Now Includes Accurate® and RAMSHOT

5000+ LOADS

HODGDON® 2022 ANNUAL MANUAL

RELOADING

HODGDON®
THE BRAND THAT'S TRUE®

FOR HANDGUNS & RIFLES WITH HODGDON®, IMR®, WINCHESTER®, ACCURATE® & RAMSHOT® POWDERS

1947 - 2022
75
ANNIVERSARY
HODGDON

WINCHESTER
MODEL 70
SUPER GRADE

DATA FOR THE

22 CREEDMOOR
FN 5.7x28mm
6.8 WESTERN
22 TCM

UPDATED DATA FOR

50 RIFLE & PISTOL CARTRIDGES


NOSLER®
THE ULTIMATE ROUND FOR 99% OF BIG GAME.
27 NOSLER
FLAT SHOOTING, HARD HITTING, KNOCKDOWN POWER.
No joke. The 27 Nosler has the flat-shooting knockdown power you need for whitetail, mule deer, elk, antelope, sheep, hogs, and. . .well, let's leave it at "big game."
See how we did it, at 27Nosler.com

From the PRESIDENT & CEO

THE STORY OF THE HODGDON Powder Company began in 1947. Bruce (B.E.) Hodgdon pioneered the modern handloading industry along with his post-World War II contemporaries at Hornady, Speer, Nosler, and other visionaries. Together, they created an industry, providing the tools, gunpowder, bullets, brass, and primers needed to "roll your own" ammunition. As we celebrate 75 years in business, we are humbled by the support and loyalty that shooters and hunters have demonstrated for our products.

Hodgdon CEO Steve Kehrwald (top left) hunting pheasant with Hodgdon customers.

Bruce's sons, J.B. (John) and Bob (R.E.) Hodgdon, assumed management of the company in 1976. They remain valuable counselors to the current management as well as to the third and fourth generations of family shareholders. They are justifiably proud of what they have built on the foundation their dad established. Today, the company continues to provide quality products for our shooting customers, rewarding employment for nearly a hundred employees, a fair return to the owners, and significant support for charitable works in the communities in which we operate. We have been blessed, and we thank God for providing for us through these 75 years.

The Hodgdon Powder Company is not resting on its laurels. In 2020, we acquired the Ramshot, Accurate, and Blackhorn 209 powder brands from Western Powders. This provided Hodgdon with new suppliers, increased capacities, and additional capabilities for the future. You will find expanded reloading data for all these great products included in this *2022 Annual Manual.* We remain committed to bringing innovative shooting sports products to market and meeting the needs of our customers.

The last two years have seen unprecedented demand for shooting sports products. Hodgdon is happy to welcome the millions of new shooters who have joined our ranks, and we have enjoyed record sales during this period. At the same time, we are frustrated that we have not been able to ship even more gunpowder to meet this overwhelming demand. Despite the various conspiracy theories (and trust us, we have heard them all!), rest assured the owners of the Hodgdon Powder Company are free-market capitalists, and we operate this business to earn a profit. We are manufacturing, packaging, and shipping every pound of powder that we can.

Thank you for your purchases of our products and allowing us to continue in business for 75 years. Hodgdon is a true American success story, and we plan to keep providing quality products to serve the handloader for years to come.

Shoot straight, good luck on your hunts, and *"Waidmannsheil."*

STEVE KEHRWALD
President & CEO

RELOADING

HODGDON® 2022 ANNUAL MANUAL

FEATURES

COVER PHOTO BY MICHAEL ANSCHUETZ

RELOADING


VORTEX®
OPTICS
Learn more at VortexOptics.com
VIP
WARRANTY™
UNLIMITED.
UNCONDITIONAL.
LIFETIME WARRANTY.
We will repair or replace the product.
Absolutely free—no matter the cause.
© 2021 Vortex Optics ® Registered Trademark and ™ Trademark of Vortex Optics

HODGDON®
THE BRAND THAT'S TRUE®

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®.

Hodgdon specifically disclaims any warranties with respect to any and all products sold or distributed by it, the safety or suitability thereof, or the results obtained, whether express or implied, 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 and 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 product liability or principles of indemnity or contribution. Hodgdon neither assumes nor authorizes any person to assume for it any liability in connection with the use of any product or data.

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.

MISSION STATEMENT

Hodgdon Powder Company operates following Biblical principles to honor God. Our mission is to provide quality products and services in a manner which enhances the lives of our employees, families, customers, suppliers, and our communities. In doing so, we will deal with integrity and honesty, reflecting that people are more important than dollars and that our purpose is to bring credit to our Lord Jesus Christ.

INDEX OF ADVERTISERS


QUALITY PROPELLANTS FOR OVER 60 YEARS
HODGDON
THE BRAND THAT'S TRUE
H322
RIFLE POWDER
HODGDON EXTREME POWDER
RELOADING DATA CENTER
For a complete listing of all our data go to www.hodgdon.com
CALIBER CHARGE BULLET CASE PRIMER C.O.L VELOCITY
17 Rem. 21.8 gr. 25 gr. Hdy. HP Rem. Rem. 7-1/2 2.150" 3921 fps
222 Rem. 22.2 gr. 50 gr. Hdy. SP Win. Win. SR 2.130" 3079 fps
223 Rem. 23.0 gr. 55 gr. Spr. SP Win. Win. SR 2.200" 3106 fps
22 PPC 26.0 gr. 53 gr. Hdy. HP SAKO Rem. 7-1/2 2.065" 3333 fps
6mm PPC 26.5 gr. 70 gr. Nos. BT SAKO Rem. 7-1/2 2.100" 3068 fps
6mm BR Rem. 32.0 gr. 60 gr. Sie. HP Rem. Rem. 7-1/2 2.080" 3481 fps
MAXIMUM LOADS – DO NOT EXCEED – REDUCE BY 10% TO START
DANGER EXTREMELY FLAMMABLE* • SEE PRECAUTIONS ON SIDE
www.hodgdon.com
IMR
IMR
4227
SMOKELESS POWDER
DANGER!
EXTREMELY FLAMMABLE
BEFORE USING SEE PRECAUTIONS ON SIDES
NET WT. 1 LB. (454 g)

45-70

BIG-GAME LOADS

GOV'T

Originally built for war and powered by black powder, when loaded with modern propellants, the grand old 45-70 is great for hunting big game.

BY LAYNE SIMPSON

THE 45-70 GOVERNMENT WAS ADOPTED BY THE U.S. MILITARY IN 1873 and made its debut in the Trapdoor Springfield rifle that was also adopted during that same year. The cartridge also became available in single-shot rifles from Winchester, Bullard, Sharps, Whitney, Marlin (Ballard), Remington (Rolling Block), and others.

The initial 45-70 loading for rifles consisted of a 405-grain lead bullet pushed to a velocity of 1,350 fps by 70.0 grains of black powder. A carbine load with 55.0 grains of powder was also introduced. Loads with 500-grain bullets were later developed. When fired from a machine rest, the Springfield rifle was expected to group its bullets in a 4-inch circle at 100 yards, inside 11 inches at 200 yards, and inside 27 inches at 300 yards.

By today's standards, the old-timer is classified as a close-distance cartridge, but during U.S. Army tests of the Springfield rifle at Sandy Hook, New Jersey, in 1879, the 500-grain bullet propelled by a case full of black powder proved capable of penetrating three, one-inch wooden boards and then burrowing eight inches into sandy soil at 2,500 yards. Angle of rifle elevation was close to 18 degrees, and of 70 rounds fired, five bullets struck a target measuring 12 feet square. Other tests were performed at 3,200 and 3,500 yards.

As detailed in this report, Layne's all-time favorite rifle in 45-70 is this first-year-production Marlin New Model 1895 restocked by Tennessee stockmaker Bob Cassidy.

The first repeating firearm in 45-70 designed for the civilian market was likely the bolt-action Hotchkiss featured in a Winchester catalog in 1880. Two other bolt actions in 45-70, the Remington-Keene and the Remington-Lee, were introduced by Remington during the 1880s. Marlin introduced its Model 1881 lever-action rifle in 1881, and it was followed about five years later by the Winchester Model 1886. The Bullard lever-action rifle in 45-70 came along in 1887 and was produced for about 10 years. Marlin replaced its Model 1881 with the Model 1895 during that year. Model 1895 production ceased around 1917 or 1918, but the Winchester Model 1886 lasted until 1935. By that point, more-modern cartridges had pretty much pushed the 45-70 aside, but it was far from dead, and its bark would continue to be heard in deer woods for decades to come.

Fortunately, for those of us who love to hunt with classic cartridges, Ruger breathed a bit of renewed life into the 45-70 by offering it in the single-shot No. 1 rifle on a special-order basis in 1969 and on a permanent basis the very next year. Harrington & Richardson and other companies followed with single-shot rifles of various designs, but what really caught the attention of a new generation of hunters was the availability in 1972 in a slightly modified Marlin Model 336 lever action called the New Model 1895. It differed from the original Model 1895 in a number of ways, the most important being an action machined from more-modern steel. The 45-70 has also been available in revolvers and in Contender handguns built by Thompson/Center and SSK Industries.

Load Levels

The 45-70 is falling-off-a-log easy to handload, and publishers of reloading manuals wisely separate load data into three levels of chamber pressures for rifles varying in strength. Maximum pressure commonly

The 45-70 is falling-off-a-log easy to handload, and a variety of propellant types are suitable for loading the classic big-bore cartridge.

recommended for weaker rifles, such as the Trapdoor Springfield, Remington Rolling Block, and Marlin 1881 lever action, all in serviceable condition, ranges from 17,000 CUP to around 25,000 CUP.

Moving up to some of the rifles with actions of greater strength, we have the Marlin New Model 1895, the lever action from today's Henry Repeating Arms, and modern reproductions of the Winchester Model 1886. There is disagreement among various sources on maximum pressures for these rifles, with some putting it at 28,000 CUP and others at 40,000 CUP. This should not be a problem as long as the components specified by the various sources are used.

For much stronger rifles like the Ruger No. 1, Ruger No. 3, and Browning B-78 single shots, recommended maximums range from 35,000 CUP to 50,000 CUP.

Those who handload for 45-70 rifles of various strengths and vintages should adopt an identification procedure to ensure that ammo loaded for one of the stronger rifles is not absentmindedly fired in a weaker rifle. Painting the heads of cartridges with red fingernail polish for a Ruger No. 1 and painting the heads of those loaded for my modern Marlin and Henry rifles black works for me. Cartridges with no color indicate safe to use in any of my rifles.

A number of powders are suitable for use in 45-70 handloads. When loading smokeless powder for older single-shot rifles like the 1873 Springfield and Remington Rolling Block, I have mostly used IMR 3031 through the years, but newer propellants, such as Varget and Benchmark, also work quite well. For a low-cost practice load the entire family can enjoy, try 13.0 grains of Trail Boss behind the Rim Rock 405-grain cast bullet or a bullet of the same weight cast of scrap wheel weight metal with a Lyman #457193 mold. When punching paper at serious distances, I find Varget and a 525-grain bullet cast with a Redding/SAECO #745 mold to be quite accurate.

When exiting the muzzle at 2,100 fps, the Swift 350-grain A-Frame expands impressively when fired into water at 25 yards (left) and 150 yards (right). Retaining close to 100 percent of its original weight during expansion, it has long been Layne's favorite mice-to-moose bullet for the 45-70.

Moving to higher velocities in my Marlin and Henry rifles, H322 and Accurate 2230 have long been favored, although IMR 3031, H335, H4198, and IMR 4198 are also excellent performers.

When putting together ammo that duplicates the performance of black powder without its heavy fouling buildup in the barrel of my Henry lever gun, I have long found Blackhorn 209 to be an excellent choice. TripleSeven Ffg is another excellent candidate for fun loads that fill the air with smoke. When loading jacketed bullets weighing from 250 to 350 grains to higher pressures and velocities for my Ruger No. 1, H4198 and IMR 4198 are the propellants most often used.

Prior to rounding up bullets to be used in any rifle with a tubular magazine, keep in mind that only those of flatnose profile are safe to use. Exceptions are Hornady's 250-grain MonoFlex and 325-grain FTX, both featuring soft pointed tips that improve ballistic coefficient a bit while being safe to use in tube-magazine rifles. Shortening cases to 2.040 inches for those two keeps overall cartridge length compatible with the actions of lever-action rifles.

Regardless of whether you are handloading for a lever-action or single-shot rifle, bullets weighing from 250 grains to 430 grains cover a variety of hunting and shooting applications.

1 Hornady 250-Gr. MonoFlex
2 Speer 300-Gr. FNHP
3 Hornady 325-Gr. FTX
4 Lyman #457122 330-Gr. FNHP
5 Swift 350-Gr. A-Frame
6 Speer 400-Gr. FNSP
7 Rim Rock 405-Gr. FNGC
8 Rim Rock 430-Gr. FNGC


OUR NAME SAYS IT ALL
Accurate®
2015®
SMOKELESS PROPELLANT
NET WT. 1LB. (454G)
OUR NAME SAYS IT ALL
Accurate®
2230®
SMOKELESS PROPELLANT
NET WT. 1LB. (454G)
OUR NAME SAYS IT ALL
Accurate®
2200
SMOKELESS PROPELLANT
NET WT. 1LB. (454G)

Excellent choices in deer bullets include the Barnes 250-grain TSX FN, the 300-grain hollowpoints from Hornady and Speer, the Nosler 300-grain BST, and the Hornady 325-grain FTX. The Speer 400-grain bullet is also quite deadly on deer but is a bit soft for optimal penetration when taking quartering shots on larger game. The 330-grain Gould with a flat, hollow nose cast of Lyman No. 2 alloy with a Lyman #457122 mold has proven to be an effective harvester of venison among hunters for well over 100 years. Best bets for moose and elk are the Barnes 300-grain TSX FN, Swift 350-grain A-Frame, Hornady 250-grain MonoFlex, or a hard-cast bullet with a wide, flat nose weighing from 400 to 430 grains. My all-time favorite mice-to-moose bullet is the Swift 350-grain A-Frame.

With good handloads fired in an accurate rifle, the 45-70 is capable of excellent accuracy. This exceptional five-shot, 100-yard group with the Hornady 325-grain FTX was delivered by Layne's restocked Marlin New Model 1895.

Tips & Techniques

The mouth of a 45-70 case has to be belled slightly prior to bullet-seating, and for this reason, die sets come with a third die. To prevent bullets in full-power cartridges in a tubular magazine from being pushed more deeply into the case during recoil, cases should be roll-crimped into the cannelure of jacketed bullets or into a crimp groove or lube groove of cast bullets. As mentioned earlier, when loading the Hornady 250-grain MonoFlex and 325-grain FTX bullets for lever-action rifles, cases have to be shortened to 2.040 inches. A standard crimp die won't work with shortened cases, so Redding designed the Special Purpose Profile Crimp Die for use when loading those bullets. It can also be used on cases of standard length.

Keeping cases trimmed to the exact same length ensures uniform crimps. Equally important is choosing a powder of the correct burn speed, the charge of which is compressed enough to assist the roll crimp in preventing recoil-induced bullet push-back.

My favorite rifle in 45-70 is a Marlin New Model 1895 purchased about 35 years ago from a friend who had it restocked in nicely figured American walnut by Tennessee stockmaker Bob Cassidy. Otherwise, it is still factory original and easily identified as early production by a front sight dovetailed to the barrel along with a straight grip and a square-shaped finger lever. At the same time, I inletted a nicely figured Fajen stock and forearm for a Ruger No. 1 barreled action in 45-70 and then turned the rifle over to Cassidy who final-shaped and finished the stock with handrubbed oil. He also applied flawlessly executed, 22-line checkering in a point pattern with generous coverage. That rifle is also still in my battery, and it is the most accurate 45-70 I have hunted with.

While the Ruger No. 1 is more accurate overall, the smallest individual group I have carved with any rifle in 45-70 was with the Marlin. The load consisted of a Remington case, a CCI 200 primer, and a Hornady 325-grain FTX pushed along by a maximum charge of H322 for an average muzzle velocity of 2,224 fps. When developing loads for a lever-action rifle, I usually shoot three-shot groups, but when the first three bullet holes at 100 yards were touching, I squeezed off two more rounds. I made the enclosed photo of the group but never got around to measuring it. While that one was chalked up to luck, three-shot averages usually run around 1.5 inches with the occasional group measuring less than an inch.

The 45-70 performs nicely on game, even when loaded to modest velocities. Layne used a Rolling Block built by the Remington Custom Shop with an adjustable, target-style tang sight to take this Newfoundland caribou bull at a laser-ranged 236 yards.

In addition to being accurate, the FTX seldom fails to drop a whitetail buck in its tracks at reasonable distances. When zeroed three inches high at 100 yards, it lands about two inches below point of aim at 200 yards, but at that distance residual velocity is less than 1,600 fps, and expansion is nothing to brag about. At the distances most woods-roaming whitetail deer are taken, 300-grain bullets from Hornady, Nosler, and Speer are just as effective as the 325-grain FTX.

Strong rifles and smokeless powders available today allow the 45-70 to be loaded to considerably higher velocities than in the old days, but due to the large diameter of its bullet, it performs nicely on game when loaded to its original velocity. Several years ago, I used a Rolling Block rifle built in Remington's Custom Shop on a hunt for caribou in Newfoundland. Elevation adjustments of its target-grade tang sight were both precise and easily repeated. The load I settled on pushed the Remington 405-grain softnose bullet along at 1,379 fps, with average 100-yard group size measuring just over two inches. Having hunted caribou many times in the past, I knew that using a woods cartridge in such open country would be challenging, so prior to the hunt, I confirmed bullet trajectory by shooting paper targets placed at 100, 150, 200, 250, and 300 yards. Sight elevation adjustments for those distances were typed on a business card and taped to the side of the rifle's stock. After several unsuccessful stalks without a shot, I used a single bullet to drop a nice bull at a laser-ranged 236 yards.

Obviously, the 45-70 Gov't is capable of downing big game. That hunt also proved the grand old cartridge can get the job nicely done at considerable distance.

45-70 GOV'T BIG-GAME LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN)	VEL. (FPS)	M.E. (FT-LBS)	100-YD. ACC. (IN)
SSK Industries Contender, 14-in. Barrel, 1-4X Scope								
Starline	Fed. GM210M	IMR 4198	39.0	Hornady 300-gr. HP	2.550	1634	1779	1.57
Starline	Fed. GM210M	IMR 4198	38.0	Hornady 325-gr. FTX	2.600	1610	1871	1.24
Remington Custom Shop Rolling Block, 28-in. Barrel, Target-Style Tang Sight								
Starline	Fed. GM210M	IMR 3031	38.0	Lyman #457193 405-gr. FN	2.565	1428	1834	1.88
Starline	Fed. GM210M	IMR 3031	42.0	Remington 405-gr. JSP	2.550	1379	1710	2.11
Starline	Fed. GM210M	Varget	44.5	Redding/SAECO #745 525-gr. Semi-Point	2.890	1352	2131	1.54
Marlin New Model 1895, 22-in. Barrel, 1-4X Scope								
Starline	Fed. GM210M	Accurate 2200	55.0	Barnes 250-gr. TSX FN	2.490	2178	2634	1.77
Starline	Fed. GM210M	H335	66.0	Nosler 300-gr. BST	2.550	2256	3391	1.65
Starline	Fed. GM210M	IMR 4198	48.0	Speer 300-gr. FNHP	2.555	2139	3048	1.83
Starline	Fed. GM210M	H322	59.0	Hornady 325-gr. FTX*	2.590	2224	3570	1.42
Starline	Fed. GM210M	Accurate 2015	55.0	Lyman #457122 330-gr. FNHP	2.550	2017	2982	2.16
Starline	Fed. GM210M	Benchmark	59.0	Swift 350-gr. A-Frame	2.550	2034	3216	1.64
Starline	Fed. GM210M	H335	60.0	Swift 350-gr. A-Frame	2.550	2015	3156	1.58
Starline	Fed. GM210M	H335	55.0	Barnes Buster 400-gr. FN	2.510	1838	3001	1.55
Starline	Fed. GM210M	IMR 4227	34.0	Lyman #457643 400-gr. FN	2.535	1543	2115	1.80
Starline	Fed. GM210M	H335	58.0	Speer 400-gr. FNSP	2.545	1964	3427	2.10
Starline	Fed. GM210M	Varget	50.0	Rim Rock 405-gr. FNGC	2.540	1620	2360	1.96
Starline	Fed. GM210M	Varget	55.0	Rim Rock 405-gr. FNGC	2.540	1952	3427	1.70
Henry, 22-in. Barrel, 1.5-5X Scope								
Starline	Fed. GM210M	IMR 4198	49.0	Hornady 250-gr. MonoFlex*	2.590	2278	2881	1.66
Starline	Fed. GM210M	H335	64.0	Barnes 300-gr. TSX FN	2.515	2287	3485	1.80
Starline	Fed. GM210M	H335	58.0	Barnes 350-gr. TSX FN	2.520	2025	3187	2.10
Starline	Fed. GM210M	IMR 3031	56.0	Hornady 350-gr. InterLock FP	2.550	1984	3060	1.68
Starline	Fed. GM210M	H4895	60.0	Swift 350-gr. A-Frame	2.550	2065	3315	1.50
Starline	Fed. GM210M	IMR 4227	34.0	Lyman 400-gr. #457643 FN	2.535	1603	2283	2.22
Starline	Fed. GM210M	H4895	57.0	Speer 400-gr. FNSP	2.540	1904	3220	1.94
Starline	Fed. GM210M	Accurate 2230	38.0	Rim Rock 430-gr. FNGC	2.550	1558	2318	1.90
Starline	Fed. 215	Blackhorn 209	55.0	Rim Rock 405-gr. FNGC	2.540	1419	1811	2.59
Starline	Fed. GM210M	Trail Boss	13.0	Rim Rock 405-gr. FNGC	2.540	1033	960	2.82
Starline	Fed. 215	Triple Se7en Ffg	62.0	Rim Rock 405-gr. FNGC	2.540	1326	1581	2.67
Ruger No. 1, 22-in. Barrel, 2-7X Scope**								
Starline	Fed. GM210M	H4198	57.0	Barnes 250-gr. TSX FN	2.530	2544	3593	2.10
Starline	Fed. GM210M	H4198	55.0	Barnes 300-gr. TSX FN	2.780	2471	4068	1.55
Starline	Fed. GM210M	H4198	52.0	Swift 350-gr. A-Frame	2.600	2189	3725	1.60
Starline	Fed. GM210M	IMR 4198	44.0	Lyman #457193 405-gr. FN	2.560	1992	3569	1.93
Starline	Fed. GM210M	Accurate 2230	47.0	Rim Rock 430-gr. FNGC	2.550	1815	3146	1.49

* Shorten case to 2.040 inches for this bullet.
**These loads should not be used in weaker rifles.
WARNING: Loads shown for the Ruger No. 1 should not be used in lever-action rifles or other rifles with weaker actions.
NOTES: Accuracy is the average of three, three-shot groups fired from a sandbag benchrest with a barrel cool-down between each group. Velocity is the average of five rounds measured 12 feet from the guns' muzzles. Lyman and Redding/SAECO bullets were cast of Lyman No. 2 alloy and lubed with Lyman Alox.


Dillon PRECISION
XL 750
STANDARD FEATURES:
• Made in the USA
• Automatic Indexing
• Automatic Powder Measure
• Automatic Linear Priming System
• Uses Standard 7/8” x 14 Dies
• Loading Rate: 500-800 Rds./Hr.
• 5-Station Interchangeable Toolhead
• Comes With One Caliber Conversion
• Loads 115 Calibers Up To .338 Lapua
• Index Block Roller for Smoother Indexing
• Spring-Loaded Priming Station Case Locator
• Lifetime “No-B.S.” Warranty
• RISK FREE 30-Day Trial!
XL 750 pictured here with available options and accessories.
dillonprecision.com

HANDLOADING THE NEW

6.8 WESTERN

The 6.8 Western is a potent and highly sophisticated round, and you could think of it as the long-range 270 Winchester.

BY STEVE GASH

IT IS NO SECRET THAT RIFLES CHAMBERED for .22-caliber and .30-caliber cartridges are by far the most popular here in the United States, but the middle ground has been firmly held by the 270 Winchester since its introduction in 1925. Countless thousands of rifles chambered for the 270 Win. have filled freezers with meat and walls with heads for years and years, and they will doubtless continue to do so for the foreseeable future. But there's a new hot-rod of a cartridge in the same caliber that is sure to turn some heads. It's called the 6.8 Western.

Cartridges with metric names put off a lot of shooters on this side of the pond, so the development of high-tech metric rounds has languished somewhat. However, in the past decade or so, the ascent of two 6.5mm rounds has transformed the ballistic landscape. Of course, I'm referring to the 6.5 Creedmoor and the 6.5 PRC (Precision Rifle Cartridge).

The immense popularity of these new 6.5mm rounds has caused cartridge designers in this country to rethink other bullet diameters. And this in turn has led to the introduction of a few new potent and highly sophisticated rounds. The 6.8 Western is one of them.

The 6.8 Western (third from left) is based on a shortened 270 WSM case (far right) and continues the proven design characteristics of the 6.5 Creedmoor (far left) and 6.5 PRC (second from left).


QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
Hybrid 100
RELOADING DATA CENTER
For a complete listing of all our data go to www.hodgdon.com
CALIBER CHARGE BULLET CASE PRIMER C.O.L. VELOCITY
243 Win. 43.7 C gr. 100 gr. Spr. BTSP Win. Win. LR 2.650" 3100 fps
270 Win. 56.0 C gr. 130 gr. Hdy. SP Win. Win. LR 3.280" 3066 fps
280 Rem. 52.0 C gr. 160 gr. Sft. SP Rem. Rem. 9-1/2 3.240" 2712 fps
7mm Rem. Mag. 63.0 gr. 140 gr. Nos. PART Win. Win. LR 3.250" 3138 fps
MAXIMUM LOADS – DO NOT EXCEED
DANGER EXTREMELY FLAMMABLE* • SEE PRECAUTIONS ON SIDE
www.hodgdon.com
WINCHESTER
COMPONENTS
PRECISION RIFLE
StaBALL™ 6.5 BALL POWDER®
SMOKELESS PROPELLANT
Delivers:
Increased Velocity
Temperature Insensitivity
Reduced Copper Fouling
Precise Metering
Ideal For:
6.5 Creedmoor, 270 Winchester, 7mm-08 and many more
See website for complete list
MADE IN USA ★
DANGER - Highly Flammable
WARNING: Keep out of reach of children. Read all warnings on package. Store in cool, dry place.
www.wwpowder.com

The 6.8 Western is true to the .27-caliber heritage and is the perfect vehicle for the new high-ballistic-coefficient 0.277-inch-caliber bullets. The IMR Enduron powders performed well over a wide range of bullet weights in the handloads for this report.

The 6.8 Western is true to the .27-caliber heritage and is the perfect vehicle for new high-ballistic-coefficient 0.277-inch-caliber bullets. The 6.8 Western case is based on the 270 WSM (Winchester Short Magnum) case shortened by 0.08 inch. The 6.8 Western retains the same 35-degree shoulder and one-caliber (0.276 inch) neck of the WSM case. (Shooters should be aware that a 6.8 Western cartridge will chamber in a 270 WSM rifle and would have what amounts to an extra 0.08 inch of "headspace.")

Designed for Success

Like the two 6.5mm cartridges noted earlier, the 6.8 Western case and the rifles that shoot it are very precisely designed. The placement and angle of the case shoulder, neck length, bulletseating depth, and chamber throat design are all geared toward perfection. These features improve the length-to-diameter ratio for better ignition and powder burn; the sharp 35-degree shoulder makes the powder burn inside the cartridge case and is not blasted into the barrel throat and down the bore. That makes the cartridge more efficient, and it takes a little less powder to attain a given velocity.

Here's a critical design feature: The S.A.A.M.I. maximum throat diameter of the 6.8 Western is 0.2781 inch. That is 0.0011 inch over the nominal .27-caliber bullet diameter of 0.277 inch. This relatively tight fit helps keep the bullet straight as it enters the rifling and prevents in-bore yaw, and that is a big contributor to good accuracy. Plus, the long throat allows the bullets to be seated farther out, rather than intrude into the powder space, and the distance the bullet travels before it engages the rifling (bullet jump) is less critical for top accuracy. And the 6.8 Western's fast twist shoots lighter "standard weight" 0.277 bullets just fine, as well.

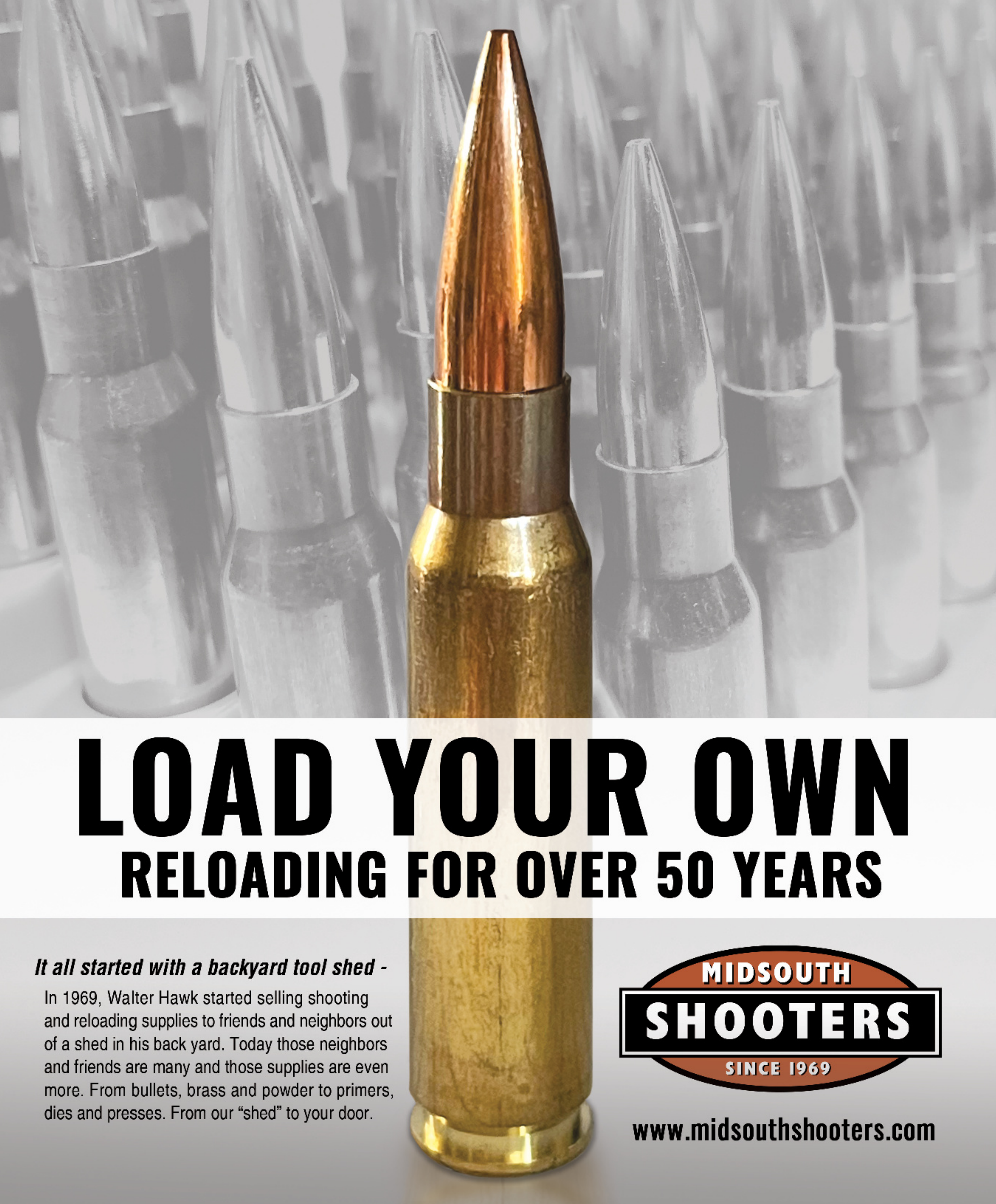
An important part of this success story is that riflemakers scrupulously follow S.A.A.M.I. specs for chamber and throat design of the 6.8 Western. Furthermore, ammo companies make sure that the ogives of the bullets they load in this cartridge mate harmoniously with those tight chamber and throat specs. Also, the long, heavy-for-caliber component projectiles now available have sky-high ballistic coefficients (B.C.) for handloaders. When these cartridge and rifle criteria are met, virtually all 6.8 Western rifles, even inexpensive ones, are expected to shoot great. It all comes together in the system's synergy.

So, the intrepid shooter might ask, why didn't they just screw a fast-twist 270 WSM barrel into an action and call it good? The answer is because you'd still have the larger throat dimensions of the original 270 WSM cartridge. Remember those chamber and throat designs.

6.8 WESTERN FACTORY LOAD ACCURACY & VELOCITY

AMMUNITION	COL (IN.)	VEL. (FPS)	S.D. (FPS)	RECOIL (FT-LBS)	M.E. (FT-LBS)	100-YD. ACC. (IN.)
Winchester XPR, 24-in. Barrel, 1:8 Twist						
Winchester Copper Impact 162-gr. EP	2.892	2950	21	24.5	3131	0.71
Browning Long Range Pro Hunter 175-gr. TGK	2.909	2818	15	23.4	3087	0.90

NOTES: Accuracy is the average of three, five-shot groups fired from an indoor benchrest. Velocity is the average of at least five rounds measured 12 feet from the gun's muzzle. Range temperature was 69 to 89 degrees Fahrenheit.


LOAD YOUR OWN
RELOADING FOR OVER 50 YEARS
It all started with a backyard tool shed -
In 1969, Walter Hawk started selling shooting and reloading supplies to friends and neighbors out of a shed in his back yard. Today those neighbors and friends are many and those supplies are even more. From bullets, brass and powder to primers, dies and presses. From our "shed" to your door.
MIDSOUTH
SHOOTERS
SINCE 1969
www.midsouthshooters.com

All this adds up to what a Hornady engineer once told me: "Good accuracy results as long as everything is lined up straight to start with."

The 6.8 Western is chambered in several rifles from Browning and Winchester. As it makes its mark, other manufactures undoubtedly will jump on this fast moving train.

I used a brand-new Winchester XPR for this project. I had previously tested a Winchester XPR in 243 Winchester, and it was an excellent shooter, so I figured the 6.8 Western rifle would be great for this handloading report. The XPR's single-stage trigger is what Winchester calls the "MOA" Trigger. It is adjustable. The one on my test rifle broke at 3 pounds, 3.3 ounces, and it was extremely crisp, so I left it well enough alone.

While several powders worked well, one of the best loads was with the Nosler 165-grain AccuBond Long Range bullet and 62.2 grains of Retumbo, which is one of Hodgdon's Extreme extruded powders.

For sighting, I mounted a brand-new Vortex Razor 4.5-22X 50mm FFP scope in Talley 30mm rings. This scope should be just the ticket for the long-range shooter, as the first focal plane reticle is the "Christmas tree" design with hash marks for windage and elevation adjustments. The elevation has a "zero-lock" feature so that the shooter can crank in an adjustment for a long shot, then return to the original zero setting.

For building my handloads, I used a set of Redding dies and my Redding Ultra-Mag press, and all powder charges were weighed on an RCBS electronic scale. Cases were periodically trimmed to 2.01 inches, 0.010 inch under maximum case length. Cartridge overall lengths (COL) were determined with the Hornady Lock-N-Load O.A.L. gauge to be either 0.020 inch off the lands or, for shorter bullets, with the bullet base even with the start of the case neck. The XPR's magazine length is 2.95 inches, so all test rounds fed smoothly from the magazine.

Powders & Bullets

As is usually the case, Hodgdon has a plethora of propellants that are ideal for handloading this cartridge. The 6.8 Western's case capacity and expansion ratio make a multitude of powders suitable for handloads. And the company also has reams of pressure-tested load data. I found recipes for 15 Hodgdon powders and four from Accurate and Ramshot, both brands recently acquired by Hodgdon, all free on the online Hodgdon Reloading Data Center.

Medium to slow burners, starting with Winchester StaBALL 6.5 through H1000, Retumbo, and the four Enduron series powders all work well with a wide range of bullet weights. The S.A.A.M.I. MAP (maximum average pressure) for the 6.8 Western is 65,000 psi, and none of Hodgdon's loads exceed that limit.

There is a multitude of excellent 0.277-inch-diameter bullets available these days, but the ones most suitable for the 6.8 Western

1 2 3 4 5 6 7 8 9 10 11 12 13

Steve paired a total of 13 0.277-caliber bullets with 11 Hodgdon, IMR, Accurate, Ramshot, and Winchester propellants for his 6.8 Western handloads.

1 Barnes 130-Gr. TTSX-BT
2 Berger 150-Gr. VLD
3 Berger 170-Gr. EOL Elite Hunter
4 Federal 136-Gr. Edge TLR
5 Federal 140-Gr. Trophy Bonded Tip
6 Hornady 145-Gr. ELD-X
7 Hornady 150-Gr. SST
8 Nosler 150-Gr. Partition
9 Nosler 150-Gr. ABLR
10 Nosler 165-Gr. ABLR
11 Sierra 140-Gr. HPBT
12 Sierra 140-Gr. TGK
13 Swift 130-Gr. Scirocco II

Redding dies and an Ultramag press were used to assemble the handloads, and all charges were weighed on an RCBS electronic scale.

lean toward the tougher and heavier ones, due to the cartridge's velocity and long-range capabilities. Hornady's 145-grain ELD-X, Nosler's 150-grain and 165-grain AccuBond Long Range, and Berger's 170-grain Extreme Outer Limit Elite Hunter fill the bill, and all performed well in my tests.

Test Protocol

Speaking of my test. I followed my standard testing protocol with the 6.8 Western: I fired three, five-shot groups at 100 yards from a Caldwell Lead Sled DFT through the port of my shooting building. It was pretty hot on testing days, so the barrel was cooled in front of the air conditioner after each five-round group, and this sped up testing considerably. The bore was cleaned with Butch's Bore Shine after every three groups, and a fouling shot was fired through the clean, dry bore before firing groups for record. The slick bore picked up very little jacket fouling over the course of testing.

Velocities were measured with an Oehler Model 35-P chronograph that has been modified to run off of line power. The Skyscreen IIIs were four feet apart, and the start screen was eight feet from the gun's muzzle. Each screen had an incandescent light and orange diffuser over it.

To establish a baseline with a new cartridge, I like to fire representative factory-loaded ammo. These were hard to come by, but I finally rounded up two loads, one from Winchester and one from Browning. The Winchester 162-grain Copper Impact load had a velocity of 2,950 fps. Browning's Long Range Hunter carries the Sierra 175-grain Tipped GameKing (TGK) at 2,818 fps. Overall, these two loads averaged 0.81 inch.

Results

Okay, enough of this technical mumbo-jumbo. The real question is how did the handloads shoot? In a word, great. The 6.8 Western is a superb hunting cartridge, and the handload results reflect that. The 27 handloads I developed used 11 powders and 13 bullets. Unfortunately, the Sierra 175-grain Tipped GameKing was not available for testing.

To get a feel for handloading this new round, I started out by loading midrange and near-maximum loads with all four of the IMR Enduron powders and two Western powders with a "normal weight" 0.277 bullet of known accuracy—the Sierra 140-grain Hollow Point Boat Tail (HPBT). There were no surprises, no pressure "excursions," and low extreme spreads. So far, so good.

Accuracy and uniformity were excellent for virtually all handloads, so a list of the "best" powders would be rather long. If I had to name names, I'd recommend IMR 7977, Hodgdon Retumbo, and Ramshot Magnum. All of the Enduron powders did well with selected loads, and they have the added bonus of Hodgdon's "copper fouling eliminator" and are temperature insensitive.

The overall group average of all loads tested was a tidy 0.93 inch, and the average standard deviation (S.D.) was 17 fps. While 10 loads grouped slightly over an inch, their group average was still 1.23 inches, well within minute-of-deer. Overall, it was an impressive showing for the new cartridge.

All shooting results are shown in the accompanying load data chart, but here are some particulars to whet your interest. The fastest velocity recorded was 3,241 fps (Barnes 130-grain Tipped Triple Shock-X and a charge of 69.6 grains of MAGPRO), with groups of 0.75 inch.

Next up were heavier big-game bullets, and a couple excellent loads were with Federal bullets. The 136-grain Edge TLR with 56.6 grains of IMR 4451 produced 3,055 fps and 0.90-inch groups. The 140-grain Trophy Bonded Tip with 58.0 grains of IMR 4955 had a velocity of 3,021 fps and a stellar 0.63-inch group average.

The Hornady 145-grain ELD-X with its "Heat Shield" tip is a great big-game bullet, and it excelled in the 6.8 Western. With 67.0 grains of MAGPRO, it registered 3,080 fps and achieved a great group average of 0.78 inch. A dose of 65.5 grains of Retumbo with the same bullet was not far behind (2,987 fps and a 0.96-inch group average).

The reliable Nosler 150-grain Partition over 65.1 grains of MAGPRO clocked 2,974 fps and grouped into one inch. And the Nosler 150-grain AccuBond Long Range liked 56.4 grains of IMR 4955 producing an average velocity of 2,936 fps and an average accuracy of 1.10 inches.

Since the 6.8 Western is designed to launch heavier bullets than the "usual" 0.277 bullets, I was itching to try the Nosler 165-grain AccuBond Long Range (ABLR) and the Berger 170-grain Extreme Outer Limit (EOL) Elite Hunter bullets. And the results with them were impressive. Slow burn powders like Retumbo and Magnum are the top picks here.

The 165-grain ABLR has an eye-popping G1 B.C. of .620 and a sectional density of .307. With 62.2 grains of Retumbo, this missile launched at 2,799 fps and grouped 0.59 inch. It is slightly less accurate but somewhat faster with 67.0 grains of Magnum (2,894 fps and 0.90 inch).

The heavyweight champ of the 270 world is the Berger 170-grain EOL Elite Hunter with a B.C. of .662 and a sectional density of .339. With 67.2 grains of Magnum, the velocity average was 2,852 fps. A charge of 64.0 grains of Retumbo propelled this bullet at 2,836 fps. Both loads grouped slightly over an inch.

These heavyweights really carry the mail downrange. Zeroed at 250 yards, the 165-grain and 170-grain bullets are 13.6 and 14.1 inches below the line of sight at 400 yards, and a correction of about 22 MOA is required at 1,000 yards. Both loads have over 1,000 ft-lbs of energy at that long range. The average recoil of the 8.5-pound 6.8 Western rifle was a modest 21.1 ft-lbs.

The Bottom Line

After shooting this diverse assemblage of handloads, it was obvious that the 6.8 Western handloader can develop superior loads for many shooting chores with minimal complications. The selection of

6.8 WESTERN LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	S.D. (FPS)	RECOIL (FT-LBS)	M.E. (FT-LBS)	100-YD. ACC. (IN.)
Winchester XPR, 24-in. Barrel, 1:8 Twist										
Winchester	Rem. 9½M	Hybrid 100V	57.0	Barnes 130-gr. TTSX-BT	2.804	3083	14	18.7	2744	1.12
Winchester	Rem. 9½M	MAGPRO	69.6	Barnes 130-gr. TTSX-BT	2.804	3241	11	24.9	3033	0.75
Winchester	Rem. 9½M	Hunter	60.0	Swift 130-gr. Scirocco II	2.805	3038	38	19.0	2665	1.22
Winchester	Rem. 9½M	StaBALL 6.5	59.5	Swift 130-gr. Scirocco II	2.805	3068	12	19.3	2718	0.81
Winchester	Rem. 9½M	IMR 4451	56.6	Federal 136-gr. Edge TLR	2.885	3055	17	19.2	2819	0.90
Winchester	Rem. 9½M	IMR 4955	58.0	Federal 140-gr. TBT	2.850	3021	19	19.9	2838	0.63
Winchester	CCI 250	IMR 4451	53.6	Sierra 140-gr. HPBT	2.704	2826	10	16.3	2483	0.63
Winchester	CCI 250	IMR 4451	55.5	Sierra 140-gr. HPBT	2.704	2915	11	17.8	2642	0.98
Winchester	CCI 250	IMR 4955	54.5	Sierra 140-gr. HPBT	2.704	2828	21	16.5	2487	0.88
Winchester	CCI 250	IMR 4955	58.5	Sierra 140-gr. HPBT	2.704	3033	28	20.2	2860	1.26
Winchester	CCI 250	IMR 7977	61.0	Sierra 140-gr. HPBT	2.704	2840	23	18.3	2508	1.06
Winchester	CCI 250	IMR 7977	62.7	Sierra 140-gr. HPBT	2.704	2929	9	20.0	2668	0.77
Winchester	CCI 250	IMR 8133	62.6	Sierra 140-gr. HPBT	2.704	2710	17	17.1	2284	1.04
Winchester	CCI 250	IMR 8133	64.3	Sierra 140-gr. HPBT	2.704	2800	15	18.7	2438	0.74
Winchester	Rem. 9½M	Magnum	69.5	Sierra 140-gr. TGK	2.886	3157	18	25.5	3099	1.25
Winchester	Rem. 9½M	MAGPRO	66.7	Sierra 140-gr. TGK	2.891	3061	16	23.1	2913	0.76
Winchester	Rem. 9½M	MAGPRO	67.0	Hornady 145-gr. ELD-X	2.909	3080	9	24.4	3055	0.78
Winchester	Rem. 9½M	Retumbo	65.5	Hornady 145-gr. ELD-X	2.909	2987	6	22.4	2873	0.96
Winchester	Rem. 9½M	Magnum	69.1	Berger 150-gr. VLD	2.791	3010	29	24.8	3018	0.85
Winchester	Rem. 9½M	IMR 4955	56.4	Nosler 150-gr. ABLR	2.914	2936	20	19.9	2872	1.10
Winchester	Rem. 9½M	MAGPRO	65.1	Nosler 150-gr. Partition	2.821	2974	18	23.0	2847	1.00
Winchester	Rem. 9½M	H1000	62.0	Hornady 150-gr. SST	2.870	2787	19	19.4	2588	0.97
Winchester	Rem. 9½M	Magnum	67.0	Nosler 165-gr. ABLR	2.900	2894	19	26.7	3069	0.90
Winchester	Rem. 9½M	Retumbo	62.2	Nosler 165-gr. ABLR	2.920	2799	7	21.9	2871	0.59
Winchester	Rem. 9½M	Magnum	61.5	Berger 170-gr. EOL Elite Hunter	2.940	2714	13	21.2	2781	1.04
Winchester	Rem. 9½M	Magnum	67.2	Berger 170-gr. EOL Elite Hunter	2.940	2852	25	26.5	3071	1.14
Winchester	Rem. 9½M	Retumbo	64.0	Berger 170-gr. EOL Elite Hunter	2.940	2836	16	23.9	3037	1.08

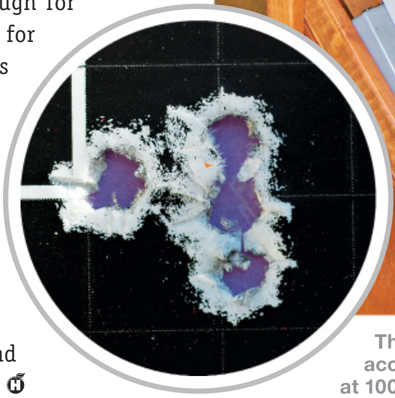
NOTES: Accuracy is the average of three, five-shot groups fired from an indoor benchrest. Range temperature was 69 to 89 degrees Fahrenheit. Velocity is the average of at least five rounds measured 12 feet from the gun's muzzle.

powders is comprehensive, and all produced good results with several loads. I am adverse to cleaning copper out of barrels, so I would lean heavily on the Enduron powders.

