
International	Fio. 616	Windjammer	–	19.0/ 7,000 PSI	20.3/ 8,600 PSI	21.6/10,200 PSI
International	Win. 209	12P18	16.4/ 8,200 PSI	17.6/ 9,200 PSI	18.8/10,100 PSI	20.0/11,100 PSI
International	Win. 209	Hor. Versalite	17.4/7,900 LUP	18.1/8,600 LUP	19.2/9,800 LUP	–
International	Win. 209	Rem. FIG 8	17.3/ 8,100 PSI	18.3/ 9,500 PSI	–	–
International	Win. 209	Trapper	17.0/ 8,100 PSI	18.0/ 9,300 PSI	19.0/10,400 PSI	–
International	Win. 209	WAA12	17.6/7,400 LUP	18.1/8,300 LUP	19.2/9,600 LUP	21.3/10,800 LUP
International	Win. 209	Windjammer	17.3/ 7,900 PSI	18.0/ 8,600 PSI	19.5/ 9,800 PSI	20.8/10,300 PSI

12G - 2 3/4″ WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT—CONT.

			1090 fps	1145 fps	1200 fps	1255 fps
244	CCI 209	12P18	16.1/ 7,700 PSI	17.0/ 8,800 PSI	17.8/ 9,900 PSI	18.7/11,000 PSI
244	Ched. 209	12P18	16.4/ 8,000 PSI	17.5/ 9,100 PSI	18.6/10,300 PSI	19.6/11,400 PSI
244	Ched. 209	CB 4118-12B	16.3/ 6,700 PSI	17.7/ 7,600 PSI	18.8/ 8,500 PSI	19.9/ 9,400 PSI
244	Ched. 209	DRV-12	16.2/ 7,200 PSI	17.3/ 8,300 PSI	18.4/ 9,400 PSI	19.6/10,500 PSI
244	Ched. 209	Rem. FIG 8	16.5/ 6,900 PSI	17.6/ 7,900 PSI	18.7/ 8,900 PSI	19.7/10,000 PSI
244	Ched. 209	WAA12	16.3/ 7,200 PSI	17.3/ 8,200 PSI	18.6/ 9,200 PSI	19.8/10,200 PSI
244	Fed. 209A	12P18	16.3/ 8,200 PSI	17.4/ 9,300 PSI	18.5/10,500 PSI	–
244	Fed. 209A	CB 4118-12B	16.5/ 6,600 PSI	17.6/ 7,600 PSI	18.7/ 8,700 PSI	19.8/ 9,800 PSI
244	Fed. 209A	DRV-12	16.2/ 7,300 PSI	17.4/ 8,500 PSI	18.5/ 9,700 PSI	19.6/11,000 PSI
244	Fed. 209A	Rem. FIG 8	16.5/ 7,400 PSI	17.6/ 8,400 PSI	18.8/ 9,400 PSI	19.9/10,400 PSI
244	Fed. 209A	WAA12	15.5/ 7,300 PSI	16.8/ 8,400 PSI	18.1/ 9,500 PSI	19.5/10,700 PSI
244	Fio. 616	12P18	16.7/ 8,200 PSI	17.7/ 9,300 PSI	18.7/10,400 PSI	19.7/11,500 PSI
244	Fio. 616	CB 4118-12B	–	17.9/ 7,200 PSI	18.9/ 8,100 PSI	20.0/ 9,100 PSI
244	Fio. 616	DRV-12	–	17.4/ 7,600 PSI	18.7/ 8,700 PSI	19.9/ 9,800 PSI
244	Fio. 616	Rem. FIG 8	16.8/ 6,800 PSI	17.6/ 7,800 PSI	18.5/ 8,900 PSI	19.3/10,000 PSI
244	Fio. 616	WAA12	16.2/ 6,500 PSI	17.4/ 7,600 PSI	18.6/ 8,800 PSI	19.8/ 9,900 PSI
244	Win. 209	12P18	16.3/ 8,300 PSI	17.4/ 9,300 PSI	18.5/10,300 PSI	19.5/11,300 PSI
244	Win. 209	CB 4118-12B	16.4/ 6,900 PSI	17.5/ 7,800 PSI	18.7/ 8,800 PSI	19.8/ 9,700 PSI
244	Win. 209	DRV-12	16.1/ 7,400 PSI	17.3/ 8,500 PSI	18.4/ 9,600 PSI	19.5/10,800 PSI
244	Win. 209	Rem. FIG 8	15.7/ 6,900 PSI	17.0/ 8,000 PSI	18.4/ 9,100 PSI	19.7/10,100 PSI
244	Win. 209	WAA12	15.7/ 7,600 PSI	17.0/ 8,700 PSI	18.3/ 9,800 PSI	19.6/10,900 PSI
572	CCI 209	12P18	20.5/ 6,400 PSI	21.6/ 7,000 PSI	22.7/ 7,700 PSI	23.8/ 8,400 PSI
572	Fed. 209A	12P18	19.7/ 6,800 PSI	20.8/ 7,600 PSI	22.0/ 8,400 PSI	23.1/ 9,200 PSI
572	Fio. 616	12P18	20.6/ 6,300 PSI	21.6/ 7,000 PSI	22.7/ 7,700 PSI	23.8/ 8,400 PSI
572	Win. 209	12P18	20.3/ 6,400 PSI	21.4/ 7,200 PSI	22.4/ 7,900 PSI	23.5/ 8,600 PSI
WSF	Fed. 209A	WAA12SL	–	21.5/ 7200 PSI	23.0/ 8,400 PSI	24.0/ 9,100 PSI

12G - 2 3/4" WINCHESTER COMPRESSION - FORMED AA & HS TYPE PLASTIC SHELLS - 1 1/8 OZ. LEAD SHOT - HIGH VELOCITY

			1420 fps	1475 fps	1530 fps	1585 fps
Longshot	CCI 209M	Fed. 12S3	30.9/10,200 PSI	32.4/11,300 PSI	–	–
Longshot	CCI 209M	Hor. Versalite	31.0/ 9,600 PSI	32.7/10,500 PSI	34.3/11,300 PSI	–
Longshot	CCI 209M	WAA12	30.9/10,000 PSI	32.5/10,900 PSI	–	–
Longshot	CCI 209M	Windjammer	32.2/ 8,700 PSI	33.7/ 9,600 PSI	35.1/10,500 PSI	–
Longshot	Fed. 209A	Fed. 12S3	31.1/10,300 PSI	32.2/11,300 PSI	–	–
Longshot	Fed. 209A	Hor. Versalite	30.7/10,100 PSI	32.4/11,000 PSI	–	–
Longshot	Fed. 209A	WAA12	31.0/ 9,800 PSI	32.3/10,800 PSI	–	–
Longshot	Win. 209	Fed. 12S3	32.6/ 8,800 PSI	34.1/ 9,500 PSI	35.7/10,300 PSI	–
Longshot	Win. 209	Hor. Versalite	32.2/ 8,600 PSI	33.6/ 9,500 PSI	34.9/10,300 PSI	–
Longshot	Win. 209	WAA12	32.1/ 9,200 PSI	33.2/10,100 PSI	34.4/11,100 PSI	–

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