From a sound rifle with the proper scope, the accuracy and flat trajectories of the 165-grain and 170-grain bullets should make long shots at big game as large as elk easier (note that I did not say “easy”). And their high sectional densities should ensure plenty of penetration. Plus, most 6.8 Western hunting rifles are lightweight enough to tote up hill and down dale in search of mountain species, and the round is powerful enough to harvest them cleanly.

This versatility, power level, and accuracy are, in essence, the 6.8 Western’s reasons for existence. It is not overpowered for deer-sized game, but it is powerful enough and accurate enough for big game like elk. Big-game hunters can craft loads for specific quarry with confidence and fine-tune loads with the multitude of suitable powders from Hodgdon, making this a rewarding and pleasant chore.

Some people handload so they can shoot, but others shoot so they can handload. The new 6.8 Western fits perfectly into either category , and the broad selection of suitable Hodgdon, IMR, Winchester, Ramshot, and Accurate powders—including Hybrid 100V, Retumbo, H1000, IMR 4451, IMR 4955, IMR 7977, IMR 8133, StaBALL 6.5, Hunter, Magnum, and MAGPRO—only makes handloading for it more fun.



The Winchester XPR 6.8 Western rifle proved to be very accurate with the handloads. Its overall average accuracy at 100 yards with 27 handloads was 0.99 inch.

WINCHESTER
COMPONENTS
HANDGUN
AUTOCOMP™
BALL POWDER
SMOKELESS PROPELLANT
The Competition Pistol Powder
MADE IN USA ★
DANGER - Highly Flammable
www.wwpowder.com
QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
LONGSHOT
SHOTGUN POWDER
RELOADING DATA CENTER
For a complete listing of all our data go to www.hodgdon.com
MAXIMUM LOADS – DO NOT EXCEED
DANGER EXTREMELY FLAMMABLE* • SEE PRECAUTIONS ON SIDE
www.hodgdon.com
QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
TITEGROUP
A LITTLE GOES A LONG WAY
RELOADING DATA CENTER
For a complete listing of all our data go to www.hodgdon.com
MAXIMUM LOADS – DO NOT EXCEED – REDUCE BY 10% TO START
DANGER EXTREMELY FLAMMABLE* • SEE PRECAUTIONS ON SIDE
www.hodgdon.com

LOADING THE

45 ACP

WITH COPPER BULLETS

Designed for enhanced personal-protection performance, monolithic copper bullets present no challenges to the accomplished handloader.

BY LANE PEARCE

"YOU'VE COME A LONG WAY, BABY!" WAS THE catchy theme of an old Virginia Slims ad campaign promoting cigarettes to the modern woman. Its underlying message touted how women's social status had improved over the years. The venerable 45 Automatic Colt Pistol (ACP) round has also come a long way since John Browning's first .45-caliber pistol debuted in 1905.

Chambered for a fat, stubby, straight-wall, rimless round topped with a 200-grain FMJ bullet and producing a muzzle velocity of about 900 fps, the M1905 Colt autoloader was significantly more powerful than the 38 Long Colt revolver then in use by the U.S. military. The refined Model 1911 45 ACP pistol fired an improved round that featured a 230-grain FMJ bullet at a velocity of approximately 850 fps. The M1911 remained the official sidearm of our armed forces for nearly three-quarters of a century, and the 45 ACP is still one of the most popular pistol cartridges for self-defense and competition. Most important, it's continued to improve and now provides even better performance.

When the U.S. Army adopted the Beretta M9 in 1985, the 9mm Parabellum (aka 9mm Luger) replaced the 45 ACP as the military's official pistol round. Federal and local law enforcement agencies soon rushed to adopt 9mm pistols to outfit their officers. Just a year later, however, FBI agents carrying 9mm pistols suffered a tragic encounter with criminals armed with rifles. The FBI quickly blamed the "anemic" 9mm round and promptly replaced its lightweight 9mm semiautomatics with large-frame, all-stainless pistols chambered for the much more powerful 10mm Auto.

As often happens with a hurried government reaction to a perceived problem, the resulting deliverable product turned out to be not what was actually desired. Hence, the following iterations occurred to remedy the blunder. First, they opted for a detuned, i.e., less powerful, 10mm Auto loading. Quickly labeled by the shooting community as the "10mm Lite," the new cartridge/existing pistol pair was once again found to be not the optimal solution. The pistol was deemed too big and heavy, especially for the now-reduced-power round.

Lane used monolithic copper bullets from Barnes, Cutting Edge, and Lehigh Defense; the copper/polymer matrix ARX bullet from Inceptor; and Berry's copper-plated Hybrid HollowPoint for handloading the 45 ACP.

Two enterprising industry giants joined forces and developed a scaled-down version of the 10mm pistol and cartridge. Could the then-new 40 S&W combination, similar in size to most 9mm pistols and with similar ballistic performance to the 10mm Lite, be the "right" answer?

What do you think?

During all of this activity, the private sector began switching from preferring revolvers to preferring semiautomatic pistols. Many chose 9mm pistols, and a few hardy souls dabbled with the full-power 10mm Auto. For quite a while, many civilians and law enforcement enthusiastically embraced the 40 S&W in spite of its lackluster accuracy and snappy recoil, but a large cadre of less easily swayed handgunners stuck with the proven and dependable 45 ACP.

Also used for the 45 ACP handloads were Starline, SIG SAUER, S&B, Winchester, Herters, and FC cases.

For many years, Colt was the only commercial manufacturer of M1911 pistols. Eventually, as demand increased, many other companies (including Auto Ordnance, Dan Wesson, Kimber, Para Ordnance, Remington, Armscor/Rock Island Armory, Rock River Arms, Ruger, Smith & Wesson, SIG SAUER, Springfield Armory, and Taurus introduced their own versions of the venerable Browning-designed pistol. Ed Brown, Les Baer, Nighthawk Custom, and Wilson Combat are a few of the many custom shops offering upscale M1911s with enhanced cosmetic and performance options.

The ammunition manufacturers were also quick to perceive the continued interest in the 45 ACP. The long-established 230-grain FMJ roundnose ammo was soon complemented by new loadings with truncated cone FMJs, semiwadcutter target loads, and multiple JHPs. Different types and weights include designs ranging from lightweight injection-molded polymer/copper bullets to twice as heavy jacketed and plated hollowpoints—and multiple configurations in between.

A more recent innovative development in bullet design is the monolithic projectile. They are typically machined and/or swaged from pure copper or a primarily copper alloy. Since they don't have a lead core that can readily expand on impact, they incorporate alternative design features to ensure effective terminal performance. This report will focus on 45 ACP monolithic bullets from three firms but will also include two other excellent self-defense bullets (see the accompanying sidebar).

Barnes's TAC-XP 160- and 185-grain bullets perform quite similarly to conventional JHPs and are designed to expand on impact. However, instead of sheathing a relatively soft lead core inside a protective copper alloy jacket, Barnes adapted its original X-Bullet manufacturing processes to make a swage-formed, pure copper, hollowpoint pistol bullet. The oversized hollow cavity coupled with the increased velocity of the lighter weight bullet ensures maximum expansion for effective terminal performance. Barnes and Black Hills offer 185-grain TAC-XP factory ammo.

Because 45 ACP cases have either a large primer pocket or a small primer pocket, Lane used both sizes of primers, depending on the specific case.

Cutting Edge Bullets offers Raptor pistol bullets precision machined from a copper alloy in several calibers. The 150-grain 45 ACP bullet features a large hollowed-out nose with precision-cut skiving and will expand and shed four nose petals like shrapnel on impact. The company offers Personal Home Defense (PHD) factory-loaded ammo as well.

Lehigh's Xtreme Defense bullets forgo bullet expansion to destroy tissue. They each have a uniquely shaped nose configuration that, coupled with the bullet's rapid rotation, causes similar wound channels compared to conventional JHP bullets. They have four flutes and an X-shaped meplat that literally cuts through outer clothing and into tissue upon impact. Black Hills Ammunition offers the 135-grain version in its well-known HoneyBadger factory-loaded ammunition.

Handloading 45 ACP monolithic copper/copper alloy bullets is essentially no different than loading the more common jacketed

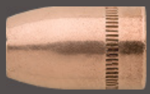
BRINGING 75 YEARS OF INNOVATION TO YOUR BENCH.

NEW BULLETS 2022

30 Caliber (.308/7.82mm) Diameter
115 gr. HP Varminter #2116 B.C. .267

30 Caliber (.308/7.82mm) Diameter
177 gr. MatchKing #2277-CN B.C. .545

9mm 355 Caliber (.355/9.02mm) Diameter
124 gr. JHP Sports Master #8124 B.C. .157



9mm 355 Caliber (.355/9.02mm) Diameter
147 gr. JHP Sig V-Crown #9947 B.C. .220

SIERRA®
The Bulletsmiths®

SEE WHAT'S NEW AT SIERRABULLETS.COM


THE NEXT LEVEL IN HANDLOADING
THE MONTANA BRAND
RAMSHOT
RELOADING POWDERS
TRIGGER YOUR INSTINCTS
ZIP®
SMOKELESS POWDER
NET WT. 1LB. (454G)
WINCHESTER®
COMPONENTS
WINCLEAN® Handgun
244 BALL POWDER
SMOKELESS PROPELLANT
Reduces Copper Fouling
Cleaner Burning
Precise Metering
MADE IN USA
DANGER - Highly Flammable
www.wwpowder.com
OUR NAME SAYS IT ALL
Accurate®
No.5®
SMOKELESS PROPELLANT
NET WT. 1LB. (454G)

or cast bullets. First, you should always tumble clean your brass in corncob media for a couple of hours, i.e., why reload gritty or dirty brass? Next, the 45 ACP round has a slightly tapered, straight-walled case, so you can resize and decap with a carbide or nitride-coated sizer die.

Thank goodness steel sizer dies that required lubing every case have long been obsolete! If you're processing a hundred or more cases, spritzing each batch with a spray or pump liquid lubricant will minimize the effort required to resize so many pieces. Just tumble them again for a half-hour or so afterwards to remove the residue.

Not everyone thinks this next step is necessary, but I clean and uniform the primer pockets with an electric case-prep unit just to ensure the primers will seat properly. This is when you should carefully inspect the flash holes and remove any bits of media that may have lodged in place. I have found after loading thousands of 45 ACP rounds that trimming cases is not required. I've had a few short cases, but I have never experienced a mishap caused by a too-long case.

The single-purpose expander die preps the case wall and mouth to readily align and properly grip the bullet during the seating step later. The expander die must be adjusted by trial and error to "bell" the case mouth just enough but not too much!

Each brand/lot of brass usually requires readjusting the expander die position. Depending on the bullet's heel design and overall diameter, the case mouth will need a little more expansion. If you overdo it, you may be able to resize the case and start over.

While loading my first batch of Barnes TAC-XP test loads, I overlooked a note in the firm's load manual. "The TAC-XP bullet has a slight taper on the base to prevent bulging case wall once the bullet is seated. Only a slight amount of case mouth belling is needed...." However, I did notice the bulletseating force was very small and

WORTH A LOOK

ALTHOUGH MY REPORT WAS ORIGINALLY TASKED TO INCLUDE only monolithic 45 ACP bullets, I suggested we should add two additional bullets—Inceptor's 118-grain ARX and Berry's 230-grain Hybrid Hollowpoint.

The ARX bullet is an exotic concept comprising a powdered copper and polymer matrix. The blended material is initially heated and then injection molded into a "tree" of multiple triple-fluted, roundnose-shaped projectiles. I visited the facility that initially produced these unique bullets, shot several myself, and watched while lots more were fired into ballistic gel. On the ride to the airport to return home, I recall commenting to the host, "I have a problem...not with the performance of the ARX bullets, but how well I can convey just how well they perform!"

Consider these facts: 1.) the bullet does not expand, yet its hydrodynamic effect creates a devastating wound channel in ballistic gelatin; 2.) while it will not penetrate solid barriers (window glass or metal door panels), soft clothing, including layers of denim and leather, have no effect on penetration, i.e., it punches through like a regular FMJ bullet; 3.) the muzzle velocity/energy of the ARX bullet significantly exceeds that of conventional bullets, while actual recoil is noticeably reduced.

The Hybrid HP (HHP) bullet from Berry's is essentially a conventional hollowpoint configuration but with two significant differences. First, instead of the typical jacketed cup-and-core design, they are copper-plated bullets with a very effective six-point, punch-formed and skived nose cavity. The other consideration is simply economics. Unlike typical cup-and-core JHP bullets, HHPs cost only a bit more than cast or swaged lead bullets.

Until I tested Berry's plated bullets a couple of years ago, I assumed plated bullets were nothing more than copper-washed lead bullets and must be inferior to conventional JHPs. After extensive loading and testing, I concluded the HHPs are comparable in accuracy and provide excellent terminal performance. Like the ARX bullet, the HHP will not punch through auto glass and door panels; however, they will absolutely hurt the bad guys. And as the chart proves, they deserved to be included in this report.

There are plenty of Hodgdon, Winchester, Accurate, and Ramshot powders that are just right for loading the 45 ACP with monolithic bullets. Lane used a variety of them for this report.

later when I fired the rounds, the velocity dispersions were greater than expected.

Back at my loading bench, I measured a few samples and determined the max bullet diameters ranged from 0.450 to 0.4505 inch. However, the shank tapered to a heel diameter of 0.447 inch. I actually could seat the TAC-XP bullets without expanding the case mouth at all. The S&B cases required chamfering the inside case mouth to allow seating them without tipping.

A 45 ACP case can have either a large or small primer pocket, and some have enlarged flashholes. A technical contact in the industry assured me that today's small pistol primers are more than energetic enough to reliably and consistently ignite the 45 ACP's relatively small powder charges. The recorded velocity data confirmed the expert's statement.

The S&B primer pockets benefited from slightly chamfering the lip before seating Large Pistol primers. Different products can obviously have slightly difference dimensional tolerances. If you experience difficulty priming with one of the several off-press hand tools, RCBS and Lee offer special "ram-prime" accessories that can be adjusted to positively and precisely press the primer into tight pockets. On-press leverage sometimes comes in handy.

The handloads were fired in a Smith & Wesson M&P Shield with a 3.3-inch barrel. They performed well, as expected.

I used a Redding competition pistol powder measure to throw every charge. My routine starts with filling the hopper about half full and cycling the handle a few times to settle the powder in the measure, throw a charge, and weigh it. I typically make three adjustments to

45 ACP LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	E.S. (FPS)	S.D. (FPS)	M.E. (FT-LBS)	12-YD. ACC. (IN.)
S&W M&P Shield, 3.3-in. Barrel										
Winchester	WLP	AutoComp	9.2	Inceptor 118-gr. ARX	1.25	1232	51	16	398	2.15
Blazer	WSP	CFE Pistol	9.3	Inceptor 118-gr. ARX	1.25	1273	46	11	425	2.18
Starline	Rem. 2½	W572	9.7	Inceptor 118-gr. ARX	1.25	1313	35	10	452	1.78
Starline	Rem. 2½	Long Shot	11.3	Lehigh 120-gr. Xtreme Defense	1.23	1213	31	6	392	2.07
SIG SAUER	Factory	Silhouette	11.1	Lehigh 120-gr. Xtreme Defense	1.23	1224	80	25	399	1.92
SIG SAUER	Factory	True Blue	10.5	Lehigh 120-gr. Xtreme Defense	1.23	1292	62	16	445	2.23
Blazer	Fed. 100	CFE Pistol	9.4	Lehigh 135-gr. Xtreme Defense	1.20	1157	57	13	401	1.96
S&B	Rem. 2½	Long Shot	10.2	Lehigh 135-gr. Xtreme Defense	1.20	1221	44	12	447	2.19
S&B	WLP	True Blue	9.5	Lehigh 135-gr. Xtreme Defense	1.20	1135	28	8	386	2.12
S&B	WLP	CFE Pistol	8.0	Cutting Edge 150-gr. Raptor	1.20	1062	55	18	376	2.02
S&B	Rem. 2½	W244	6.5	Cutting Edge 150-gr. Raptor	1.20	1066	25	6	379	1.99
S&B	WSP	W572	8.3	Cutting Edge 150-gr. Raptor	1.20	1064	79	29	377	2.32
S&B	Rem. 2½	Accurate No. 2	5.9	Barnes 160-gr. TAC-XP	1.23	951	28	11	321	2.21
Starline	Rem. 2½	Accurate No. 5	9.0	Barnes 160-gr. TAC-XP	1.23	991	45	12	349	2.54
Winchester	WLP	W244	5.8	Barnes 160-gr. TAC-XP	1.23	968	35	10	333	2.55
S&B	WLP	Long Shot	7.2	Barnes 185-gr. TAC-XP	1.23	963	19	5	381	2.72
Starline	CCI 300	TiteGroup	5.2	Barnes 185-gr. TAC-XP	1.23	927	33	10	353	2.17
SIG SAUER	Rem. 2½	True Blue	7.5	Barnes 185-gr. TAC-XP	1.23	912	51	15	342	2.53
Herters	WLP	Accurate No. 7	9.9	Berry's 230-gr. HHP	1.23	826	31	10	349	1.73
FC10	Rem. 2½	W572	6.5	Berry's 230-gr. HHP	1.23	798	51	13	325	1.82
SIG SAUER	CCI 300	ZIP	6.3	Berry's 230-gr. HHP	1.23	832	46	11	354	2.67

NOTES: Accuracy is the average of four, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured six feet from the gun's muzzle.

achieve the desired charge setting. I leave the pan on the scale and charge all but the last two primed cases.

I dump the initial correct weight powder charge into one case, throw another, and weigh it. The second charge weighs almost always the same as the first, so I simply pour it into the last case. Using an LED penlight, I carefully inspect the batch of cases to verify each one has a powder charge that all look the same.

As you can see in the accompanying chart, I included different propellants representing the Hodgdon, Accurate, Ramshot, and Winchester brands. I compared several load manuals to select charge weights, and if the references differed substantially, I deferred to the latest Hodgdon and Western Powders data. How Hodgdon is going to integrate the Ramshot and Accurate brands into one load manual will be evident when this edition is published. I used 13 propellants in 21 test loads, and there are at least that many more now available. I purposely included both standard 45 ACP pressure (20,000 psi) and +P (23,000 psi) handloads.

With a tray of cases sized, primed, case mouths belled properly, and charged with the appropriate type and weight of propellant, it's time to top them off with bullets. The maximum cartridge overall length (COL) for the 45 ACP is 1.26 inches. However, that's only for roundnose bullets. If the bullet you are loading has a flat nose, the allowable COL will be shorter. It's best to use the COL recommended in the load data you're referencing.

With the bullets seated, the next step is to remove any vestige of the case mouth flare so the round will chamber and headspace properly. Adjust your taper crimp die just enough to straighten the case mouth and align it with the bullet shank. You can overdo this step when loading relatively soft cast or jacketed bullets; however, copper bullets are quite hard, so you'll feel stout resistance when the crimp die has done its job adequately.

I chose a Smith & Wesson M&P 45 Shield pistol to fire the various handloads. The compact pistol has a short 3.3-inch barrel, weighs only 20.5 ounces, and comes with two single-stack magazines. After firing more than 1,000 rounds to date, it's proved to be 100 percent reliable. That's why it resides in the side pocket of my Tahoe's driver's side door.

I chose to shoot targets at 12 yards for two reasons: 1.) the M&P Shield is intended for close-up, self-defense scenarios, i.e., it's not a target pistol; and 2.) I didn't want my aging eyes trying to focus iron sights on a blurry target to excessively influence the results. The S&W Shield has a two-stage, DA trigger pull that consistently measures 5.5 pounds. Many of the five-shot groups I fired had three or even four bullets striking the target relatively close together, while the other one or two strayed off due to operator error.

In summary, the 45 ACP still is an effective personal-defense cartridge. For more than a century the M1911 has proven to be a reliable platform for this round, but several new and different pistols chambered for this excellent cartridge have also been introduced. They are not as easy to handle as a 38 Special revolver or a 380 ACP or 9mm pistol. However, if you're interested in carrying a top-end personal-defense handgun, you must try several models to see if you and a 45 ACP pistol are compatible.

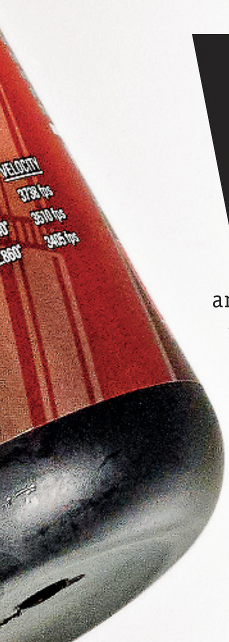
Finally, don't overlook copper or copper alloy bullets when you're reloading ammo to test-fire at your range. They're second to none when it comes to effective terminal performance.


QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
HODGDON EXTREME POWDER
VARGET
RIFLE POWDER
RELOADING DATA CENTER
For a complete listing of all our data go to www.hodgdon.com
MAXIMUM LOADS - DO NOT EXCEED - REDUCE BY 10% TO START
DANGER EXTREMELY FLAMMABLE* • SEE PRECAUTIONS ON SIDE
www.hodgdon.com
WINCHESTER
COMPONENTS
PRECISION RIFLE
StaBALL™ 6.5 BALL POWDER
SMOKELESS PROPELLANT
Ideal For:
6.5 Creedmoor, 270 Winchester, 7mm-08 and many more
See website for complete list
Delivers:
Increased Velocity
Temperature Insensitivity
Reduced Copper Fouling
Precise Metering
MADE IN USA
DANGER - Highly Flammable
www.wwpowder.com
QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
Hornady
SUPERFORMANCE
IT IS . . . ROCKET SCIENCE
RIFLE POWDER
More data available at www.hodgdon.com
Before Using, See Warnings on Sides
NET WT 1 LBS. (454 grams)

HANDLOADING THE 22 CREEDMOOR

Get the best out of the king of .22-caliber centerfire cartridges with Hodgdon and Winchester powders.

BY JOSEPH VON BENEDIKT



WITH NEARLY 15 PERCENT MORE PROPELLANT capacity than the 22-250 Remington and a modern shape optimized for efficiency and consistency, the 22 Creedmoor is arguably the best extreme-performance .22 centerfire yet. For comparison's sake, and to put this in perspective for shooters most familiar with the 223 Remington, the 22 Creedmoor has about 41 percent more powder capacity than the 223 Rem.

As a result, the 22 Creedmoor is faster. Of course, it's pushing the limits of the old "diminishing returns" situation, so for their 41-percent greater investment in powder, shooters get about 12 to 15 percent more speed than with the 223 Rem. and just a few percent more speed than the 22-250. However, the cartridge has other characteristics that provide a performance increase over the 22-250, and I'll get to those shortly.

As of this writing, the 22 Creedmoor is a handloading prospect since no major ammunition manufacturer has introduced factory ammo for it. On the optimistic side, several companies are manufacturing properly headstamped cartridge cases, including Hornady, Peterson, and Alpha Munitions. Better yet, from at least one company, you can have your pick of Large Rifle primer pocket or Small Rifle primer pocket. And reloading dies are readily available from Hornady, RCBS, and Redding.

Currently, properly headstamped 22 Creedmoor brass is available from Hornady, Peterson, and Alpha Munitions.

Appropriate load data has been the most elusive piece of the puzzle. However, Hodgdon has been busy generating pressure-tested data, and it's becoming more widely available.

Before diving into case prep, primers, propellants, and load development, let's examine suitable projectiles—because this cartridge really shines with certain types.

Practical Uses

Perhaps the most important characteristic of the 22 Creedmoor is that most rifles are built using barrels with relatively fast rifling twists, in the neighborhood of one turn every eight inches. This enables the cartridge to excel with extremely aerodynamic, heavy-for-caliber, long-range projectiles. Good examples are Sierra's 80-grain MatchKing, Berger's 85.5-grain Long Range Hybrid Target, and Hornady's 88-grain ELD Match.

Here's where the 22 Creedmoor pulls away from the 22-250. Grand as it is—and the 22-250 is indeed a grand old cartridge—the "two-fi'ty" is traditionally given a 1:12 twist rate. This limits it to lightweight bullets of 40 to 60 grains, which have low ballistic coefficients (BC). At anything past 250 yards, heavier bullets from the 22 Creedmoor leave the 22-250 in the dust. Of course, a custom barrel with a fast 1:8 twist elevates the 22-250 to near (but not quite) equal long-range performance.

Loaded with Hornady's 73-grain ELD Match projectile and 44.5 grains of H1000 powder, the custom 22 Creedmoor rifle averaged 0.31 inch at 100 yards for three, three-shot groups.

For a brief time, the 22 Creedmoor flared in popularity among PRS shooters. Thanks to its ability to push high-BC bullets at impressive velocities, it's a legitimate long-range cartridge. Its primary advantage over 6.5mm and 6mm cartridges is significantly less recoil, so spotting one's own impacts is easy—an important characteristic when firing a 10-shot string on a variety of distant targets, without a spotter to recommend corrections after a miss, all under a 90-second time limit.

Unfortunately, little .22-caliber projectiles have minimal effect on heavy steel targets, particularly at distances past 800 yards or so. It's hard for ROs (range officers) serving triple duty as spotters and scorers to spot impacts of tiny bullets. As a result, 22 Creedmoor shooters made a lot of hits that didn't get counted.

Enthusiasm waned rather quickly when the word got out, and the popularity surge faded. Serious competitors migrated back to 6mm cartridges. Still, the 22

At present, the 22 Creedmoor is strictly a handloading proposition, and a broad spectrum of powders works well in the speedy .22-caliber centerfire.

Creedmoor is a superb low-recoil long-range cartridge, fully capable of making precision hits past 1,000 yards. It just won't ring or swing a steel plate like a cartridge pushing a bigger bullet.

Another demographic of shooters cottoned on to the 22 Creedmoor early on and continue to champion it for their favorite hobby: predator hunting. Lightweight 40- to 60-grain varmint bullets at extreme speeds turn the light switch right off on close-up coyotes and foxes, without causing too much pelt damage.

What the 22 Creedmoor does better than most traditional .22-caliber centerfire predator cartridges is hit with authority. One way to accomplish that is by pushing those lightweight bullets extremely fast, achieving performance akin to the legendary 220 Swift. Better yet, load heavy-for-caliber, high-BC bullets that hit much harder and carry much farther. Serious predator hunters striving to increase their lethal distance opt for 73- to 85-grain bullets, tune 22 Creedmoor handloads to extreme levels of precision, and cleanly kill coyotes at distances out to 800 yards.

Thanks to modern case design coupled with plenty of propellant capacity, the 22 Creedmoor (second from right) is today's top-performing .22-caliber centerfire cartridge, especially at long ranges.

1 223 Remington
2 224 Valkyrie
3 22 Nosler
4 22-250
5 22 Creedmoor
6 220 Swift

Hunters who favor lightweight bullets often opt for traditional rifling twist rates, such as one turn every 10 or 12 inches. This optimizes performance with 40- to 60-grain bullets. Long-range shooters prefer the more versatile 1:8 twist rate, which serves well enough with light bullets and enables the rifle to stabilize heavy, highly aerodynamic 70- to 90-grain projectiles.

Handloading Components

As mentioned, new brass headstamped "22 Creedmoor" is available from several sources. I've mostly used Hornady brass and had excellent luck with it. Fanatical 22 Creedmoor shooters claim they get best life out of Alpha brass. It's all good stuff, and in this day and age, what's available may well determine what you use.

Alternately, it's quite simple to neck down 6mm Creedmoor brass with a single pass through a 22 Creedmoor sizing die. Shooters partial to Lapua cases tend to travel this route.

To maximize potential accuracy, it's a good idea to trim cases perfectly square and concentric with a premium trimmer, such as the L.E. Wilson, and weight-sort them after applying a minimal, low-drag chamfer to the inside of the case mouth. If you're really striving for perfection, you should consider neck-turning cases, too.

Prime with match-grade primers. The 22 Creedmoor is a precision cartridge, and it deserves primers that enable it to shine. I prefer Federal Gold Medal primers.

Propellant choice can be confusing. In reality, the 22 Creedmoor can—and should—be viewed as a magnum cartridge. It occupies the same position within the .22-caliber centerfire realm as the 300 Remington Ultra Mag does in the .30-caliber magnum realm. In short, it's overbored.

Slow-burning propellants, such as H1000, give excellent results with heavy, high-BC bullets. However, because of the cartridge case's relatively small size—on the grand spectrum of things—it also performs quite well with medium-burn-rate powders like Varget, H4350, and StaBALL 6.5. This is particularly true with the lightweight to medium-weight bullets.

According to the test data supplied to me by Hodgdon engineers, Superformance powder really shines in the 22 Creedmoor. In the company's pressure tests, it provides best-in-class velocities with projectiles from the 60-grain weight range right up through the 85-grainers. My tests showed similar results, with top-shelf velocity.

When using extruded stick powder, such as H1000, H4350, and Varget, make a point of weighing charges carefully. Propellants like H1000 are quite coarse-grained, and typically,

Plenty of powders, such as H1000, H4350, Varget, and StaBALL 6.5, work well in the 22 Creedmoor. Superformance really shines in the hot-rod .22-caliber centerfire cartridge.

While Joseph fired lightweight to midweight bullets in his 22 Creedmoor handloads, excellent long-range heavier bullets are suitable for rifles with a faster 1:8 rifling twist rate.

1 Barnes 52-Gr. MatchBurner
2 Sierra 52-Gr. MatchKing
3 Nosler 50-Gr. Ballistic Tip
4 Hornady 60-Gr. V-Max
5 Hornady 73-Gr. ELD Match
6 Sierra 77-Gr. TMK
7 Sierra 80-Gr. MatchKing
8 Berger 85.5-Gr. LRHT
9 Hornady 88-Gr. ELD Match

handloaders can get away with a tenth-grain charge variation here and there because large charges are being used in big, magnum cartridge cases. But in the 22 Creedmoor, a tenth-grain variation in a 42-grain charge is twice the inconsistency of a tenth-grain variation in an 80- to 90-grain charge.

StaBALL 6.5 is the first temperature-stable Ball-type propellant that really excels in Creedmoor-class cartridges. Accurate long-range shooting requires powders that don't vary much in temperature extremes in order to maintain predictable trajectories when shooting far. But most temp-stable powders have large, cylindrical shapes and, as a result, are a pain to meter accurately in trickle-type chargers or volumetric measures.

Thanks to its small, consistent granules, StaBALL 6.5 meters and weighs superbly, and it boasts the added advantage of containing a copper-fouling reducer. It's a fantastic choice for 22 Creedmoor shooters that load hundreds—even thousands—of rounds every month and regularly burn them up at PRS matches.

It's worth taking a pause here to discuss the tendency toward overly zesty handloads among 22 Creedmoor shooters. Partly due to the previous lack of readily available load data, and partly due to the adventurous nature of some handloaders, quite a few folks have worked up accurate loads that generate really fast velocities. Forums online casually report speeds of 3,500 fps with 80-grain bullets, with no signs of high pressures.

Here's the problem. Thanks to the modern design of the 22 Creedmoor case, it doesn't show excessive pressure warning signs quite as early as a tapered, shallow-shouldered older-design case. Plus, many 22 Creedmoor rifles are built using custom match-grade actions with extremely tight tolerances, and such actions also minimize pressure signs because they support the case heads so well.

While I haven't been able to find any S.A.A.M.I. spec on the 22 Creedmoor, it stands to reason that it has a safe pressure ceiling of 62,000 psi, same as its 6.5 Creedmoor parent cartridge. I suspect a lot of shooters are generating 70,000 psi or more in their 22 Creedmoor rifles but just don't know it. That's not safe.

The load data found in this manual is safe.

22 CREEDMOOR SPECIFICATIONS* (AS TESTED)

PARENT CARTRIDGE	6.5 Creedmoor
CAPACITY	52.6 grains of water filled to case mouth (as measured)
OVERALL CASE LENGTH	1.920 in.
TRIM-TO CASE LENGTH	1.910 in.
CARTRIDGE OVERALL LENGTH	2.700 in.
PRIMER	Large Rifle or Small Rifle depending on brass
MAXIMUM AVERAGE PRESSURE:	62,000 psi

Time will tell if the hot-rod 22 Creedmoor (left) becomes as popular as its 6mm Creedmoor (center) and 6.5 Creedmoor (right) cartridge family. It surely has all the right DNA to do so.

Now, more about bullets—focused this time on .22-caliber centerfire projectiles that provide good terminal performance while hunting with the 22 Creedmoor. While it's great fun to push a 40-grain frangible bullet at a velocity higher than 4,000 fps and vaporize prairie dogs, the 22 Creedmoor is particularly suited for projectiles of 60 grains and heavier. Sierra, Nosler, and Hornady all offer excellent 60-grain varmint bullets (I find them to be fantastic for cleaning rodents out of the horse pasture).

Shooters wanting capability past 500 yards or so are best served with the heavyweights, starting with Hornady's 73-grain ELD Match bullet and ranging up. If you're just shooting long-range steel and paper targets, any heavy match bullet that shoots well in your rifle will serve beautifully. If, on the other hand, you're shooting coyotes at extreme distances, you need a bullet that will reliably open up (mushroom) on impact.

This eliminates all FMJs and hollowpoint designs with super-tight, closed noses. Hornady's ELD Match bullet is an excellent choice because the composite tip caves in on impact, exposing a large hollow cavity. Dramatic expansion and complete energy transfer results. Berger and Sierra projectiles with a bit of an open tip work beautifully as well.

Maybe you're wondering if the 22 Creedmoor is good for hunting deer. The answer depends on your definition of "good." If you like shooting deer with a 223 Rem. or 22-250 rifle, then the 22 Creedmoor is good. Just select a controlled-expansion bullet, such as a monometal projectile by Barnes or Nosler. If your rifle has a fast 1:7 or 1:8 twist, then check out Barnes's new 77-grain Long Range X (LRX) bullet. I haven't had a chance to try it yet, but it looks splendid on paper.

I've been working with a nice custom rifle built by Alpha & Omega Rifle and Tool Company (aogunsmith.com), which, ironically, has a 1:10 twist rather than the 1:8 twist I personally suggest to prospective 22 Creedmoor shooters. Top gunsmith Caleb Morris recommended seating bullets to jump between 0.020 and 0.030 inch to the rifling leade, and it's paid off for me. The rifle shoots every load I've tried into less than 0.75 MOA. A couple of loads are better than 0.5 MOA, even in the horribly windy, gusty conditions I've encountered.

To my delight, even with the slowish rifling twist rate, the rifle shoots Hornady 73-grain ELD Match bullets superbly. In fact, with a 0.31-inch group average, it took top honors. Sierra 77-grain Tipped MatchKing bullets grouped quite well, too. Presumably, the fact that I live—and accuracy-test—at an altitude of 5,000 feet or more enables heavy-ish bullets to stabilize in the medium-slow twist better than they would at sea level. Plus, since the 22 Creedmoor generates far more velocity than the 223 Rem., those bullets are actually spinning fast enough.

Will we see mass acceptance of the 22 Creedmoor cartridge? If ever, now is the time. More shooters understand precision cartridge design than at any time in our history, and they appreciate the advantages that cartridges like the 22 Creedmoor offer.

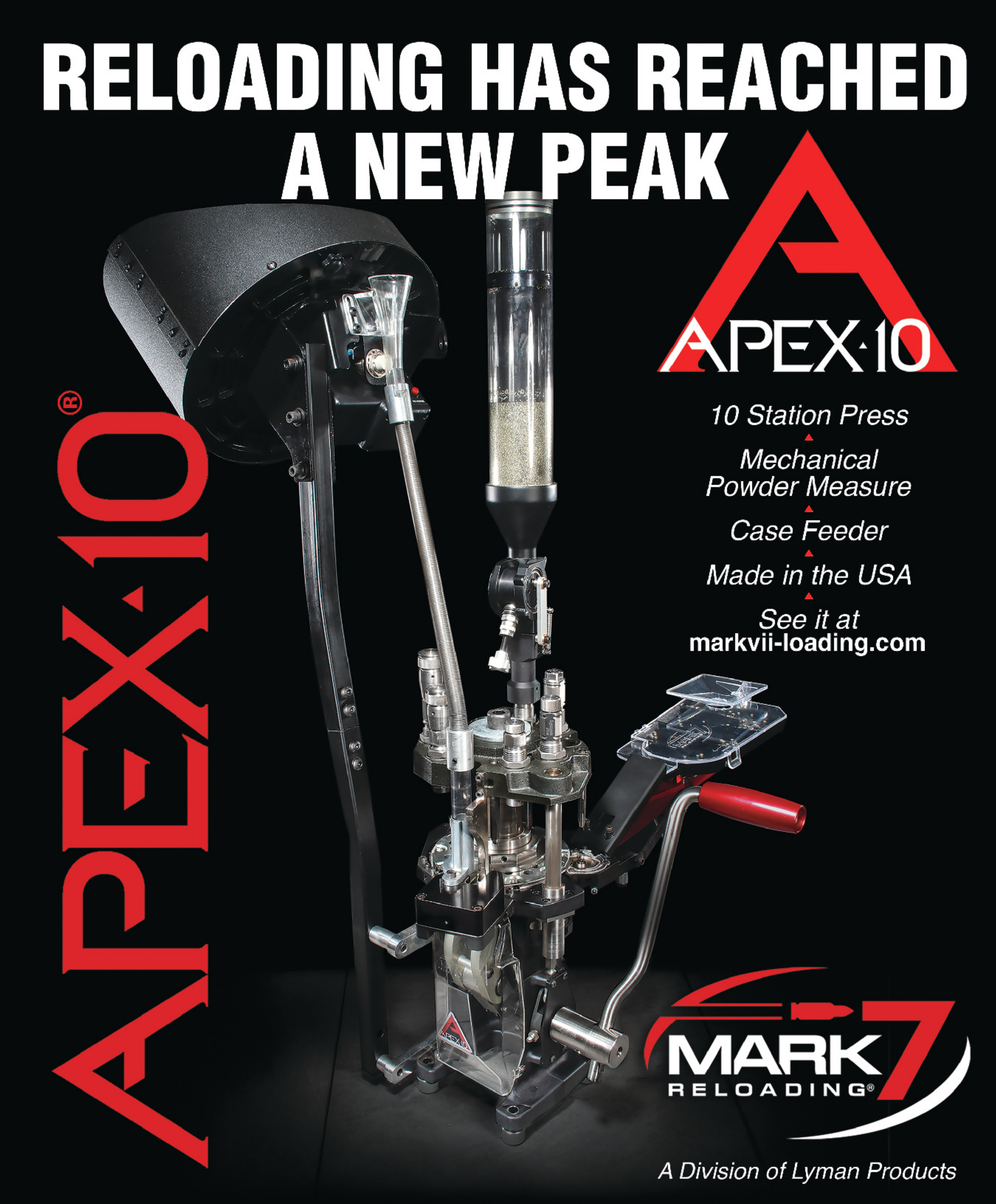
Candidly, I'm certain the 22 Creedmoor will never achieve the widespread devotion that its two bigger siblings (6.5 Creedmoor and 6mm Creedmoor) have inspired. It's just not quite as versatile. However, within the confines of its particular kingdom, the 22 Creedmoor is the best high-octane .22-caliber centerfire cartridge available.

22 CREEDMOOR LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	E.S. (FPS)	S.D. (FPS)	100-YD. ACC. (IN.)
Custom Alpha & Omega Rifle, 22-in. Barrel, 1:10 Twist									
Hornady	Fed. GM210M	StaBALL 6.5	46.0	Nosler 50-gr. Ballistic Tip	2.470	3762	43	12	0.75
Hornady	Fed. GM210M	Varget	42.5	Barnes 52-gr. MatchBurner	2.405	----*	----*	----*	0.51
Hornady	Fed. GM210M	H4350	41.5	Sierra 52-gr. MatchKing	2.445	3530	31	12	0.49
Hornady	Fed. GM210M	Superformance	45.7	Sierra 52-gr. MatchKing	2.445	3567	40	16	0.67
Hornady	Fed. GM210M	StaBALL 6.5	44.0	Hornady 60-gr. V-Max	2.510	3486	29	9	0.80
Hornady	Fed. GM210M	H1000	44.5	Hornady 73-gr. ELD Match	2.485	3177	31	11	0.31
Hornady	Fed. GM210M	Superformance	43.5	Hornady 73-gr. ELD Match	2.485	3360	32	11	0.56
Hornady	Fed. GM210M	H1000	45.5	Sierra 77-gr. TMK	2.485	3255	50	16	0.56

*No velocity results due to chronograph failure

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 gun's muzzle. Ambient temperature: 70 degrees Fahrenheit. Elevation: 5,100 feet.


RELOADING HAS REACHED
A NEW PEAK
APEX·10®
APEX·10
10 Station Press
Mechanical
Powder Measure
Case Feeder
Made in the USA
See it at
markvii-loading.com
MARK 7
RELOADING®
A Division of Lyman Products

A HISTORY OF ACHIEVEMENT

STAFF REPORT

THE SEEDS FOR WHAT WOULD GROW INTO THE HODGDON Powder Co. were planted in 1947 when Brewster Eltinge "Bruce" Hodgdon returned home from serving in the U.S. Navy during World War II. His idea was to purchase mass quantities of unused U.S. military surplus gunpowder, repackage it in small quantities, and sell it to a burgeoning market of hobbyist handloaders. Today, the family-owned company celebrates 75 years of continuous business.

This article includes excerpts from *The Gunpowder People,* a book detailing the history of this legendary company that was published in 2017 for the company's 70th Anniversary, as well as new information about the achievements made over the last five years. For details on many of the numerous innovations the Hodgdon Powder Co. is responsible for, see the tandem article entitled "A History of Innovation," beginning on page 46 of this special publication.

1940s & '50s

After Bruce returned from the war, he was convinced there was a previously untapped demand at the consumer level for propellant. He had heard the stories of some of the U.S. warships literally dumping tons of powder into the world's oceans once World War I had ended. He was absolutely certain that many Americans would take a small portion of their hard-earned weekly wages and buy propellant to build their own ammo.

So he began writing letters to everyone he could think of, including the President of the United States and U.S. Senators and Congressmen, to find out how, when, and where surplus powder could be obtained. Working through an arduous pile of government regulations, Bruce remained persistent and was finally able to purchase 50,000 pounds of government surplus 4895 powder. His bid was 4 cents per pound.

Hodgdon Powder Co. was born in 1947 by founder Bruce Hodgdon. His wife, Amy, and his sons, J.B. and Bob, were the first employees. It remains a family business 75 years later.

In January 1948, Hodgdon placed his first ad for the military surplus powder in the *American Rifleman* magazine.

In order to pursue his dream of creating his own company, while still working as a salesman for the Gas Service Co., Bruce took a huge gamble and borrowed $1,500 from his life insurance policy. Banks at the time were unwilling to loan money on gunpowder. With that money he was able to lease the land, put a couple of railroad boxcars on it for powder storage, and buy the surplus powder from the U.S. government. He took possession of the powder in November 1947.

The following January, Bruce placed his first advertisement for the repackaged powder in the *American Rifleman*. The ad listed 150 pounds of 4895 powder in original G.I. containers for just $30.00 F.O.B. It also offered the powder at a price of 75 cents per pound or 10 pounds for $6.75. B.E. Hodgdon was in the powder business.

And the business quickly flourished. So much so that Bruce's wife, Amy, served as bookkeeper and saleswoman, and his two sons, J.B. and Bob, who were in grade school at the time, weighed and filled one-pound bags of 4895 powder by hand in the family home's basement. They also glued on labels, loaded the bags into the trunk of the family Ford, and delivered the packages to the nearby train station.

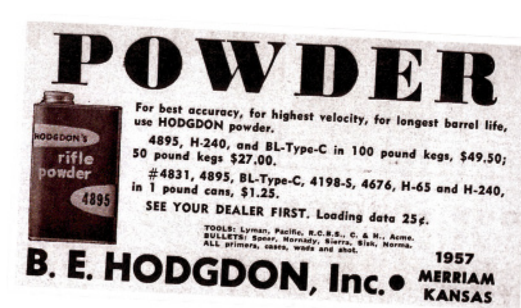
By the time 1952 rolled around, Bruce's sideline powder business was making three times his gas company salary. When the gas company implemented a dress code (meaning Bruce would have to wear a tie while calling on clients), Bruce decided to pursue the powder business full-time. The following year, the Hodgdon Powder Co. was officially started.

Handloading was beginning to gain traction. And the mid-1950s marked a period of growth unmatched in handloading to this day.

1960s

During the 1960s, the Hodgdon family business really began to make its mark in the shooting sports on a variety of fronts. A significant achievement was Bruce's first talks with Winchester to buy and sell its powder under his own brand. These talks would eventually be the foundation of a very long relationship.

In 1960, the Hodgdon Powder Co. first began selling newly manufactured powder in canisters instead of military surplus powder. Over the years, Bruce's purchases of military powder amounted to more than 4.5 million pounds. Most of it was what is now known as H4831. Other propellants of lesser quantities were H4198, H4227, H4895, and Ball C.



Over the years, Bruce purchased more than 4.5 million pounds of miitary surplus powder.

HODGDON POWDER CO.
TIMELINE

1947	Brewster E. "Bruce" Hodgdon wins bid to U.S. government for 50,000 pounds of 4895 surplus powder — the start of Hodgdon Powder Co.
1948	Bruce places ad for selling 4895 propellant in *American Rifleman* magazine
1953	B.E. Hodgdon Inc. family-owned business is officially started
1960	Bruce talks with Olin about selling him Winchester propellants that he can market and sell under Hodgdon brand, beginning a long-term relationship
1967	The Bullet Hole shooting range developed and designed by Hodgdon is opened
1974	Hodgdon has first meeting with Dan Pawlak, developer of Pyrodex
1976	Pyrodex is introduced
1978	Hodgdon begins construction of propellant plant in Herington, Kansas
1983	B.E. Hodgdon Inc. closes
1991	Hodgdon Clays is introduced
1995	Hodgdon Extreme powders are introduced
1996	Pyrodex Pellets are introduced
2003	Hodgdon acquires IMR
2005	Hodgdon licenses and begins marketing Winchester powders
2009	Hodgdon acquires Goex black powder
2012	Hodgdon CFE propellants are introduced
2014	Hodgdon introduces IMR Enduron propellants
2020	Hodgdon introduces Winchester StaBALL 6.5 powder
2020	Hodgdon acquires Ramshot, Accurate, and Blackhorn 209 powders
2022	Hodgdon celebrates 75th Anniversary

Another Hodgdon major achievement was getting the Department of Transportation to change its regulations on shipping powder. During 1963 and 1964, Bruce, along with Ray Speer of Speer Bullets, Homer Clark of Alcan, and Dave Wolfe of Wolfe Publishing, enlisted the aid of Senator Frank Church (D-ID) to set up a meeting with the Interstate Commerce Commission in Washington, D.C. They were successful in persuading the Department of Transportation to downgrade certain packages of smokeless powder to the much-easier-to-ship "4.1C Flammable Solid" classification. As a result of their efforts, propellant containers under eight pounds each and in approved packaging of shipments weighing less than 100 net pounds could be handled by any common carrier, including UPS. Prior to this, all smokeless powders were considered Class B explosives.

Bruce also had been selling guns and shooting accessories along the way, and he had been developing and designing a massive shooting complex to provide a safe and enjoyable environment where shooters and their families could participate in the shooting sports. Consequently, the Bullet Hole shooting range opened to the public in 1967, and it promoted recreational shooting as a family sport.

1970s

The 1970s saw the introduction of the black powder substitute Pyrodex, which was announced at the 1976 NRA Meetings in Indianapolis, Indiana. The importance of Pyrodex to the Hodgdon company history cannot be overstated. It was a technological marvel and gave the industry the first totally new propellant since the invention of smokeless powder. (You can read more about the technology in the accompanying "A History of Innovation" article.)

The original agreement was that Dan Pawlak, the co-inventor of Pyrodex, and his folks would manufacture the new propellant at their facilities in Washington State, and Hodgdon, based in Kansas, would be the sole distributor marketing it worldwide. Unfortunately, on January 27, 1977, after Pyrodex was launched, an explosion at Pawlak's plant killed Pawlak and three others. In addition to the human tragedy, which the Hodgdons felt on a very personal level, the setbacks experienced put the Hodgdon company on the brink of bankruptcy.

A HISTORY OF ACHIEVEMENT

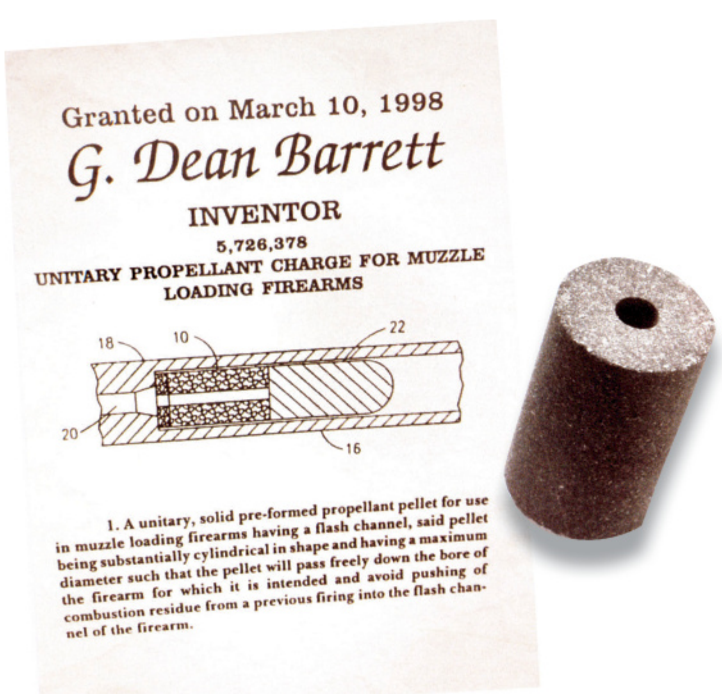
Even though the industry was abuzz with excitement over the prospects of the black powder substitute—and, in fact, Hodgdon had received an industry award for the best new product of the year as well as selling 250,000 pounds of it during its first year of production—a new business plan had to be developed and implemented. Quickly, Pyrodex production was moved to a facility in Herington, Kansas.

But the Hodgdon family was facing a serious crisis. They had invested heavily into the launch of Pyrodex, and the accident changed everything. Once initial production caught up with orders, business gradually fell to one-fourth of plant capacity due to a combination of depressed business conditions throughout the country, runaway interest rates, and vendor problems. On top of that, Hodgdon discovered that the consumer packaging being used was faulty (it was not moisture-tight), and the company had to recall upwards of 100,000 pounds of the propellant. As the situation got worse, Bruce and sons J.B. and Bob were advised by bankruptcy attorneys to let the company sink.

1980s & '90s

The Hodgdons wouldn't hear of letting the company sink, so they laid off workers at the sister company, B.E. Hodgdon Inc.; liquidated it in 1983; sold off lots of assets to keep the powder company afloat; and took no salary for about four years. They scrimped, saved, and sold off unnecessary assets. After 12 years of struggle, things slowly got better with increased Pyrodex business and continued decent smokeless powder sales. In 1990, when the plant industrial revenue bonds were paid off, relief came, and the business began to prosper once again.

The 1990s saw the introductions of significant new products, including the groundbreaking Clays shotshell powder and Varget rifle powder.



Almost 20 years after the monumental introduction of loose Pyrodex, Hodgdon introduced it to muzzleloaders in the form of a solid pellet.

The 1990s also saw significant new products being introduced by the company. One was Clays powder, which was announced in 1991.

Clays turned out to be a stroke of genius, a real business builder. Bob and J.B. realized the market demanded a new shotgun powder. They literally searched the world over to find a 12-gauge target powder that was clean burning, produced less muzzle blast, had ideal bulk density with optimal fit in the most popular gauges, and was competitively priced. They found what they were looking for in a new propellant being worked on by their powder producer in Australia. Hodgdon had begun working with the company, named Australian Defense Industries (ADI), in 1989 when their previous supplier in Scotland closed.

ADI's new shotgun powder had uniform grain size, macro-controlled micro porosity, and a nitroglycerine glaze that gave it a consistent burn. (Again, you can read more about the technology in the accompanying "A History of Innovation" article.) As a bonus, Clays turned out to be an excellent choice for 38 Special, 9mm Luger, 40 S&W, and 45 ACP handgun cartridges as well. It virtually set the handloading world on its ear.

For rifle reloaders came Varget in 1995. Varget was the first of what Hodgdon termed Extreme powders, and it was developed as a mid-range burn speed propellant. It is an extruded rifle powder, and during its development the ballistic department discovered it is very insensitive to changes in temperature. The name "Varget" stands for varmint (Var) and target (get). Its characteristics include small extruded grains for uniform metering and higher energy for improved velocities over other powders in its burning speed class. Shooters found its easy ignition and clean burning translated into better accuracy.

This technology was applied to subsequent rifle powders, and in addition to Varget, Hodgdon's Extreme rifle powders today include Benchmark, H322, H1000, H4198, H4350, H4381SC, H4831, H4895, H50BMG, and Retumbo.

Another major development came in 1996, with the creation of Pyrodex Pellets. Almost 20 years after loose Pyrodex was invented, Hodgdon transformed it into a 50-grain pellet that would simplify the loading process of percussion firearms. Hodgdon engineer Dean Barrett, upon being asked by Bob Hodgdon if he could make a military black powder mortar igniter disk out of Pyrodex for use in sporting muzzleloaders, designed the pellet and drove the process to produce it. Coinciding with the development of the Pyrodex Pellet was the rise of inline muzzleloading rifles. The fast-growing popularity of inline muzzleloaders created a market for the Pyrodex Pellet, and in the words of then-president of Hodgdon Tom Shepherd, "…we were selling Pyrodex Pellets like popcorn."

2000s

You could easily call the decade from 2000 to 2010 a period of acquisitions. In 2003 Hodgdon acquired IMR Legendary Powders. This added many, many rifle, handgun, and shotgun propellants to the Hodgdon lineup. Then in 2005 Hodgdon licensed and began marketing Winchester smokeless powders. And in 2009, Hodgdon acquired Goex black powder.

2010s & '20s

The last dozen years in the history of the Hodgdon Powder Co. have seen exceptional growth on the developmental and the acquisition sides of the business. In January 2012, Hodgdon introduced CFE 223, which is a spherical propellant that incorporates Copper Fouling Eraser (CFE). The ingredient was originally used in military propellant, and it greatly deters copper fouling and contributes to longer periods of top accuracy with less barrel-cleaning time.

Beginning in 2014, Hodgdon introduced the IMR Enduron technology and offers it in the form of several outstanding rifle propellants. Enduron technology extruded powders feature a copper-fouling eliminator, are insensitive to temperature changes, provide ideal loading density, and are environmentally friendly.

Then Hodgdon applied many of those technological advancements to spherical rifle powder and came up with Winchester StaBALL 6.5, the first spherical powder to be temperature insensitive. Introduced in 2020, Winchester StaBALL 6.5 meters precisely, provides 93 percent to 100 percent case fill/loading density in all cartridges appropriate for its burn speed, and reduces copper fouling due to a special additive.

On the acquisition front, Hodgdon acquired Accurate, Ramshot, and Blackhorn 209 brands of powders in 2020. As detailed in several of the articles throughout this special publication, the Accurate and Ramshot powders add many excellent options to the company's extensive lineup of rifle, handgun, and shotgun propellants.

And, of course, 2022 marks the 75th Anniversary. Throughout its 75-year existence, the Hodgdon Powder Co. and the Hodgdon family have promoted the shooting sports every step of the way. They were (and still are) instrumental in generating public interest in handloading. Furthermore, they donated property so the largest indoor shooting range in the world could be opened. They created the Hodgdon Foundation, which has helped fund numerous educational programs in the shooting sports. And they have been vocal and outspoken defenders of the Second Amendment. All the while they have provided, developed, and produced innovative gunpowder products that their customers desire.

Hodgdon's IMR Enduron technology led the way for Winchester StaBALL 6.5. Recent acquisitions include Accurate and Ramshot.

HODGDON®
THE BRAND THAT'S TRUE®

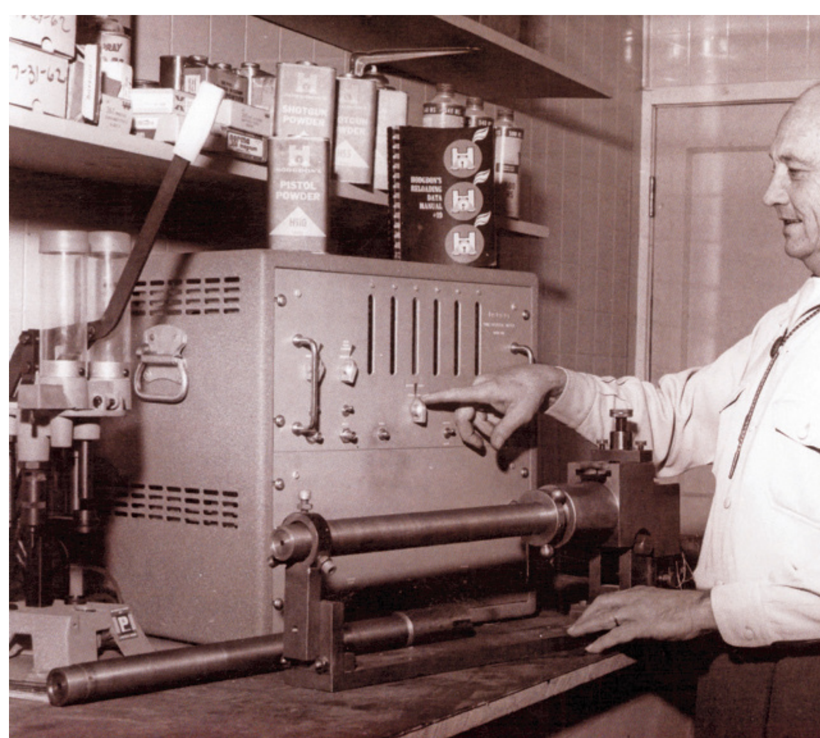
A HISTORY OF INNOVATION

STAFF REPORT

THE INNOVATIONS OF THE HODGDON POWDER Co. started in 1947 with the novel idea that founder Bruce Hodgdon had for purchasing large quantities of surplus military powder, repackaging it, and selling it to hobbyist handloaders. Throughout the 75 years the company has been in business, the innovations have kept coming.

For example, early on Hodgdon Powder Co. provided load recipes to go along with the surplus powder the company sold. By 1960, when it first started selling newly manufactured powder instead of military-purchase powder, Hodgdon was using expensive pressure-testing equipment, including pressure barrels and chronographs, to provide safe load data. According to longtime Hodgdon ballistician Ron Reiber, who retired in 2020, to this day, the Hodgdon laboratory makes sure the company has safe and reliable data for every propellant it sells, for all the popular—and not so popular—cartridges available.

As alluded to in the previous article, "A History of Achievement," Hodgdon changed the muzzleloading world forever in 1976 with the introduction of the first black powder substitute called Pyrodex. Pyrodex was invented by Dan Pawlak and Mike Levenson. Pawlak, according to Bob Hodgdon, was one of the most brilliant people



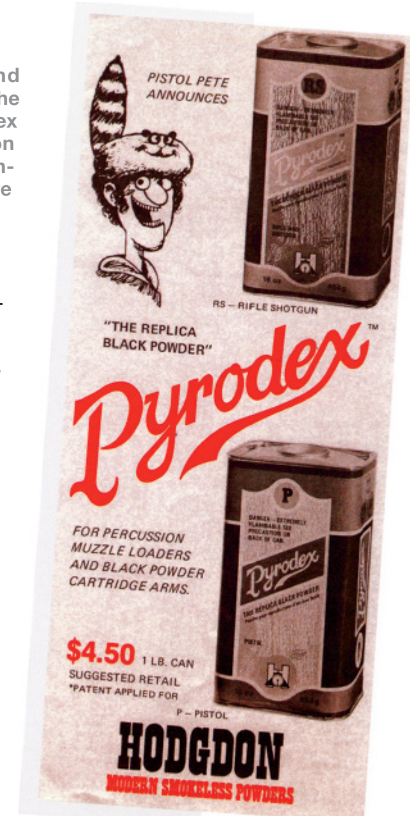
Early on Hodgdon Powder Co. began using sophisticated and expensive pressure-measuring equipment and chronographs to provide safe and reliable handloading data for every propellant the company sells.

he had ever met, but he was still a boy at heart and loved anything that went *bang*. Levenson was a chemist by training, and together he and Pawlak created the pyrotechnic deflagrating explosive they called Pyrodex.

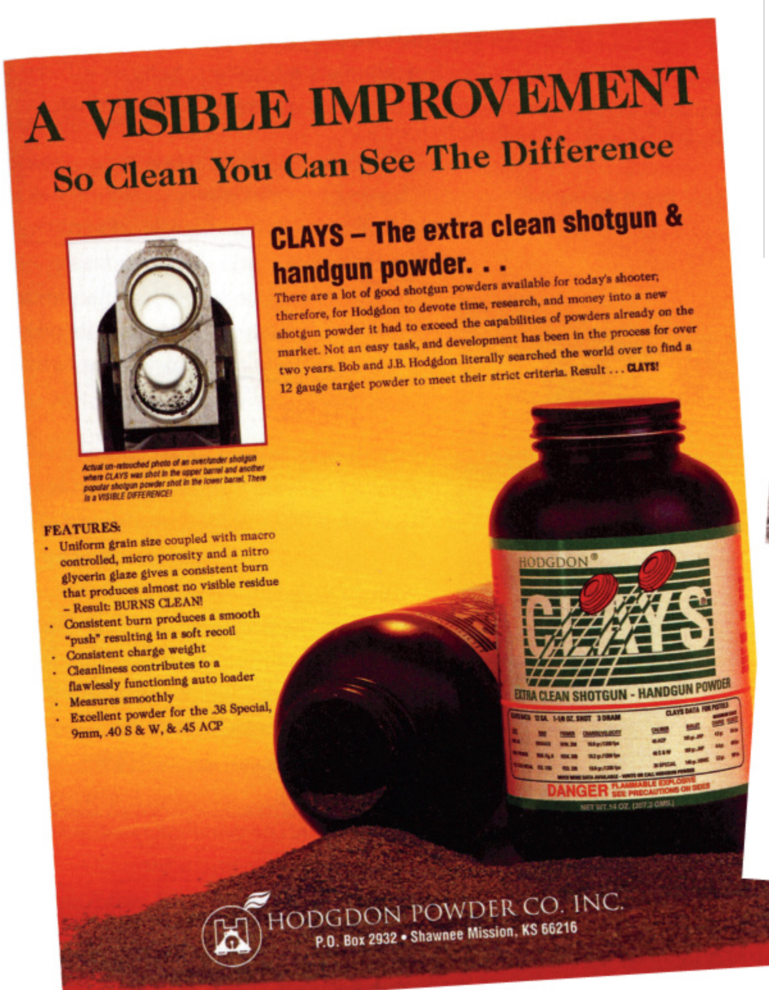
One of Pyrodex's characteristics is that when compared to the velocities and pressures of black powder, equal volume charges of Pyrodex and FFFg Gearhart-Owen black powder gave velocities of 1,800 fps to 1,850 fps, and an oscilloscope showed pressures of about 5,000 psi for Pyrodex and 6,000 psi for the black powder. Along with that analysis, in a lead crusher pressure-measuring system, both propellants would show about 6,000 l.u.p. because the Pyrodex pressure-time trace was lower but wider, giving a substantially equal area under the pressure curve. What all that means is that Pyrodex will give lower pressure and velocity after the first shot, while black powder will give higher pressure and velocity after the first shot. Because of black powder's nature of fouling, subsequent shots with black powder will continue to climb in pressure and then become erratic until the point where the projectile cannot be seated is reached and the fouling must be cleaned out. Additionally, Pyrodex was much cleaner shooting, and Pawlak and other testers shot muzzleloaders with Pyrodex all day, all week, and actually left firearms uncleaned for 30 to 60 days without any damaging results.

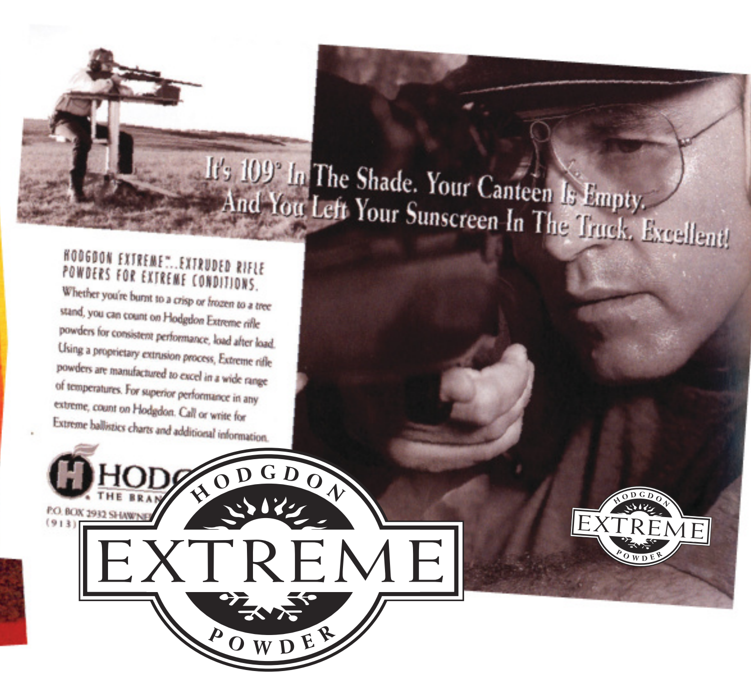
Another extremely innovative propellant was introduced in 1991. Called Clays, this smokeless powder is for shotshells, and it was developed by Hodgdon's Australian powder producer, Australian Defense Industries (ADI). Again according to Reiber, Clays was developed to be super-clean burning when other shotshell propellants were notoriously not clean burning. Most other powders were single-base, and ADI was experimenting with a process to apply nitroglycerine to give the powder more energy. It also would make the powder more impervious to moisture, light more easily, and burn super-clean. Clays turned out to be quieter (less muzzle blast) with less recoil. The new powder really took off and became Hodgdon's most successful product launch.

In 1995 Hodgdon introduced Varget, the first rifle powder in the company's Extreme extruded line. The powder description in this *Annual Manual* states, "The first of Hodgdon's revolutionary Extreme extruded powders, Varget features small extruded grains for uniform metering, insensitivity to hot/cold temperatures and higher



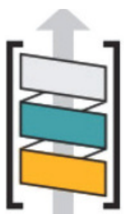
Invented by Dan Pawlak and launched by Hodgdon in 1976, the black powder substitute Pyrodex set the muzzleloading world on its ear. Pyrodex is cleaner-burning and produces lower pressure than black powder.



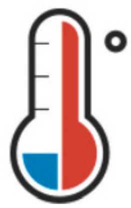


ENDURON™
TECHNOLOGY

The Consistency That Serious
Hunters and Shooters Demand



Copper Fouling Elimination
Shoot more rounds accurately between cleanings.



Extreme Temperature Stability
Stay on target, no matter the conditions.

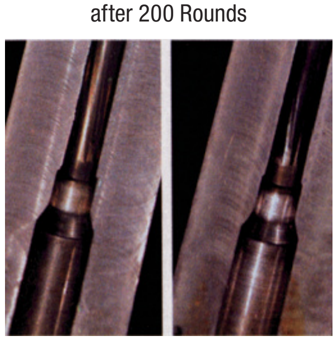
Ideal Load Density
Maximize velocity and prevent pressure spikes.

Environmentally Friendly
Be kind to the Earth with non-harmful ingredients.

Copper Fouling Eraser (CFE)

The Technology that greatly reduces copper fouling Developed for the Military, is now available in CFE 223 for your reloads!

New Match AR-15 Barrels
after 200 Rounds



Other Propellant | CFE 223

GROUNDBREAKING HODGDO

1947
First company to sell surplus powder to the reloading market

1952
First company to market spherical powder, called BB Ball

1960
First use of newly manufactured instead of military-purchase powder in reloading canisters

1960s
First company to provide pressure-tested handload data to consumers

1967
First company to build the largest indoor shooting range in the world, called the Bullet Hole

1976
First company to patent and market a black powder substitute, called Pyrodex

1991
First company to develop a clean-burning shotshell powder, called Clays (the most successful powder launch in Hodgdon's history)

1995
First company to offer temperature-insensitive Extreme extruded powders with the introduction of Varget

ON FIRSTS

1996

First company to patent and market the muzzleloading pellet

2001

First company to patent and introduce a new easy-to-clean-up muzzleloading powder substitute, called TripleSeven

2003

First company to annually produce a reloading manual, complete with load data and feature articles, for distribution on newsstands nationwide

2005

First company to introduce a reduced-load, "bulky" propellant for Cowboy Action shooting, called Trail Boss

2007

First company to provide online reloading data with the Hodgdon Reloading Data Center

2012

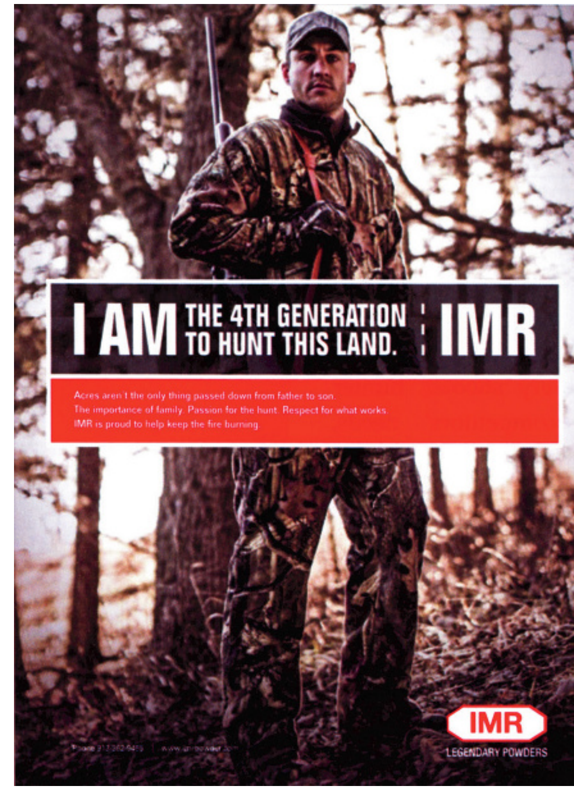
First company to market Copper Fouling Eraser (CFE) propellants

2014

First use of powders with combined features of temperature stability and decoppering additive, called IMR Enduron technology

2020

First company to provide temperature-insensitive spherical rifle powder, called Winchester StaBALL 6.5



energy for improved velocities over other powders in its burning-speed class. Easy ignition and clean burning are other features that translate into superb accuracy; higher scores; and more clean, one-shot kills. Outstanding performance and velocity can be obtained in such popular cartridges as the 223 Remington, 22-250 Remington, 308 Winchester, 30-06, 375 H&H, and many more."

Subsequent Hodgdon Extreme extruded rifle powders have won more benchrest matches and taken more big game than any other propellant. This family of powders covers every rifle cartridge from the 204 Ruger to the .50-caliber BMG, and all produce very low extreme spreads in velocity and pressure.

In 1996 Hodgdon released Pyrodex Pellets to the world. Combining the proven qualities of loose Pyrodex with the ease of loading that a solid-form pellet provided, Pyrodex Pellets were first offered in 50 grains and sized for .50-caliber muzzleloaders. Since their introduction, Pyrodex Pellets also have been offered in 30-grain weights for use in .44-caliber and .45-caliber cap-and-ball revolvers and .45-caliber muzzleloading rifles.

Pyrodex Pellets, created by Hodgdon engineer Dean Barrett and introduced by the company in 1996, combine the proven qualities of loose Pyrodex propellant with the ease of loading that a solid-form pellet provides.

The IMR Enduron technology powders are extruded, double-base propellants that are clean-burning and insensitive to temperature changes. They reduce copper fouling, and they also are environmentally friendly.

In 2001 Hodgdon returned to the field of black powder substitutes with the introduction of TripleSeven. Essentially Pyrodex without the sulfur, TripleSeven is cleaner and more powerful. First available as a loose propellant, it was later offered in pellet form. TripleSeven black powder substitute also is used as the basis for the star-shaped FireStar muzzleloader pellet (introduced in 2019). The unique-shaped propellant drives bullets faster, leaves less residue, and provides improved accuracy.

While this next product is not a propellant, it is still truly innovative. Beginning in 2003, Hodgdon started producing an annual newsstand publication called the *Annual Manual*. It was innovative at the time because it not only included tons of updated reloading data, but also featured in-depth reloading articles on the latest, most interesting new cartridge introductions. These articles were (and still are) written by the most knowledgeable and popular writers in the industry. It remains an incredibly valuable resource for handloading tips and techniques as well as a vehicle to announce the most recent developments from Hodgdon. And there are plenty of loyal customers who now collect each and every Hodgdon *Annual Manual* that's produced. It has become a collectible.

Back to innovative propellants. In 2005, under the IMR brand, Hodgdon introduced Trail Boss primarily for Cowboy Action shooters. In this sport, muzzle velocities are held to under 1,000 fps, and that often requires reduced loads. In some revolver cartridges, reduced loads with standard smokeless powders can be dangerous because of an increase in air space within a cartridge case. These shooters needed a propellant that was bulky enough to take up the space in the case without increasing velocity and pressure.

Trail Boss is based on a whole new technology that allows very high loading density, good flow through powder measures, and stability in severe temperature variations. Its characteristics include being too bulky to double charge and too bulky to surpass maximum pressures. Now wearing the Hodgdon brand, Trail Boss is primarily a handgun powder, but it has some application in rifles. Most importantly, it

provides improved safety to the handloader.

In 2012 Hodgdon unveiled its CFE 223 (Copper Fouling Eraser) powder that removes copper bullet jacket fouling from the bore as you shoot. This technology was subsequently applied to CFE Pistol powder and CFE BLK powder. CFE 223 is described as a spherical propellant that incorporates chemical ingredients that retard jacket fouling, allowing shooters to shoot more and clean less. As many handloaders have discovered, it actually removes copper fouling, too.

Starting in 2012, Hodgdon introduced the CFE spherical powders that utilize a special Copper Fouling Eraser ingredient which retards jacket fouling. Shooters have found that it actually removes copper fouling, too.

CFE 223 is great for cartridges ranging from the 204 Ruger through the 223 Remington and the 22-250 Remington to the 308 Winchester. CFE BLK is intended for the 300 AAC Blackout as well as small-capacity rifle cartridges like 17 Hornet, 218 Bee, and 221 Fireball. It also is excellent for the 6.8 Remington SPC and the 7.62x39mm Russian. CFE Pistol (introduced in 2014) is designed for match loads as well as defense loads in 9mm Luger, 38 Super, 40 S&W, and 45 ACP.

Also introduced in 2014, IMR Enduron rifle powders are double-base propellants, the first IMR double-base powders in fact. That means they contain nitroglycerine. Adding nitroglycerine increases the energy value. In other words, when the exact same charge weight of two propellants that are otherwise identical are fired, the nitro-filled propellant will deliver higher velocities.

What's more, the Enduron powders are totally friendly to birds, bees, trees, and condors. And there is an additive that reduces copper fouling deposited in rifle bores. Additionally, these powders are insensitive to changes in temperature. Again, all components of the Enduron powders are environmentally friendly. Many of Hodgdon's powders have established performance benchmarks by which other powders have since been compared. The IMR Enduron powders set the bar even higher.

The latest technological innovation from Hodgdon is Winchester StaBALL 6.5 rifle powder. Not until StaBALL 6.5 had a BALL powder been temperature insensitive. StaBALL 6.5 is stable in all conditions, hot or cold. It provides a case fill/loading density from 93 percent to 100 percent in all cartridges appropriate for its burn speed.

Top performance is achieved in 6 Creedmoor, 6.5 Creedmoor, 270 Winchester, 7mm-08 Remington, 375 H&H, and many more. StaBALL 6.5 meters precisely and provides speeds that are from 30 fps to 200 fps faster than all powders in its burn speed class. Plus, it has a copper-fouling-reducing additive. Stability, precision, and speed make it a top performer for long-range competitive shooters and hunters at all ranges and in all conditions.

As writer Steve Gash stated in his article introducing StaBALL 6.5 to readers, "What sets StaBALL 6.5 apart is that it incorporates several highly desirable features in one propellant. StaBALL 6.5 has the uniform metering of other spherical powders, the chemical ingredients that retard copper fouling, and temperature insensitivity. This is the first BALL powder to include all these qualities. Another great feature of StaBALL 6.5 is that it produces velocities a bit higher and standard deviations a bit lower than most other powders, contributing to pinpoint accuracy."

Obviously, Hodgdon Powder Co. has been at the forefront of innovation the entire length of its 75 years in business. It probably would have been easier and perhaps successful enough to sit back and coast on its previous achievements. But that's not the way company founder Bruce Hodgdon operated. It's not the way his sons J.B. and Bob Hodgdon operate, and it's not the way the company operates.

The latest technological breakthrough from Hodgdon is Winchester StaBALL 6.5. It is the first BALL powder that is temperature insensitive, and it provides a very high load density and reduces copper fouling.


Swift
SCIROCCO II®
.308-180 Grain | 2.5x expansion
TERMINAL PERFORMANCE
3300+ fps.
84%+ Wt.Ret.
.704 dia.
A-FRAME®
.308-180 Grain | 2.2x expansion
95%+ Wt.Ret.
.670 dia.
24 COUNT
Swift
BREAK AWAY
SOLIDS
100 COUNT
Swift
BULLET COMPANY
SCIROCCO® II
BONDED
50 COUNT
Swift
BULLET COMPANY
A-FRAME®
BONDED
Swift bullets are the best hunting bullets made!
For thirty four years, Swift Bullet Company's innovative designs and construction have led the way in bonded core hunting bullet technology. Whether you choose Swift A-Frame® or Scirocco®, with the signature black polymer tip, you get terminal performance without equal and excellent accuracy. A-Frame® and Scirocco® bullets provide the best performance for hunting any game species anywhere in the world.
Bullets without equal.
Swift
BULLET COMPANY
SWIFT
BULLET COMPANY
SWIFT RELOADING MANUAL
NUMBER TWO
See website for details!
785-754-3959 | www.swiftbullets.com


THE NEXT LEVEL IN HANDLOADING
THE MONTANA BRAND
RAMSHOT
RELOADING POWDERS
TRIGGER YOUR INSTINCTS
HUNTER
SMOKELESS POWDER
NET WT. 1LB. (454G)
MAGNUM
WARNING

RAMSHOT HUNTER

Hunter rifle powder from Ramshot is a great propellant simply because it produces some definite zip and very good accuracy.

BY JOHN BARSNESS

THE INTRODUCTION OF NEW RIFLE POWDERS RESULTS in various reactions among handloaders. Some snort, "The powders I've been using since 19__ (you fill in the blanks) still work fine, so why would I buy something new?"

Today, this might get classified as a "boomer" response, from people born during the 1946–1964 Baby Boom era after World War II, when Americans settled down in an also-booming economy and had lots of babies. Boomers are the present retirement generation and, like many "experienced" humans, think the world worked just fine in their youth, so why change?

At the other extreme are handloaders eager to try anything new, especially if it gets more muzzle velocity. Thanks to the internet, they often brag about how the latest magic powder gets another 50 to 100 fps—or even more, though "even more" often depends on exceeding maximum load data.

Of course, many of us stand somewhere in the middle—or even along the edges. I was born during the peak of the Baby Boom, but I still try lots of new stuff, and not just powders (I enjoy trying the newest bullets, cartridges, and rifles). However, I still use many favorites that I "discovered" when younger. I also make some of my living writing about handloading, and some readers (even other Boomers) want to know about new stuff.

My handloading records fill four three-inch-thick ring binders, each containing 250 to 300 pages. While recently reviewing some favorite handloads, I found plenty for Ramshot Hunter, a powder that was introduced in the 21st century. In fact, I found so many Hunter handloads that the accompanying table may not be complete, since my eyes started hurting about halfway through the binders. But the list does indicate why Hunter became one of my standby rifle powders. Simply put, it produces some definite zip, usually accompanied by very good accuracy.

Ramshot Hunter works well in traditional rounds like the 257 Roberts and modern "accuracy" cartridges, such as the 6.5 Creedmoor.

The author has had good luck with Hunter in a wide range of cartridges, ranging from the 220 Swift through the 270 Winchester to the 338 Winchester Magnum.

However, those aren't the only reasons for using Hunter. One of the things I "discovered" during the late 20th century is many popular older powders lose considerable velocity as temperature falls, which can affect accuracy and even shift point-of-impact up to three inches at 100 yards. Hunter isn't as temperature resistant as other newer powders, such as the Hodgdon Extremes, but it does well enough to hunt with in my native Montana, which has the widest recorded temperature range of any of the 50 states, 187 degrees Fahrenheit.

It should also be mentioned that temperature resistance can vary due to load density, primer, and even the specific cartridge-bullet application. One old standby powder I've been using for close to half a century, IMR 4350, has lost as much as 74 fps when tested at 70 and zero degrees with a 165-grain 30-06 load and as little as 28 fps when used in a compressed load with 300-grain bullets in the 375 H&H.

This is actually pretty good cold-weather performance (some other popular rifle powders have lost close to 200 fps between 70 and zero), though not as consistent as H4350 Extreme, which I've yet to see vary more than about 25 fps in my cold tests (often it's less). But Hunter does about as well as IMR 4350 and has some other advantages.

Advantages

First, Hunter is spherical. As a result, a charge of Hunter drops precisely and quickly from a mechanical powder measure, and I handload enough ammo to appreciate quick case-charging. Other handloaders enjoy weighing every powder charge, whether on a traditional scale or an electronic dispenser, but neither is as fast as a mechanical measure. (That's one reason I've long suspected some handloaders consider weighing powder charges a vacation from more stressful stuff in their lives.)

Second, Hunter also isn't prone to the tendency of many spherical powders of leaving plenty of powder fouling in the bore. That residue is due to the deterrent coatings necessary to control burn rate in spherical powders, which almost by definition don't burn very well. While many extruded powders also feature deterrent coatings, their burn rate is also partly controlled by granule size, but the granules in all spherical powders are basically the same size. While many other sphericals don't burn as "dirty" as they used to, the four Ramshot spherical powders made in Belgium are the cleanest burning I've yet used.

This discovery was initially made even before Hunter appeared. In 2000 a Montana firm named Western Powders contacted several gun writers living within a day's drive from the company's headquarters in Miles City and asked if we'd care to try some new powders by shooting prairie dogs. Western invited relatively local writers because the company had a pretty slim budget and couldn't afford to pay travel expenses, but the company would pick up the tab for everything else once we arrived. That first bunch included John Haviland from Montana and Bob Milek Jr. from northern Wyoming.

Western Powders got its start by supplying explosives to the local coal-mining industry but in time began distributing handloading powders, including Hodgdon and IMR. Western's owner, Doug Phair, eventually decided to distribute his own line of handloading powders, which he named Ramshot, contracting with a couple of powder manufacturers to supply them. One was PB Clermont, when a black powder factory was built in the city of Clermont-sous-Huy, a few miles from the gun-making center of Liege.

In 1952 PB Clermont became the first company in Europe to manufacture spherical powder and initially provided Western with three, which Phair named TAC (short for tactical), Big Game, and Magnum. TAC's burn rate is a little faster than IMR 4895, while Big Game's is close to Winchester 760 (which is a little faster than IMR 4350), and Magnum's is similar to Retumbo.

TAC was originally developed for the 5.56x45mm and 7.62x51mm NATO rounds, partly because Belgium was among the founding members of the North Atlantic Treaty Organization (NATO), so its military uses both cartridges. The civilian version of the 5.56x45mm NATO is the 223 Remington—and for the prairie dog shoot Western provided plenty of TAC-loaded 223 Rem. ammo, which shot very accurately when we range-checked the rifles we used.

After banging away at prairie dogs for an hour or so, some of us got out cleaning rods. This is an old tradition among prairie dog shooters, especially those who've used older spherical powders that left considerable residue in the bore. One of the Western Powders guys looked at the cleaning rods and said, "I don't think you'll need those." Some guys decided to clean the bores of their rifles anyway, but I'm always willing to experiment—and would rather shoot than clean rifles. So I just kept shooting—and never noticed any change in minute-of-PD accuracy.

John's wife, Eileen, performed a pair of early "field-tests" with Hunter in November 2003, first with a spike elk taken with the 270 Winchester in the mountains of southwest Montana and then again 10 days later with the 257 Roberts on a whitetail buck near the North Dakota border.


QUALITY PROPELLANTS SINCE 1947
HODGDON
THE BRAND THAT'S TRUE
H4831
EXTREME
RIFLE POWDER
RELOADING DATA CEN
DANGER
IMR
IMR
4831
SMOKELESS
POWDER
DANGER!
EXTREMELY FLAMMABLE
BEFORE USING SEE PRECAUTIONS ON SIDES
WT. 1 LB. (454 grams)
THE NEXT LEVEL IN HANDLOADING
THE MONTANA BRAND
RAMSHOT
RELOADING POWDERS
TRIGGER YOUR INSTINCTS
HUNTER
SMOKELESS POWDER
NET WT. 1LB. (454G)

That evening I did clean the barrel, finding only the faintest hint of powder and copper fouling—the reason accuracy remained good. Admittedly, the barrel of my 223 Remington Model 700 Varmint had never fouled much, but it fouled far less with TAC. I also ran a patch or two through the rifle's bore on the evening of the final day of shooting, again encountering only slight fouling.

We all received samples of the Belgian Ramshot powders to take home and use. With all three I noticed "starting loads" tended to leave considerable powder fouling, but as powder charges increased to near max, the fouling almost disappeared. Smokeless powder manufacturers don't normally reveal their trade secrets to firearms journalists, who might reveal them to the rest of the world.

I also tested all three powders both at 70 degrees and at zero, and in actual ambient conditions, not by simply chilling the rounds. Cold ammo sometimes provides valid results, but sometimes it doesn't, due to being fired in a warm rifle. Instead, the big trick in cold-weather testing (aside from living somewhere like Montana) is keeping the chronograph reasonably warm, especially the battery.

The velocity loss with Big Game in a 30-06 handload using 150-grain bullets averaged 28 fps. The loss with Magnum in a 257 Weatherby handload with 100-grain bullets was 32 fps. But in the 223 Rem. I'd taken to Miles City, when shooting 26.0 grains of TAC with 50-grain bullets, the average velocity was exactly the same at zero degrees as at 70 degrees (3,292 fps). That was obviously lucky, since separate chronograph strings with the same load rarely average the same velocity, even when tested at the same temperature, on the same day. But it happened. Oh, and accuracy with all three cartridges at zero was basically the same as at 70, though my trigger finger tends not to function as finely when semi-frozen.

That turned out to be the first of several annual Ramshot prairie dog shoots, which usually took place in late May or June. This happens to be the peak of Montana's "rainy season," which doesn't amount to much in Miles City, since it averages only a foot of precipitation a year.

But a year or two later, we got thunderstormed out one afternoon, and Phair suggested that he and I spend some time with their piezo-electronic pressure machine and another Belgian rifle powder that had recently arrived. Phair had decided the burn-rate gap between Big Game and Magnum was too wide, and this then-new powder was meant to fill the gap.

He decided to test it in the 300 Winchester Magnum, and I did the handloading—as I recall with 165-grain bullets—while he did the shooting and ran the computer. The new powder did very well, and

The author found chronographing handloads at zero degrees Fahrenheit wasn't as bad as it might seem, since colder Montana days tend to be sunny and calm.

The 6XC handload consisting of 42.5 grains of Hunter under the Berger 105-grain Hunting VLD shoots very well in John's custom rifle made by Charlie Sisk.

as we "worked," he mentioned they hadn't yet named the powder—which came in a barrel marked with a random combination of letters and numbers, resembling a short internet password. After thinking a little, I semi-facetiously suggested "Caribou," since they're larger than whitetails but smaller than the game animals some hunters feel require "magnum" rounds. Phair smiled faintly and shortly after came up with Hunter.

Hunter is listed on Hodgdon's burn-rate chart between IMR 4831 and H4831, both very useful in a wide range of popular hunting cartridges, including the 270 Winchester—where H4831 was long considered *the* powder even before the Extremes appeared. However, since Hunter's a spherical powder, the same charge weight doesn't take up as much room as H4831, even the short-cut version. This has proven handy in several cartridge-bullet combinations, especially with longer bullets, whether heavier lead cores or monolithics.

Like other sphericals, Hunter often results in finer accuracy when lit by Magnum primers. In rounds using more than 50 grains of powder, I tend to start working up loads with Magnum primers but usually start with standard primers in smaller, shorter rounds.

Field-Tests

The very first Hunter handloads I worked up were put together in 2003 for my wife, Eileen, and her pair of New Ultra Lite Arms (NULA) rifles in 257 Roberts and 270 Win., which also featured the then-new Barnes Triple-Shock X-Bullet (TSX). I'd noticed the top listed +P charge of 46.5 grains of Hunter with 100-grain bullets got over 3,100 fps velocity, despite the fact that in the 257 +P only means an average S.A.A.M.I. maximum pressure of 58,000 psi, far less than the 65,000 in the 270 Win. In the NULA, 46.5 grains averaged 3,142 fps, with three-shot groups well under an inch.

Evidently, Ramshot's data for the 270 Win. back then was different than now, as I worked up to 55.0 grains with the Barnes 140-grain TSX, a grain more than any listed 140-grain load in today's data. However, that was before Ramshot received any TSX bullets to test, and they tend to result in less pressure than other bullets of the same diameter and weight. The final load produced just under 3,000 fps and groups slightly smaller than the 257 Roberts.

Eileen field-tested both loads that November, first the 270 Win. load on a spike bull elk at a "normal" mountain temperature for Montana at that time of year, somewhere around freezing. The shot turned out to be about 200 yards, and everything worked fine.

The 257 Roberts load received a much sterner test 10 days later at an ambient temperature of -11 degrees Fahrenheit on a big whitetail buck cruising the timbered bottomland of the Missouri River near North Dakota. She shot the buck twice, which wasn't really necessary because the first TSX passed through the broadside buck's chest. But he was fired up by the rut and at the shot ran 40 yards before stopping, again broadside. He probably would have fallen in a second or two, but she wanted to make sure and put another bullet through both shoulders.

A couple of years later Eileen started developing recoil headaches and had to give up the 270 Win., but since then, she has used the same basic handload in the NULA 257 Roberts on all of the "common quartet" of Montana big game (pronghorns, whitetails, mule deer, and elk), along with two fall turkeys, one taken with a neck shot at 75 yards. The only change in the load was switching to the 100-grain Tipped TSX when it came out a few years later.

I also found Hunter to be one of the finest powders for bullets in the 180-grain weight range for the 30-06, which has long been the most popular 30-06 hunting load. The first handload I worked up used Berger 185-grain Hunting VLDs for field-testing on feral goats and red deer in New Zealand in 2007.

Ramshot's data showed every 180-grain to 185-grain bullet getting at least 2,800 fps with Hunter, so I worked up to 58.0 grains in my NULA 30-06 rifle. The load averaged around 2,850 fps from the 24-inch barrel, and three-shot groups averaged slightly over half an inch. It worked fine out to 500 yards, and since then Hunter has proven excellent in other 30-06 rifles with 180-grain bullets, including Nosler Partitions in a Sauer drilling.

A couple of handloads in the accompanying chart weren't based on Ramshot's data. One is for Sierra's 160-grain GameKing in a custom 7x57 Mauser rifle. Ramshot didn't list any 7x57 data—and still doesn't. Instead, I used Ramshot's 7mm-08 data because the 7mm-08 has slightly less powder room than the 7x57, so it should produce a little less pressure. At the listed velocity, the Sierra bullet has worked great on medium-sized big game in both North America and Africa, at ranges out to around 400 yards.

Hunter also works well in modern "accuracy" cartridges, such as David Tubb's 6XC and the ever-popular 6.5 Creedmoor. In fact, the first big-game animal I shot with the 6.5 Creedmoor fell to the Hunter/Nosler 120-grain Ballistic Tip handload. That rifle was my first 6.5 Creedmoor, a Ruger Hawkeye that turned out to be very accurate right out of the box. That's why it's on the long list of rifles I never should have sold.

All these examples, and many more, are the reason that when a new-to-me rifle appears in a chambering where one of the 4831 powders would be a top candidate, a canister of Hunter also gets pulled off the shelf.

RAMSHOT HUNTER LOAD DATA

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	VEL. (FPS)	100-YD. ACC. (IN)
220 Swift Ruger Model 77, 24-in. Barrel, 1:14 Twist						
Winchester	Fed. 210M	Hunter	48.5	Sierra 55-gr. GameKing	3727	0.45
6XC Sisk STAR Custom, 26-in. Lilja Barrel, 1:8 Twist						
Norma	Fed. 210M	Hunter	42.5	Berger 105-gr. Hunting VLD	3072	0.61
243 Win. Barrett Fieldcraft, 21-in. Barrel, 1:8 Twist						
Hornady	Fed. 210M	Hunter	42.0	Berger 105-gr. Target VLD	2894	0.69
243 Win. Custom Mauser, 26-in. Barrel, 1:10 Twist						
Remington	Fed. 210M	Hunter	46.0	Hornady 87-gr. V-Max	3384	0.92
6mm Rem. T/C Encore, 24-in. Barrel, 1:9 Twist						
Winchester	Fed. 210M	Hunter	47.0	Nosler 90-gr. E-Tip	3226	1.01
257 Roberts New Ultra Light Arms M20, 24-in. Douglas Barrel, 1:10 Twist						
Winchester	Fed. 215	Hunter	46.5	Barnes 100-gr. TTSX	3142	0.67
6.5 Creedmoor Fierce Edge, 24-in. Barrel, 1:8 Twist						
Hornady	Fed. 210M	Hunter	46.0	Swift 130-gr. Scirocco II	2940	0.74
6.5 Creedmoor Ruger Hawkeye, 26-in. Barrel, 1:8 Twist						
Hornady	Fed. 210M	Hunter	47.0	Nosler 120-gr. Ballistic Tip	3206	0.78
Hornady	Fed. 210M	Hunter	45.0	Berger 140-gr. Hunting VLD	2830	0.94
260 Rem. Tikka T3 Superlite, 22-in. Barrel, 1:8 Twist						
Lapua	CCI 200	Hunter	47.0	Speer 120-gr. Hot-Cor	2841	1.22
270 Win. New Ultra Light Arms, 22-in. Barrel, 1:8 Twist						
Winchester	Fed. 215M	Hunter	55.0	Barnes 140-gr. TSX	2956	0.51
270 Win. Remington Model 760, 22-in. Barrel, 1:10 Twist						
Remington	Fed. 215	Hunter	54.0	Nosler 140-gr. AccuBond	2888	0.98
270 Win. Ruger No. 1B, 26-in. Barrel, 1:10 Twist						
Winchester	WLR	Hunter	54.0	Berger 140-gr. Hunting VLD	2978	0.77
270 Win. Winchester Model 70 O'Connor Commemorative, 22-in. Barrel, 1:10 Twist						
Winchester	WLR	Hunter	54.0	Berger 140-gr. Hunting VLD	2863	0.54
7x57 Mauser Serengeti Rifles Walkabout, 21-in. Barrel, 1:9 Twist						
Winchester	CCI 250	Hunter	48.0	Sierra 160-gr. GameKing	2641	1.30
280 Ackley Improved Hill Country Rifles, 24-in. Barrel, 1:9 Twist						
Nosler	WLR	Hunter	61.0	Barnes 140-gr. TSX	3180	0.78
30-06 New Ultra Light Arms M24, 24-in. Douglas Barrel, 1:10 Twist						
Nosler	WLR	Hunter	58.0	Berger 185-gr. Hunting VLD	2862	0.58
300 WSM Winchester Model 70, 24-in. Barrel, 1:10 Twist						
Norma	CCI 250	Hunter	70.0	Barnes 168-gr. TSX	3168	0.99
300 H&H Winchester Pre-'64 Model 70, 26-in. Barrel, 1:10 Twist						
Winchester	Fed. 215	Hunter	67.0	Sierra 180-gr. GameKing	3011	1.00
300 Win. Mag. Heym SR-21, 24-in. Barrel, 1:10 Twist						
Winchester	WLR Magnum	Hunter	77.5	Nosler 150-gr. Ballistic Tip	3322	1.08
Winchester	WLR Magnum	Hunter	77.0	Nosler 165 AccuBond	3228	1.19
338 Win. Mag. Custom FN Mauser, 22-in. Sako Barrel, 1:10 Twist						
Winchester	Fed. 215	Hunter	70.0	Cutting Edge 252-gr. MTH	2663	1.06

NOTES: Accuracy is the average of several three-shot groups, except for the 6XC Sisk rifle and the 243 Win. Custom Mauser rifle, which are for several five-shot groups. Velocity is the average of at least five rounds measured 15 feet from the guns' muzzles.


IMR
IMR
4064
SMOKELESS
POWDER
DANGER!
EXTREMELY FLAMMABLE
BEFORE USING SEE PRECAUTIONS ON SIDES
NET WT. 1 LB. (454 grams)
OUR NAME SAYS IT ALL
Accurate
4064
SINGLE-BASE
SMOKELESS PROPELLANT
NET WT. 1LB. (454g)

COMPARING SIMILAR POWDERS

With certain powders bearing similar label numbers, you may be wondering how they compare performance-wise. Here's one set of comparisons.

BY LANE PEARCE

IMR AND ACCURATE POWDER BRANDS OFFER RIFLE PROPELLANTS labeled 4064. Each brand also offers powders numbered 4350, and so does Hodgdon. Until you open the containers and look inside, the only apparent difference is the company brand. They're all extruded stick powders, but they do differ in size (diameter and length) and in one case in color.

The same numerical product labeling suggests the contents are also the same. They definitely are not. Depending on the specific cartridge-load recipe, the different propellants' internal ballistic performances may not be! You cannot simply substitute recipes for propellants having the same numerical identity.

The purpose of this report is to demonstrate the differences between the 4064 powders and the 4350 powders in a limited selection of popular rifle cartridges.

Soon after the turn of the 19th century, DuPont started manufacturing black gunpowder. Nearly a century later, it and other companies began experimenting with smokeless propellants that would eventually allow the development of significantly more powerful and more user-friendly firearms.

Lane compared IMR, Accurate, and Hodgdon powders with similar numbers in handloads for 250 Savage, 308 Win., 8mm Mauser, 243 Win., 280 Ackley Improved, and 300 WSM cartridges.

DuPont remained a leader in the industry and, in the early 1900s, introduced its new "Improved Military Rifle" propellants. Thirty years later, the firm began to replace those initial products with a series of further-improved IMR brand propellants. Two of these single-base, extruded powders (IMR 4064 and IMR 4320) were the "slowest" burn-rate canister powders available at the time. In 1940 IMR 4350 gained that distinction and held it until IMR 4831 was reintroduced to the commercial market in 1973. Although they've been with us for nearly a century since, both IMR 4064 and IMR 4350 are still popular choices for handloaders.

Bruce Hodgdon, patriarch of Hodgdon Powder Company, bought tons of U.S. military surplus propellant from the government after World War II. He repackaged and sold it under the labels 4831 and 4895 to gunshops and hobbyist reloaders. As Hodgdon's business grew, he introduced new products to compete with the "big three" other brands—IMR, Winchester, and Hercules. The expanding product line of Hodgdon rifle, pistol, and shotgun propellants were sourced from established domestic and foreign makers, including Olin Corp., General Dynamics, Australian Defence Industries, etc.

Other entrepreneurs followed Hodgdon's business model. Accurate and Western Powders companies were established and thrived. Years later, Alliant acquired the Hercules propellants, and just a few years ago, Western bought the Accurate product line. In 2006, Hodgdon Powder Co. acquired the IMR brand, adding several popular propellants to the portfolio. Not too long after that, Hodgdon began distributing Winchester brand powder. And just last year, Hodgdon purchased Western, thereby adding dozens more Accurate and Ramshot brand powders.

Although these events surely benefited the hobbyist handloader, the increasing propellant choices also caused some confusion. DuPont had made the surplus powder sold by Hodgdon after World War II. Years later, when IMR 4831 and IMR 4895 were reintroduced, Hodgdon added an "H" to their canister labels to distinguish them from DuPont's products. Later, Hodgdon introduced H4227 and H4350 to compete with IMR 4227 and IMR 4350 propellants.

The similarly labeled powders' burn rates are different enough that brand-specific load recipes are recommended to ensure safe handloads. For example, when I first reloaded 270 Winchester, I purchased surplus Hodgdon 4831 powder repackaged in a paper sack for 75 cents a pound. Years later, "new" IMR 4831 powder was introduced, and its burn rate was significantly faster, so maximum charge weights differed by several grains.

Using load data from the Hodgdon *Annual Manual*, Lane compared propellant performance using the same bullets, cases, and primers in the same cartridge-rifle platform for each example.

IMR 4064 v. ACCURATE 4064

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	E.S. (FPS)	S.D. (FPS)	50-YD. ACC. (IN.)	100-YD. ACC. (IN.)
250 Savage Savage 99, 24-in. Barrel, Iron Sights										
Hornady	WLR	IMR 4064	36.0	Speer 87-gr. Spitzer	2.50	3010	45	15	1.65	----
Hornady	WLR	Accurate 4064	36.5	Speer 87-gr. Spitzer	2.50	2995	19	19	1.45	----
308 Win. Ruger Precision Rifle, 20-in. Barrel, Nikon 4-16X Scope										
Lapua	WLR	IMR 4064	43.0	Berger 175-gr. VLD Target	2.81	2585	31	9	----	1.41
Lapua	WLR	Accurate 4064	44.0	Berger 175-gr. VLD Target	2.81	2594	35	11	----	1.20
8mm Mauser Turkish Mauser M98, 29.5-in. Barrel, Iron Sights										
PPU	WLR	IMR 4064	44.5	Hornady 195-gr. InterLock SP	3.10	2436	46	14	1.88	----
PPU	WLR	Accurate 4064	46.0	Hornady 195-gr. InterLock SP	3.10	2499	30	11	1.81	----

NOTES: Accuracy is the average of three, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured eight feet from the guns' muzzles.

Jack O'Connor, famous for promoting the 270 Win., among other things, touted a favorite load (it's too high to safely quote) of the surplus 4831 topped with Speer's 130-grain HotCor bullet. Today, Hodgdon's max H4831 or H4831SC (short cut) recipe is a compressed load about 2 grains less. And that amount exceeds the recommended maximum safe charge of IMR 4831 by nearly 10 percent.

Prior to all of the many recent acquisitions I've detailed, the companies were active competitors. So, it's not surprising when a new product "borrowed" an already popular moniker. Hodgdon introduced H4350 in 1982. Accurate later offered its versions of 4064 and 4350 to capitalize on the popularity of the IMR and Hodgdon similarly labeled propellants.

Comparing the Powders

The obvious way to compare propellant performance is to develop and test handloads in the same cartridge-rifle platform. The results might also be more meaningful if the cartridge-bullet combinations selected are especially compatible with the specific propellant. So, to compare IMR 4064 with Accurate 4064 and IMR 4350, H4350, with Accurate 4350, I chose three sets each that were most suitable for the respective propellants.

Using my vintage Powley slide rule "computer" as a predictive tool for determining safe load data for IMR propellants (see the accompanying sidebar), I determined the 250 Savage, 308 Winchester, and 8mm Mauser cartridges best fit the bill for IMR 4064. Similarly, I selected the 243 Winchester, 280 Ackley Improved, and 300 WSM as excellent candidates to evaluate and compare the performance of IMR 4350 propellant.

For each cartridge I compared load data from Hodgdon's most recent reloading manual, Western Powders's load manual, and several other reliable sources. I recorded the maximum charge recommendations and then assembled a series of test loads in ascending half-grain increments. In a couple of cases, the preliminary test data and my observations suggested the results were quite safe.

4064 Load Development

Hodgdon's maximum charge weight for IMR 4064 in the 250 Savage with an 87-grain bullet is 35.5 grains. Another source also listed the same amount, and yet another indicated a half-grain more. The S.A.A.M.I. maximum average pressure limit (MAP) for this cartridge is 45,000 CUP, with a nominal velocity of 3,010 fps.

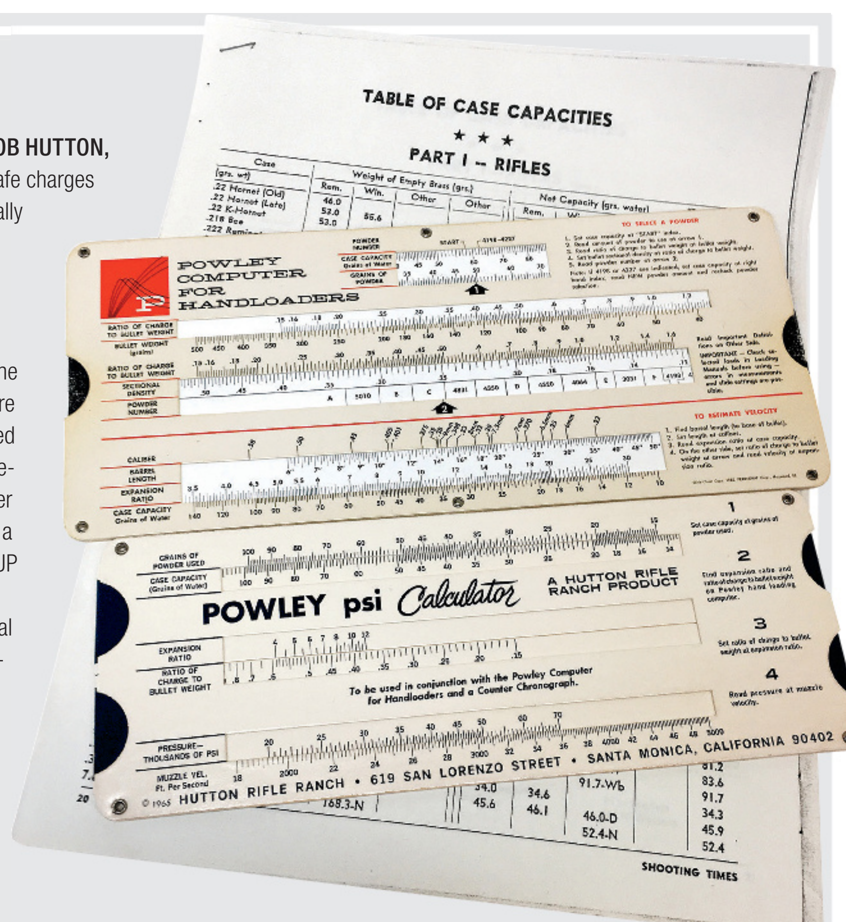
My preliminary test loads stopped at 36 grains with an average velocity of 3,019 fps. Extraction was nominal; cases looked fine; and the bullets and powder gases exited the muzzle without mishap. So I charged the record test loads with 36 grains of IMR 4064. I initially fired the Accurate 4064 test loads with the same incremental range of charges. Average velocities for equal charge weights lagged approximately 120 fps. So, in order to achieve a more comparable velocity to the IMR results, I charged the Accurate 4064 handloads with 36.5 grains.

POWLEY COMPUTER

DEVELOPED IN THE EARLY 1960S BY HOMER POWELL AND BOB HUTTON, this simple cardboard slide rule device will still accurately predict safe charges of IMR propellants for popular rifle cartridges. Calculations are initially based on case capacity and bullet caliber/weight. Adding in barrel length (measured from the base of the bullet to the muzzle), the expansion ratio is indicated. Comparing the expansion ratio to the powder charge/bullet weight ratio yields the estimated velocity.

An additional slide rule is used to calculate chamber pressure. The reviews in those days referred to pressure as psi (pounds per square inch). However, measuring pressure then employed small, calibrated copper cylinders that were crushed when the round was fired in a specially configured universal receiver. The length of the crushed copper cylinder was correlated to a previously determined data set called a tarage table. The corresponding pressure value was recorded in CUP (copper units of pressure).

Modern pressure barrels are fitted with piezoelectric or conformal pressure transducers that measure chamber pressure in psi. Unfortunately, there is no reliable algorithm to correlate CUP results to actual psi values. The Powley tools were set up to indicate load recipes that would yield approximately 45,000 CUP. At that time, typical cartridge pressures maxed out at about 50,000 CUP or approximately 60,000 psi to 62,000 psi in current terms. My results chart validates that feature quite well (except for the high-performance 300 WSM cartridge, which is rated at 65,000 psi), and the predicted and actual velocities were quite close.



COMPARING SIMILAR POWDERS

I used the RCBS Uniflow mechanical measure to "throw" the powder and then weighed each charge before adding or removing powder to obtain the exact desired amount. I achieved the final charge weight of Accurate 4064 without further adjustment about 80 percent of the time. My experience indicated just the opposite results with the longer-grain IMR 4064.

I followed the same method for the 308 Win. and the 8mm Mauser. Because my Savage 99 and M98 Mauser rifles are equipped with iron sights, I fired those groups at 50 yards to minimize shooter error. Almost every 250 Savage five-shot group had four rounds striking in or near half an inch. One of the five rounds pierced the target at least an inch away from the other four.

I bumped up the Accurate 4064 charge for the 308 Win. test loads by one grain and matched the IMR test load's average velocity within 10 fps. Velocity variations between the two propellants were closely similar. The 1.5-grain charge weight delta for the 8mm Mauser handloads was a bit too much, and the Accurate handload's velocity jumped 60+ fps. Accuracy of both loads was also identical.

This experiment illustrated how IMR, Hodgdon, and Accurate handloading powders with similar numbers perform differently in respective cartridges.

4350 Load Development

The Powley tool indicated 43 grains of IMR 4350 as a safe charge for 243 Win. handloads topped with a 95-grain cup-and-core bullet. Hodgdon's data listed 42 grains as the maximum recommended charge. Of course, I started lower and worked up to Hodgdon's limit in half-grain increments with all three 4350 propellants. I recorded velocities and found the IMR results trailed the other two by nearly 100 fps. I decided I could safely bump up the charge to the Powley prediction.

The 280 Ackley is a sharp-shouldered, blown-out "improved" version of the 280 Remington, which bumps case capacity up to approximately 64 grains of water. The MAP is 65,000 psi compared to 60,000 psi for the parent round. The Powley computer indicated 55

IMR 4350 v. ACCURATE 4350 v. H4350

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	E.S. (FPS)	S.D. (FPS)	50-YD. ACC. (IN.)	100-YD. ACC. (IN.)
243 Win. Ruger Model 77, 22-in. Barrel, Redfield 2-7X Scope										
Lapua	WLR	IMR 4350	43.0	Berger 95-gr. VLD Hunting	2.72	3002	35	12	----	2.16
Lapua	WLR	Accurate 4350	42.0	Berger 95-gr. VLD Hunting	2.72	3017	49	16	----	1.98
Lapua	WLR	H4350	42.0	Berger 95-gr. VLD Hunting	2.72	3002	40	13	----	1.96
280 Ackley Improved Legendary Model 704, 25-in. Barrel, Meopta 4.5-14X Scope										
Nosler	WLR	IMR 4350	55.0	Nosler 150-gr. Partition	3.30	2869	39	14	----	1.42
Nosler	WLR	Accurate 4350	55.0	Nosler 150-gr. Partition	3.30	2897	29	9	----	1.31
Nosler	WLR	H4350	55.0	Nosler 150-gr. Partition	3.30	2912	39	13	----	1.67
300 WSM Kimber 8400, 24-in. Barrel, Leupold 2.5-8X Scope										
Winchester	Fed. 215	IMR 4350	63.5	Federal 180-gr. TBT	2.85	2984	53	15	----	1.56
Winchester	Fed. 215	Accurate 4350	63.5	Federal 180-gr. TBT	2.85	3040	33	10	----	1.52
Winchester	Fed. 215	H4350	63.5	Federal 180-gr. TBT	2.85	3012	26	11	----	1.28

NOTES: Accuracy is the average of three, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured eight feet from the guns' muzzles.

grains of IMR 4350 was a safe load for a 150-grain bullet. Again firing incrementally stepped charges with all three propellants, I concluded the Powley prediction was safe to use to charge all of the record test loads.

For the 300 WSM, I loaded Federal 180-grain Trophy Bonded Tip bullets. Hodgdon's load data for the same weight and similarly constructed Swift Scirocco bullet indicated 64 grains of H4350 and 65 grains of IMR 4350 as the maximum charges. Western's data for Accurate 4350 listed 67 grains as the max charge behind a Sierra 180-grain GameKing bullet.

I concluded I would back off 2 grains of Accurate 4350 to accommodate the expected different results caused by firing Federal's stoutly constructed bonded bullet and Sierra's less robust cup-and-core design. After all preliminary test loads were fired, I concluded loading 63.5 grains of each propellant to fire for record was enough.

I did not attempt to optimize the test load for any cartridge. In fact, after recording a disappointing 2-MOA accuracy in my Ruger Model 77 rifle, I belatedly realized the 95-grain Berger VLD Hunting bullet could only be marginally stable in the Model 77's 1:10 twist rate sporter barrel.

I conducted a similar powder dispensing exercise with the three 4350 propellants. The average IMR and Accurate charge weights and variations were almost identical with the same Uniflow volume setting. The H4350 charge weights were about 3 percent greater. Since the H4350 granules appear to be somewhat smaller than the other two powders, I expected less variation and fewer hang-ups as I operated the measure. Not so…all three averaged about one stoppage in five cycles.

The H4350 propellant is one of Hodgdon's Extreme powders, and that means its performance is less sensitive to ambient temperature. Therefore, velocity deltas in hot and cold hunting conditions are significantly reduced compared to the similarly labeled IMR and Accurate powders.

IMR 4166 AND IMR 4451

I JUST COULDN'T COMPLETE THIS REPORT WITHOUT COMMENTING ON THE fairly new IMR 4166 and IMR 4451 Enduron propellants. In these examples, Enduron technology was developed to complement the vintage IMR 4064 and IMR 4350, respectively, and these powders are chemically formulated to significantly reduce copper fouling (making it easier to clean the barrel), ensure ignition-velocity stability over a broad temperature range (lowering velocity variation), and achieve improved propellant load density (eliminating compressed loads). They are also formulated with eco-friendly ingredients.

I chose to fire a five-round batch of test loads for each cartridge loaded with the Enduron propellants and record velocity results to compare with the corresponding 4064 and 4350 data. Because of previous extensive test data, I charged the Enduron loads at max or near-max levels listed in the Hodgdon *Annual Manual.*

The IMR 4064, Accurate 4064, and IMR 4166 test loads recorded very similar results. Propellant lot-to-lot burn rate differences would be expected to cause similar velocity variation. Substituting a different Large Rifle primer may also cause similar minor ballistic performance differences. That's the purpose for and challenge of reloading—experimenting with suitable components to develop the best load for your firearm.

The IMR 4451 results suggest that its burn rate is a bit faster than IMR 4350, but the 300 WSM data indicates IMR 4451 performed almost identically to Accurate 4350 in my Kimber rifle.

IMR 4166 & IMR 4451

CASE	PRIMER	POWDER	CHARGE (GRS.)	BULLET	COL (IN.)	VEL. (FPS)	E.S. (FPS)	S.D. (FPS)	50-YD. ACC. (IN.)	100-YD. ACC. (IN.)
250 Savage Savage 99, 24-in. Barrel, Iron Sights										
Hornady	WLR	IMR 4166	35.5	Speer 87-gr. Spitzer	2.50	2985	11	4	1.49	----
308 Win. Ruger Precision Rifle, 20-in. Barrel, Nikon 4-16X Scope										
Lapua	WLR	IMR 4166	43.0	Berger 175-gr. VLD Target	2.81	2611	23	8	----	2.98
8mm Mauser Turkish Mauser M98, 29.5-in. Barrel, Iron Sights										
PPU	WLR	IMR 4166	45.1	Hornady 195-gr. InterLock SP	3.10	2494	29	11	0.88	----
243 Win. Ruger Model 77, 22-in. Barrel, Redfield 2-7X Scope										
Lapua	WLR	IMR 4451	43.0	Berger 95-gr. VLD Hunting	2.72	3028	31	14	----	2.00
280 Ackley Improved Legendary Model 704, 25-in. Barrel, Meopta 4.5-14X Scope										
Nosler	WLR	IMR 4551	55.0	Nosler 150-gr. Partition	3.30	2923	21	8	----	1.48
300 WSM Kimber 8400, 24-in. Barrel, Leupold 2.5-8X Scope										
Winchester	Fed. 215	IMR 4451	63.5	Federal 180-gr. TBT	2.85	3044	35	13	----	1.52

NOTES: Accuracy is the average of three, five-shot groups fired from a sandbag benchrest. Velocity is the average of 10 rounds measured eight feet from the guns' muzzles.

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.


QUALITY • ACCURACY • RELIABILITY
AMERICAN MADE FOR 60 YEARS
Superior Plated Bullets
1961
60
2021
YEARS
berrysmfg.com
BERRY'S®
1-800-269-7373

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	•				•										
Titewad	•				•										
Hi-Skor 700-X	•				•	•									
International	•	•			•		•								
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 TARGET	•	•	•	
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	•	•	•	•		
760		•		•	•	
StaBALL 6.5	•	•		•	•	
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				•	•	
Magnum			•	•		
LRT					•	•

RELATIVE BURN RATES FROM FASTEST TO SLOWEST

1. NORMA R1
2. VihtaVuori N310
3. Accurate Nitro 100
4. Alliant e3
5. Hodgdon TITEWAD
6. Ramshot Competition
7. Alliant Red Dot
8. Alliant Promo
9. Hodgdon CLAYS
10. Alliant Clay Dot
11. Hodgdon Hi-Skor 700-X
12. Alliant Bullseye
13. Hodgdon TITEGROUP
14. Alliant American Select
15. Ramshot Silhouette
16. Accurate Solo 1000
17. Alliant Green
18. Ramshot True Blue
19. Winchester WST
20. Hodgdon Trail Boss
21. Winchester Super Handicap
22. Hodgdon INTERNATIONAL
23. VihtaVuori N320
24. Accurate No. 2
25. Ramshot Zip
26. Winchester 231
27. Alliant 20/28
28. Winchester 244
29. Alliant Unique
30. Hodgdon UNIVERSAL
31. Alliant Power Pistol
32. VihtaVuori N330
33. Alliant Herco
34. Winchester WSF
35. VihtaVuori N340
36. Accurate No. 5
37. Hodgdon HS-6
38. Winchester AutoComp
39. Hodgdon CFE Pistol
40. VihtaVuori 3N37
41. VihtaVuori N350
42. VihtaVuori 3N38
43. Winchester 572
44. Alliant Blue Dot
45. Accurate No. 7
46. Alliant Pro Reach
47. Hodgdon LONGSHOT
48. Alliant 410
49. Accurate TCM
50. Alliant 2400
51. Ramshot Enforcer
52. VihtaVuori N105
53. Accurate No. 9
54. Accurate 4100
55. Alliant Steel
56. NORMA R123
57. VihtaVuori N110
58. Hodgdon LIL'GUN
59. Hodgdon H110
60. Winchester 296
61. IMR 4227
62. Alliant Power Pro 300-MP
63. Accurate 5744
64. Accurate 1680
65. Accurate LT-30
66. Hodgdon CFE BLK
67. NORMA 200
68. Accurate 2200
69. Alliant Reloder 7
70. Accurate LT-32
71. IMR 4198
72. Hodgdon H4198
73. VihtaVuori N120
74. Alliant Power Pro 1200-R
75. Hodgdon H322
76. Accurate 2015BR
77. Alliant Reloder 10X
78. VihtaVuori N130
79. IMR 3031
80. VihtaVuori N133
81. Hodgdon BENCHMARK
82. Hodgdon H335
83. Ramshot X-Terminator
84. Accurate 2230
85. Accurate 2460
86. IMR 8208 XBR
87. Alliant AR Comp
88. Ramshot TAC
89. Alliant Power Pro Varmint
90. Hodgdon H4895
91. VihtaVuori N530
92. IMR 4895
93. VihtaVuori N135
94. Alliant Reloder 12
95. Accurate 2495
96. IMR 4166
97. IMR 4064
98. NORMA 202
99. Accurate 4064
100. Accurate 2520
101. Alliant Reloder 15
102. NORMA 203B
103. VihtaVuori N140
104. Hodgdon VARGET
105. Winchester 748
106. Hodgdon BL-C(2)
107. Hodgdon CFE 223
108. Alliant Power Pro 2000-MR
109. Hodgdon LEVERevolution
110. Hodgdon H380
111. Ramshot Big Game
112. VihtaVuori N540
113. Alliant Power Pro 4000-MR
114. Winchester 760
115. VihtaVuori N150
116. Accurate 2700
117. IMR 4350
118. IMR 4451
119. Alliant Reloder 16
120. Hodgdon H4350
121. Alliant Reloder 17
122. Accurate 4350
123. NORMA 204
124. Hodgdon HYBRID 100V
125. Winchester StaBALL 6.5
126. VihtaVuori N550
127. Alliant Reloder 19
128. IMR 4831
129. Ramshot Hunter
130. Accurate 3100
131. VihtaVuori N160
132. NORMA 205
133. Hodgdon H4831 & H4831SC
134. Hodgdon SUPERFORMANCE
135. IMR 4955
136. NORMA MRP
137. Alliant Reloder 22
138. NORMA MRP2
139. VihtaVuori N560
140. Alliant Reloder 23
141. VihtaVuori N165
142. IMR 7828SC
143. Alliant Reloder 25
144. VihtaVuori N170
145. Accurate Magpro
146. IMR 7977
147. Alliant Reloder 26
148. Hodgdon H1000
149. Ramshot Magnum
150. Hodgdon RETUMBO
151. IMR 8133
152. Ramshot LRT
153. VihtaVuori N570
154. Alliant Reloder 33
155. VihtaVuori 24N41
156. Hodgdon H50BMG
157. Hodgdon US869
158. Alliant Reloder 50
159. VihtaVuori 20N29

HODGDON Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate

TITEWAD® Through advanced technology, Hodgdon Powder Co. has produced a superior flattened spherical shotgun powder. Unlike spherical propellants in the past, TITEWAD features low charge weights, mild muzzle report, minimum recoil and reduced residue for optimum ballistic performance. This outstanding propellant designed for 12 ga. only meters superbly and is ideal for 7/8-, 1- and 1 1/8-oz. loads. As the name implies, "a little goes a long way!"

» **CLAYS®** Introduced in January 1992, CLAYS has "taken the clay target world by storm." It is the most clean-burning, consistent 12-ga. 7/8-oz., 1-oz. and 1 1/8-oz. powder available today. The superb burning characteristics of this powder produce soft, smooth recoil; ultra-clean burning; mild muzzle report; and excellent patterns. These features transfer directly to handgun applications where target shooting is the main goal. The 45 ACP and 38 Special are only two of the cartridges where CLAYS provides "tackdriving" target accuracy with flawless functioning.

Hi-Skor 700-X™ This extruded flake powder is ideally suited for shotshells in 12 and 16 gauge 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® Trail Boss was designed specifically for low-velocity lead bullets suitable for Cowboy Action shooting. It is primarily a pistol powder but has some application in rifles. It is based on a whole new technology that allows very high loading density, good flow through powder measures, stability in severe temperature variation and, most important, additional safety to the handloader.

» **INTERNATIONAl®** INTERNATIONAL is the second in the CLAYS series of powders. It is positioned in burning speed to accommodate 12-ga., 2¾" light, medium and heavy 1 1/8-oz. loads, with some very nice 1-oz. listings. Also, it works splendidly in 20-ga., 7/8-oz. target and light field loads. As with CLAYS, clean burning and flawless functioning are the rule.

TITEGROUP® As the name implies, this new spherical propellant was designed for accuracy. Because of the unique design, this powder provides flawless ignition with all types of primers, including the lead-free versions. Unlike pistol powders of the past, powder position in large cases (45 Colt, 357 Magnum and others) has virtually no effect on velocity and performance. Cowboy Action, Bullseye and Combat Shooters should love this one! TITEGROUP has it all: low charge weight; clean burning; mild muzzle report; and superb, uniform ballistics.

HP-38® 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®** UNIVERSAL handles the broadest spectrum of cartridges for both pistol and shotgun. 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 burning and uniformity are part of its attributes.

CFE™Pistol New in 2014, this excellent spherical pistol propellant utilizes our CFE formula, Copper Fouling Eraser, virtually eliminating copper fouling, plus providing top velocities with clean burning and minimal muzzle flash. For competitive shooters and handloaders seeking the perfect powder for target or self-defense loads, CFE Pistol provides optimum performance in cartridges like the 9mm Luger, 38 Super, 40 S&W, the venerable 45 ACP and many more.

HS-6® HS-6 is a fine spherical propellant that has wide application in pistol and shotshell. In pistol, 9mm, 38 Super, 40 S&W and 10mm Auto are some of the cartridges where HS-6 provides top performance. In shotshell, HS-6 yields 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 spherical propellant.

LONGSHOT® This new spherical shotshell powder is the most versatile heavy field propellant Hodgdon has ever produced. Great field loads in 10 ga., 12 ga., 16 ga., 20 ga. and 28 ga. are shown herein. This propellant provides true magnum velocities with superb patterns. In addition, LONGSHOT is the best choice for those competitors shooting "race" games, such as "Buddy" shoots, "Annie Oakleys" and more.

H110® H110 is the spherical powder that screams, "No wimps, please!" It delivers top velocities with top accuracy in the 44 Magnum, 454 Casull and 475 Linebaugh. Silhouette shooters claim it is the most accurate 44 powder they have ever used. In addition, H110 is the choice for the minuscule 410 Bore shotgun. It handles all 2½", 1/2-oz. loads as well as all 11/16-oz. loads for the 3" version.

LIL' GUN® The 410 Bore has long been difficult to load due to shortcomings in powder fit and metering, along with poor burning characteristics. Not anymore! LIL' GUN was designed to fit, meter and perform flawlessly in the 410 Bore. 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 Burning Rate

CFE BLK™ This new spherical propellant was designed expressly for the 300 Remington AAC Blackout cartridge. It provides full function of AR-type rifles throughout the range of bullet weights and is perfect for those subsonic reduced loads. In addition to being outstanding in the 300 Blackout, it performs beautifully in many smaller-capacity cartridges—in particular, varmint specials like the 17 Hornet, 17 Ackley Hornet, 218 Bee, 221 Fireball and many more. It also yields top performance in the 6.8 Remington SPC and the 7.62x39mm Russian cartridge. This fine powder meters like a dream and leaves no copper residue, extending accuracy for longer shooting periods and making cleanup quick and easy. It is truly a remarkable new propellant!

HODGDON Smokeless Rifle Powders (Continued)

In Order of Approximate Burning Rate

» **H4198™** This Extreme Extruded propellant has gone through some changes since its inception, all the time maintaining the same important burning speed of the past. The kernels were shortened for improved metering, and necessary elements were added to make it extremely insensitive to hot/cold temperatures. H4198 is outstanding in cartridges like the 222 Remington, 444 Marlin and the 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 the 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 precision cartridges. As such, it is ideally suited for benchrest and small varmint cartridges like the 6mm PPC, 22 PPC, 6mm BR, 22 BR, 223 Remington and 222 Remington. Additionally, it performs superbly in the 308 Winchester with light match bullets like the 147-gr. and 155-gr. versions. With small, easy-metering granules, competitors will love how it flows through progressive presses.

H335® H335 originated as a military powder, used for the 5.56 NATO, or 223 Remington as handloaders know it. 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®** H4895 is a most versatile rifle powder. This member of the Extreme Extruded line is great 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 of Hodgdon's revolutionary Extreme Extruded Powders, VARGET features small extruded grains for uniform metering, insensitivity to hot/cold temperatures and higher energy for improved velocities over other powders in its burning-speed class. Easy ignition and clean burning are other features that translate into superb accuracy; higher scores; and more clean, one-shot kills. Outstanding performance and velocity can be obtained in such popular cartridges as the 223 Remington, 22-250 Remington, 308 Winchester, 30-06, 375 H&H and many more.

BL-C(2)® BL-C(2) is a spherical powder that began as a military powder used in the 7.62 NATO, commonly known as the 308 Winchester. When the powder was first introduced to the handloader, benchrest shooters 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, plus many more.

CFE™ 223 Introduced in January 2012, this versatile spherical rifle propellant incorporates in its formula CFE, Copper Fouling Eraser. This ingredient, originally used in military propellant, greatly deters copper fouling. It contributes to longer periods of top accuracy with less barrel cleaning time. Being a spherical powder, metering is superbly accurate. CFE 223 yields top velocities in many cartridges, such as the 204 Ruger, 223 Remington/5.56mm NATO, 22-250 Remington and the 308 Winchester/7.62mm NATO, plus many, many more. Match, Varmint and AR shooters will love this one!

LEVEREVOLUTION® Hodgdon® Powder Company and Hornady® Manufacturing have teamed together to answer the frequently asked reloading question: "Can I buy the powder used in Hornady LEVERevolution factory ammunition?" Yes, this is the same spherical propellant used in Hornady's innovative and award-winning high-performance factory ammunition. This fabulous propellant meters flawlessly and makes lever-action cartridges like the 30-30 Winchester yield velocities in excess of 100 fps over any published handloads, with even greater gains over factory ammunition. Other cartridges include the 35 Remington, 308 Marlin Express, 338 Marlin Express and the 25-35 Winchester. The list of cartridges and bullets is limited with this highly specialized powder, but where it works, it really works!

H380® H380 was an unnamed spherical rifle propellant when the late Bruce Hodgdon first used it. When 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, 257 Roberts and other fine varmint cartridges.

» **H4350™** The burning speed of this Extreme Extruded propellant has been known to shooters for decades. During that time, Hodgdon has modernized H4350 by shortening the grains for improved metering and making it insensitive to hot/cold temperatures. H4350 is great in such cartridges as the 243 Winchester, 6mm Remington, 270 Winchester, 338 Winchester Magnum and many more. For magnums with light to moderate-weight bullets, it can't be beat!

HYBRID 100V™ This excellent new product is the result of combining the technologies of spherical powders and extruded propellants. The chemistry of a spherical powder is combined with the geometry of an extruded propellant, creating a smooth-metering, super-short-granule, extruded-shaped propellant with high energy. HYBRID 100V has a burn speed between H4350 and H4831, yielding superb performance in such popular calibers as 270 Winchester, 243 Winchester Super Short Magnum, 7mm Remington Magnum, 300 Winchester Magnum and dozens more.

» **H4831®** It is probably safe to say more big game has been taken with H4831 than any other powder. Bruce Hodgdon was the first supplier to introduce this popular burning powder in 1950. Since that time, it has become a favorite for cartridges such as the 270 Winchester, 25-06 Remington, 280 Remington and 300 Winchester Magnum. As an Extreme Extruded propellant, it shares the fine quality of insensitivity to hot/cold temperatures, as well as superb uniformity from lot to lot.

» **H4831SC®** Ballistically, this Extreme Extruded powder is the exact copy of H4831. Physically, it has a shorter grain size and therefore the designation SC, or short cut. The shorter, more compact kernels allow the powder to flow through powder measures more smoothly, helping to alleviate the constant cutting of granules. With the smoother flow characteristics comes more uniform charge weights, while the individual grains orient more compactly, creating better loading density.

SUPERFORMANCE™ This is another of the spherical powders Hodgdon® Powder Company and Hornady® Manufacturing introduced to answer the frequently asked reloading question: "Can I buy the powder used in Hornady Superformance factory ammunition?" Superformance delivers striking velocities in cartridges like the 22-250 Remington, 243 Winchester and the 300 Winchester Short Magnum. Velocities well in excess of 100 fps over the best published handloads and even larger gains over factory ammunition! Because this propellant is tailored for specific applications, the number of cartridges and bullets is limited, but where it works, it really works!

» **H1000®** This very slow-burning Extreme Extruded powder is perfect for highly overbored magnums like the 7mm Remington Magnum, 7mm STW and the 30-378 Weatherby. In addition, with heavy bullets, H1000 gives top velocity and performance in such cartridges as the 6mm-284, 257 Weatherby, 270 Winchester and 300 Winchester Magnum. In a short period of time this powder has achieved considerable notoriety among long-range match shooters.

» **RETUMBO®** This magnum powder was designed expressly for the really large overbored 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 Powder, making it perfect for big-game hunting under all types of conditions.

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

» **H50BMG™** As the name implies, this new-generation Extreme Extruded rifle propellant is a clean-burning powder designed expressly for the 50-caliber BMG cartridge. Because it shares the same technology as VARGET, 50 BMG displays a high degree of thermal stability in temperature extremes. Tests have conclusively proven that H50BMG yields very low extreme spreads in velocity and pressure. All this translates into small groups at extended ranges.

IMR Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate

IMR TARGET™ The first powder in this new family is a fast-burning pistol powder. This fine-grained, small-flake powder meters superbly, providing very precise loads in even the smallest pistol cartridges like the 25 ACP! Performance in match cartridges like 38 Special and 45 ACP is first rate. Target loads for the popular Cowboy Action game are perfect for this propellant, where reduced loads are absolutely necessary. For the shooter wanting competition accuracy in a great pistol powder, this is it!

IMR 4227™ This 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™ The latest in the versatile IMR line of fine propellants, this accurate-metering, super-short-grain extruded rifle powder was designed expressly for match, varmint and AR sniper cartridges. Ideally suited for cartridges such as the 223 Remington/5.56 NATO, 308 Winchester/7.62mm NATO and the 6mm PPC, shooters will find IMR 8208 XBR totally insensitive to changes in temperature while yielding max velocities and "tackdriving" accuracy. Clearly, it's the competitor's choice and the Varmint Hunter's "dream powder."

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 Smokeless Rifle Powders (Continued)

In Order of Approximate Burning Rate

IMR 4166® This fine, extruded propellant is the first in the series of Enduron® Technology powders. The main features of the Enduron® series are copper fouling eliminator, insensitivity to temperature changes, ideal loading density and being environmentally friendly. IMR 4166 is the perfect burn speed for cartridges like the 308 Win./7.62mm NATO, 22-250 Remington, 257 Roberts and dozens more. Positively, a versatile, match-grade propellant.

IMR 4064® 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. Versatility with uniformity and accuracy.

IMR 4350™ 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® Another new Enduron® extruded powder, IMR 4451 gives top performance in the venerable 30-06, 270 Winchester and 300 WSM, to name just a few. This propellant is ideally suited for many mid-range burn speed cartridges. Simply scroll through the list of cartridges on the Hodgdon Reloading Data Center and see how many of your favorite cartridges are covered with this fine powder. Once the shooter tries this one in that favorite cartridge, the search is over!

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 new Enduron® extruded powder is a top performer with such great cartridges as the 270 Winchester, 25-06 Remington, 280 Remington, 300 Winchester Magnum and many, many more. It falls directly between IMR 4451 and IMR 7977 in burn speed, providing top performance for all such cartridges used for big game. As with all Enduron® powders, it is temperature insensitive and clean burning, minimizes copper fouling and is totally safe for the environment. Adding this propellant to the Enduron® line filled in an important place in the chart. IMR 4955, plus the original three, provides top loading for cartridges from 223 Remington to the massive 500 Nitro Express Magnum.

IMR 7828 SSC™ This magnum rifle powder has exactly the same burn rate as standard IMR 7828 and uses the same data. However, due to the super-short kernels, metering is virtually as good as a spherical powder. This allows up to 4 percent more powder space in the case and in many loads yields more velocity than standard 7828. Such loads are marked with an asterisk in the data to show where standard 7828 will not fit.

IMR 7977® The slowest burn rate Enduron® Technology extruded powder is IMR 7977, and it is a true magnum cartridge propellant. It yields outstanding performance in such cartridges as the 300 Winchester Magnum, 7mm Remington Magnum, 338 Lapua and a host of others. Loading density is perfect for magnums, nicely filling the case at maximum charges, contributing to superb uniformity and accuracy. The 7mm Remington Magnum "never had it so good"!

IMR 8133® The latest IMR Legendary Powder, IMR 8133® is an Enduron® Technology powder. It was designed to provide optimum performance in the large overbored cartridges like the 300 Remington Ultra Mag, 6.5mm-300 Weatherby Magnum, 28 Nosler and a host of other fine magnum cartridges. It provides excellent loading density, copper fouling eliminator, insensitivity to extreme temperature changes, and is environmentally friendly. It is, without equal, the consummate big-game cartridge propellant.

WINCHESTER Smokeless Pistol and Shotgun Powders

In Order of Approximate Burning Rate

WST® The choice for 12-ga. AA duplicate handloads and standard-velocity handgun loads. 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 reload propellants, 231 is a pistol powder 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 new Winchester pistol powder has all the latest features for a mid-range burn speed propellant. Winchester 244 Ball powder is a WINCLEAN® product with a host of attributes, including reduced copper fouling, clean burning, and precise metering. The versatility of this fine powder can be found in 9mm Luger, 45 ACP, 38 Special and many, many more pistol cartridges. From plinking rounds to top competitive target loads, 244 is a "clean" winner!

AUTOCOMP™ This new Winchester powder is perfect for the top target game semiauto pistols. In such cartridges as the 9mm, 38 Super, 40 S&W and the ever-popular 45 ACP, maximum velocities with excellent accuracy are the norm. AutoComp ranks tops in efficiency by achieving maximum performance with .3 to .5 grain less powder. All this with less muzzle flash and clean burning!

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. Excellent propellant for action pistol applications.

572® This new Winchester powder is strategically designed to do a myriad of jobs. First, it has the correct burn rate to create the famous 3¼-dram equivalent, 1¼-oz., 1,330-fps 12-gauge load originated by Winchester. And it does it with any brand case! Back Fence competitors and pheasant hunters will be delighted. Now, that is just one application, and it goes on to provide superb clay target loads in 20 gauge and 28 gauge, top field loads in both, and outstanding field loads for the wonderful 16 gauge. It even is used to duplicate the always-popular 28-gauge WAAHS target load. In addition, 572 has a vast number of pistol applications, ranging from the 25 ACP to the 45 ACP and all popular calibers in between. This is one positively versatile and useful propellant.

296® This propellant was developed for Winchester factory-loaded ammunition for 357 Magnum, 44 Magnum and 410 Bore. 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® 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.

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

StaBALL™ 6.5, BALL Powder® Never before, has a BALL powder propellant been temperature insensitive, but now StaBALL 6.5 is stable in all conditions, hot or cold! Case fill/loading density is 93-100% in all cartridges appropriate for the burn speed, creating the perfect condition for small standard deviations in velocity and pressure, a key element in achieving benchrest accuracy. Like all spherical powders, it meters precisely. It provides speed that eclipses all powders in its burn speed class (30-200 fps), along with a copper fouling reducing additive. Stability, precision and speed makes Winchester's new StaBALL 6.5 powder the "Best of the Best"!

Top performance is achieved in these cartridges, 6 Creedmoor, 6.5 Creedmoor, 270 Win., 7mm-08 Rem., 375 H&H, plus many, many more. Long Range competitive shooters and hunters will find this is THE powder for top performance at all ranges and all conditions!

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-gauge 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. Low recoil and low flash make No. 2 well suited for use in short-barrel, concealed-carry applications. This propellant is a non-position-sensitive powder, and low charge weights make it an economical and versatile choice for high-volume handgun shooters. Made in the USA.

ACCURATE No. 5® is a fast-burning, double-base, spherical handgun propellant. It is extremely versatile and can 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 is also a cost-effective solution in larger magnum handgun calibers. Made in the USA.

ACCURATE TCM® was created in 2017, when Western Powders partnered with Armscor International to provide a canister-grade propellant for their innovative 22 TCM cartridge. Producing 2,000 fps at the muzzle with virtually no recoil, this accurate and fun little cartridge brings handgun performance to a new level for small-game hunting and plinking. 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 Magnum, 41 Magnum, and 44 Magnum. It is particularly well-suited to the 357 Sig and 10mm Auto, providing high velocities and excellent case-fill. No. 9 can also be used with large magnums, such as the 460 S&W and 500 S&W, for economical target loads. Made in the USA.

ACCURATE 4100 is a double-base, slow-burning spherical powder with exceptional metering characteristics. 4100 is an excellent choice for high-performance, full-power loads in magnum handgun cartridges. It is ideally suited for the 357 Magnum, 41 Magnum, 44 Magnum, 454 Casull, 460 S&W, and 500 S&W. Made in Belgium.

ACCURATE Smokeless Rifle Powders

In Order of Approximate Burning Rate

ACCURATE 5744® is an extremely fast-burning, double-base, extruded powder. This unique powder can be used in a wide range of rifle calibers and magnum handguns. 5744 is characterized by excellent ignition and consistency over a very wide performance range. Low bulky 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 and the 7.62x39, as well as other low-capacity rifle cartridges. 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 its development phase, LT-30 was used to win numerous matches, even claiming a world record along the way. With a burn rate similar to 4198, this single-base fine-grained powder is at home in many smaller-capacity cartridges from the 6.5 Grendel to the 222 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® is a fine-grained extruded powder that was developed for 6mm PPC benchrest competitors. Already a proven match winner, LT-32's excellent shot-to-shot consistency and low standard deviations provide the ultimate competitive edge. Due to its small grain size, LT-32 flows like a spherical powder and allows for very precise handloading. It also offers outstanding accuracy in varmint and tactical cartridges, including the 223 Remington and the 308 Winchester. LT-32 is the perfect choice for extreme accuracy.

ACCURATE 2015® is a fast-burning, single-base, extruded rifle powder that performs very well in small to medium varmint calibers (223 Remington, 204 Ruger). 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 Winchester Magnum). 2015 offers excellent ignition characteristics and shot-to-shot consistency. Made in Canada.

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- and medium-caliber cartridges, including the 308 Winchester. 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 the 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 the 223 Remington to 308 Winchester and for light bullets in the 30-06 Springfield. 2460 is within the threshold limit for M14 systems. Made in the USA.

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 Winchester NRA High Power shooting disciplines, as well as heavy-bullet 223 Remington target applications. 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. 4064 is a popular 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. 2520 is our "Camp Perry" powder and is extremely popular with many service shooters. 2520 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. 2700 provides excellent velocities and performance in the Winchester Super Short Magnum cartridges. Made in the USA.

ACCURATE 4350® is a short-cut, single-base, extruded rifle powder in the extremely popular 4350 burn range. A highly versatile powder, 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. This short-cut extruded powder meters accurately, resulting in excellent shot-to-shot consistency. Made in Canada.

ACCURATE MAGPRO is a slow-burning, double-base, spherical rifle powder developed specifically for the Short Magnums of both Winchester (WSM) and Remington (SAUM). This powder excels in the 6.5x284, 270 WSM, and 7mm WSM. MAGPRO is an excellent choice for belted cartridges, such as the 300 Winchester Magnum. Consistent performance can be expected from the excellent metering properties of MAGPRO. 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-gauge target shooters. A double-base modified (flattened) spherical propellant, it is designed for the 12-gauge 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, such as 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 using high-volume, progressive reloading equipment. It works well with cast bullets and is also an excellent choice for 9mm law enforcement rounds. 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 benefit 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, .20-caliber cartridges, 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 is perfect for elk country cartridges, such as the 270 Winchester, 300 WSM, and 338 Winchester Magnum. It's the only spherical powder in the popular 4350 burn range, making it an ideal powder for a wide range of cartridges. The excellent flow characteristics allow accurate metering and consistent shot-to-shot results. Made in Belgium.

RAMSHOT MAGNUM is the ultimate high-performance magnum rifle powder. It provides outstanding performance from the popular 7mm Remington Magnum and 300 Winchester Magnum through the Remington Ultra Mags and the 338 Lapua. It is a double-base, spherical propellant that is the number one choice for high-performance, overbore 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 offers high load densities and low standard deviations for superior accuracy. Hunters who prefer the advantages of overbore magnums like the 257 Weatherby or 30 Nosler will find that LRT meters more easily and produces flatter trajectories than rival propellants.

LEGEND

BRANDS

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

PRIMERS

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

DATA

C	Compressed Powder Charge

BULLETS

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

17 HORNET

Barrel: 24″ Twist: 1:9″ Trim: 1.340″

Bullet: 15.5 GR. HDY NTX Dia: .172″

Case: Hornady Primer: FED 205M, SR Match Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN SR Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-5744	10.1	3097	42,800 PSI	11.2	3412	47,500 PSI
A-1680	10.0	3183	44,300 PSI	11.2	3493	49,700 PSI

Case: Hornady Primer: FED 205M, SR Match Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	8.0	3173	40,900 PSI	8.7	3301	45,100 PSI

Bullet: 25 GR. HDY V-MAX Dia: .172″

Case: Hornady Primer: WIN SR Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-5744	9.4	2786	44,100 PSI	10.5	3070	49,300 PSI
A-1680	9.0	2724	44,100 PSI	10.0	2983	49,000 PSI

Case: Hornady Primer: FED 205M, SR Match Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
H4198	10.3	2983	34,900 PSI	11.1C	3187	42,500 PSI
Lil'Gun	8.6	3125	45,000 PSI	8.9	3195	48,000 PSI
IMR 4227	8.5	2856	40,900 PSI	9.3	3032	45,700 PSI

Bullet: 30 GR. BER HP Dia: .172″

Case: Hornady Primer: FED 205M, SR Match Col: 1.715″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H335	11.8	2718	36,700 PSI	12.5C	2866	44,000 PSI
H322	11.7	2853	40,500 PSI	12.5C	3020	48,000 PSI
H4198	10.0	2815	38,700 PSI	10.8C	3024	47,300 PSI

204 RUGER

Barrel: 24″ Twist: 1:12″ Trim: 1.840″

Bullet: 24 GR. HDY NTX Dia: .204″

Case: REM Primer: WIN SR Col: 2.245″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-5744	18.7	3455	43,100 PSI	25.0	4395	57,500 PSI

Case: Hornady Primer: FED 205M, SR Match Col: 2.245″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: REM Primer: WIN SR Col: 2.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
X-Terminator	26.7	4050	53,400 PSI	29.7	4435	59,400 PSI
A-2230	26.7	4050	53,400 PSI	29.7	4435	59,400 PSI
A-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: FED 205M, SR Match Col: 2.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
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
IMR 4166	26.7	3869	49,500 PSI	28.7C	4064	55,500 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: REM Primer: WIN SR Col: 2.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	26.6	3680	53,200 PSI	29.5	4089	59,000 PSI
A-2460	25.3	3652	51,700 PSI	28.1	3968	57,500 PSI
A-2495	25.2	3560	51,500 PSI	28.0	3867	57,200 PSI
X-Terminator	24.7	3564	50,600 PSI	27.5	3960	56,300 PSI
A-2230	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
A-5744	17.6	3178	43,000 PSI	23.4	3978	57,300 PSI

Case: Hornady Primer: FED 205M, SR Match Col: 2.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
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
IMR 4166	26.2	3589	47,500 PSI	28.5C	3881	57,400 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: REM Primer: WIN SR Col: 2.255″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
X-Terminator	23.4	3270	50,700 PSI	26.0	3633	56,300 PSI
A-2230	23.4	3270	50,700 PSI	26.0	3633	56,300 PSI

Case: Hornady Primer: FED 205M, SR Match Col: 2.255″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 8208 XBR	26.0	3586	48,300 PSI	27.3	3754	56,300 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 3031	24.0	3456	46,300 PSI	25.6C	3694	56,600 PSI
IMR 4166	24.7	3314	48,000 PSI	26.9	3578	57,300 PSI
H335	25.0	3508	47,300 PSI	26.8	3738	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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Benchmark	24.0	3419	45,200 PSI	25.7	3646	55,400 PSI
H322	23.0	3319	41,500 PSI	25.1	3639	55,900 PSI

Bullet: 50 GR. BER HPBT Dia: .204″

Case: Hornady Primer: FED 205M, SR Match Col: 2.300″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	25.2	3279	54,400 PSI	26.8	3370	55,700 PSI
BL-C(2)	25.0	3089	42,900 PSI	27.0	3334	54,500 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
IMR 4895	24.0	3092	45,400 PSI	26.2C	3344	56,000 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
IMR 4166	22.9	3007	47,800 PSI	24.9	3237	57,300 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″

Bullet: 30 GR. BAR VG FB Dia: .224″

Case: WIN Primer: WIN SR Col: 1.750″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	11.1	2807	33,000 CUP	12.3	3150	41,500 CUP
H110	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

Bullet: 35 GR. HDY V-MAX Dia: .224″

Case: REM Primer: REM 6 1/2, SR Col: 1.723″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	12.1	2516	37,600 PSI	13.5	2860	41,900 PSI
No. 11 FS	10.7	2731	39,800 PSI	12.6	3101	46,900 PSI

Case: WIN Primer: WIN SR Col: 1.725″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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. NOS BT Dia: .224″

Case: REM Primer: REM 6 1/2, SR Col: 1.720″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-5744	9.2	2092	38,800 PSI	9.8	2307	41,300 PSI
Enforcer	8.1	2298	37,900 PSI	9.0	2553	42,100 PSI

Bullet: 40 GR. SPR SP Dia: .224″

Case: WIN Primer: WIN SR Col: 1.725″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN SR Col: 1.850″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN SR Col: 1.750″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4198				10.5C	2010	20,100 CUP

Bullet: 50 GR. HDY SPSX Dia: .224″

Case: REM Primer: REM 6 1/2, SR Col: 1.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	10.4	2105	38,200 PSI	11.5	2392	42,200 PSI
A-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: WIN Primer: WIN SR Col: 1.850″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Lil'Gun	12.0	2556	31,600 CUP	13.0	2713	35,300 CUP
CFE BLK	11.7	2338	29,200 PSI	13.0C	2512	33,700 PSI
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: WIN Primer: WIN SR Col: 1.850″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Lil'Gun	12.0	2551	39,400 CUP	13.0	2652	42,900 CUP
CFE BLK	11.7	2340	39,400 PSI	13.0C	2520	45,600 PSI
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″

Bullet: 30 GR. BAR VG Dia: .224″

Case: WIN Primer: WIN SR Col: 2.040″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: REM 7 1/2, SR Mag Col: 2.130″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
A-5744	16.5	2921	40,000 PSI	20.7	3599	50,000 PSI

Case: WIN Primer: WIN SR Col: 2.130″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Bullet: 40 GR. NOS BT Dia: .224″

Case: WIN Primer: REM 7 1/2, SR Mag Col: 2.130″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
X-Terminator	22.5	3098	40,300 PSI	25.0	3442	44,800 PSI
A-2460	22.5	3045	43,700 PSI	25.0	3425	48,500 PSI
A-2230	22.2	3038	43,700 PSI	24.7	3410	48,600 PSI
A-2200	20.8	3220	45,000 PSI	23.1	3534	50,000 PSI
LT-32	20.7	3161	44,900 PSI	23.0	3480	49,900 PSI
A-2015	20.7	3085	41,100 PSI	23.0	3422	45,700 PSI
LT-30	19.4	3145	44,800 PSI	21.6	3449	49,800 PSI
A-5744	18.4	3125	44,700 PSI	20.4	3448	49,700 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: 40 GR. SIE HP	**Dia: .224″**					
Case: WIN		**Primer: WIN SR**				**Col: 2.125″**
Benchmark	23.5	3110	34,800 CUP	25.0	3303	40,700 CUP
IMR 8208 XBR	22.5	3049	30,400 PSI	25.0C	3452	42,800 PSI
H335	22.5	3125	38,400 CUP	25.0	3371	44,600 CUP
H322	20.7	2966	31,700 CUP	23.0	3313	44,000 CUP
H4895	20.0	2572	23,300 CUP	24.0C	3133	34,200 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
IMR 4227	14.0	2984	38,100 PSI	16.0	3240	45,200 PSI
Bullet: 45 GR. BAR TSX FB	**Dia: .224″**					
Case: WIN		**Primer: REM 7 1/2, SR Mag**				**Col: 2.130″**
TAC	22.6	3038	45,000 PSI	25.1	3340	50,000 PSI
X-Terminator	22.2	3099	44,900 PSI	24.7	3387	49,900 PSI
A-2230	22.2	3099	44,900 PSI	24.7	3387	49,900 PSI
A-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
A-5744	17.8	2987	45,000 PSI	19.8	3293	50,000 PSI
Bullet: 45 GR. SPR SP	**Dia: .224″**					
Case: WIN		**Primer: WIN SR**				**Col: 2.130″**
BL-C(2)	23.0	2774	28,100 CUP	25.5	3100	37,400 CUP
Benchmark	23.0	3092	39,700 CUP	24.5	3290	44,900 CUP
IMR 8208 XBR	22.2	3121	38,700 PSI	23.6	3327	47,200 PSI
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
H322	20.5	2914	34,600 CUP	22.5	3173	43,600 CUP
H4895	20.0	2510	25,000 CUP	23.8C	3080	35,900 CUP
IMR 3031	20.0	2806	31,000 PSI	22.5C	3226	45,800 PSI
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
W748				25.5	3210	41,000 CUP
Bullet: 50 GR. HDY SP	**Dia: .224″**					
Case: WIN		**Primer: WIN SR**				**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
IMR 4320	22.5	2802	36,900 PSI	25.0C	3100	47,600 PSI
BL-C(2)	22.5	2693	25,500 CUP	25.0	3000	38,600 CUP
Benchmark	22.5	2994	39,200 CUP	24.0	3168	45,800 CUP
IMR 4895	22.0	2845	37,800 PSI	24.0C	3106	47,400 PSI
IMR 8208 XBR	21.9	3006	39,200 PSI	23.3	3201	47,100 PSI
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
H322	20.2	2810	33,300 CUP	22.2	3079	43,200 CUP
H4895	20.0	2466	23,900 CUP	23.8C	3022	36,500 CUP
IMR 3031	20.0	2740	32,000 PSI	22.4C	3156	47,800 PSI
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
W748				24.0	2980	38,000 CUP
Bullet: 50 GR. HDY V-MAX	**Dia: .224″**					
Case: WIN		**Primer: REM 7 1/2, SR Mag**				**Col: 2.130″**
A-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
A-5744	17.1	2874	44,900 PSI	19.0	3157	49,900 PSI
Bullet: 55 GR. SIE SBT	**Dia: .224″**					
Case: WIN		**Primer: REM 7 1/2, SR Mag**				**Col: 2.125″**
A-2520	21.5	2641	39,300 PSI	23.8	2985	43,500 PSI
A-2460	20.7	2740	42,800 PSI	23.0	3027	47,500 PSI
A-2230	20.5	2720	43,600 PSI	22.8	3032	48,500 PSI
A-2015	19.3	2770	42,400 PSI	21.5	3070	47,200 PSI
A-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
A-5744	17.0	2775	44,900 PSI	18.8	3052	49,900 PSI
Bullet: 55 GR. SPR SP	**Dia: .224″**					
Case: WIN		**Primer: WIN SR**				**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
BL-C(2)	22.0	2625	28,200 CUP	24.2	2876	35,400 CUP
IMR 8208 XBR	21.8	2905	38,400 PSI	23.2C	3120	48,500 PSI
IMR 4320	21.5	2647	34,500 PSI	24.0C	2961	46,000 PSI
IMR 4064	21.5	2739	36,500 PSI	23.0C	2954	44,400 PSI
Benchmark	21.5	2843	38,100 CUP	23.2	3052	45,100 CUP
IMR 4895	21.0	2632	32,700 PSI	23.5C	3017	47,300 PSI
H335	20.5	2776	35,300 CUP	23.0	3037	45,600 CUP
H4895	20.0	2569	28,900 CUP	23.5C	3023	39,900 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
W748				24.0	2900	38,000 CUP
Bullet: 60 GR. HDY V-MAX	**Dia: .224″**					
Case: WIN		**Primer: WIN SR**				**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
IMR 8208 XBR	20.5	2737	39,200 PSI	21.8	2920	48,200 PSI
IMR 4320	20.0	2408	32,400 PSI	23.0C	2805	47,800 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
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: WIN		**Primer: REM 7 1/2, SR Mag**				**Col: 2.120″**
A-2520	20.7	2562	40,300 PSI	23.0	2897	44,800 PSI
A-2460	20.4	2600	42,400 PSI	22.5	2910	46,800 PSI
A-2230	20.0	2630	43,100 PSI	22.2	2931	47,800 PSI
A-2015	18.5	2661	42,900 PSI	20.6	2950	47,800 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%.

223 REMINGTON

Barrel: 24″ Twist: 1:12″ Trim: 1.750″

Bullet: 40 GR. NOS BT Dia: .224″

Case: WIN Primer: WIN SR Col: 2.260″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
IMR 4320	26.0	3267	43,500 PSI	27.7C	3456	48,900 PSI
H335	26.0	3299	34,400 CUP	28.0	3572	44,600 CUP
Benchmark	25.3	3404	39,600 CUP	27.3	3666	51,000 CUP
TAC	25.2	3405	49,000 PSI	28.0	3721	54,400 PSI
A-2460	25.0	3406	47,200 PSI	27.8	3722	52,500 PSI
Varget	25.0	3310	34,400 CUP	28.0C	3674	47,200 CUP
H4895	25.0	3204	32,100 CUP	27.5C	3573	44,500 CUP
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
X-Terminator	24.3	3435	48,400 PSI	27.0	3754	53,800 PSI
A-2230	24.3	3435	48,400 PSI	27.0	3754	53,800 PSI
IMR 3031	23.5	3291	42,600 PSI	25.2C	3498	46,200 PSI
H322	23.5	3376	34,600 CUP	25.5	3574	48,000 CUP
A-2200	22.9	3386	48,400 PSI	25.4	3701	53,700 PSI
A-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
A-5744	18.5	3025	49,200 PSI	20.6	3439	54,800 PSI

Bullet: 45 GR. SIE SPT Dia: .224″

Case: WIN Primer: WIN SR Col: 2.240″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
IMR 4320	25.5	3158	40,300 PSI	27.8C	3342	46,300 PSI
Benchmark	25.3	3327	41,100 CUP	27.3	3554	51,100 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
IMR 8208 XBR	24.5	3287	41,700 PSI	26.8	3550	52,000 PSI
TAC	24.3	3276	49,200 PSI	27.0	3580	54,700 PSI
H335	24.0	3280	41,500 CUP	26.2	3456	51,000 CUP
A-2460	23.6	3260	48,900 PSI	26.2	3563	54,300 PSI
X-Terminator	23.2	3296	49,500 PSI	25.8	3602	55,000 PSI
A-2230	23.2	3296	49,500 PSI	25.8	3602	55,000 PSI
H322	23.0	3164	36,000 CUP	25.0	3424	47,400 CUP
IMR 3031	22.7	3065	37,700 PSI	25.2C	3374	45,800 PSI
A-2200	22.0	3219	48,800 PSI	24.4	3518	54,300 PSI
A-2015	21.8	3088	49,500 PSI	24.2	3375	55,000 PSI
H4198	20.0	3009	28,800 CUP	22.0	3472	49,100 CUP
IMR 4198	19.5	3205	44,600 PSI	22.1	3495	52,000 PSI

Bullet: 50 GR. SIE BK Dia: .224″

Case: WIN Primer: WIN SR Col: 2.260″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-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
A-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
A-2230	22.9	3143	48,700 PSI	25.4	3435	54,200 PSI
A-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
A-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: WIN Primer: WIN SR Col: 2.210″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
CFE 223	27.0	3241	41,500 PSI	28.5	3505	53,600 PSI
Varget	26.5	3242	40,800 CUP	27.5C	3383	44,800 CUP
BL-C(2)	26.0	3187	34,200 CUP	28.0	3428	47,100 CUP
IMR 4895	25.2	3118	43,300 PSI	26.7C	3211	45,200 PSI
H4895	25.0	3200	38,300 CUP	27.5C	3468	51,300 CUP
IMR 4320	24.8	3006	39,400 PSI	27.5C	3270	48,900 PSI
H335	24.0	3166	43,000 CUP	26.0	3393	51,700 CUP
Benchmark	24.0	3139	38,600 CUP	26.5	3396	50,400 CUP
IMR 4166	23.9	3026	43,200 PSI	26.2C	3267	51,600 PSI
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
W748				26.0	3200	40,000 CUP

Bullet: 55 GR. BAR TSX FB Dia: .224″

Case: WIN Primer: WIN SR Col: 2.185″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
CFE 223	24.7	3065	44,600 PSI	27.4	3317	54,000 PSI
A-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
IMR 4166	22.9	2845	45,600 PSI	25.5C	3096	53,800 PSI
Varget	22.8	2996	47,600 PSI	24.0C	3134	53,300 PSI
W748	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
IMR 4320	22.1	2805	41,900 PSI	24.6	3078	52,100 PSI
A-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
A-2230	21.7	2905	49,400 PSI	24.1	3195	54,900 PSI
IMR 4895	21.5	2837	43,000 PSI	23.9C	3107	52,300 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
IMR 4064	21.2	2871	43,900 PSI	23.5C	3116	52,500 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
IMR 3031	20.0	2878	46,800 PSI	21.3	3024	52,200 PSI
Benchmark	20.0	2885	47,600 PSI	22.2	3066	52,200 PSI
A-2200	20.0	2798	48,300 PSI	22.2	3058	53,700 PSI
A-2015	19.8	2685	49,400 PSI	22.0	2966	54,900 PSI

Bullet: 55 GR. HDY V-MAX Dia: .224″

Case: WIN Primer: WIN SR Col: 2.260″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-2520	23.0	2934	48,700 PSI	25.6	3207	54,100 PSI
A-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
A-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
A-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
A-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: 55 GR. SPR SP Dia: .224″

Case: WIN Primer: WIN SR Col: 2.200″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
CFE 223	26.0	3133	43,300 PSI	27.8	3329	51,300 PSI
Varget	25.5	3174	41,300 CUP	27.5C	3384	49,700 CUP
BL-C(2)	25.5	3069	37,200 CUP	27.5	3313	48,500 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%.

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H4895	25.0	3176	39,700 CUP	26.0	3315	49,000 CUP
IMR 4166	24.2	2975	44,900 PSI	26.2C	3195	53,200 PSI
Benchmark	24.0	3113	42,600 CUP	25.6	3264	50,000 CUP
IMR 4320	23.5	2874	41,300 PSI	26.1C	3146	50,700 PSI
IMR 4064	23.0	2867	40,300 PSI	25.7C	3201	52,600 PSI
IMR 4895	23.0	2843	39,500 PSI	26.2C	3219	53,200 PSI
H335	23.0	3018	40,800 CUP	25.3	3203	49,300 CUP
IMR 8208 XBR	23.0	3024	42,100 PSI	25.3	3268	53,100 PSI
IMR 3031	21.6	2907	41,100 PSI	24.6C	3233	52,500 PSI
H322	21.0	2841	38,600 CUP	23.0	3106	48,900 CUP
H4198	19.0	2841	34,800 CUP	21.0	3150	47,600 CUP
IMR 4198	18.8	2885	41,600 PSI	20.4	3122	53,600 PSI
W748				26.3	3150	39,000 CUP

Bullet: 60 GR. HDY V-MAX Dia: .224″

Case: WIN Primer: WIN SR Col: 2.250″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE 223	25.0	3007	46,000 PSI	26.7	3176	53,400 PSI
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
H4895	24.0	2918	37,600 CUP	26.0C	3174	50,100 CUP
IMR 4320	23.7	2860	45,400 PSI	25.3C	3006	52,100 PSI
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
H335	22.5	2910	43,700 CUP	24.0	3075	50,600 CUP
IMR 4166	22.0	2777	45,800 PSI	24.2C	2985	53,100 PSI
H322	22.0	2873	40,300 CUP	23.5	3063	49,800 CUP
IMR 8208 XBR	21.5	2857	43,500 PSI	23.6	3057	51,700 PSI
IMR 3031	21.0	2815	42,500 PSI	22.5	3008	51,700 PSI
IMR 4198	18.3	2795	42,500 PSI	19.5	2945	52,000 PSI
H4198	18.0	2747	42,500 CUP	20.0	2953	47,600 CUP

Bullet: 60 GR. NOS PART Dia: .224″

Case: WIN Primer: WIN SR Col: 2.205″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-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
A-2230	21.2	2836	48,900 PSI	23.6	3099	54,400 PSI
A-2460	21.2	2792	48,500 PSI	23.6	3051	53,900 PSI
A-2015	19.4	2628	48,600 PSI	21.5	2872	54,100 PSI
A-2200	19.3	2713	49,100 PSI	21.4	2965	54,500 PSI

Bullet: 62 GR. BAR TSX BT Dia: .224″

Case: WIN Primer: WIN SR Col: 2.255″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-2520	24.1	2864	47,300 PSI	26.8	3140	52,600 PSI
A-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
A-2230	22.1	2833	48,700 PSI	24.5	3100	54,000 PSI
A-2015	20.5	2669	49,300 PSI	22.8	2935	54,900 PSI
A-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	54700 PSI

Bullet: 62 GR. SFT SCIR Dia: .224″

Case: WIN Primer: WIN SR Col: 2.260″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE 223	23.8	2884	44,100 PSI	25.9	3110	53,700 PSI
IMR 4320	22.7	2729	45,200 PSI	24.4	2920	52,700 PSI
BL-C(2)	22.5	2772	45,100 PSI	24.2	2949	52,500 PSI
IMR 4895	22.4	2782	46,900 PSI	24.1	2956	53,400 PSI
W748	22.3	2779	44,600 PSI	24.0	2967	52,400 PSI
Varget	22.1	2773	44,700 PSI	24.1	2974	52,600 PSI
IMR 4064	21.9	2671	42,200 PSI	23.6	2928	53,200 PSI
IMR 4166	21.4	2626	44,000 PSI	23.8C	2890	53,000 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
H322	19.5	2717	45,400 PSI	21.2	2904	52,300 PSI
H335	19.3	2678	47,500 PSI	21.4	2887	53,600 PSI

Bullet: 69 GR. SIE HPBT Dia: .224″

Case: WIN Primer: WIN SR Col: 2.255″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-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
A-2495	20.3	2664	49,100 PSI	22.5	2939	54,400 PSI
A-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
A-2230	20.7	2666	48,800 PSI	23.1	2895	54,400 PSI
A-2015	19.7	2524	49,600 PSI	21.8	2762	54,900 PSI
A-2200	18.5	2613	49,400 PSI	20.6	2822	55,000 PSI

Bullet: 70 GR. SPR SP Dia: .224″

Case: WIN Primer: WIN SR Col: 2.140″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE 223	23.0	2719	45,600 PSI	24.7	2900	53,800 PSI
Varget	23.5	2827	41,000 CUP	26.0C	3024	48,400 CUP
IMR 4320	20.3	2490	38,200 PSI	24.3	2799	52,900 PSI
IMR 4064	19.5	2485	42,000 PSI	23.5C	2831	53,300 PSI
IMR 4166	20.9	2503	42,700 PSI	23.3C	2767	52,900 PSI
BL-C(2)	24.5	2774	41,700 CUP	26.5	2954	50,800 CUP
IMR 4895	20.2	2562	45,700 PSI	24.5C	2917	52,300 PSI
H335	21.0	2520	34,500 CUP	23.5	2867	47,900 CUP
H4895	23.0	2782	40,400 CUP	25.0	2997	50,500 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
Benchmark	20.5	2665	45,200 CUP	22.8	2869	51,000 CUP
H322	19.0	2515	37,500 CUP	23.0	2962	51,200 CUP

Bullet: 75 GR. JLK VLD Dia: .224″

Case: WIN Primer: WIN SR Col: 2.250″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
BL-C(2)	23.0	2646	39,800 CUP	26.0	2858	49,500 CUP
CFE 223	23.0	2680	45,200 PSI	25.0	2876	54,400 PSI
Varget	22.5	2693	40,600 CUP	25.0C	2907	48,400 CUP
H4895	22.5	2696	39,900 CUP	24.5	2905	50,000 CUP
IMR 4320	22.5	2554	39,700 PSI	24.2C	2766	53,200 PSI
IMR 4064	21.0	2531	37,500 PSI	24.0C	2827	53,400 PSI
IMR 4895	21.2	2506	41,200 PSI	23.8C	2786	51,800 PSI
Benchmark	21.5	2610	41,900 CUP	23.5	2829	49,400 CUP
IMR 4166	20.8	2530	45,100 PSI	23.0	2733	53,000 PSI
H335	21.0	2624	41,300 CUP	23.0	2814	50,000 CUP
IMR 8208 XBR	20.0	2538	40,800 PSI	22.7	2804	53,900 PSI
H322	20.0	2594	40,700 CUP	22.0	2785	48,100 CUP
IMR 3031	20.0	2543	40,000 PSI	21.8C	2740	53,500 PSI

Bullet: 77 GR. SIE HPBT Dia: .224″

Case: WIN Primer: WIN SR Col: 2.260″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-2520	21.7	2553	49,300 PSI	24.1	2785	54,800 PSI
TAC	21.1	2483	49,100 PSI	23.4	2759	54,500 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-2460	20.4	2532	48,800 PSI	22.6	2743	54,100 PSI
A-2230	20.0	2531	48,900 PSI	22.2	2731	54,300 PSI
X-Terminator	20.2	2531	49,400 PSI	22.2	2731	54,300 PSI
A-2495	19.6	2487	48,900 PSI	21.8	2741	54,400 PSI
A-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
A-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: WIN Primer: WIN SR Col: 2.380″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-2520	22.4	2536	49,400 PSI	24.9	2792	54,900 PSI
A-2460	21.0	2509	48,800 PSI	23.3	2729	54,100 PSI
A-2230	20.8	2528	49,000 PSI	23.1	2732	54,400 PSI
A-2015	19.5	2349	49,100 PSI	21.7	2582	54,700 PSI
A-2495	19.3	2467	48,800 PSI	21.5	2726	54,400 PSI
A-2200	18.8	2414	49,000 PSI	20.9	2641	54,500 PSI
TAC	21.9	2500	48,900 PSI	24.3	2749	54,300 PSI
X-Terminator	20.8	2528	49,000 PSI	23.1	2732	54,400 PSI

Bullet: 82 GR. BER BT TARG Dia: .224″

Case: WIN Primer: WIN SR Col: 2.375″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
StaBALL 6.5	24.3	2450	43,300 PSI	26.3	2675	53,900 PSI
W760	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
Varget	20.0	2417	44,000 PSI	21.5	2590	52,800 PSI
IMR 4320	20.5	2398	45,000 PSI	22.2	2582	53,300 PSI
IMR 4166	20.3	2461	46,200 PSI	22.5C	2648	53,400 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
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: WIN Primer: WIN SR Col: 2.380″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
StaBALL 6.5	23.6	2374	44,200 PSI	25.7C	2561	53,400 PSI
W760	22.5	2332	41,700 PSI	24.0	2482	52,100 PSI
A-2520	21.2	2374	48,900 PSI	23.6	2586	54,400 PSI
CFE 223	21.0	2391	45,900 PSI	22.8	2554	53,500 PSI
Varget	21.0	2332	46,700 PSI	22.3C	2447	52,100 PSI
IMR 4320	21.0	2338	47,800 PSI	22.5C	2476	53,800 PSI
BL-C(2)	21.0	2291	41,400 PSI	22.5	2491	52,300 PSI
IMR 4895	21.0	2356	46,200 PSI	22.5C	2527	53,000 PSI
TAC	20.5	2313	49,200 PSI	22.8	2546	54,700 PSI
H4895	20.0	2352	47,500 PSI	21.5	2481	53,500 PSI
A-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
A-2230	19.6	2393	49,200 PSI	21.8	2542	54,700 PSI
IMR 4166	19.3	2272	42,600 PSI	21.4C	2510	53,800 PSI
A-2015	19.0	2198	49,100 PSI	21.1	2400	54,500 PSI
A-2495	18.6	2315	49,100 PSI	20.6	2545	54,400 PSI
A-2200	18.1	2235	49,300 PSI	20.1	2446	54,700 PSI
IMR 8208 XBR	18.0	2270	45,600 PSI	19.6	2419	52,800 PSI

22-250 Remington

Barrel: 24″ Twist: 1:14″ Trim: 1.902″

Bullet: 36 GR. BAR VG FB Dia: .224″

Case: WIN Primer: WIN LR Col: 2.350″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Varget	37.8	4061	50,800 PSI	40.2C	4277	59,800 PSI
IMR 4320	37.1	3995	49,800 PSI	39.5	4254	59,600 PSI
IMR 4895	37.1	4063	50,900 PSI	40.0C	4367	63,100 PSI
H4895	36.6	4130	50,700 PSI	39.0C	4376	61,400 PSI
IMR 8208 XBR	36.5	4137	50,700 PSI	38.8	4404	62,300 PSI
IMR 4064	35.7	3976	48,300 PSI	38.0C	4202	55,700 PSI
Benchmark	35.6	4108	51,700 PSI	37.8	4335	61,100 PSI
IMR 3031	33.7	3953	45,500 PSI	35.8	4333	61,500 PSI

Bullet: 40 GR. NOS BT Dia: .224″

Case: WIN Primer: WIN LR Col: 2.350″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W760	38.0	3644	39,600 CUP	41.0	3933	47,100 CUP
H380	38.0	3647	34,500 CUP	41.0	3855	39,200 CUP
Varget	37.5	3936	43,400 CUP	39.5	4135	51,100 CUP
IMR 4320	37.0	3945	52,400 PSI	39.5	4201	62,600 PSI
IMR 4064	36.0	3877	47,700 PSI	38.5C	4187	60,500 PSI
IMR 4895	36.0	3807	45,500 PSI	39.0C	4189	60,200 PSI
IMR 4166	35.5	3900	52,100 PSI	38.6C	4198	62,300 PSI
IMR 8208 XBR	35.0	3944	47,000 PSI	39.0	4336	63,500 PSI
H4895	34.0	3750	43,800 CUP	37.0	4060	48,700 CUP
IMR 3031	34.0	3941	50,200 PSI	36.3	4224	62,100 PSI
Benchmark	34.0	3837	41,600 CUP	36.5	4114	50,100 CUP

Case: REM Primer: WIN LR Col: 2.350″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
TAC	33.8	3722	54,000 PSI	38.9	4186	62,200 PSI
A-2460	33.7	3663	54,400 PSI	37.5	4163	60,500 PSI

Bullet: 45 GR. BAR XBT Dia: .224″

Case: WIN Primer: WIN LR Col: 2.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W760	38.0	3537	40,200 CUP	41.0	3899	47,600 CUP
H380	38.0	3612	37,900 CUP	41.0	3839	43,500 CUP
IMR 4320	36.0	3780	53,100 PSI	38.2	3990	62,500 PSI
Varget	35.0	3652	46,000 CUP	38.0	3921	49,200 CUP
IMR 4064	35.0	3708	48,700 PSI	38.0C	4042	63,000 PSI
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: 45 GR. BER FBV Dia: .224″

Case: REM Primer: WIN LR Col: 2.305″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-4064	35.1	3426	50,500 PSI	39.0	3894	56,100 PSI
A-2520	33.8	3412	53,000 PSI	37.5	3877	58,800 PSI
A-2460	32.4	3392	52,900 PSI	36.0	3854	58,800 PSI

Bullet: 50 GR. HDY V-MAX Dia: .224″

Case: REM Primer: WIN LR Col: 2.350″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-4064	34.2	3340	53,400 PSI	38.0	3796	59,300 PSI
TAC	31.8	3391	54,100 PSI	35.3	3763	60,100 PSI

Bullet: 50 GR. SIE SP Dia: .224″

Case: WIN Primer: WIN LR Col: 2.350″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W760	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

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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4320	35.0	3582	50,200 PSI	38.0	3864	62,800 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
IMR 4166	33.8	3564	51,200 PSI	36.8C	3874	63,200 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: WIN **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
StaBALL 6.5	39.0	3619	48,600 PSI	42.4	3939	62,200 PSI
H4350	39.0	3402	43,800 CUP	41.0	3557	49,400 CUP
H380	38.0	3509	41,900 CUP	41.0	3717	46,600 CUP
W760	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
IMR 4320	35.0	3550	52,000 PSI	37.5	3789	62,400 PSI
IMR 4064	34.5	3538	50,200 PSI	36.9C	3795	62,400 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
IMR 4166	33.3	3537	52,100 PSI	36.2	3805	62,400 PSI
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
IMR 3031	32.0	3474	48,000 PSI	34.0	3768	62,500 PSI
BL-C(2)	31.0	3461	44,600 CUP	34.0	3702	49,700 CUP
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: 53 GR. HDY HP **Dia: .224″**

Case: REM **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2700	39.0	3404	56,400 PSI	41.0	3621	59,300 PSI
A-2520	32.0	3167	50,800 PSI	35.5	3599	56,400 PSI
A-2460	31.5	3194	52,700 PSI	35.0	3629	58,600 PSI

Bullet: 53 GR. SIE HP **Dia: .224″**

Case: REM **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	36.5	3361	54,400 PSI	40.5	3734	60,400 PSI
A-4064	33.7	3314	57,900 PSI	37.5	3767	64,400 PSI

Bullet: 55 GR. HDY V-MAX **Dia: .224″**

Case: REM **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4064	33.3	3236	53,600 PSI	37.0	3678	59,500 PSI
TAC	29.7	3223	55,800 PSI	33.0	3581	62,000 PSI

Bullet: 55 GR. NOS BT **Dia: .224″**

Case: REM **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	35.6	3326	56,700 PSI	39.5	3695	62,900 PSI
A-2520	32.4	3172	53,700 PSI	36.0	3605	59,700 PSI
TAC	29.5	3237	53,700 PSI	32.8	3597	59,700 PSI

Bullet: 55 GR. SPR SP **Dia: .224″**

Case: WIN **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
H4350	37.0	3296	46,400 CUP	39.0	3490	47,800 CUP
Hybrid 100V	36.0	3254	43,500 PSI	39.0	3466	50,600 PSI
W760	36.0	3324	40,200 CUP	39.0	3582	46,700 CUP
CFE 223	36.0	3557	49,300 PSI	39.2	3855	63,500 PSI
Varget	34.0	3490	46,100 CUP	36.5	3664	50,400 CUP
IMR 4320	34.0	3480	52,900 PSI	36.5	3689	62,200 PSI
IMR 4064	34.0	3461	50,000 PSI	36.3	3713	62,000 PSI
IMR 4895	34.0	3486	50,900 PSI	36.5	3725	62,400 PSI
IMR 4166	33.3	3454	51,000 PSI	36.2	3751	63,400 PSI
H4895	32.5	3446	45,000 CUP	35.5	3670	49,300 CUP
IMR 8208 XBR	32.0	3514	52,300 PSI	35.8	3768	62,700 PSI
IMR 3031	32.0	3474	51,300 PSI	34.1	3691	62,500 PSI
Benchmark	31.6	3532	46,200 CUP	33.6	3674	50,200 CUP
BL-C(2)	31.0	3410	43,800 CUP	34.0	3606	49,600 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
Trail Boss	9.1	1664	17,200 PSI	13.0	1984	26,600 PSI

Bullet: 60 GR. HDY V-MAX **Dia: .224″**

Case: WIN **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
H380	37.5	3335	51,000 PSI	40.5	3580	62,000 PSI
StaBALL 6.5	37.3	3391	47,300 PSI	40.6	3715	62,400 PSI
W760	37.0	3273	47,600 PSI	40.0	3548	60,300 PSI
IMR 4451	35.5	3194	47,800 PSI	38.9C	3479	58,800 PSI
Hybrid 100V	35.0	3168	44,900 PSI	38.0C	3366	50,900 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
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
IMR 4166	31.4	3280	51,300 PSI	34.2	3555	62,500 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: WIN **Primer: WIN LR** **Col: 2.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	38.0	3294	44,600 PSI	42.7C	3674	61,400 PSI
IMR 4350	38.0	3308	52,900 PSI	40.0C	3467	60,300 PSI
StaBALL 6.5	37.0	3330	46,700 PSI	40.6	3669	62,300 PSI
H4350	36.0	3210	45,400 CUP	38.0	3391	48,000 CUP
H380	36.0	3266	46,600 CUP	38.5	3419	51,200 CUP
Hybrid 100V	35.0	3146	44,700 PSI	38.0C	3382	53,900 PSI
IMR 4451	35.0	3184	51,700 PSI	38.4C	3441	62,300 PSI
W760	35.0	3262	43,200 CUP	38.0	3432	47,100 CUP
CFE 223	35.0	3400	53,900 PSI	37.3	3597	64,000 PSI
IMR 4064	33.0	3269	50,800 PSI	35.3	3499	62,900 PSI
IMR 4895	33.0	3287	51,500 PSI	35.5	3502	62,700 PSI
IMR 4166	32.4	3301	52,900 PSI	34.9	3523	62,600 PSI
H4895	31.5	3317	47,300 CUP	34.0	3486	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
Varget	29.5	3039	39,500 CUP	34.0	3426	50,400 CUP

Bullet: 70 GR. BER FBV **Dia: .224″**

Case: REM **Primer: WIN LR** **Col: 2.325″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2700	32.8	2934	56,000 PSI	34.5	3121	58,900 PSI
A-4064	29.0	2833	58,100 PSI	32.2	3220	64,500 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: 70 GR. SPR SP		**Dia: .224″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.330″**
Suprform	37.0	3206	50,500 PSI	40.8C	3499	63,700 PSI
H1000	36.0	3042	41,100 CUP	38.0	3187	47,500 CUP
IMR 4350	36.0	3162	54,500 PSI	38.2C	3324	62,500 PSI
H4831	35.0	2976	42,000 CUP	38.0	3189	50,300 CUP
StaBALL 6.5	35.0	3168	48,700 PSI	38.6	3460	62,400 PSI
Hybrid 100V	35.0	3091	49,000 PSI	38.0C	3322	58,500 PSI
H4350	34.0	3007	44,800 CUP	36.0	3129	49,600 CUP
IMR 4451	34.0	3012	47,700 PSI	37.5C	3269	59,400 PSI
H380	33.0	3006	45,200 CUP	35.0	3161	51,500 CUP
CFE 223	33.0	3147	52,600 PSI	35.8	3373	63,200 PSI
W760	31.0	2860	42,000 CUP	34.0	3117	49,400 CUP
IMR 4320	31.0	3111	55,000 PSI	33.5	3282	62,600 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
IMR 4166	30.5	3067	50,200 PSI	33.2	3330	61,800 PSI
Varget	29.5	3006	44,700 CUP	32.0	3196	50,300 CUP
IMR 3031	29.0	3068	53,600 PSI	31.5	3248	63,600 PSI
H4895	28.0	2933	43,000 CUP	31.5	3196	50,700 CUP
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″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 35 GR. NOS LF		**Dia: .224″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.680″**
W760	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
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: WIN		**Primer: WIN LR**				**Col: 2.680″**
W760	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
Varget	38.0	4007	49,800 CUP	40.5	4113	49,800 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 4895	36.0	3743	42,500 CUP	40.5	4093	51,300 CUP
IMR 3031	35.0	3904	48,100 CUP	38.5	4189	52,000 CUP
Bullet: 45 GR. HDY SP		**Dia: .224″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.680″**
W760	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
H4895	36.5	3676	38,400 CUP	39.5	3996	52,100 CUP
Varget	36.0	3777	47,100 CUP	40.2	4002	52,100 CUP
Bullet: 50 GR. HDY SP		**Dia: .224″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.680″**
W760	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 4064	35.0	3640	46,900 CUP	38.4	3905	53,000 CUP
BL-C(2)	35.0	3431	40,200 CUP	38.0	3888	51,000 CUP
IMR 4895	35.0	3661	48,700 CUP	38.7	3868	52,900 CUP
H4895	35.0	3460	39,000 CUP	38.0	3840	51,200 CUP
Varget	34.5	3616	47,200 CUP	36.0	3770	50,200 CUP
IMR 3031	33.0	3681	48,600 CUP	36.5	3877	53,100 CUP
Bullet: 50 GR. HDY V-MAX		**Dia: .224″**				
Case: WIN		**Primer: FED 210 LR**				**Col: 2.680″**
A-2700	42.8	3793	59,400 PSI	45.0	4035	62,500 PSI
Big Game	37.0	3500	54,100 PSI	41.0	3800	60,000 PSI
Bullet: 52 GR. SIE HPBT		**Dia: .224″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.680″**
W760	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
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: WIN		**Primer: WIN LR**				**Col: 2.680″**
H4831	41.5	3194	36,600 CUP	46.0	3616	46,600 CUP
W760	40.5	3536	47,300 CUP	44.0	3833	53,700 CUP
H4350	39.0	3225	42,000 CUP	42.0	3619	50,800 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
Hybrid 100V	38.0	3358	44,700 CUP	42.0C	3627	52,600 CUP
IMR 4451	38.0	3401	45,600 CUP	40.9	3650	53,800 CUP
Varget	34.0	3516	47,000 CUP	36.0	3645	51,900 CUP
IMR 4064	34.0	3498	46,100 CUP	37.5	3742	52,500 CUP
BL-C(2)	34.0	3426	44,400 CUP	36.0	3682	49,900 CUP
IMR 4895	34.0	3546	48,500 CUP	38.0	3739	53,000 CUP
H4895	34.0	3481	45,900 CUP	37.0	3698	52,000 CUP
IMR 3031	32.0	3490	47,300 CUP	35.2	3687	52,700 CUP
Bullet: 55 GR. NOS BT		**Dia: .224″**				
Case: WIN		**Primer: FED 210 LR**				**Col: 2.680″**
Hunter	40.0	3432	55,300 PSI	44.4	3813	61,400 PSI
A-2700	41.3	3602	54,100 PSI	43.5	3832	57,000 PSI
Bullet: 55 GR. SIE BK		**Dia: .224″**				
Case: WIN		**Primer: FED 210 LR**				**Col: 2.680″**
Big Game	36.0	3450	54,000 PSI	40.0	3600	60,000 PSI
A-4064	33.3	3138	55,400 PSI	37.0	3566	61,600 PSI
Bullet: 60 GR. HDY V-MAX		**Dia: .224″**				
Case: WIN		**Primer: FED 210 LR**				**Col: 2.680″**
A-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: WIN		**Primer: WIN LR**				**Col: 2.680″**
H4831	41.5	3252	41,600 CUP	46.0C	3556	51,800 CUP
W760	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
Hybrid 100V	37.5	3287	44,800 CUP	41.0C	3550	50,900 CUP
H4350	37.0	3230	39,800 CUP	41.0	3527	50,600 CUP
IMR 4451	37.0	3312	45,600 CUP	39.8	3557	53,400 CUP
H380	35.0	3188	44,400 CUP	38.0	3413	51,900 CUP
IMR 4166	33.6	3359	48,100 CUP	35.8	3525	53,700 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

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	30.5	3165	39,200 CUP	33.5	3401	49,600 CUP

Bullet: 62 GR. BAR TAC-X BT Dia: .224″

Case: WIN Primer: WIN LR Col: 2.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
StaBALL 6.5	38.0	3322	45,400 CUP	41.8	3609	53,000 CUP
Hybrid 100V	37.8	3254	42,200 CUP	42.0	3539	51,800 CUP
H4350	37.2	3177	43,500 CUP	40.5C	3389	52,400 CUP
IMR 4451	37.2	3251	46,300 CUP	40.0	3501	53,600 CUP
W760	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
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
IMR 4166	31.9	3131	44,900 CUP	34.0	3328	53,000 CUP
H4895	31.7	3121	45,700 CUP	33.7	3364	51,400 CUP

Bullet: 63 GR. SIE SP Dia: .224″

Case: WIN Primer: WIN LR Col: 2.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	41.5	3180	37,200 CUP	46.0	3586	52,000 CUP
W760	38.5	3339	44,400 CUP	42.0	3595	52,100 CUP
Suprform	38.4	3360	45,300 CUP	42.0	3583	52,500 CUP
StaBALL 6.5	38.2	3305	43,400 CUP	42.0	3611	53,200 CUP
H380	38.0	3405	45,900 CUP	41.0	3580	51,900 CUP
Hybrid 100V	37.5	3269	42,700 CUP	41.0C	3517	51,200 CUP
H4350	37.0	3181	46,000 CUP	39.0	3474	52,000 CUP
IMR 4451	36.2	3237	45,400 CUP	39.6	3499	52,800 CUP
IMR 4166	33.0	3276	46,800 CUP	34.4	3403	53,200 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: WIN Primer: WIN LR Col: 2.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	42.0	3149	43,800 CUP	44.0	3317	50,200 CUP
Suprform	37.3	3209	45,400 CUP	40.8	3428	52,700 CUP
H4831	37.0	2991	45,800 CUP	42.0	3359	52,600 CUP
Hybrid 100V	37.0	3188	44,800 CUP	40.0C	3397	51,800 CUP
H4350	36.0	3027	45,200 CUP	38.0	3313	51,200 CUP
StaBALL 6.5	35.9	3088	44,200 CUP	39.3	3359	52,400 CUP
IMR 4451	35.3	3105	45,400 CUP	38.6	3373	53,800 CUP
W760	34.0	2955	44,200 CUP	37.0	3148	50,300 CUP
IMR 4166	32.7	3140	46,200 CUP	34.8	3347	53,600 CUP
Varget	31.0	3103	46,500 CUP	33.0	3247	49,900 CUP

22 CREEDMOOR

Barrel: 24″ Twist: 1:7″ Trim: 1.910″

Bullet: 62 GR. SFT SCIR Dia: .224″

Case: Alpha Primer: WIN LR Col: 2.570″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 7828SSC	40.7	3246	48,100 PSI	44.3	3552	61,700 PSI
Suprform	40.5	3350	47,600 PSI	44.2	3656	60,900 PSI
IMR 4955	40.2	3251	47,400 PSI	43.7	3595	61,900 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. SIE HPBT Dia: .224″

Case: Alpha Primer: WIN LR Col: 2.570″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	44.5	3149	47,100 PSI	48.4	3441	61,100 PSI
IMR 7828SSC	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
Suprform	40.4	3269	48,200 PSI	44.0	3540	61,000 PSI
IMR 4955	40.2	3142	45,800 PSI	43.8	3474	61,700 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: WIN LR Col: 2.570″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	44.1	3187	47,600 PSI	48.0C	3435	58,300 PSI
H1000	41.3	3130	48,700 PSI	44.8C	3395	60,800 PSI
IMR 7977	40.7	3076	48,400 PSI	44.3C	3335	61,000 PSI
Magpro	43.0	3116	48,700 PSI	46.8	3411	61,900 PSI
H4831	39.0	3131	49,900 PSI	42.6	3375	60,600 PSI
IMR 7828SSC	39.1	3134	50,200 PSI	42.5	3361	60,800 PSI
Suprform	39.0	3232	51,700 PSI	42.4	3451	61,300 PSI
IMR 4955	38.6	3118	49,800 PSI	42.0	3353	61,100 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: WIN LR Col: 2.570″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	44.2	3061	40,300 PSI	48.0C	3348	53,200 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 7977	41.4	2982	42,500 PSI	45.0C	3326	59,200 PSI
IMR 7828SSC	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
Suprform	40.0	3225	48,300 PSI	43.5	3484	61,300 PSI
IMR 4955	39.3	3120	45,900 PSI	42.8	3385	60,600 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 HPBT Dia: .224″

Case: Alpha Primer: WIN LR Col: 2.570″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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	46.0C	3260	60,800 PSI
IMR7977	41.1	2979	49,200 PSI	44.7C	3231	61,300 PSI
H1000	41.0	2998	47,800 PSI	44.6	3271	60,900 PSI
IMR 7828SSC	38.6	2990	49,400 PSI	42.0	3215	60,800 PSI
Suprform	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
IMR 4955	37.3	2982	49,100 PSI	40.6	3211	60,100 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 LRHT Dia: .224″

Case: Alpha Primer: WIN LR Col: 2.700″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 7977	39.0	2807	50,100 PSI	42.5	3060	61,800 PSI
IMR 7828SSC	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
Suprform	36.0	2940	52,300 PSI	39.3	3134	60,700 PSI
IMR 4955	35.6	2813	49,200 PSI	38.8	3053	60,900 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

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: 90 GR. HDY A-TIP		**Dia: .224″**				
Case: Alpha		**Primer: WIN LR**				**Col: 2.700″**
Magnum	42.5	2833	48,000 PSI	46.2C	3107	59,900 PSI
Retumbo	42.1	2840	49,600 PSI	45.0C	3058	60,300 PSI
Magpro	40.3	2759	47,300 PSI	43.9C	3041	60,000 PSI
H1000	39.5	2804	48,800 PSI	43.0	3049	60,400 PSI
IMR7977	39.3	2750	47,900 PSI	42.8C	3013	61,500 PSI
IMR 7828SSC	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
IMR 4955	35.8	2770	49,200 PSI	39.0	3008	61,400 PSI
Suprform	35.8	2789	48,000 PSI	39.0	3042	60,500 PSI
IMR 4831	34.7	2774	50,400 PSI	38.0	2987	60,000 PSI
Hunter	34.9	2712	48,400 PSI	38.0	2961	60,600 PSI

6 MM ARC

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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 100 GR. NOS PART		**Dia: .243″**				
Case: Hornady		**Primer: FED 205M, SR Match**				**Col: 2.150″**
W760	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
LVR	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
W748	24.7	2475	40,800 PSI	27.5	2698	51,700 PSI
Bullet: 103 GR. VPRTRL VTAC		**Dia: .243″**				
Case: Hornady		**Primer: FED 205M, SR Match**				**Col: 2.260″**
StaBALL 6.5	27.6	2324	36,300 PSI	30.7C	2611	49,800 PSI
W760	26.6	2387	36,800 PSI	29.5C	2656	50,100 PSI
CFE 223	26.0	2465	37,600 PSI	28.9	2727	50,600 PSI
LVR	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
W748	25.1	2422	37,900 PSI	27.9	2674	50,500 PSI
Varget	23.5	2369	39,700 PSI	26.2	2608	51,800 PSI
Bullet: 107 GR. SIE HPBT		**Dia: .243″**				
Case: Hornady		**Primer: FED 205M, SR Match**				**Col: 2.260″**
StaBALL 6.5	27.2	2258	34,400 PSI	30.3C	2557	50,300 PSI
W760	26.5	2352	38,100 PSI	29.4C	2610	51,100 PSI
CFE 223	25.8	2450	40,300 PSI	28.8	2687	51,400 PSI
LVR	25.4	2400	37,700 PSI	28.2	2669	51,800 PSI
BL-C(2)	24.9	2358	41,200 PSI	27.7	2576	51,500 PSI
W748	24.7	2398	40,400 PSI	27.4	2623	51,500 PSI
Varget	23.2	2325	40,900 PSI	25.8C	2541	51,600 PSI
Bullet: 110 GR. HDY A-TIP		**Dia: .243″**				
Case: Hornady		**Primer: FED 205M, SR Match**				**Col: 2.260″**
StaBALL 6.5	27.0	2238	34,900 PSI	30.0C	2555	50,400 PSI
W760	26.4	2336	37,900 PSI	29.3C	2590	50,400 PSI
LVR	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
BL-C(2)	24.8	2329	38,800 PSI	27.5	2568	50,300 PSI
W748	24.4	2357	37,800 PSI	27.1	2604	50,000 PSI
Varget	23.0	2296	38,600 PSI	25.7C	2541	51,900 PSI

6MM DASHER

Barrel: 30″ Twist: 1:8″ Trim: 1.540″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 58 GR. HDY V-MAX		**Dia: .243″**				
Case: Lapua (ref)		**Primer: CCI BR4, SR 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
H4895	35.1	3682	42,700 CUP	37.0C	3866	48,000 CUP
IMR 4895	34.5	3434	41,400 CUP	37.5C	3785	51,800 CUP
IMR 4166	33.8	3427	44,800 CUP	37.2C	3671	51,600 CUP
IMR 8208 XBR	33.5	3508	41,200 CUP	36.3	3819	50,800 CUP
Benchmark	33.0	3546	43,300 CUP	36.3	3847	52,000 CUP
Bullet: 70 GR. NOS BT		**Dia: .243″**				
Case: Lapua (ref)		**Primer: CCI BR4, SR 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, SR 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 4895	31.3	2991	42,800 CUP	34.0C	3229	52,300 CUP
IMR 4064	31.0	2933	42,500 CUP	34.1	3199	52,100 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, SR Match**				**Col: 2.360″**
H4350	33.4	2836	41,600 CUP	36.8C	3086	51,700 CUP
IMR 4451	33.4	2777	41,900 CUP	36.7	3045	52,100 CUP
StaBALL 6.5	33.3	2724	40,800 CUP	37.0	3004	51,600 CUP
CFE 223	30.7	2860	44,800 CUP	33.4	3011	51,900 CUP
IMR 4064	30.5	2852	43,100 CUP	33.6	3088	52,600 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, SR Match**				**Col: 2.360″**
H4350	33.4	2792	44,600 CUP	35.2C	2917	48,800 CUP
StaBALL 6.5	33.2	2644	40,600 CUP	36.9	2943	52,300 CUP
IMR 4451	33.0	2740	42,900 CUP	35.6C	2934	51,100 CUP
IMR 4064	29.8	2746	42,300 CUP	32.8C	2978	52,200 CUP
CFE 223	29.4	2706	43,700 CUP	33.1	2926	51,400 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: 1:7.7″ Trim: 1.720″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 95 GR. SIE TMK		**Dia: .243″**				
Case: Alpha		**Primer: WIN SR**				**Col: 2.480″**
Suprform	38.6	2874	43,800 PSI	42.9	3248	62,000 PSI
StaBALL 6.5	37.6	2811	41,100 PSI	41.8	3240	62,300 PSI
Bullet: 100 GR. SIE SBT		**Dia: .243″**				
Case: Alpha		**Primer: WIN SR**				**Col: 2.390″**
Suprform	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
H4350	34.8	2726	45,100 PSI	38.7	3044	61,800 PSI
Hybrid 100V	34.5	2740	44,600 PSI	38.4C	3029	58,700 PSI
IMR 4451	34.3	2659	45,500 PSI	38.2	3011	62,500 PSI
CFE 223	32.3	2658	43,200 PSI	35.9	3010	61,200 PSI
IMR 4064	31.4	2722	46,100 PSI	34.9	3019	61,800 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4166	31.3	2757	49,700 PSI	34.8	2995	61,300 PSI
Varget	30.9	2753	49,900 PSI	34.3	2992	62,500 PSI

Bullet: 103 GR. VPRTRL VTAC Dia: .243″

Case: Alpha Primer: WIN SR Col: 2.500″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
Hybrid 100V	38.0	2958	47,800 PSI	40.0	3119	56,400 PSI
H4350	37.0	2830	43,600 PSI	41.2C	3153	62,000 PSI
IMR 4451	36.0	2784	44,400 PSI	40.0C	3126	61,500 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
IMR 4166	32.2	2779	46,400 PSI	36.0	3081	62,200 PSI

Bullet: 105 GR. HDY ELD-M Dia: .243″

Case: Alpha Primer: WIN SR Col: 2.500″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	37.0	2770	45,700 PSI	41.2	3097	61,500 PSI
StaBALL 6.5	36.4	2740	44,900 PSI	40.4	3078	62,200 PSI
Hybrid 100V	34.5	2741	47,700 PSI	38.4C	3038	62,200 PSI
H4350	34.3	2702	47,200 PSI	38.1	2973	61,900 PSI
IMR 4451	33.6	2633	47,400 PSI	37.4	2938	62,400 PSI
CFE 223	31.0	2586	44,800 PSI	34.4	2910	61,300 PSI
IMR 4064	30.1	2617	45,700 PSI	33.5	2903	61,700 PSI
Varget	29.8	2646	47,400 PSI	33.1	2892	61,200 PSI
IMR 4166	29.4	2633	48,000 PSI	33.2	2908	62,400 PSI

Bullet: 107 GR. SIE HPBT Dia: .243″

Case: Alpha Primer: WIN SR Col: 2.530″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
Hybrid 100V	34.5	2700	45,600 PSI	38.4C	3007	61,200 PSI
H4350	34.1	2668	45,400 PSI	38.1	2966	61,500 PSI
IMR 4451	33.9	2631	45,600 PSI	37.8	2936	62,100 PSI
CFE 223	31.6	2691	50,100 PSI	35.5	2949	62,300 PSI
IMR 4064	30.8	2664	46,800 PSI	34.2	2927	61,400 PSI
Varget	30.6	2679	48,200 PSI	34.0	2909	61,800 PSI
IMR 4166	29.5	2608	46,400 PSI	34.0	2926	61,700 PSI

Bullet: 110 GR. HDY A-TIP Dia: .243″

Case: Alpha Primer: WIN SR Col: 2.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
Hybrid 100V	34.7	2676	44,100 PSI	38.6C	3002	59,700 PSI
H4350	34.5	2654	43,500 PSI	38.5	2958	62,200 PSI
IMR 4451	34.2	2626	45,400 PSI	38.2C	2936	61,800 PSI
CFE 223	31.7	2537	41,000 PSI	35.6	2911	62,400 PSI
Varget	30.8	2634	47,000 PSI	34.2	2880	62,200 PSI
IMR 4064	30.6	2631	45,600 PSI	34.0	2895	61,600 PSI
IMR 4166	29.7	2596	44,900 PSI	34.2	2924	62,000 PSI

6X47MM Lapua

Barrel: 30″ Twist: 1:8″ Trim: 1.840″

Bullet: 55 GR. NOS BT Dia: .243″

Case: Lapua (ref) Primer: FED 205M, SR Match Col: 2.440″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Varget	39.9	3760	44,400 CUP	41.8C	3979	51,600 CUP
CFE 223	39.7	3741	43,100 CUP	43.7	4040	51,600 CUP
IMR 4064	38.1	3587	43,700 CUP	40.4C	3832	51,100 CUP
IMR 4166	37.0	3531	44,100 CUP	39.7	3801	52,400 CUP
H4895	36.9	3678	44,400 CUP	40.6	4064	52,100 CUP
IMR 8208 XBR	36.6	3676	43,300 CUP	39.8	3996	52,300 CUP
IMR 4895	36.5	3461	43,100 CUP	40.2	3895	52,300 CUP

Bullet: 70 GR. NOS BT Dia: .243″

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

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 4166	34.7	3216	43,100 CUP	38.1	3507	52,200 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: FED 205M, SR Match Col: 2.505″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4166	33.8	3176	45,300 CUP	37.2	3424	52,400 CUP
H4895	33.6	3265	45,100 CUP	37.0	3531	52,400 CUP
IMR 8208 XBR	33.4	3266	44,200 CUP	36.3	3502	52,000 CUP
IMR 4895	33.2	3158	44,200 CUP	36.5	3427	52,500 CUP

Bullet: 80 GR. BAR TTSX BT Dia: .243″

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

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 8208 XBR	32.3	3118	45,500 CUP	35.1	3341	52,000 CUP
IMR 4895	32.1	3034	45,300 CUP	35.3	3279	52,100 CUP
IMR 4166	32.0	2984	45,500 CUP	35.4	3242	52,300 CUP

Bullet: 85 GR. HDY IB Dia: .243″

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

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4350	38.0	3069	44,000 CUP	41.9	3369	52,400 CUP
IMR 4451	36.5	2923	42,800 CUP	40.1	3214	52,300 CUP
CFE 223	35.5	3170	45,200 CUP	39.3	3426	52,500 CUP
Varget	33.5	3096	45,900 CUP	36.8	3307	52,300 CUP
IMR 4064	33.0	2999	43,300 CUP	36.2	3265	52,400 CUP
H4895	32.8	3087	44,600 CUP	36.0	3319	51,700 CUP
IMR 4166	32.6	2993	45,000 CUP	35.8	3204	51,600 CUP
IMR 8208 XBR	32.3	3087	44,200 CUP	35.6	3320	52,400 CUP

Bullet: 90 GR. NOS E-TIP Dia: .243″

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

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4451	35.5	2836	44,800 CUP	39.1	3117	51,900 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
IMR 4166	31.6	2831	43,900 CUP	34.8	3079	52,400 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: FED 205M, SR Match Col: 2.500″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	38.7	2828	47,200 CUP	42.6C	3042	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
IMR 4955	37.2	2739	43,700 CUP	40.9	3009	52,400 CUP
Hybrid 100V	36.2	2844	46,600 CUP	39.8	3113	52,100 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
IMR 4451	34.5	2663	44,600 CUP	38.0	2912	52,500 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
IMR 4166	30.2	2709	44,600 CUP	33.2	2907	52,200 CUP

Bullet: 105 GR. LAP SCENAR Dia: .243″

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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	37.3	2717	46,100 CUP	41.0	2959	52,300 CUP
IMR 4955	36.6	2672	45,900 CUP	40.3	2935	52,600 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
Hybrid 100V	34.3	2732	45,300 CUP	37.7	2951	51,800 CUP
IMR 4451	33.5	2652	45,300 CUP	36.8	2893	52,300 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
IMR 4166	29.3	2637	46,200 CUP	32.2	2846	52,300 CUP

Bullet: 108 GR. BER TGT BT Dia: .243″

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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	37.5	2676	46,200 CUP	41.3	2933	52,300 CUP
IMR 4955	36.7	2635	46,300 CUP	40.3	2865	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
Hybrid 100V	34.4	2697	44,000 CUP	37.5	2890	51,400 CUP
IMR 4451	33.7	2618	45,400 CUP	37.0	2872	52,500 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
IMR 4166	29.6	2620	46,800 CUP	32.5	2804	52,400 CUP

6MM CREEDMOOR

Barrel: 24″ Twist: 1:8″ Trim: 1.910″

Bullet: 55 GR. NOS BT Dia: .243″

Case: Hornady Primer: WIN LR Col: 2.490″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	48.8	3734	46,500 PSI	53.0C	4088	60,000 PSI
W760	46.2	3704	45,300 PSI	50.2	4049	58,500 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
IMR 4166	41.5	3730	49,300 PSI	45.0	4005	59,800 PSI
IMR 4064	41.2	3661	45,100 PSI	44.7	4036	59,100 PSI
IMR 4895	41.2	3704	46,800 PSI	44.8	4066	60,200 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: 58 GR. HDY V-MAX Dia: .243″

Case: Hornady Primer: FED 210M, LR Match Col: 2.475″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2700	45.4	3538	55,300 PSI	50.5	3947	61,400 PSI
Big Game	44.3	3581	55,200 PSI	49.3	3924	61,400 PSI
A-4064	40.9	3427	55,200 PSI	45.5	3838	61,300 PSI

Bullet: 60 GR. SIE HP Dia: .243″

Case: Hornady Primer: WIN LR Col: 2.410″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	47.3	3605	46,800 PSI	51.5C	3947	60,100 PSI
W760	44.8	3536	44,700 PSI	48.7	3893	58,800 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 4166	40.2	3563	48,900 PSI	43.6	3865	60,700 PSI
IMR 4895	40.1	3550	46,200 PSI	43.5	3913	60,600 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: FED 210M, LR Match Col: 2.550″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-4064	38.4	3171	54,900 PSI	42.7	3505	61,000 PSI

Bullet: 70 GR. SPR HP Dia: .243″

Case: Hornady Primer: WIN LR Col: 2.490″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4451	43.8	3355	48,700 PSI	46.7C	3576	57,400 PSI
H380	43.8	3413	49,000 PSI	47.5	3673	60,300 PSI
W760	43.5	3367	45,700 PSI	47.7	3684	59,400 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 4166	39.7	3403	49,300 PSI	43.1	3655	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
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: WIN LR Col: 2.540″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	44.0	3106	50,300 PSI	47.2C	3285	58,300 PSI
IMR 4955	42.9	3098	47,400 PSI	46.6C	3348	57,600 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
IMR 4451	39.8	3072	47,700 PSI	43.9C	3378	60,600 PSI
W760	39.8	3094	45,700 PSI	43.8	3403	59,400 PSI
H380	39.6	3125	50,500 PSI	42.7	3353	60,300 PSI
BL-C(2)	37.5	3093	50,500 PSI	40.5	3320	59,700 PSI
CFE 223	37.4	3114	49,400 PSI	40.7	3345	59,900 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
IMR 4166	35.8	3094	49,300 PSI	38.9	3331	60,000 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

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: 80 GR. SIE SBT		**Dia: .243″**				
Case: Hornady		**Primer: FED 210M, LR Match**				**Col: 2.500″**
Hunter	42.6	3141	55,300 PSI	47.3	3431	61,500 PSI
A-2700	40.5	3087	54,900 PSI	45.0	3410	61,000 PSI
Big Game	39.4	3081	55,200 PSI	43.8	3379	61,300 PSI
Bullet: 85 GR. NOS PART		**Dia: .243″**				
Case: Hornady		**Primer: WIN LR**				**Col: 2.580″**
StaBALL 6.5	44.0	3194	46,100 PSI	47.9	3511	60,300 PSI
IMR 4955	43.7	3036	43,900 PSI	47.5C	3371	59,000 PSI
IMR 4831	43.2	3029	43,900 PSI	47.0C	3352	58,000 PSI
IMR 4350	41.3	3031	44,800 PSI	45.4	3373	59,500 PSI
H4350	41.1	3061	45,300 PSI	45.7	3390	60,500 PSI
W760	40.7	3110	47,600 PSI	44.7	3379	59,200 PSI
IMR 4451	40.5	3028	44,700 PSI	44.9	3371	60,100 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
IMR 4895	37.0	3150	50,800 PSI	40.4	3350	59,700 PSI
IMR 4166	37.0	3146	50,700 PSI	40.3	3361	60,100 PSI
Varget	36.8	3128	51,100 PSI	39.9	3316	59,800 PSI
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: WIN LR**				**Col: 2.725″**
H4831	42.9	3001	50,700 PSI	46.6	3208	60,100 PSI
IMR 4955	42.2	3015	48,800 PSI	46.0	3278	60,700 PSI
StaBALL 6.5	41.7	3050	46,000 PSI	45.3	3365	60,000 PSI
IMR 4831	41.7	2992	48,000 PSI	45.5	3262	59,300 PSI
Hybrid 100V	39.6	2981	45,400 PSI	43.8	3263	56,700 PSI
H4350	40.2	3039	50,300 PSI	43.7	3261	60,100 PSI
IMR 4350	40.2	3029	48,800 PSI	43.7	3280	59,500 PSI
W760	39.5	3028	50,000 PSI	43.2	3267	59,800 PSI
IMR 4451	39.5	3006	48,900 PSI	42.9	3250	60,000 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
IMR 4166	34.9	2984	49,900 PSI	37.9	3196	59,500 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: FED 210M, LR Match**				**Col: 2.750″**
Magpro	44.3	2764	55,300 PSI	49.2	3052	61,400 PSI
A-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 TRGT		**Dia: .243″**				
Case: Hornady		**Primer: FED 210M, LR Match**				**Col: 2.650″**
Magpro	44.7	2796	55,300 PSI	49.7	3102	61,500 PSI
A-4350	41.5	2860	55,200 PSI	46.1	3192	59,500 PSI
Hunter	39.6	2871	55,100 PSI	44.0	3136	60,000 PSI
A-2700	38.6	2876	55,200 PSI	42.9	3146	59,000 PSI

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: Hornady		**Primer: WIN LR**				**Col: 2.650″**
H4831	42.8	2921	47,000 PSI	47.0C	3158	61,300 PSI
Suprform	42.1	3021	45,700 PSI	46.3	3314	61,300 PSI
IMR 4955	41.7	2871	43,500 PSI	45.9	3224	59,700 PSI
StaBALL 6.5	42.3	3061	45,800 PSI	45.7	3342	61,300 PSI
IMR 4831	41.4	2877	43,500 PSI	45.5	3222	60,900 PSI
IMR 4350	40.4	2946	45,500 PSI	44.4	3255	60,300 PSI
H4350	39.5	2932	45,700 PSI	44.0	3211	60,400 PSI
W760	39.5	2965	47,300 PSI	43.4	3227	59,300 PSI
IMR 4451	39.3	2916	46,800 PSI	43.2	3201	59,700 PSI
Hybrid 100V	39.2	2944	45,200 PSI	43.1	3233	60,500 PSI
H380	39.4	2958	49,700 PSI	42.0	3150	60,100 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
IMR 4166	35.4	2978	49,500 PSI	38.5	3187	60,000 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
Bullet: 100 GR. HDY BTSP		**Dia: .243″**				
Case: Hornady		**Primer: WIN LR**				**Col: 2.625″**
H1000	44.6	2784	41,900 PSI	49.0C	3050	55,300 PSI
H4831	42.0	2853	48,400 PSI	46.2	3070	60,000 PSI
Suprform	41.4	2922	46,200 PSI	45.5	3200	60,600 PSI
IMR 4955	40.9	2775	45,600 PSI	45.0	3073	60,500 PSI
IMR 4831	40.6	2823	45,600 PSI	44.7C	3127	60,700 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
Hybrid 100V	38.8	2881	46,800 PSI	42.7	3139	59,400 PSI
H4350	38.8	2879	48,200 PSI	42.7	3113	59,800 PSI
W760	38.6	2858	47,200 PSI	42.5	3120	60,200 PSI
IMR 4451	38.4	2828	47,700 PSI	42.2	3074	59,200 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
IMR 4166	35.2	2890	50,000 PSI	38.1	3089	60,300 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: FED 210M, LR Match**				**Col: 2.625″**
Magpro	44.1	2757	54,900 PSI	49.0	3032	61,000 PSI
A-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: 107 GR. SIE HPBT		**Dia: .243″**				
Case: Hornady		**Primer: WIN LR**				**Col: 2.780″**
Magnum	44.9	2787	54,900 PSI	49.9	3049	61,000 PSI
H1000	43.8	2778	45,700 PSI	48.2C	3024	59,200 PSI
Magpro	42.5	2701	54,900 PSI	47.2	2957	61,000 PSI
IMR 7977	42.9	2721	45,400 PSI	46.6C	3008	59,400 PSI
H4831	40.3	2750	47,400 PSI	44.4	2997	60,800 PSI
Suprform	40.1	2850	47,400 PSI	44.2	3089	60,100 PSI
IMR 4955	39.4	2744	46,800 PSI	43.4	3000	59,600 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
H4350	37.5	2801	49,200 PSI	41.3	3009	60,300 PSI
IMR 4350	37.5	2776	47,200 PSI	41.3	3008	59,500 PSI
A-4350	36.9	2670	55,000 PSI	41.0	2912	61,200 PSI
Hybrid 100V	37.2	2794	47,700 PSI	40.9	3037	60,200 PSI
IMR 4451	36.8	2747	48,200 PSI	40.5	2986	60,400 PSI

Bullet: 108 GR. HDY ELD-M Dia: .243″

Case: Hornady Primer: WIN LR Col: 2.770″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H1000	43.8	2786	46,600 PSI	48.2C	3042	59,700 PSI
IMR 7977	42.3	2748	46,700 PSI	45.9C	3002	59,700 PSI
H4831	40.8	2766	48,400 PSI	44.1	2972	60,200 PSI
Suprform	40.2	2813	46,300 PSI	44.2	3078	60,200 PSI
IMR 4955	40.1	2771	48,100 PSI	43.5	2995	59,700 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
Hybrid 100V	37.9	2805	48,300 PSI	41.7	3031	59,100 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
IMR 4451	37.1	2754	48,700 PSI	40.8	2980	59,800 PSI

Bullet: 110 GR. HDY A-TIP Dia: .243″

Case: Hornady Primer: WIN LR Col: 2.780″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H1000	44.5	2796	49,300 PSI	47.5C	2956	57,500 PSI
IMR 7977	42.5	2700	47,300 PSI	46.3C	2954	60,200 PSI
H4831	40.5	2738	48,300 PSI	44.1C	2970	60,200 PSI
Suprform	39.3	2800	47,500 PSI	42.8	3037	60,300 PSI
StaBALL 6.5	39.3	2787	46,900 PSI	42.7	3046	60,000 PSI
IMR 4831	39.2	2731	48,400 PSI	42.8	2975	60,500 PSI
IMR 4350	38.2	2792	51,400 PSI	41.5	2983	60,000 PSI
IMR 4955	37.5	2638	46,900 PSI	41.4	2899	60,500 PSI
IMR 4451	37.4	2712	48,000 PSI	40.7	2947	60,300 PSI
H4350	37.2	2741	48,100 PSI	41.4	2987	60,700 PSI
Hybrid 100V	36.7	2714	46,300 PSI	40.8	3029	60,800 PSI

Bullet: 112 GR. BAR BT-MB Dia: .243″

Case: Hornady Primer: FED 210M, LR Match Col: 2.780″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
A-4350	38.0	2626	55,200 PSI	42.2	2896	61,300 PSI

Bullet: 115 GR. BER VLD Dia: .243″

Case: Hornady Primer: FED 210M, LR Match Col: 2.780″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
A-4350	36.8	2583	55,100 PSI	40.9	2823	61,200 PSI

Case: Hornady Primer: WIN LR Col: 2.780″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H1000	43.2	2687	46,100 PSI	48.0C	2944	59,500 PSI
IMR 7977	42.7	2693	47,300 PSI	46.4C	2942	59,800 PSI
H4831	39.6	2658	47,200 PSI	43.6	2889	59,500 PSI
Suprform	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 4955	39.2	2661	47,000 PSI	43.1	2919	60,300 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
Hybrid 100V	36.4	2662	46,400 PSI	40.5	2909	59,600 PSI
IMR 4451	36.3	2684	49,900 PSI	39.9	2886	59,600 PSI

243 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.035″

Bullet: 55 GR. NOS BT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.650″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Hunter	49.4	3771	53,400 PSI	54.9	4086	59,400 PSI
A-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
A-4064	41.3	3581	53,800 PSI	45.9	3941	59,700 PSI

Case: WIN Primer: WIN LR Col: 2.650″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H380	46.0	3704	40,600 CUP	51.0	4010	48,700 CUP
W760	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
IMR 4320	40.0	3603	48,600 CUP	45.5	3876	49,800 CUP
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
IMR 4166	41.2	3696	48,600 PSI	44.8	3950	57,700 PSI
H4895	40.0	3638	35,100 CUP	44.5	4058	49,300 CUP
IMR 4895	40.0	3599	42,100 CUP	44.0	3877	50,200 CUP
IMR 4064	39.5	3554	41,300 CUP	44.0	3875	51,200 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
IMR 3031	37.0	3520	38,300 CUP	40.5	3864	50,900 CUP

Bullet: 58 GR. HDY V-MAX Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Hunter	46.9	3591	53,200 PSI	52.1	3958	59,100 PSI
A-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
A-4064	40.5	3464	53,500 PSI	45.0	3843	59,500 PSI

Case: WIN Primer: WIN LR Col: 2.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H380	46.0	3721	47,500 CUP	49.5	3874	51,000 CUP
W760	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 4320	40.5	3448	41,800 CUP	44.8	3822	50,100 CUP
IMR 4895	40.5	3551	42,300 CUP	44.7	3819	50,000 CUP
IMR 4166	40.9	3645	49,800 PSI	44.5	3889	58,600 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

Bullet: 60 GR. SIE HP Dia: .243″

Case: WIN Primer: WIN LR Col: 2.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W760	43.0	3423	38,600 CUP	47.5	3724	49,600 CUP
H380	43.0	3514	38,900 CUP	48.0	3781	47,400 CUP
CFE 223	41.0	3541	49,400 PSI	45.0	3785	58,600 PSI
Varget	40.0	3671	45,400 CUP	42.7	3816	50,400 CUP
IMR 4320	40.0	3431	42,500 CUP	44.4	3716	50,500 CUP
IMR 4064	40.0	3476	43,600 CUP	43.8	3766	50,400 CUP
IMR 4166	39.7	3508	48,400 PSI	43.5	3793	58,900 PSI
IMR 4895	39.6	3464	43,500 CUP	43.3	3785	50,800 CUP
Benchmark	38.5	3587	47,000 CUP	41.2	3713	50,700 CUP
H4895	38.0	3521	40,500 CUP	42.0	3812	50,600 CUP
IMR 8208 XBR	37.0	3505	50,000 PSI	40.2	3702	58,500 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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 3031	36.8	3448	43,000 CUP	40.5	3714	50,500 CUP
H335	35.0	3445	41,400 CUP	39.0	3717	50,300 CUP

Bullet: 62 GR. BAR VG Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.645″

Hunter	45.6	3499	53,500 PSI	50.7	3825	59,500 PSI
A-2700	43.7	3609	53,700 PSI	48.6	3854	59,800 PSI
A-4350	43.7	3282	50,400 PSI	48.6	3648	56,000 PSI
Big Game	40.8	3515	53,500 PSI	45.3	3779	59,400 PSI

Bullet: 62 GR. BAR VG FB Dia: .243″

Case: WIN Primer: WIN LR Col: 2.620″

W760	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
IMR 4166	38.7	3397	48,100 PSI	42.5	3700	59,000 PSI
Varget	39.3	3476	50,900 PSI	41.4	3620	57,100 PSI
IMR 4320	39.0	3425	49,600 PSI	41.4	3602	56,900 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: WIN Primer: WIN LR Col: 2.600″

Suprform	49.0	3530	52,100 PSI	51.9C	3773	57,300 PSI
W760	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 4320	40.5	3448	43,800 CUP	43.9	3670	49,500 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 4166	39.4	3448	48,800 PSI	42.9	3711	58,800 PSI
IMR 4895	38.5	3392	42,300 CUP	42.7	3664	50,600 CUP
BL-C(2)	39.0	3493	47,300 CUP	42.0	3612	49,500 CUP
Varget	38.0	3494	43,100 CUP	41.0	3682	49,600 CUP
H4895	38.0	3522	44,500 CUP	41.0	3677	49,200 CUP
IMR 8208 XBR	37.0	3363	45,800 PSI	41.0	3666	58,500 PSI
Benchmark	37.0	3417	44,300 CUP	40.0	3598	50,600 CUP
IMR 3031	36.5	3397	43,800 CUP	39.8	3624	50,200 CUP

Bullet: 68 GR. BER FBT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.650″

Hunter	45.6	3516	53,800 PSI	50.7	3766	59,800 PSI
A-4350	44.3	3412	52,200 PSI	49.2	3682	58,000 PSI
A-2700	42.8	3424	53,800 PSI	47.5	3697	59,700 PSI

Bullet: 70 GR. SIE HPBT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.625″

Hunter	46.0	3486	53,700 PSI	51.2	3764	59,800 PSI
A-4350	44.1	3295	50,400 PSI	49.0	3616	56,000 PSI
A-2700	43.5	3437	53,700 PSI	48.4	3704	59,700 PSI
Big Game	41.4	3381	54,100 PSI	45.9	3653	59,900 PSI

Bullet: 70 GR. SPR HP Dia: .243″

Case: WIN Primer: WIN LR Col: 2.625″

Suprform	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
W760	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

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4895	38.5	3349	44,300 CUP	42.6	3558	50,000 CUP
IMR 4320	38.5	3325	43,800 CUP	42.5	3541	50,300 CUP
IMR 4064	38.5	3316	43,700 CUP	42.5	3541	50,000 CUP
IMR 4166	38.5	3366	49,600 PSI	41.9	3600	58,800 PSI
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
IMR 3031	35.5	3218	41,500 CUP	39.0	3485	51,100 CUP
BL-C(2)	35.0	3228	47,900 CUP	39.0	3384	50,400 CUP
IMR 8208 XBR	35.0	3232	47,600 PSI	38.6	3461	58,100 PSI

Bullet: 75 GR. HDY HP Dia: .243″

Case: WIN Primer: WIN LR Col: 2.640″

Suprform	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
W760	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 4320	37.7	3180	43,500 CUP	41.5	3420	50,600 CUP
IMR 4064	37.5	3183	43,300 CUP	41.2	3419	50,300 CUP
IMR 4166	37.1	3227	49,300 PSI	40.4	3460	58,600 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: 75 GR. HDY V-MAX Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.620″

Hunter	43.8	3311	53,800 PSI	48.7	3632	59,800 PSI
A-4350	43.7	3253	53,600 PSI	48.5	3579	59,400 PSI
A-2700	41.8	3312	53,700 PSI	46.5	3580	59,700 PSI
Big Game	39.7	3232	53,900 PSI	44.1	3509	59,900 PSI

Bullet: 80 GR. HDY GMX Dia: .243″

Case: WIN Primer: WIN LR Col: 2.610″

StaBALL 6.5	41.0	3149	48,100 PSI	45.0	3423	58,500 PSI
Hybrid 100V	39.1	3083	48,600 PSI	42.5	3318	58,100 PSI
W760	38.9	3022	48,400 PSI	42.3	3231	57,300 PSI
IMR 4451	38.8	3132	51,400 PSI	41.8	3338	58,800 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
IMR 4320	35.7	3011	49,800 PSI	38.0	3182	58,200 PSI
IMR 4166	35.6	3024	48,200 PSI	39.2	3307	59,400 PSI
IMR 4895	35.3	3032	51,500 PSI	37.5	3165	58,100 PSI
Varget	34.1	2986	51,200 PSI	36.3	3137	58,700 PSI
IMR 4064	34.0	2966	49,500 PSI	36.3	3134	57,600 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: WIN Primer: REM 9 1/2, LR 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
A-4350	42.6	3140	53,800 PSI	47.3	3436	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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2700	40.4	3149	53,800 PSI	44.9	3399	59,800 PSI
Bullet: 80 GR. SIE BTSP		**Dia: .243″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.635″**
Suprform	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
IMR 4451	42.5	3195	47,700 PSI	46.2	3462	58,300 PSI
W760	42.0	3249	46,300 CUP	45.0	3404	50,100 CUP
Hybrid 100V	41.0	3072	40,100 CUP	45.0C	3330	48,400 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
IMR 4320	37.0	3132	44,000 CUP	40.5	3339	50,600 CUP
IMR 4166	37.0	3171	48,400 PSI	40.3	3409	58,300 PSI
IMR 4895	36.5	3094	43,300 CUP	40.2	3290	50,300 CUP
Varget	36.0	3193	45,400 CUP	38.5	3355	50,300 CUP
BL-C(2)	35.0	3083	47,100 CUP	38.5	3242	50,600 CUP
H4895	35.0	3123	45,800 CUP	38.0	3307	50,100 CUP
IMR 8208 XBR	34.0	3013	45,400 PSI	38.0	3269	57,500 PSI
Bullet: 85 GR. BAR TSX-BT		**Dia: .243″**				
Case: WIN		**Primer: REM 9 1/2, LR**				**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
A-2700	38.7	3046	53,600 PSI	42.9	3270	59,500 PSI
A-4350	37.3	2990	53,300 PSI	41.5	3221	59,300 PSI
Case: WIN		**Primer: WIN LR**				**Col: 2.620″**
StaBALL 6.5	41.9	3105	46,500 PSI	45.6	3404	58,900 PSI
IMR 4451	40.7	3138	50,200 PSI	43.8	3342	58,700 PSI
IMR 4831	38.3	3014	49,900 PSI	42.6C	3233	58,500 PSI
Hybrid 100V	38.3	3022	47,500 PSI	42.5C	3267	58,100 PSI
W760	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
H4350	37.3	2972	49,600 PSI	40.5	3141	57,300 PSI
IMR 4166	35.9	3019	48,200 PSI	39.5	3249	57,800 PSI
H380	36.4	2987	55,700 PSI	38.7	3074	57,300 PSI
IMR 4320	35.3	2996	49,700 PSI	37.6	3158	58,100 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
Bullet: 87 GR. HDY V-MAX		**Dia: .243″**				
Case: WIN		**Primer: REM 9 1/2, LR**				**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
A-4350	41.8	3078	53,200 PSI	46.4	3313	59,100 PSI
Hunter	41.8	3036	54,000 PSI	46.4	3336	59,900 PSI
A-2700	39.1	3033	53,600 PSI	43.5	3261	59,600 PSI
Bullet: 90 GR. SPR SP		**Dia: .243″**				
Case: WIN		**Primer: WIN LR**				**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
IMR 4955	43.6	2926	49,700 PSI	47.4C	3153	58,500 PSI
Hybrid 100V	40.0	2934	43,000 CUP	44.0C	3204	50,100 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

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W760	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
IMR 4451	37.6	2967	51,900 PSI	40.5	3138	58,300 PSI
IMR 4166	34.3	2857	48,500 PSI	37.7	3097	58,500 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
Varget	34.0	2964	44,800 CUP	36.5	3106	50,400 CUP
H4895	34.0	2967	44,900 CUP	36.5	3114	50,800 CUP
Bullet: 95 GR. NOS BT		**Dia: .243″**				
Case: WIN		**Primer: REM 9 1/2, LR**				**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
A-4350	38.0	2863	53,300 PSI	42.2	3075	59,200 PSI
A-2700	36.8	2847	53,900 PSI	40.9	3059	59,900 PSI
Bullet: 95 GR. NOS PART		**Dia: .243″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.650″**
IMR 7977	45.3	2903	48,400 PSI	49.3C	3146	58,200 PSI
H1000	45.0	2946	44,900 CUP	48.0C	3077	50,000 CUP
IMR 4955	44.1	2860	47,500 PSI	48.0C	3115	58,600 PSI
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
Hybrid 100V	39.0	2866	42,200 CUP	43.0C	3113	50,200 CUP
IMR 4831	39.5	2793	43,900 CUP	42.8	2985	50,200 CUP
StaBALL 6.5	39.0	2988	51,400 PSI	42.8	3171	58,400 PSI
H4350	39.0	2917	45,800 CUP	42.0	3087	50,500 CUP
W760	39.0	2933	43,800 CUP	42.0	3138	50,700 CUP
IMR 4451	38.5	2922	49,500 PSI	41.8	3141	58,500 PSI
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
Varget	33.0	2870	45,000 CUP	35.0	2996	50,200 CUP
IMR 4064	33.0	2745	43,500 CUP	36.5	2967	51,100 CUP
H4895	33.0	2865	45,000 CUP	35.0	2990	50,700 CUP
IMR 4895	32.0	2687	41,800 CUP	35.5	2908	50,400 CUP
Bullet: 100 GR. SIE SBT		**Dia: .243″**				
Case: WIN		**Primer: REM 9 1/2, LR**				**Col: 2.650″**
Magnum	45.7	2824	53,800 PSI	50.7	3092	59,700 PSI
Magpro	45.2	2861	53,900 PSI	50.2	3107	59,900 PSI
Hunter	38.8	2795	53,900 PSI	43.1	3052	59,900 PSI
A-4350	34.8	2741	53,700 PSI	38.4	2911	59,200 PSI
Bullet: 100 GR. SPR BTSP		**Dia: .243″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.650″**
IMR 7977	45.6	2927	49,400 PSI	49.1C	3122	58,100 PSI
H1000	44.0	2876	45,700 CUP	47.0C	3000	49,800 CUP
IMR 4955	43.1	2799	48,000 PSI	46.9C	3038	58,700 PSI
IMR 7828	42.5	2796	43,700 CUP	46.0C*	3009	51,100 CUP
Hybrid 100V	40.0	2868	45,400 CUP	43.7C	3100	51,700 CUP
IMR 4831	39.2	2733	43,500 CUP	43.0	2947	50,800 CUP
IMR 4451	39.2	2858	47,900 PSI	42.7	3090	58,400 PSI
H4831	39.0	2761	44,400 CUP	42.0	2924	50,100 CUP
StaBALL 6.5	38.5	2893	50,400 PSI	42.0	3085	58,200 PSI
IMR 4350	38.5	2760	43,000 CUP	42.0	2958	50,100 CUP
H4350	37.0	2806	45,100 CUP	40.0	2973	51,000 CUP
W760	37.0	2800	44,500 CUP	40.0	2963	50,600 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
H380	34.0	2639	43,600 CUP	36.0	2770	50,100 CUP
IMR 4166	33.9	2761	47,900 PSI	37.3	2984	58,100 PSI
IMR 4064	33.0	2672	42,200 CUP	36.5	2902	51,100 CUP
IMR 4895	32.8	2683	42,300 CUP	35.7	2862	50,100 CUP
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: 107 GR. SIE BTHP Dia: .243″

Case: WIN Primer: WIN LR Col: 2.850″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Retumbo	46.0	2785	42,800 CUP	49.0C	2974	48,500 CUP
IMR 8133	45.3	2754	49,600 PSI	49.2C	2981	59,200 PSI
IMR 7977	44.0	2827	49,400 PSI	47.4C	3008	57,300 PSI
H1000	43.0	2787	44,700 CUP	46.0C	2918	50,100 CUP
IMR 4955	41.8	2714	47,800 PSI	45.5C	2952	58,500 PSI
IMR 7828	40.0	2675	43,000 CUP	43.5	2878	50,100 CUP
StaBALL 6.5	38.0	2809	49,900 PSI	42.3	3021	59,200 PSI
Hybrid 100V	38.0	2760	45,300 CUP	41.5C	2957	50,900 CUP
H4831	38.0	2678	43,700 CUP	41.0	2835	50,100 CUP
IMR 4831	37.5	2662	43,900 CUP	40.9	2844	50,400 CUP
IMR 4451	37.5	2807	51,100 PSI	40.4	2967	58,500 PSI
IMR 4350	36.5	2661	42,100 CUP	39.8	2853	50,600 CUP
H4350	35.0	2671	43,100 CUP	37.5	2800	50,200 CUP
W760	35.0	2664	43,400 CUP	38.0	2809	49,500 CUP
H380	33.0	2570	44,400 CUP	34.8	2682	50,100 CUP
Varget	31.0	2630	45,300 CUP	33.0	2749	50,400 CUP
H4895	30.5	2613	45,900 CUP	32.5	2719	49,900 CUP

Bullet: 107 GR. SIE HPBT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	46.1	2778	53,800 PSI	51.2	3073	59,800 PSI
Magpro	45.0	2741	52,200 PSI	50.0	3010	58,000 PSI
Hunter	38.9	2736	53,200 PSI	43.2	3001	59,100 PSI

Bullet: 108 GR. BER BTT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	44.8	2797	52,500 PSI	49.7	3037	58,200 PSI
Magnum	44.8	2752	53,800 PSI	49.8	3027	59,800 PSI
Hunter	37.9	2717	53,600 PSI	42.1	2964	59,500 PSI

Bullet: 108 GR. HDY ELD-M Dia: .243″

Case: WIN Primer: WIN LR Col: 2.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	46.1	2705	41,400 PSI	49.6C	2970	52,500 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
IMR 7977	43.1	2712	45,800 PSI	48.4C	3018	59,400 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
IMR 4955	39.4	2737	47,000 PSI	44.2	3024	59,500 PSI
StaBALL 6.5	39.6	2799	46,700 PSI	43.1	3044	59,400 PSI
Hybrid 100V	37.3	2751	44,500 PSI	42.4C	3054	58,600 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
IMR 4451	35.8	2648	44,400 PSI	40.7	2987	59,400 PSI

Bullet: 115 GR. BER VLD Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.850″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: WIN Primer: WIN LR Col: 2.850″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	42.2	2661	46,100 PSI	48.0C	2963	59,400 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 7977	38.3	2578	44,600 PSI	44.0C	2903	59,400 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 4955	36.5	2575	44,000 PSI	41.9	2889	59,200 PSI
Hybrid 100V	35.4	2652	45,600 PSI	40.2	2931	59,300 PSI
IMR 4350	34.8	2594	45,600 PSI	39.6	2886	59,400 PSI
IMR 4451	34.7	2577	45,700 PSI	39.5	2866	59,300 PSI
H4350	34.2	2616	46,900 PSI	38.4	2850	58,700 PSI

6MM REMINGTON

Barrel: 24″ Twist: 1:9″ Trim: 2.223″

Bullet: 55 GR. NOS BT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H380	48.0	3793	49,900 PSI	53.0	4083	60,700 PSI
W760	46.0	3626	43,900 PSI	51.0	4016	58,800 PSI
BL-C(2)	44.0	3680	44,800 PSI	48.8	4094	60,100 PSI
Varget	43.0	3678	45,700 PSI	47.5	4023	58,800 PSI
IMR 4320	43.0	3603	43,900 PSI	47.8	4047	60,300 PSI
IMR 4166	42.7	3694	48,100 PSI	47.0	4026	60,100 PSI
H4895	42.0	3656	43,700 PSI	46.5	4066	59,300 PSI
IMR 8208 XBR	40.0	3533	39,700 PSI	45.0	4044	59,300 PSI
IMR 3031	40.0	3656	44,500 PSI	45.0	4090	61,200 PSI
Benchmark	40.0	3656	44,800 PSI	44.5	4028	59,600 PSI

Case: REM Primer: FED 210M, LR Match Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	46.2	3317	44,300 PSI	51.3	3685	49,200 PSI
A-2700	45.1	3445	53,500 PSI	50.5	3915	59,900 PSI
Big Game	44.8	3539	54,000 PSI	49.8	3932	60,100 PSI
A-4064	40.5	3547	54,200 PSI	45.0	4031	60,200 PSI

Bullet: 58 GR. HDY V-MAX Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.775″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H380	46.0	3627	47,300 PSI	50.0	3898	56,700 PSI
W760	45.0	3534	43,200 PSI	49.7	3925	59,100 PSI
IMR 4320	43.0	3616	46,800 PSI	47.0	3974	61,100 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 4166	42.2	3635	48,900 PSI	46.4	3968	61,700 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: REM Primer: FED 210M, LR Match Col: 2.750″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	46.6	3306	48,700 PSI	51.8	3673	54,100 PSI
A-4064	40.9	3432	57,200 PSI	45.5	3901	63,600 PSI

Case: WIN Primer: REM 9 1/2, LR Col: 2.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W760	45.0	3435	37,100 PSI	50.0	3877	60,300 PSI
H380	45.0	3546	47,400 PSI	50.0	3874	59,700 PSI
IMR 4320	42.0	3488	45,100 PSI	47.2	3899	61,100 PSI
Varget	42.0	3565	47,200 PSI	46.5	3900	60,200 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	42.0	3570	46,400 PSI	46.2C	3930	60,400 PSI
IMR 4895	42.0	3609	49,100 PSI	46.5	3955	62,500 PSI
W748	41.0	3532	47,500 PSI	46.5	3870	61,100 PSI
BL-C(2)	41.0	3454	42,600 PSI	46.7	3870	59,200 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: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	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
W760	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
Varget	41.0	3468	47,600 PSI	45.5	3775	60,200 PSI
IMR 4320	40.0	3380	44,900 PSI	45.3	3794	61,700 PSI
IMR 4895	40.0	3457	46,900 PSI	45.3	3856	63,100 PSI
IMR 4166	40.9	3511	51,200 PSI	45.0	3782	61,100 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
W748	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. NOS BT Dia: .243″

Case: REM Primer: FED 210M, LR Match Col: 2.810″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	46.4	3203	52,200 PSI	51.5	3559	57,900 PSI
Big Game	42.3	3263	56,300 PSI	47.0	3625	62,500 PSI
A-4064	40.0	3235	56,800 PSI	44.5	3677	63,200 PSI

Bullet: 70 GR. SIE HPBT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.810″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	50.0	3509	48,600 PSI	54.0	3812	61,000 PSI
H4350	46.0	3360	46,700 PSI	50.8C	3671	59,800 PSI
W760	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
IMR 4320	40.0	3342	47,400 PSI	45.3	3718	63,400 PSI
W748	40.0	3324	46,300 PSI	45.0	3691	63,400 PSI
IMR 4166	40.5	3443	51,500 PSI	44.6	3712	61,800 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
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: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	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
Hybrid 100V	44.0	3213	47,700 PSI	48.0C	3491	57,900 PSI
W760	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
IMR 4166	39.4	3298	49,800 PSI	43.4	3564	60,600 PSI
IMR 4064	39.0	3275	50,600 PSI	43.0	3553	62,100 PSI
W748	39.0	3244	50,600 PSI	43.0	3502	61,900 PSI
IMR 4320	38.0	3185	47,800 PSI	43.0	3508	60,900 PSI
IMR 4895	38.0	3255	50,600 PSI	43.0	3558	63,100 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: 75 GR. HDY V-MAX Dia: .243″

Case: REM Primer: FED 210M, LR Match Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	45.1	3180	55,200 PSI	50.1	3533	61,400 PSI
Big Game	40.7	3078	55,100 PSI	45.2	3420	61,200 PSI

Bullet: 80 GR. BAR TTSX BT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.810″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	46.0	3202	45,000 PSI	51.0C	3581	59,600 PSI
IMR 4451	43.1	3090	43,100 PSI	48.2C	3505	59,200 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
W760	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
IMR 4320	39.0	3112	46,400 PSI	43.5	3441	60,800 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
W748	38.0	3075	45,800 PSI	43.0	3431	61,300 PSI
IMR 4064	38.0	3094	44,700 PSI	42.0	3415	58,700 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. NOS BT Dia: .243″

Case: REM Primer: FED 210M, LR Match Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4350	44.6	2997	55,700 PSI	49.5	3406	61,800 PSI
A-2700	43.2	3006	56,600 PSI	48.0	3416	62,900 PSI
Hunter	42.3	3011	51,700 PSI	47.0	3346	57,400 PSI
Big Game	41.4	3078	56,400 PSI	46.0	3420	62,700 PSI

Bullet: 80 GR. SPR SP Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.775″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	46.0	3207	49,100 PSI	51.4	3536	61,000 PSI
Hybrid 100V	44.0	3186	50,500 PSI	48.0C	3458	61,500 PSI
IMR 4451	43.6	3174	47,800 PSI	48.0C	3492	60,900 PSI
H4350	42.0	3123	46,700 PSI	47.0	3430	59,400 PSI
W760	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
IMR 4166	39.2	3223	50,600 PSI	43.1	3492	62,100 PSI
Varget	38.0	3148	49,400 PSI	41.8	3376	59,400 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 4320	36.0	3079	50,400 PSI	39.8	3321	61,700 PSI
IMR 4064	35.0	3066	51,600 PSI	39.6	3346	61,800 PSI
W748	35.0	3132	58,800 PSI	39.2	3297	61,800 PSI
IMR 4895	35.0	3067	50,800 PSI	39.4	3337	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: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4831	44.0	3058	49,300 PSI	48.5C	3379	62,400 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
IMR 4451	44.4	3142	48,800 PSI	48.3C	3455	62,900 PSI
StaBALL 6.5	44.0	3154	48,200 PSI	48.0	3429	60,900 PSI
Hybrid 100V	43.0	3143	51,700 PSI	47.5C	3411	62,200 PSI
H4350	42.0	3075	48,200 PSI	46.5	3350	59,300 PSI
IMR 4350	42.0	2996	48,900 PSI	47.0	3335	62,100 PSI
W760	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
IMR 4895	36.5	2998	50,500 PSI	40.7	3261	61,800 PSI
IMR 4320	36.0	2945	49,300 PSI	40.5	3249	62,900 PSI
W748	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 HPBT Dia: .243″

Case: REM Primer: FED 210M, LR Match Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4451	43.5	3107	48,800 PSI	47.3C	3386	60,800 PSI
StaBALL 6.5	43.0	3045	45,800 PSI	47.5	3382	62,100 PSI
Hybrid 100V	43.0	3149	53,300 PSI	47.0C	3386	63,300 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
W760	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 4320	36.0	2962	51,000 PSI	40.0	3215	62,900 PSI
IMR 4064	36.0	2945	48,900 PSI	40.3	3217	61,200 PSI
IMR 4895	36.0	2982	51,200 PSI	40.2	3236	62,800 PSI
W748	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

Bullet: 95 GR. NOS BT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	47.0	2835	43,000 PSI	50.5C	3056	52,900 PSI
IMR 7828 SSC	44.0	2818	48,400 PSI	48.7C	3130	61,800 PSI
H4831	44.0	2798	43,700 PSI	49.5C	3125	57,600 PSI
IMR 4451	43.2	2984	48,400 PSI	47.0C	3273	61,500 PSI
IMR 4831	42.0	2887	49,000 PSI	47.0C	3218	63,000 PSI
StaBALL 6.5	41.0	2826	45,600 PSI	45.2	3128	60,300 PSI
Hybrid 100V	41.0	2930	50,700 PSI	45.5	3226	63,100 PSI
H4350	41.0	2909	48,100 PSI	45.5	3167	59,200 PSI
IMR 4350	41.0	2867	49,900 PSI	45.5C	3153	61,500 PSI
W760	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
W748	36.0	2750	48,600 PSI	39.7	3042	62,200 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: REM Primer: FED 210M, LR Match Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	47.7	2754	55,300 PSI	53.0	3060	61,500 PSI
A-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: WIN Primer: REM 9 1/2, LR Col: 2.775″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4451	42.2	2938	48,200 PSI	45.9	3189	60,100 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
Hybrid 100V	40.0	2909	53,400 PSI	44.5	3142	61,500 PSI
IMR 4350	40.0	2842	50,200 PSI	44.6C	3126	62,600 PSI
W760	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
W748	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
IMR 4895	34.0	2737	48,800 PSI	38.5	3016	62,400 PSI
H4895	34.0	2749	45,900 PSI	38.5	3035	59,900 PSI

Bullet: 105 GR. HDY ELD-M Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	48.8	2768	45,300 PSI	53.0C	3090	59,000 PSI
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
Hybrid 100V	40.0	2849	51,900 PSI	43.7C	3078	62,500 PSI
H4350	40.0	2838	49,700 PSI	43.5	3029	58,800 PSI
W760	40.0	2826	50,700 PSI	43.0	3009	58,600 PSI
IMR 4350	39.0	2713	48,200 PSI	43.8	3027	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

Case: REM Primer: FED 210M, LR Match Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2700	40.1	2605	54,900 PSI	44.5	2960	60,900 PSI
A-4350	39.6	2563	53,300 PSI	44.0	2912	59,200 PSI

Bullet: 107 GR. SIE HPBT Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.950″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	48.0	2761	47,100 PSI	52.0C	3045	60,000 PSI
Retumbo	47.0	2836	44,900 PSI	50.0C	3033	55,200 PSI
H1000	47.0	2818	47,400 PSI	50.0C	2980	55,100 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
StaBALL 6.5	41.0	2815	49,800 PSI	44.2	3044	61,600 PSI
Hybrid 100V	40.0	2870	54,400 PSI	43.5	3053	62,800 PSI
IMR 4831	40.0	2772	48,800 PSI	44.5	3080	63,600 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
W760	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
IMR 4064	33.0	2650	48,900 PSI	37.0	2869	60,800 PSI

Bullet: 115 GR. BAR RN Dia: .243″

Case: WIN Primer: REM 9 1/2, LR Col: 2.825″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Retumbo	47.0	2711	43,200 CUP	50.0C	2878	49,000 CUP
H1000	43.0	2665	43,800 CUP	45.5	2793	49,600 CUP
H4831	39.0	2598	43,800 CUP	42.0	2761	49,800 CUP
H4350	36.0	2537	43,200 CUP	39.0	2696	49,700 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%.

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: REM		**Primer: WIN LR**				**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
A-4350	53.1	3326	55,300 PSI	59.0	3780	61,400 PSI
Case: REM		**Primer: REM 9 1/2, LR**				**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
IMR 4451	53.8	3464	48,100 PSI	58.5	3781	60,300 PSI
Hybrid 100V	51.0	3395	44,300 CUP	55.5	3625	50,900 CUP
W760	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
Bullet: 80 GR. BAR TTSX BT		**Dia: .257″**				
Case: REM		**Primer: REM 9 1/2, LR**				**Col: 3.075″**
IMR 7828 SSC	57.0	3350	49,900 PSI	61.0C*	3582	58,500 PSI
IMR 4955	55.4	3318	48,700 PSI	60.9C	3626	61,900 PSI
IMR 4831	52.0	3301	45,600 PSI	56.0C	3569	55,200 PSI
IMR 4451	51.5	3388	48,700 PSI	56.0C	3673	59,800 PSI
H4350	51.0	3347	48,500 PSI	55.0C	3560	56,900 PSI
IMR 4350	51.0	3372	49,300 PSI	55.0C	3600	57,300 PSI
Hybrid 100V	50.0	3353	46,400 PSI	54.0C	3624	56,600 PSI
H380	49.0	3394	52,800 PSI	52.5	3597	60,800 PSI
W760	48.0	3379	52,800 PSI	53.0	3586	60,300 PSI
IMR 4166	44.5	3339	48,300 PSI	50.0	3616	60,700 PSI
IMR 4064	45.0	3377	49,500 PSI	49.5	3645	61,400 PSI
IMR 4895	45.0	3385	50,500 PSI	49.5	3661	61,900 PSI
H4895	43.0	3408	52,100 PSI	47.5	3630	61,500 PSI
Bullet: 85 GR. NOS BT		**Dia: .257″**				
Case: REM		**Primer: REM 9 1/2, LR**				**Col: 3.230″**
H1000	58.0	3218	41,000 CUP	62.0C	3442	48,100 CUP
IMR 7977	57.0	3256	49,200 PSI	62.0C	3564	60,600 PSI
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
IMR 4955	53.0	3210	49,700 PSI	58.3	3499	61,700 PSI
Hybrid 100V	49.0	3223	44,100 CUP	54.0	3490	51,200 CUP
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 4451	48.6	3289	51,600 PSI	52.9	3494	59,100 PSI
IMR 4350	48.0	3107	43,700 CUP	53.0	3398	50,800 CUP
W760	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
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 4166	42.0	3148	47,700 PSI	47.2	3466	59,900 PSI
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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 87 GR. HDY SP		**Dia: .257″**				
Case: REM		**Primer: WIN LR**				**Col: 3.120″**
Magpro	56.3	3261	54,900 PSI	62.5	3573	60,900 PSI
A-4350	49.5	3203	55,300 PSI	55.0	3501	61,500 PSI
Bullet: 87 GR. SPR HP		**Dia: .257″**				
Case: REM		**Primer: REM 9 1/2, LR**				**Col: 3.115″**
IMR 7977	58.9	3209	46,500 PSI	62.0C	3407	54,000 PSI
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 4955	53.5	3184	48,600 PSI	58.8	3496	61,800 PSI
IMR 4831	52.0	3099	41,900 CUP	56.5	3398	50,600 CUP
IMR 4451	50.9	3260	49,500 PSI	55.7	3545	61,400 PSI
Hybrid 100V	50.0	3214	42,400 CUP	55.0	3499	49,300 CUP
H4350	50.0	3234	45,600 CUP	54.5	3409	50,800 CUP
IMR 4350	50.0	3086	41,800 CUP	54.8	3378	50,900 CUP
W760	47.0	3138	43,800 CUP	50.5	3327	51,100 CUP
IMR 4166	43.2	3155	47,300 PSI	48.6	3467	59,600 PSI
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
IMR 4064	42.0	3091	42,000 CUP	46.5	3344	50,600 CUP
IMR 4895	42.0	3148	45,800 CUP	46.0	3341	51,000 CUP
Bullet: 90 GR. BAR BAND-S		**Dia: .257″**				
Case: REM		**Primer: WIN LR**				**Col: 3.250″**
Magnum	57.3	2980	52,400 PSI	63.7	3311	58,300 PSI
Hunter	49.5	3028	55,100 PSI	55.0	3364	61,300 PSI
Bullet: 90 GR. HDY GMX		**Dia: .257″**				
Case: REM		**Primer: REM 9 1/2, LR**				**Col: 3.115″**
Retumbo	56.0	3250	51,000 PSI	60.0C	3432	58,700 PSI
H1000	56.0	3248	54,900 PSI	60.0C	3377	59,300 PSI
IMR 7977	55.9	3200	51,200 PSI	60.8C	3473	61,300 PSI
IMR 4955	52.5	3106	49,600 PSI	57.7C	3415	61,700 PSI
IMR 7828 SSC	52.0	3198	52,300 PSI	57.0C	3437	61,500 PSI
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
IMR 4451	46.5	3169	52,200 PSI	52.3	3429	61,000 PSI
Hybrid 100V	46.0	3152	49,100 PSI	50.7	3436	59,500 PSI
H4350	45.0	3117	51,300 PSI	49.5	3344	60,600 PSI
IMR 4166	41.5	3019	47,000 PSI	46.7	3347	59,800 PSI
Varget	41.0	3098	51,600 PSI	44.0	3261	58,800 PSI
IMR 4895	41.0	3070	49,200 PSI	46.0	3351	59,900 PSI
IMR 4064	40.0	3043	48,900 PSI	44.0	3253	57,300 PSI
H4895	39.0	3053	50,800 PSI	43.0	3281	60,200 PSI
Bullet: 90 GR. SIE HPBT		**Dia: .257″**				
Case: REM		**Primer: WIN LR**				**Col: 3.100″**
Magpro	55.9	3248	55,300 PSI	62.2	3550	61,500 PSI
A-4350	48.6	3055	56,600 PSI	54.0	3472	62,900 PSI
Case: REM		**Primer: REM 9 1/2, LR**				**Col: 3.100″**
H1000	58.0	3142	40,300 CUP	62.0C	3330	47,500 CUP
IMR 7977	57.0	3126	45,100 PSI	62.0C	3419	55,700 PSI
IMR 7828 SSC	55.0	3145	46,400 CUP	59.5C*	3374	52,900 CUP
IMR 4955	53.0	3161	49,000 PSI	58.3	3451	61,900 PSI
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

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 4451	50.3	3270	50,900 PSI	54.7	3517	61,200 PSI
Hybrid 100V	50.0	3217	46,400 CUP	54.0	3404	51,500 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
W760	47.0	3135	44,300 CUP	51.0	3315	50,200 CUP
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 BT Dia: .257″

Case: REM Primer: WIN LR Col: 3.170″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	47.7	2969	56,000 PSI	53.0	3245	62,200 PSI

Bullet: 100 GR. NOS PART Dia: .257″

Case: REM Primer: REM 9 1/2, LR Col: 3.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 7977	55.5	3064	48,600 PSI	61.0C	3372	61,300 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
IMR 4955	51.4	3033	50,500 PSI	56.5	3287	61,500 PSI
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
IMR 4350	48.0	2975	43,200 CUP	52.8	3257	51,200 CUP
Hybrid 100V	48.0	3034	44,200 CUP	52.5	3295	51,800 CUP
IMR 4451	46.8	3092	52,700 PSI	51.9	3329	61,600 PSI
H4350	47.0	3038	47,800 CUP	50.0	3155	51,500 CUP
W760	42.0	2843	44,600 CUP	47.0	3059	50,700 CUP
IMR 4166	41.0	2956	48,000 PSI	46.1	3243	59,700 PSI
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
H4895	40.0	2921	44,200 CUP	43.0	3072	51,000 CUP
Trail Boss	13.4	1454	25,500 PSI	19.2	1712	30,600 PSI

Bullet: 117 GR. HDY SPBT Dia: .257″

Case: REM Primer: WIN LR Col: 3.165″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	45.9	2784	56,400 PSI	51.0	3043	62,700 PSI

Case: REM Primer: REM 9 1/2, LR Col: 3.165″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	56.2	2939	49,100 PSI	61.1C	3216	61,500 PSI
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
IMR 7977	53.0	2889	50,000 PSI	58.0C	3153	61,700 PSI
IMR 7828 SSC	51.0	2879	46,600 CUP	55.0	3037	51,200 CUP
IMR 4955	49.3	2811	49,700 PSI	54.2	3063	61,500 PSI
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
Hybrid 100V	46.0	2981	43,100 CUP	50.5	3111	50,400 CUP
H4350	44.0	2737	44,300 CUP	47.7	2923	50,800 CUP
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: REM Primer: REM 9 1/2, LR Col: 3.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	57.0	2962	52,200 PSI	62.0C	3173	60,400 PSI
Retumbo	56.0	2806	43,700 CUP	60.0C	2991	50,300 CUP
IMR 7977	52.3	2797	49,800 PSI	57.2	3064	61,000 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 4955	48.7	2716	48,800 PSI	53.5	2994	61,600 PSI
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
Hybrid 100V	46.0	2796	44,500 CUP	50.0	3009	51,200 CUP
H4350	44.0	2643	42,900 CUP	47.5	2816	50,900 CUP
Varget	38.0	2584	45,100 CUP	41.0	2755	51,900 CUP
H4895	37.0	2541	45,400 CUP	40.0	2694	51,700 CUP

Bullet: 120 GR. SIE HPBT Dia: .257″

Case: REM Primer: WIN LR Col: 3.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	53.1	2768	55,600 PSI	59.0	3025	61,800 PSI
Magpro	50.6	2788	56,200 PSI	56.3	3038	62,500 PSI

257 WEATHERBY MAGNUM

Barrel: 26″ Twist: 1:10″ Trim: 2.537″

Bullet: 70 GR. SIE BK Dia: .257″

Case: Weatherby Primer: WIN LR Col: 3.170″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	72.6	3460	55,200 PSI	80.7	3872	61,300 PSI
Magpro	71.9	3398	55,200 PSI	79.9	3826	61,400 PSI
A-4350	64.4	3407	55,400 PSI	71.5	3863	61,600 PSI
A-5744	39.7	3243	47,600 PSI	49.7	3855	59,500 PSI

Bullet: 75 GR. HDY V-MAX Dia: .257″

Case: Weatherby Primer: FED 215, LR Magnum Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W760	65.0	3717	44,200 CUP	69.5	3971	52,400 CUP

Bullet: 75 GR. HDY HP Dia: .257″

Case: Weatherby Primer: WIN LR Col: 3.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	64.1	3318	55,700 PSI	71.2	3741	61,900 PSI

Bullet: 85 GR. NOS BT Dia: .257″

Case: Weatherby Primer: WIN LR Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	60.6	3246	55,400 PSI	67.3	3597	61,500 PSI

Case: Weatherby Primer: FED 215, LR Magnum Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W760	62.5	3543	44,800 CUP	66.5	3746	51,700 CUP
IMR 7828				74.5	3775	53,500 CUP

Bullet: 90 GR. HDY GMX Dia: .257″

Case: Weatherby Primer: WIN LR Col: 3.180″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

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
A-4350	59.9	3213	55,900 PSI	66.6	3554	62,100 PSI

Bullet: 90 GR. SIE BK **Dia: .257″**

Case: Weatherby **Primer: WIN LR** **Col: 3.150″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	60.4	3190	55,300 PSI	67.1	3586	61,500 PSI
A-5744	34.5	2823	44,400 PSI	46.0	3458	59,200 PSI

Bullet: 90 GR. SIE HPBT **Dia: .257″**

Case: Weatherby **Primer: FED 215, LR Magnum** **Col: 3.150″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	62.0	3458	44,000 CUP	66.0	3671	52,200 CUP

Bullet: 100 GR. SFT A-FRAME **Dia: .257″**

Case: Weatherby **Primer: WIN LR** **Col: 3.160″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LRT	71.8	3064	55,200 PSI	79.8	3466	61,300 PSI
Magpro	65.4	3087	55,100 PSI	72.6	3451	61,100 PSI
Magnum	65.3	3060	55,100 PSI	72.6	3428	61,300 PSI
A-4350	58.2	3053	55,100 PSI	64.6	3503	61,300 PSI

Bullet: 100 GR. SPR SPBT **Dia: .257″**

Case: Weatherby **Primer: FED 215, LR Magnum** **Col: 3.200″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	73.0	3410	45,800 CUP	78.0	3575	52,400 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
W760	59.0	3294	45,300 CUP	62.5	3449	51,800 CUP
IMR 7828				73.0	3655	53,100 CUP

Bullet: 115 GR. BAR TSX FB **Dia: .257″**

Case: Weatherby **Primer: WIN LR** **Col: 3.160″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LRT	69.3	2902	55,900 PSI	77.0	3263	62,100 PSI
Magnum	63.3	2908	55,500 PSI	70.4	3238	61,600 PSI
Magpro	61.9	2877	55,500 PSI	68.8	3236	61,700 PSI

Bullet: 115 GR. BAR XFB **Dia: .257″**

Case: Weatherby **Primer: FED 215, LR Magnum** **Col: 3.250″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	67.0	3147	50,000 CUP	71.0	3265	52,700 CUP
H4831	60.0	3030	46,200 CUP	64.0	3170	52,000 CUP
H4350	56.0	2988	46,900 CUP	60.0	3188	52,500 CUP

Bullet: 115 GR. BER VLD **Dia: .257″**

Case: Weatherby **Primer: WIN LR** **Col: 3.240″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: FED 215, LR Magnum** **Col: 3.220″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	70.0	3169	45,200 CUP	74.0	3321	51,800 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
IMR 7828				70.0	3390	52,600 CUP

Bullet: 117 GR. SIE SBT **Dia: .257″**

Case: Weatherby **Primer: WIN LR** **Col: 3.250″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN LR** **Col: 3.240″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-5744	31.4	2404	45,700 PSI	40.7	2914	59,200 PSI

Bullet: 120 GR. SFT SP **Dia: .257″**

Case: Weatherby **Primer: FED 215, LR Magnum** **Col: 3.220″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	69.0	3103	45,700 CUP	73.0	3256	51,800 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
IMR 7828				69.0	3325	53,000 CUP

6.5X47MM Lapua

Barrel: 30″ Twist: 1:8″ Trim: 1.840″

Bullet: 95 GR. HDY V-MAX **Dia: .264″**

Case: Lapua (ref) **Primer: FED 205M, SR Match** **Col: 2.525″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
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
IMR 4166	35.0	2871	43,800 CUP	38.9	3183	51,900 CUP
Benchmark	34.9	3014	44,200 CUP	38.3	3264	52,000 CUP

Bullet: 100 GR. NOS BT **Dia: .264″**

Case: Lapua (ref) **Primer: FED 205M, SR Match** **Col: 2.600″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
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
IMR 4166	32.4	2819	44,600 CUP	38.0	3097	52,200 CUP

Bullet: 107 GR. SIE HPBT **Dia: .264″**

Case: Lapua **Primer: WIN SR** **Col: 2.645″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	39.6	2827	50,800 PSI	44.0	3141	56,500 PSI
A-4064	36.0	2787	54,000 PSI	40.0	3097	60,000 PSI
A-2520	35.1	2806	55,100 PSI	39.0	3118	61,300 PSI

Case: Lapua (ref) **Primer: FED 205M, SR Match** **Col: 2.665″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	38.6	3077	47,000 CUP	42.5	3276	52,000 CUP
Varget	35.9	2916	45,300 CUP	39.0	3123	51,800 CUP
IMR 4064	35.5	2860	44,400 CUP	39.0	3117	51,900 CUP
IMR 4166	34.0	2781	44,400 CUP	37.0	3009	52,100 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) **Primer: FED 205M, SR Match** **Col: 2.685″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	40.9	2649	44,400 CUP	43.6C	2832	49,400 CUP
IMR 4955	39.9	2595	44,400 CUP	43.3C	2872	51,700 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
IMR 4451	36.4	2569	44,600 CUP	40.3	2823	52,000 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 4166	32.4	2588	46,300 CUP	35.5	2790	52,100 CUP
IMR 8208 XBR	32.1	2634	45,100 CUP	34.9	2816	52,000 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%.

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Benchmark	31.0	2563	44,400 CUP	34.1	2785	51,800 CUP

Bullet: 123 GR. SIE HPBT Dia: .264″

Case: Lapua Primer: WIN SR Col: 2.635″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	38.3	2655	52,400 PSI	42.5	2950	58,300 PSI
A-2700	37.8	2606	49,300 PSI	42.0	2896	54,800 PSI
A-4064	34.5	2579	53,600 PSI	38.3	2866	59,600 PSI
A-2520	33.3	2582	54,500 PSI	37.0	2869	60,600 PSI

Bullet: 130 GR. SIE TMK Dia: .264″

Case: Lapua (ref) Primer: FED 205M, SR Match Col: 2.700″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	38.9	2450	44,200 CUP	43.3C	2723	51,500 CUP
IMR 4955	38.3	2514	44,600 CUP	42.5	2763	51,900 CUP
StaBALL 6.5	36.9	2568	42,600 CUP	41.0	2814	52,300 CUP
H4350	36.8	2549	44,800 CUP	40.5C	2822	51,900 CUP
IMR 4350	36.8	2524	43,900 CUP	40.5C	2786	51,900 CUP
IMR 4451	34.9	2357	40,600 CUP	38.8C	2651	51,800 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) Primer: FED 205M, SR Match Col: 2.695″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	38.7	2494	43,900 CUP	42.6C	2727	51,800 CUP
IMR 4955	36.8	2401	43,100 CUP	40.9C	2650	51,700 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
IMR 4451	34.7	2409	44,900 CUP	38.2	2696	52,100 CUP
CFE 223	31.8	2455	44,900 CUP	35.8	2718	52,200 CUP
IMR 8208 XBR	31.0	2480	47,700 CUP	33.7	2668	51,700 CUP
Varget	30.8	2473	45,700 CUP	34.8	2733	52,600 CUP

Bullet: 140 GR. BER VLD Dia: .264″

Case: Lapua (ref) Primer: FED 205M, SR Match Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	38.2	2478	43,700 CUP	42.5C	2714	51,400 CUP
IMR 4955	37.3	2367	43,700 CUP	41.4C	2615	52,700 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
IMR 4451	34.6	2412	45,500 CUP	38.1	2684	52,400 CUP
CFE 223	32.4	2438	45,700 CUP	36.2	2693	51,400 CUP
Varget	30.9	2450	45,000 CUP	34.9	2696	51,900 CUP

Bullet: 142 GR. SIE HPBT Dia: .264″

Case: Lapua Primer: WIN SR Col: 2.695″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
A-4064	33.0	2384	55,600 PSI	36.7	2649	61,800 PSI

Bullet: 143 GR. HDY ELD-X Dia: .264″

Case: Lapua (ref) Primer: FED 205M, SR Match Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	38.2	2484	43,900 CUP	41.5C	2632	48,500 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 4955	36.5	2399	44,400 CUP	40.5C	2645	50,000 CUP
H4350	35.6	2489	42,900 CUP	40.0C	2770	51,300 CUP
IMR 4350	35.5	2477	45,100 CUP	39.5C	2717	52,000 CUP
IMR 4451	34.8	2414	45,000 CUP	38.7C	2658	52,900 CUP
CFE 223	32.6	2496	46,500 CUP	36.3	2702	52,400 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) Primer: FED 205M, SR Match Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
StaBALL 6.5	36.5	2487	45,600 CUP	39.7	2711	52,600 CUP
H4350	35.8	2496	43,100 CUP	39.8C	2732	52,600 CUP
IMR 4350	35.3	2444	43,700 CUP	39.2C	2711	52,500 CUP
IMR 4451	34.6	2395	43,400 CUP	38.4C	2632	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: 153 GR. HDY A-TIP Dia: .264″

Case: Lapua (ref) Primer: FED 205M, SR Match Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4451	34.0	2359	47,000 PSI	37.0C	2556	52,700 PSI
CFE 223	31.6	2384	45,500 PSI	34.5	2554	52,100 PSI

6.5 Creedmoor

Barrel: 24″ Twist: 1:8″ Trim: 1.910″

Bullet: 95 GR. HDY V-MAX Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.670″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	42.0	2991	46,100 PSI	46.5	3243	57,100 PSI
CFE 223	40.4	3152	54,500 PSI	43.0	3274	60,000 PSI
BL-C(2)	40.0	3082	49,800 PSI	44.0	3313	60,300 PSI
Varget	39.0	3051	49,000 PSI	43.0	3286	60,100 PSI
W748	39.0	3050	50,200 PSI	43.0	3259	59,000 PSI
IMR 4166	38.7	3022	48,300 PSI	42.6	3285	59,900 PSI
IMR 4064	38.0	3009	45,800 PSI	41.6	3281	58,700 PSI
IMR 4895	38.0	3006	46,600 PSI	42.2	3295	60,400 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: FED 210M, LR Match Col: 2.655″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	39.7	2893	47,100 PSI	44.5	3163	60,400 PSI
IMR 4166	37.3	2870	49,300 PSI	41.0	3131	59,900 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: FED 210M, LR Match Col: 2.760″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	40.0	2923	48,700 PSI	43.8	3143	58,700 PSI
IMR 4166	37.7	2931	48,900 PSI	41.5	3185	60,600 PSI
BL-C(2)	37.5	2912	48,800 PSI	41.8	3163	60,100 PSI
Varget	36.5	2888	48,900 PSI	40.5	3122	60,300 PSI
IMR 4895	36.5	2899	48,400 PSI	40.5	3151	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

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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: WIN LR   Col: 2.710″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	41.9	2875	53,100 PSI	46.5	3194	59,000 PSI
A-4064	37.8	2757	53,600 PSI	42.0	3063	59,600 PSI

Case: Hornady   Primer: FED 210M, LR Match   Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	40.0	2832	45,300 PSI	45.0	3127	58,800 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
W748	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 4166	36.7	2841	48,600 PSI	40.4	3086	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: FED 210M, LR Match   Col: 2.670″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4451	40.2	2618	46,200 PSI	44.7	2929	61,400 PSI
W760	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
Varget	36.0	2668	49,600 PSI	40.2	2891	60,400 PSI
W748	36.0	2650	56,900 PSI	40.4	2899	59,900 PSI
IMR 4064	35.0	2666	47,200 PSI	38.9	2903	59,800 PSI
IMR 4895	35.0	2670	48,600 PSI	39.0	2895	59,300 PSI
IMR 4166	34.7	2642	50,500 PSI	38.5	2867	61,500 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: WIN LR   Col: 2.710″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	42.8	2697	52,500 PSI	47.5	2997	58,300 PSI
A-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
A-4064	36.0	2549	53,300 PSI	40.0	2832	59,200 PSI

Bullet: 123 GR. SIE HPBT   Dia: .264″

Case: Hornady   Primer: WIN LR   Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	42.3	2683	53,000 PSI	47.0	2981	58,800 PSI
A-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: FED 210M, LR Match   Col: 2.670″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4451	40.1	2627	46,600 PSI	44.6	2930	61,500 PSI
W760	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
W748	37.0	2650	45,600 PSI	40.8	2900	58,900 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 4166	34.2	2624	49,200 PSI	38.0	2855	61,000 PSI
IMR 8208 XBR	32.0	2570	46,100 PSI	36.0	2806	59,000 PSI

Bullet: 130 GR. SIE TMK   Dia: .264″

Case: Hornady   Primer: WIN LR   Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
A-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
A-4064	33.7	2507	54,500 PSI	37.5	2722	60,500 PSI

Bullet: 130 GR. NOS AB   Dia: .264″

Case: Hornady   Primer: FED 210M, LR Match   Col: 2.750″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
StaBALL 6.5	39.9	2582	44,300 PSI	44.3	2889	61,300 PSI
IMR 4451	37.5	2479	47,800 PSI	41.7C	2735	59,500 PSI
W760	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
IMR 4895	32.9	2435	49,600 PSI	37.0	2668	61,000 PSI
IMR 4166	32.0	2416	47,800 PSI	35.7	2663	60,400 PSI
Varget	31.4	2414	51,500 PSI	34.9	2610	61,400 PSI
BL-C(2)	31.2	2358	52,600 PSI	34.9	2529	60,400 PSI
IMR 4064	31.0	2352	47,600 PSi	34.9	2585	59,600 PSI
W748	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: 135 GR. HDY A-TIP   Dia: .264″

Case: Hornady   Primer: FED 210M, LR Match   Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
StaBALL 6.5	41.4	2633	46,600 PSI	45.0	2870	60,800 PSI
Hybrid 100V	40.4	2670	50,300 PSI	44.0C	2878	61,400 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
IMR 4451	39.4	2553	48,900 PSI	42.8	2775	61,300 PSI
W760	39.0	2556	45,900 PSI	42.4	2803	60,900 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
IMR 4166	34.1	2535	50,600 PSI	37.1	2708	60,800 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. HDY ELD-M   Dia: .264″

Case: Hornady   Primer: WIN LR   Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	40.8	2501	53,100 PSI	45.3	2779	59,000 PSI
A-4350	39.2	2446	54,700 PSI	43.5	2695	60,800 PSI
A-2700	37.8	2432	52,700 PSI	42.0	2702	58,600 PSI
Big Game	36.3	2423	52,900 PSI	40.3	2692	58,800 PSI
A-4064	33.9	2332	52,900 PSI	37.7	2591	58,800 PSI

Case: Hornady   Primer: FED 210M, LR Match   Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4350	37.0	2460	47,500 PSI	41.0C	2607	59,800 PSI
Hybrid 100V	36.0	2451	45,300 PSI	40.9C	2736	59,600 PSI
H4350	36.0	2464	49,200 PSI	40.0C	2660	59,200 PSI
StaBALL 6.5	40.0	2535	45,400 PSI	44.0	2806	61,100 PSI
IMR 4451	37.0	2414	47,700 PSI	41.1	2670	60,700 PSI
W760	36.0	2460	50,100 PSI	40.2	2672	60,300 PSI
H380	34.5	2388	47,800 PSI	38.5	2605	59,500 PSI
IMR 4895	33.7	2491	52,700 PSI	35.9	2609	60,200 PSI
Varget	32.0	2371	47,400 PSI	35.8	2598	59,900 PSI
IMR 4064	32.0	2393	48,700 PSI	35.7	2603	60,800 PSI
IMR 4166	31.7	2359	48,300 PSI	35.2	2576	60,100 PSI
H4895	30.0	2316	46,800 PSI	34.0	2555	60,400 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
IMR 8208 XBR	30.0	2335	49,200 PSI	32.8	2511	59,300 PSI

Bullet: 140 GR. SFT A-FRAME Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.700″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
IMR 4955	39.5	2473	47,000 PSI	43.0	2698	60,100 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
Hybrid 100V	38.1	2565	48,500 PSI	41.4	2767	60,200 PSI
W760	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
IMR 4451	36.8	2481	48,700 PSI	40.0	2677	60,500 PSI
H380	35.7	2445	49,600 PSI	38.8	2632	59,900 PSI

Bullet: 142 GR. SIE HPBT Dia: .264″

Case: Hornady Primer: WIN LR Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	41.1	2485	52,700 PSI	45.7	2761	58,500 PSI
A-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
A-4064	34.2	2335	52,800 PSI	38.0	2594	58,700 PSI

Case: Hornady Primer: FED 210M, LR Match Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Hybrid 100V	39.0	2581	50,200 PSI	41.5	2737	58,900 PSI
H4350	38.8	2573	52,300 PSI	41.5	2694	59,800 PSI
IMR 4451	37.3	2422	46,600 PSI	41.4	2691	61,200 PSI
W760	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
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
IMR 4166	32.0	2383	48,900 PSI	35.5	2598	60,600 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: FED 210M, LR Match Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	39.4	2414	45,800 PSI	46.3C	2735	61,500 PSI
Suprform	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
Hybrid 100V	36.8	2433	44,300 PSI	43.4	2791	61,500 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: WIN LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	37.8	2418	55,300 PSI	42.0	2626	61,400 PSI
A-4350	37.3	2385	54,900 PSI	41.4	2590	60,900 PSI

Case: Hornady Primer: FED 210M, LR Match Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	40.4	2432	47,700 PSI	46.0C	2695	61,400 PSI
Suprform	39.7	2456	48,100 PSI	45.2	2746	61,100 PSI
IMR 4955	40.1	2383	48,300 PSI	44.6C	2615	60,400 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
Hybrid 100V	38.2	2480	46,600 PSI	43.0	2741	59,800 PSI
IMR 4350	37.3	2385	44,300 PSI	42.4	2697	60,500 PSI
IMR 4451	37.1	2367	45,300 PSI	42.2	2680	61,500 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

Bullet: 150 GR. SIE BTHP Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	41.1	2467	50,200 PSI	45.7C	2664	61,200 PSI
Suprform	40.9	2519	52,000 PSI	44.5	2710	60,500 PSI
IMR 4955	40.7	2466	49,500 PSI	44.3C	2663	59,600 PSI
IMR 4831	39.6	2426	46,800 PSI	44.0C	2666	60,200 PSI
Hybrid 100V	39.1	2530	50,600 PSI	42.6	2713	60,300 PSI
StaBALL 6.5	39.0	2469	47,300 PSI	42.3	2693	60,800 PSI
IMR 4451	37.8	2433	49,300 PSI	42.0C	2664	61,400 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 Primer: FED 210M, LR Match Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	41.2	2503	50,600 PSI	44.8C	2674	61,100 PSI
A-4350	40.4	2481	50,400 PSI	44.0C	2655	61,500 PSI
IMR 4955	40.2	2475	50,900 PSI	43.8C	2654	61,000 PSI
IMR 4451	38.8	2447	49,600 PSI	42.2C	2627	60,700 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
Suprform	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
Hybrid 100V	38.1	2500	48,800 PSI	41.5	2689	60,800 PSI
H4350	37.7	2438	48,600 PSI	41.0	2631	61,200 PSI

260 REMINGTON

Barrel: 24″ Twist: 1:9″ Trim: 2.025″

Bullet: 100 GR. NOS BT Dia: .264″

Case: REM Primer: WIN LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4350	43.2	2845	52,800 PSI	48.0	3234	58,700 PSI
A-2700	40.5	2746	53,000 PSI	45.0	3121	58,900 PSI
Big Game	40.5	2840	52,000 PSI	45.0	3156	57,700 PSI

Bullet: 107 GR. SIE HPBT Dia: .264″

Case: REM Primer: WIN LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	44.6	2777	49,100 PSI	49.6	3086	54,600 PSI
A-4350	43.2	2797	53,000 PSI	48.0	3179	58,900 PSI
A-2700	41.4	2722	52,400 PSI	46.0	3094	58,200 PSI
Big Game	40.5	2782	51,200 PSI	45.0	3091	56,800 PSI

Case: REM Primer: REM 9 1/2, LR Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	50.0	2963	50,300 PSI	51.0C	3027	54,000 PSI
IMR 4955	46.5	2872	47,800 PSI	49.5C	3078	57,100 PSI
Hybrid 100V	42.0	2835	46,600 PSI	46.0C	3071	56,100 PSI
H4350	46.0	2997	50,400 PSI	49.0	3164	58,700 PSI
W760	43.5	2917	46,900 PSI	46.5	3151	58,100 PSI
H380	43.0	2908	48,500 PSI	46.0	3107	58,200 PSI
BL-C(2)	40.0	2951	50,400 PSI	42.7	3097	57,800 PSI
Benchmark	40.0	3158	50,900 PSI	42.5	3227	59,500 PSI
CFE 223	39.7	2955	54,900 PSI	42.2	3081	58,900 PSI
Varget	38.5	2947	49,800 PSI	41.5	3125	58,700 PSI
H4895	38.0	2950	51,900 PSI	40.7	3074	58,000 PSI
IMR 4166	37.8	2935	52,000 PSI	40.7	3099	59,500 PSI
H335	37.0	2862	50,300 PSI	39.2	3014	58,400 PSI
IMR 8208 XBR	37.2	2900	52,300 PSI	39.1	3001	57,900 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: 120 GR. NOS BT **Dia: .264″**

Case: REM **Primer: WIN LR** **Col: 2.800″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
Hunter	41.2	2581	51,300 PSI	45.8	2868	57,100 PSI
A-4350	40.0	2594	53,900 PSI	44.5	2948	60,000 PSI
A-2700	37.8	2468	52,800 PSI	42.0	2805	58,700 PSI

Bullet: 120 GR. SPR SP **Dia: .264″**

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
IMR 4955	43.8	2739	51,400 PSI	46.6	2911	59,900 PSI
H4350	43.5	2814	51,400 PSI	46.5	2960	58,200 PSI
W760	42.5	2802	51,000 PSI	45.5	2968	58,600 PSI
Hybrid 100V	41.0	2738	50,200 PSI	45.0C	2934	58,500 PSI
IMR 4451	40.8	2727	50,300 PSI	43.7	2894	58,000 PSI
H380	40.0	2686	51,500 PSI	43.0	2844	58,100 PSI
BL-C(2)	37.0	2686	52,800 PSI	40.0	2840	58,900 PSI
Benchmark	37.0	2768	51,200 PSI	40.0	2935	59,500 PSI
Varget	36.0	2716	50,300 PSI	39.0	2877	58,300 PSI
IMR 4166	35.0	2684	50,100 PSI	38.0	2867	59,000 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
IMR 7828				47.0C	2895	57,800 PSI
IMR 4831				44.0	2885	58,400 PSI
IMR 4350				43.0	2885	58,000 PSI
IMR 4320				37.5	2805	58,400 PSI
IMR 4064				37.0	2805	57,700 PSI
IMR 4895				36.0	2770	57,100 PSI
IMR 3031				34.0	2720	57,600 PSI

Bullet: 123 GR. SIE HPBT **Dia: .264″**

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 4955	45.3	2767	51,100 PSI	48.0C	2937	59,700 PSI
IMR 4451	41.0	2704	47,900 PSI	43.9	2926	58,700 PSI
IMR 4166	35.7	2704	51,200 PSI	38.4	2858	59,000 PSI

Bullet: 125 GR. NOS PART **Dia: .264″**

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H1000	48.0	2685	46,300 PSI	51.0C	2821	53,300 PSI
IMR 7977	45.2	2658	49,200 PSI	48.7	2866	58,900 PSI
H4831	45.0	2725	51,600 PSI	48.0C	2862	58,000 PSI
IMR 4955	42.3	2664	50,900 PSI	45.0	2830	59,000 PSI
H4350	41.0	2714	50,900 PSI	44.3	2867	57,900 PSI
Hybrid 100V	40.0	2657	48,600 PSI	44.0C	2876	58,600 PSI
W760	40.0	2691	50,500 PSI	43.0	2852	58,100 PSI
IMR 4451	39.7	2691	51,100 PSI	42.5	2854	58,200 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
Varget	34.5	2624	51,200 PSI	37.5	2785	58,400 PSI
IMR 4166	34.2	2620	49,500 PSI	37.2	2813	59,000 PSI
H4895	34.0	2623	54,300 PSI	37.0	2743	58,900 PSI

Bullet: 129 GR. HDY SP **Dia: .264″**

Case: REM **Primer: WIN LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-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
A-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: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
IMR 4955	42.1	2617	53,600 PSI	44.8C	2759	58,800 PSI
Hybrid 100V	39.9	2666	49,800 PSI	42.8	2835	58,300 PSI
H4350	39.7	2646	50,600 PSI	42.7	2816	59,000 PSI
W760	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
Varget	34.6	2563	50,500 PSI	37.2	2719	58,800 PSI
IMR 4166	33.0	2535	50,100 PSI	35.9	2717	59,400 PSI
H4895	33.0	2504	50,700 PSI	36.0	2677	59,500 PSI

Bullet: 140 GR. NOS PART **Dia: .264″**

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H1000	48.0	2619	51,200 PSI	50.5	2730	57,000 PSI
IMR 7828				47.0C	2755	57,200 PSI
IMR 7977	42.5	2523	51,100 PSI	45.8C	2686	58,900 PSI
H4831	43.0	2568	53,000 PSI	45.7	2686	59,000 PSI
IMR 4831				44.0	2715	57,000 PSI
IMR 4350				43.0	2715	57,000 PSI
H4350	39.0	2530	51,900 PSI	42.0	2677	58,800 PSI
W760	38.0	2496	50,700 PSI	41.0	2656	58,800 PSI
Hybrid 100V	37.0	2464	49,500 PSI	41.0C	2670	58,400 PSI
StaBALL 6.5	36.9	2441	47,700 PSI	41.1	2689	59,700 PSI
H380	37.0	2434	51,200 PSI	40.0	2594	58,900 PSI
IMR 4451	36.4	2479	51,000 PSI	39.0	2631	58,500 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
IMR 4320				36.0	2600	57.600 PSI
IMR 4064				36.0	2615	56,900 PSI
IMR 4895				35.5	2605	57,600 PSI
IMR 4166	31.7	2426	49,600 PSI	34.5	2597	58,500 PSI
H4895	32.0	2367	50,500 PSI	34.3	2517	58,400 PSI
IMR 3031				32.5	2505	56,200 PSI

Bullet: 142 GR. SIE HPBT **Dia: .264″**

Case: REM **Primer: WIN LR** **Col: 2.800″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-4350	38.7	2414	51,800 PSI	43.0	2744	57,500 PSI
A-2700	36.9	2323	52,900 PSI	41.0	2640	58,800 PSI

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.780″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H4831	45.0	2601	50,900 PSI	48.0C	2747	58,700 PSI
IMR 4955	42.3	2535	50,100 PSI	45.1C	2702	59,200 PSI
H4350	41.5	2590	50,100 PSI	44.5	2735	58,000 PSI
W760	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
Hybrid 100V	38.0	2464	46,800 PSI	42.0C	2690	57,500 PSI
H380	39.0	2490	50,100 PSI	41.5	2636	58,300 PSI
IMR 4451	38.8	2545	50,100 PSI	41.5	2717	58,900 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
IMR 4166	32.2	2440	48,900 PSI	35.0	2624	59,300 PSI

Bullet: 143 GR. HDY ELD-X **Dia: .264″**

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.800″**

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 7977	43.5	2499	45,300 PSI	47.3C	2741	59,500 PSI
H1000	43.2	2453	42,000 PSI	48.0C	2668	52,500 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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	41.6	2543	49,200 PSI	46.2C	2739	59,500 PSI
Suprform	40.7	2564	50,200 PSI	45.3	2791	59,500 PSI
StaBALL 6.5	40.7	2562	48,100 PSI	44.0	2765	59,900 PSI
IMR 4831	40.6	2546	47,800 PSI	45.0C	2771	59,700 PSI
IMR 4955	40.5	2491	45,900 PSI	45.0C	2748	59,700 PSI
Hybrid 100V	38.9	2549	45,800 PSI	43.2	2796	59,700 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
IMR 4451	37.9	2467	46,500 PSI	42.2C	2731	59,300 PSI

Bullet: 147 GR. HDY ELD-M Dia: .264″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	42.6	2419	44,100 PSI	47.3C	2695	59,900 PSI
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
IMR 4955	40.5	2444	46,300 PSI	45.0C	2708	59,800 PSI
Suprform	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
H4350	38.5	2471	48,600 PSI	42.8	2678	59,900 PSI
IMR 4350	38.5	2438	46,800 PSI	42.8C	2691	59,900 PSI
IMR 4451	38.3	2433	47,800 PSI	42.5C	2668	59,700 PSI

Bullet: 150 GR. SIE BTHP Dia: .264″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	41.6	2449	47,600 PSI	45.2C	2633	58,500 PSI
IMR 4955	40.5	2422	47,100 PSI	45.0C	2668	59,200 PSI
IMR 4831	40.5	2475	48,000 PSI	44.0C	2656	59,100 PSI
Suprform	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
H4350	38.6	2467	49,300 PSI	42.0C	2635	59,500 PSI
IMR 4350	38.6	2459	48,800 PSI	42.0C	2623	59,100 PSI
Hybrid 100V	38.1	2464	47,100 PSI	42.0C	2673	58,700 PSI
IMR 4451	38.4	2424	48,600 PSI	41.8C	2620	59,600 PSI

Bullet: 153 GR. HDY A-TIP Dia: .264″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	40.6	2391	47,300 PSI	45.4C	2609	59,700 PSI
IMR 4955	40.5	2407	48,200 PSI	43.8C	2613	59,900 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
Hybrid 100V	38.3	2456	47,200 PSI	41.9C	2671	59,400 PSI
H4350	38.2	2441	50,500 PSI	41.5	2606	59,900 PSI
IMR 4451	35.9	2366	49,500 PSI	40.3	2572	59,400 PSI

Bullet: 160 GR. HDY RN Dia: .264″

Case: REM Primer: REM 9 1/2, LR Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	48.0	2498	50,500 PSI	50.0C	2595	56,400 PSI
IMR 7977	46.3	2488	52,700 PSI	48.3C	2597	58,600 PSI
H4831	43.0	2419	50,900 PSI	46.0	2540	58,100 PSI
IMR 7828				45.0	2580	58,100 PSi
IMR 4955	41.6	2399	51,300 PSI	44.3	2543	59,500 PSI
H4350	40.0	2417	52,100 PSI	43.0	2538	58,200 PSI
W760	39.0	2365	51,200 PSI	42.0	2514	58,800 PSI
Hybrid 100V	38.0	2346	47,400 PSI	42.0C	2539	56.900 PSI
IMR 4831				41.5	2520	57,200 PSI
IMR 4350				40.5	2520	57,400 PSI

6.5-284

Barrel: 24″ Twist: 1:9″ Trim: 2.160″

Bullet: 107 GR. SIE HPBT Dia: .264″

Case: WIN (REF.) Primer: FED 210 LR Col: 2.920″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	56.0	2808		60.0C	2985	
IMR 4955	51.3	2867		55.8C	3156	
H4831	51.0	2842		55.5	3084	
IMR 7828 SSC	50.0	2779		55.3	3105	
Hybrid 100V	49.0	3167		53.0	3358	
IMR 4831	48.0	2888		53.0	3222	
IMR 4350	46.0	2845		51.5	3191	
H4350	47.0	2898		51.5	3118	
IMR 4451	46.6	2919		51.8	3205	
W760	46.0	2883		49.5	3110	
H380	43.0	2735		47.5	3020	
Varget	42.0	2970		45.8	3125	
IMR 4064	40.0	2916		43.5	3105	

Bullet: 120 GR. SFT SP Dia: .264″

Case: WIN (REF.) Primer: FED 210 LR Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	55.0	2743		58.5C	2901	
IMR 7977	52.7	2732		58.0C	3024	
H4831	48.0	2651		52.5	2871	
IMR 7828 SSC	47.0	2636		52.0	2899	
Hybrid 100V	46.0	2739		50.0	2979	
H4350	45.0	2744		49.0	2897	
IMR 4831	44.0	2671		48.7	2920	
IMR 4451	44.2	2732		48.6	2989	
IMR 4955	44.3	2499		48.3	2685	
IMR 4350	42.5	2624		47.2	2878	
W760	42.0	2577		46.0	2797	
H380	39.0	2463		42.5	2626	

Bullet: 129 GR. HDY SP Dia: .264″

Case: WIN (REF.) Primer: FED 210 LR Col: 2.935″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	52.1	2724		57.2C	3018	
H1000	51.0	2638		55.5C	2820	
IMR 4955	46.7	2623		51.2	2837	
H4831	47.0	2670		51.0	2859	
IMR 7828 SSC	45.0	2536		50.5	2832	
Hybrid 100V	45.0	2731		49.0	2910	
IMR 4451	43.2	2695		48.0	2942	
H4350	43.0	2670		47.0	2863	
IMR 4831	42.0	2559		47.0	2832	
IMR 4350	41.0	2574		45.9	2821	

Bullet: 130 GR. NOS AB Dia: .264″

Case: WIN (REF.) Primer: FED 210 LR Col: 2.950″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	50.6	2670		55.5C	2939	
H1000	47.7	2570		53.0	2812	
IMR 7828 SSC	47.0	2589		52.2	2872	
H4831	44.0	2541		48.8	2779	
IMR 4955	44.3	2481		48.7	2698	
IMR 4831	43.5	2628		48.3	2898	
IMR 4350	43.4	2667		48.2	2935	
Hybrid 100V	45.0	2746		47.3	2884	
H4350	42.1	2645		46.7	2874	
IMR 4451	41.4	2588		46.4	2867	

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: 140 GR. SPR GS-SP Dia: .264″						
Case: WIN (REF.)	**Primer: FED 210 LR**					**Col: 2.910″**
H1000	49.0	2503		53.5C	2694	
IMR 7828 SSC	45.0	2462		50.5	2718	
H4831	45.0	2520		49.5	2722	
Hybrid 100V	45.0	2696		49.0	2895	
IMR 4831	43.0	2536		47.8	2762	
IMR 4350	42.0	2539		46.8	2753	
IMR 4451	41.2	2495		46.0	2739	
H4350	42.0	2548		45.5	2720	
Bullet: 142 GR. SIE HPBT Dia: .264″						
Case: WIN (REF.)	**Primer: FED 210 LR**					**Col: 2.900″**
IMR 7977	50.6	2586		55.6C	2788	
H1000	49.0	2436		55.0C	2700	
H4831	45.0	2479		50.3	2714	
IMR 4955	45.5	2481		50.0	2707	
IMR 7828 SSC	45.0	2484		50.0	2719	
Hybrid 100V	45.0	2666		49.5	2901	
IMR 4831	41.0	2460		46.2	2692	
H4350	42.0	2583		46.0	2735	
Bullet: 143 GR. HDY ELD-X Dia: .264″						
Case: WIN (REF.)	**Primer: FED 210 LR**					**Col: 2.910″**
IMR 7977	48.3	2394		54.3	2711	
IMR 7828	46.3	2493		51.5	2792	
IMR 4955	44.1	2465		50.2	2740	
IMR 4831	43.5	2433		50.1	2763	
H4831	44.2	2444		50.0	2713	
IMR 4451	42.2	2494		47.5	2724	
IMR 4350	41.9	2466		47.1	2722	
Hybrid 100V	42.3	2464		47.0	2725	
H4350	41.1	2540		46.2	2760	
Bullet: 150 GR. SIE BTHP Dia: .264″						
Case: WIN (REF.)	**Primer: FED 210 LR**					**Col: 2.930″**
IMR 7977	48.9	2379		54.9	2711	
H1000	47.5	2384		54.6	2718	
IMR 7828	46.7	2495		51.9	2782	
H4831	45.5	2502		51.2	2735	
IMR 4955	43.8	2386		49.8	2700	
IMR 4831	44.1	2420		49.5	2689	
IMR 4350	42.7	2467		48.0	2738	
Hybrid 100V	42.8	2457		47.3	2706	
IMR 4451	41.9	2420		47.1	2700	
H4350	41.9	2522		46.6	2698	
Bullet: 160 GR. HDY RN Dia: .264″						
Case: WIN (REF.)	**Primer: FED 210 LR**					**Col: 2.980″**
IMR 7977	51.5	2534		56.5C	2789	
H1000	51.0	2454		55.0	2622	
IMR 4955	46.0	2449		50.6	2653	
H4831	46.0	2433		50.0	2582	
IMR 7828 SSC	45.0	2376		49.5	2557	
Hybrid 100V	45.0	2548		49.5	2755	
IMR 4831	42.0	2367		46.3	2567	

6.5-284 NORMA

Barrel: 26″ Twist: 1:9″ Trim: 2.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 85 GR. SIE HP Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**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
A-4350	53.1	3177	48,600 PSI	59.0	3523	54,000 PSI
A-5744	29.7	2772	43,300 PSI	39.6	3492	57,800 PSI
Bullet: 93 GR. NORMA SPT Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.740″**
Magnum	58.8	3069	53,500 PSI	65.4	3420	59,400 PSI
Magpro	57.4	3074	53,400 PSI	63.8	3411	59,300 PSI
A-4350	52.8	3182	51,300 PSI	58.7	3465	57,100 PSI
Bullet: 100 GR. BAR TTSX BT Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**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
A-4350	48.9	3107	53,500 PSI	54.3	3322	59,500 PSI
Bullet: 100 GR. NOS PART Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.870″**
Magnum	57.2	2995	53,500 PSI	63.6	3319	59,400 PSI
Magpro	57.1	3054	53,500 PSI	63.4	3337	59,400 PSI
A-4350	50.6	3187	53,500 PSI	56.2	3394	59,500 PSI
Bullet: 100 GR. SIE HP Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.850″**
Magnum	56.7	2949	53,400 PSI	63.0	3283	59,400 PSI
Magpro	55.9	2968	53,100 PSI	62.1	3280	58,900 PSI
A-4350	50.1	3040	53,400 PSI	55.7	3328	59,300 PSI
Bullet: 120 GR. HDY GMX Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**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
A-4350	44.6	2772	53,300 PSI	49.5	2965	59,300 PSI
Bullet: 123 GR. SIE HPBT Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 3.005″**
Magnum	54.1	2780	53,500 PSI	60.1	3067	59,500 PSI
Magpro	53.0	2791	53,400 PSI	58.9	3078	59,400 PSI
A-4350	47.7	2866	53,500 PSI	53.0	3064	59,400 PSI
A-5744	26.4	2332	43,600 PSI	34.7	2845	57,400 PSI
Bullet: 127 GR. BAR LRX BT Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.990″**
Magnum	52.5	2691	53,500 PSI	58.4	2935	59,400 PSI
Magpro	51.5	2738	53,500 PSI	57.2	2941	59,500 PSI
Bullet: 129 GR. HDY SST Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.950″**
Magnum	53.7	2689	53,400 PSI	59.7	2992	59,300 PSI
Magpro	53.4	2727	53,500 PSI	59.4	3016	59,400 PSI
Bullet: 129 GR. NOS ABLR Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**Col: 2.900″**
Magnum	55.6	2713	53,500 PSI	61.7	3028	59,400 PSI
Magpro	54.1	2714	53,500 PSI	60.1	3023	59,500 PSI
Bullet: 130 GR. BER VLD Dia: .264″						
Case: Lapua	**Primer: CCI 200 LR**					**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

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: 130 GR. SIE HPBT Dia: .264″

Case: Lapua Primer: CCI 200 LR Col: 2.850″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	52.4	2660	53,200 PSI	58.2	2946	59,100 PSI
Magpro	52.2	2712	53,400 PSI	58.0	2978	59,300 PSI

Bullet: 139 GR. LAP SCENAR Dia: .264″

Case: Lapua Primer: CCI 200 LR Col: 3.035″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 LR Col: 3.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 140 GR. NOS BT Dia: .264″

Case: Lapua Primer: CCI 200 LR Col: 3.000″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
LRT	59.0	2716	53,700 PSI	65.5	3005	59,600 PSI
Magnum	51.6	2575	53,500 PSI	57.4	2845	59,400 PSI
Magpro	49.6	2598	53,400 PSI	55.1	2844	59,400 PSI

Bullet: 142 GR. SIE HPBT Dia: .264″

Case: Lapua Primer: CCI 200 LR Col: 3.085″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-5744	24.8	2115	43,800 PSI	32.6	2591	57,600 PSI

6.5 PRC

Barrel: 24″ Twist: 1:9″ Trim: 2.015″

Bullet: 85 GR. SIE HP-V Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.620″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	58.9	3015	52,800 PSI	69.3	3551	62,200 PSI
A-4350	56.5	3208	51,300 PSI	62.8	3599	56,900 PSI
A-5744	36.4	3228	54,000 PSI	42.8	3624	63,500 PSI

Bullet: 100 GR. SIE HP-V Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.720″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	59.8	3042	57,000 PSI	66.4	3374	63,300 PSI
A-4350	55.2	3114	57,600 PSI	61.4	3472	64,000 PSI

Bullet: 120 GR. BAR TSX BT Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.780″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	58.1	2859	51,700 PSI	64.6	3148	57,400 PSI
Magpro	56.6	2854	57,600 PSI	62.9	3174	64,000 PSI
A-4350	49.3	2883	57,500 PSI	54.7	3126	63,900 PSI

Bullet: 120 GR. BAR TTSX BT Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.875″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	51.8	2769	45,800 PSI	61.7C	3162	60,800 PSI
Retumbo	51.6	2796	43,800 PSI	61.0C	3177	60,600 PSI
IMR 7977	49.0	2732	47,000 PSI	58.4	3096	61,400 PSI
H1000	48.8	2823	51,800 PSI	58.2	3113	61,500 PSI
IMR 4955	43.8	2705	49,300 PSI	52.1	3020	60,800 PSI

Bullet: 129 GR. NOS ABLR Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	57.8	2821	53,800 PSI	64.2	3134	59,800 PSI
Magpro	56.2	2790	57,500 PSI	62.5	3122	63,900 PSI
A-4350	51.1	2819	57,300 PSI	56.8	3116	63,600 PSI

Bullet: 130 GR. SFT SCIR II Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.930″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	52.9	2723	46,300 PSI	61.0C	3066	61,000 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
IMR 7977	50.2	2654	46,200 PSI	57.8C	2985	60,900 PSI

Bullet: 130 GR. SIE TGK Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.890″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	48.9	2743	57,500 PSI	54.4	3023	63,900 PSI

Bullet: 135 GR. HDY A-TIP Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.945″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	61.2	2602	44,200 PSI	68.0C	2969	60,300 PSI
IMR 8133	55.0	2674	45,800 PSI	61.5C	3037	61,400 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
IMR 7977	52.0	2672	47,900 PSI	58.0C	2968	61,100 PSI

Bullet: 140 GR. BAR BT-MB Dia: .264″

Case: Hornady Primer: REM 9 1/2, LR Mag Col: 2.890″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
LRT	58.8	2677	49,500 PSI	65.4	2946	55,000 PSI
Magnum	55.6	2721	57,600 PSI	61.8	3018	64,000 PSI
Magpro	54.3	2711	57,600 PSI	60.4	3004	64,000 PSI
A-4350	47.0	2683	56,600 PSI	52.2	2897	62,900 PSI

Bullet: 140 GR. NOS BT Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.880″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	61.5	2631	40,300 PSI	68.5C	2995	58,900 PSI
IMR 8133	52.2	2619	43,100 PSI	59.9C	2966	60,400 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
IMR 7977	49.4	2547	45,800 PSI	56.8C	2879	60,800 PSI

Bullet: 143 GR. HDY ELD-X Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.945″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	61.2	2643	40,200 PSI	68.0C	2982	58,200 PSI
IMR 8133	53.6	2637	43,700 PSI	61.0C	2958	59,700 PSI
Retumbo	50.7	2647	44,700 PSI	59.0C	2953	59,600 PSI
IMR 7977	50.9	2606	45,000 PSI	58.6C	2912	60,100 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: REM 9 1/2, LR Mag Col: 2.930″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-5744	30.2	2386	55,000 PSI	34.5	2621	62,900 PSI

Case: Hornady Primer: FED 210M, LR Match Col: 2.945″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	59.3	2533	44,100 PSI	66.3	2872	59,900 PSI
IMR 8133	52.5	2510	43,300 PSI	59.7	2869	59,900 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
IMR 7977	48.9	2430	44,300 PSI	56.3	2777	60,500 PSI

Bullet: 150 GR. SIE BTHP Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.945″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	57.8	2452	41,100 PSI	66.7	2852	58,800 PSI
IMR 8133	52.2	2476	43,100 PSI	60.0	2846	60,300 PSI
Retumbo	49.2	2544	46,100 PSI	58.6C	2878	60,700 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
H1000	49.3	2498	44,600 PSI	57.0C	2818	60,300 PSI
IMR 7977	49.4	2453	44,200 PSI	56.8	2787	60,400 PSI

Bullet: 153 GR. HDY A-TIP Dia: .264″

Case: Hornady Primer: FED 210M, LR Match Col: 2.945″

US 869	59.0	2538	46,800 PSI	65.5C	2835	60,000 PSI
IMR 8133	52.0	2565	49,200 PSI	57.8	2824	60,800 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
IMR 7977	49.2	2509	49,100 PSI	54.7	2772	61,200 PSI

264 WINCHESTER MAGNUM

Barrel: 24″ Twist: 1:9″ Trim: 2.490″

Bullet: 85 GR. SIE HP Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.100″

Magnum	69.8	3352	56,800 PSI	77.6	3692	63,200 PSI
Magpro	69.5	3328	57,200 PSI	77.3	3689	63,600 PSI

Bullet: 95 GR. HDY V-MAX Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.200″

Magnum	67.9	3258	57,000 PSI	75.5	3590	63,400 PSI
Magpro	67.4	3269	56,900 PSI	74.9	3597	63,200 PSI

Bullet: 100 GR. BAR TTSX BT Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.250″

Magpro	64.7	3122	55,000 PSI	74.4	3539	63,200 PSI
Magnum	63.8	3093	55,200 PSI	73.3	3506	63,500 PSI

Bullet: 100 GR. NOS BT Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.215″

Magpro	68.2	3274	57,200 PSI	75.8	3597	63,500 PSI
Magnum	67.4	3201	57,200 PSI	74.9	3548	63,600 PSI

Bullet: 110 GR. BAR BAND-S Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.215″

Magnum	65.9	3053	56,100 PSI	74.9	3439	63,800 PSI
Magpro	64.2	3068	55,700 PSI	73.7	3480	63,900 PSI

Bullet: 120 GR. BAR TTSX BT Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.250″

Magnum	60.3	2851	55,500 PSI	69.3	3219	63,800 PSI
Magpro	59.8	2875	54,600 PSI	69.6	3246	63,500 PSI

Bullet: 120 GR. NOS BT Dia: .264″

Case: WIN Primer: WIN LR Magnum 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: WIN Primer: WIN LR Magnum 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: WIN Primer: WIN LR Magnum Col: 3.250″

IMR 8133	67.0	3059	54,800 PSI	71.5	3251	63,200 PSI
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
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
Hybrid 100V	56.4	3080	53,500 PSI	60.0	3232	60,600 PSI
H4350	54.5	3045	53,000 PSI	58.0	3185	61.200 PSI

Bullet: 125 GR. NOS PART Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.225″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Bullet: 129 GR. HDY SP Dia: .264″

Case: WIN Primer: WIN LR Magnum 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
IMR 8133	64.0	2932	53,500 PSI	68.5	3142	63,300 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
Hybrid 100V	53.0	2922	51,000 PSI	56.7	3045	59,700 PSI

Bullet: 130 GR. BAR TSX FB Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.180″

Magnum	60.1	2817	57,000 PSI	66.8	3084	63,300 PSI
Magpro	59.1	2856	57,200 PSI	65.7	3110	63,600 PSI

Bullet: 130 GR. NOS AB Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.280″

IMR 8133	63.5	2925	53,500 PSI	67.5	3107	61,600 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
Hybrid 100V	50.7	2809	54,800 PSI	54.5	2970	61,900 PSI
H4350	50.7	2786	54,600 PSI	55.0	2956	62,000 PSI

Bullet: 140 GR. BER VLD Dia: .264″

Case: WIN Primer: WIN LR Magnum 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. HDY ELD-M Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.210″

Magnum	61.5	2754	57,000 PSI	68.3	3049	63,300 PSI
Magpro	60.6	2781	56,700 PSI	67.3	3053	63,000 PSI

Bullet: 140 GR. NOS PART Dia: .264″

Case: WIN Primer: WIN LR Magnum Col: 3.260″

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
IMR 8133	61.0	2840	54,500 PSI	65.0	3007	62,500 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
Hybrid 100V	51.2	2787	55,700 PSI	54.5	2912	61,800 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

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: 142 GR. SIE HPBT Dia: .264″

Case: WIN **Primer: WIN LR Magnum** **Col: 3.320″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	57.7	2693	57,100 PSI	64.2	3021	63,600 PSI
Magpro	56.8	2724	56,700 PSI	63.1	3014	63,000 PSI

Bullet: 160 GR. HDY RN Dia: .264″

Case: WIN **Primer: WIN LR Magnum** **Col: 3.350″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	61.5	2730	55,500 PSI	65.4	2857	62,200 PSI
IMR 8133	60.5	2655	53,000 PSI	64.7	2816	61,600 PSI
Retumbo	60.2	2703	54,800 PSI	64.0	2846	61.000 PSI
Magpro	57.1	2611	56,800 PSI	63.4	2840	63,100 PSI
Magnum	56.8	2571	57,100 PSI	63.2	2813	63,600 PSI
IMR 7828 SSC	58.6	2764	56,500 PSI	62.3	2861	61,200 PSI
H4831	58.1	2725	54,800 PSI	61.8	2847	61,500 PSI
IMR 4831	55.5	2680	54,000 PSI	59.0	2810	60,900 PSI
IMR 4350	54.5	2696	53,800 PSI	58.0	2834	62,100 PSI
H4350	53.4	2675	56,600 PSI	56.8	2784	61,500 PSI
Hybrid 100V	52.7	2690	57,400 PSI	56.0	2784	61,500 PSI

26 NOSLER

Barrel: 24″ Twist: 1:8″ Trim: 2.575″

Bullet: 100 GR. NOS BT Dia: .264″

Case: Nosler **Primer: WIN LR Magnum** **Col: 3.300″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 7977	78.3	3484	57,000 PSI	82.5	3625	62,500 PSI
H1000	77.9	3484	57,000 PSI	82.0	3628	63,100 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: WIN LR Magnum** **Col: 3.300″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Retumbo	68.5	3127	56,000 PSI	74.0	3299	62,800 PSI
IMR 7977	67.8	3130	57,300 PSI	73.0	3287	62,700 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: WIN LR Magnum** **Col: 3.300″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Retumbo	70.5	3185	58,400 PSI	74.0	3301	64,300 PSI

Bullet: 140 GR. SFT A-FRAME Dia: .264″

Case: Nosler **Primer: WIN LR Magnum** **Col: 3.300″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Retumbo	62.0	2847	54,500 PSI	67.5	3010	61,700 PSI

6.8 WESTERN

Barrel: 24″ Twist: 1:8″ Trim: 2.010″

Bullet: 110 GR. HDY V-MAX Dia: .277″

Case: WIN **Primer: WIN LR Magnum** **Col: 2.690″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	67.7	3158	48,300 PSI	74.7	3474	62,900 PSI
A-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
Suprform	60.7	3284	49,700 PSI	66.7	3582	63,100 PSI
IMR 4955	60.5	3159	49,200 PSI	66.6	3477	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
Hybrid 100V	57.5	3248	49,600 PSI	63.5	3557	63,000 PSI
IMR 4451	58.0	3169	48,600 PSI	63.3	3498	63,500 PSI
Big Game	57.7	3231	51,200 PSI	62.5	3468	63,200 PSI
A-2700	56.8	3223	50,500 PSI	62.2	3488	63,000 PSI
W760	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: WIN **Primer: WIN LR Magnum** **Col: 2.885″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	64.8	2949	46,200 PSI	71.2C	3196	55,500 PSI
Magpro	64.5	2990	49,400 PSI	71.1	3294	63,400 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 7977	61.9	2964	51,600 PSI	67.5C	3211	63,100 PSI
IMR 8133	61.2	2858	47,000 PSI	66.7C	3133	57,600 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
A-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
Suprform	56.4	3003	51,100 PSI	62.0	3255	62,900 PSI
IMR 4955	56.8	2946	50,900 PSI	62.0	3221	63,500 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
Hybrid 100V	54.2	3021	51,900 PSI	59.3	3258	62,900 PSI
IMR 4451	53.2	2974	53,000 PSI	58.2	3206	63,200 PSI
Big Game	53.0	2946	52,800 PSI	56.9	3141	62,900 PSI
A-2700	52.5	2986	54,100 PSI	56.2	3159	62,700 PSI
W760	52.5	2986	54,100 PSI	56.2	3159	62,700 PSI

Bullet: 130 GR. SFT SCIR Dia: .277″

Case: WIN **Primer: WIN LR Magnum** **Col: 2.900″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	65.0	3010	51,300 PSI	70.7	3264	63,100 PSI
Retumbo	62.5	2850	44,700 PSI	68.2C	3157	58,200 PSI
H1000	62.5	3008	52,100 PSI	67.1C	3243	63,400 PSI
IMR 7977	60.8	2945	51,300 PSI	66.4C	3211	63,300 PSI
IMR 8133	60.5	2832	46,100 PSI	66.0C	3145	59,700 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
A-4350	56.0	2965	52,700 PSI	62.1	3211	63,400 PSI
Suprform	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
IMR 4955	56.0	2940	51,700 PSI	61.2	3213	63,600 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
Hybrid 100V	53.8	2989	51,100 PSI	58.8	3252	63,400 PSI
IMR 4451	52.9	2914	51,800 PSI	57.7	3157	63,300 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
Big Game	52.4	2930	53,900 PSI	56.3	3117	62,900 PSI
A-2700	52.5	2966	54,800 PSI	56.1	3137	62,900 PSI
W760	52.5	2966	54,800 PSI	56.1	3137	62,900 PSI

Bullet: 136 GR. FED TLR Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
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
IMR 8133	60.2	2903	51,000 PSI	65.5C	3143	61,900 PSI
IMR 7977	58.8	2930	51,900 PSI	64.2	3170	63,500 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
A-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
IMR 4955	55.8	2923	51,700 PSI	60.9	3170	63,400 PSI
Suprform	55.6	2968	51,400 PSI	60.7	3201	63,200 PSI
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
Hybrid 100V	53.5	2961	51,300 PSI	58.4	3195	63,100 PSI
IMR 4451	53.2	2942	52,900 PSI	58.1	3165	63,500 PSI

Bullet: 140 GR. SIE TGK Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Retumbo	61.7	2851	47,800 PSI	67.3C	3129	61,200 PSI
IMR 8133	59.8	2845	50,500 PSI	65.3C	3103	62,900 PSI
H1000	59.4	2931	52,500 PSI	64.8	3149	63,200 PSI
IMR 7977	58.3	2870	52,000 PSI	63.7	3113	63,500 PSI
A-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
Suprform	55.0	2936	53,100 PSI	60.0	3145	63,100 PSI
IMR 4955	54.5	2875	52,600 PSI	59.5	3099	63,300 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
Hybrid 100V	51.8	2903	52,200 PSI	56.9	3130	63,100 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
IMR 4451	50.7	2837	51,700 PSI	56.5	3089	63,100 PSI

Bullet: 145 GR. HDY ELD-X Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Retumbo	61.5	2830	49,000 PSI	67.0C	3098	61,900 PSI
IMR 8133	60.0	2831	51,400 PSI	65.0C	3060	62,100 PSI
H1000	58.5	2836	50,200 PSI	63.9	3092	63,100 PSI
IMR 7977	57.8	2789	50,300 PSI	63.2	3054	63,300 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
Suprform	54.4	2869	51,400 PSI	59.3	3090	63,500 PSI
IMR 4955	54.0	2809	50,900 PSI	59.0	3044	63,100 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
Hybrid 100V	51.7	2853	51,200 PSI	56.5	3088	63,300 PSI

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4451	51.4	2832	53,100 PSI	56.1	3033	63,100 PSI

Bullet: 150 GR. HDY IB Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.840″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	65.0	2850	51,100 PSI	71.0	3098	62,900 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
IMR 8133	58.5	2749	50,600 PSI	63.7C	3004	62,900 PSI
H1000	58.2	2809	51,500 PSI	63.4	3029	63,200 PSI
IMR 7977	57.5	2769	52,100 PSI	62.5	2982	63,400 PSI
H4831	54.0	2783	52,100 PSI	58.9	2993	63,100 PSI
A-4350	52.8	2746	52,700 PSI	58.9	2979	63,000 PSI
IMR 7828 SSC	54.0	2756	51,700 PSI	58.9	2990	63,300 PSI
Suprform	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 4955	53.0	2752	50,900 PSI	57.9	2981	63,400 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
Hybrid 100V	51.0	2794	51,700 PSI	55.7	3022	63,600 PSI
H4350	50.2	2774	53,600 PSI	54.8	2960	63,600 PSI
IMR 4451	50.0	2751	53,300 PSI	54.7	2959	63,100 PSI

Bullet: 165 GR. NOS ABLR Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	62.5	2717	51,800 PSI	68.5	2956	63,300 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
IMR 8133	57.5	2666	52,000 PSI	62.5	2881	63,200 PSI
H1000	55.8	2661	52,500 PSI	60.9	2870	63,300 PSI
IMR 7977	54.8	2579	51,600 PSI	59.6	2800	63,200 PSI
A-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
Suprform	51.0	2631	51,100 PSI	55.6	2843	63,300 PSI
IMR 4955	50.8	2601	52,800 PSI	55.3	2786	63,200 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
Hybrid 100V	48.5	2624	52,100 PSI	53.1	2830	63,200 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
IMR 4451	47.5	2578	52,800 PSI	51.8	2769	63,500 PSI

Bullet: 170 GR. BER EOL Dia: .277″

Case: WIN Primer: WIN LR Magnum Col: 2.940″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	63.5	2716	52,000 PSI	69.1	2938	63,300 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
IMR 8133	58.4	2612	50,400 PSI	63.5C	2871	63,000 PSI
H1000	57.0	2659	51,300 PSI	62.0	2881	63,200 PSI
IMR 7977	56.3	2591	50,700 PSI	61.2	2831	63,100 PSI
A-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
Suprform	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
IMR 4955	52.0	2611	52,700 PSI	56.6	2816	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
StaBALL 6.5	51.4	2643	53,300 PSI	55.9	2818	63,100 PSI
Hybrid 100V	50.0	2652	52,300 PSI	54.5	2857	63,500 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
IMR 4451	49.2	2609	52,800 PSI	53.5	2793	63,000 PSI

270 WINCHESTER

Barrel: 24″ Twist: 1:10″ Trim: 2.530″

Bullet: 85 GR. BAR MPG Dia: .277″

Case: WIN Primer: WIN LR Col: 3.100″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	58.8	3482	53,300 PSI	65.4	3759	59,200 PSI
A-2700	56.4	3491	58,100 PSI	62.6	3777	64,600 PSI
Big Game	55.4	3488	58,300 PSI	61.5	3802	64,700 PSI

Bullet: 90 GR. SIE HP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	57.0	3426	57,600 PSI	63.4	3700	64,000 PSI
A-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
A-2700	53.3	3311	58,000 PSI	59.3	3621	64,500 PSI
W760	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
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
IMR 4320	48.5	3220	46,800 CUP	52.7	3425	51,500 CUP
BL-C(2)	49.0	3328	45,400 CUP	52.0	3475	50,100 CUP
IMR 4166	46.9	3300	53,900 PSI	51.0	3520	63,100 PSI
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: 95 GR. BAR TAC-TX Dia: .277″

Case: WIN Primer: WIN LR Col: 3.100″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	58.8	3422	55,900 PSI	65.3	3690	62,200 PSI
A-2700	55.3	3338	57,900 PSI	61.5	3643	64,300 PSI
A-4350	53.3	2993	47,100 PSI	59.2	3371	52,400 PSI
Big Game	52.7	3319	58,000 PSI	58.6	3604	64,500 PSI

Bullet: 100 GR. SPR SP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.145″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4350	56.0	3258	44,000 CUP	59.4	3401	50,200 CUP
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
W760	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
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 4320	46.2	3066	47,100 CUP	50.0	3220	51,000 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: WIN Primer: WIN LR Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	58.0	3057	42,600 CUP	62.0C	3214	48,200 CUP
IMR 4955	57.1	2984	49,400 PSI	62.5C	3205	58,200 PSI
H4350	54.0	3164	46,900 CUP	57.0	3267	50,100 CUP
StaBALL 6.5	53.7	3108	47,400 PSI	58.4	3396	61,900 PSI
Hybrid 100V	53.0	3072	49,500 PSI	57.0C	3240	56,100 PSI
IMR 4350	52.5	2997	43,000 CUP	57.8	3308	50,900 CUP
W760	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
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
IMR 4320	45.5	3031	48,700 CUP	49.7	3152	50,100 CUP
IMR 4166	45.5	3018	52,100 PSI	49.5	3250	63,300 PSI
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
Varget	43.0	3072	44,100 CUP	48.7	3248	50,800 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: WIN Primer: WIN LR Col: 3.100″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-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
A-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: WIN Primer: WIN LR Col: 3.270″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
H4350	51.0	2886	44,700 CUP	55.0	3069	51,200 CUP
IMR 4350	50.5	2836	42,300 CUP	56.0	3131	50,500 CUP
W760	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 4320	44.2	2782	43,800 CUP	48.5	3029	51,000 CUP
Varget	44.0	2858	46,300 CUP	47.0	3010	51,000 CUP
IMR 4895	44.0	2883	44,900 CUP	48.2	3057	50,600 CUP
IMR 3031	42.5	2864	48,000 CUP	45.0	2976	49,300 CUP
H4895	42.0	2799	45,000 CUP	45.0	2950	50,400 CUP

Bullet: 130 GR. BAR TSX Dia: .277″

Case: WIN Primer: WIN LR Col: 3.230″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4955	55.5	2852	52,000 PSI	60.7C	3096	63,500 PSI
IMR 7828 SSC	55.0	2815	48,700 PSI	60.2C	3083	62,400 PSI
H4831	54.0	2747	45,500 PSI	60.0C	3025	59,000 PSI
IMR 7977	56.0	2736	42,300 PSI	59.5C	2936	50,700 PSI
Hybrid 100V	52.2	2994	55,700 PSI	55.5	3144	63,100 PSI
StaBALL 6.5	52.0	2954	51,400 PSI	56.5	3194	63,100 PSI
IMR 4831	52.0	2822	46,600 PSI	57.0C	3113	61,700 PSI
IMR 4451	51.5	2889	51,300 PSI	55.5	3109	62,300 PSI
H4350	51.0	2905	52,500 PSI	55.5	3111	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
IMR 4350	50.0	2824	48,900 PSI	55.0C	3104	62,800 PSI
W760	48.0	2840	50,400 PSI	52.5	3059	62,100 PSI
H380	47.0	2810	51,900 PSI	50.8	2989	61,600 PSI
Varget	44.0	2849	54,800 PSI	48.0	3013	63,200 PSI
IMR 4166	43.5	2842	52,900 PSI	47.3	3032	62,100 PSI
IMR 4064	42.0	2760	49,400 PSI	47.3	3013	62,900 PSI
IMR 8208 XBR	42.3	2798	55,700 PSI	45.0	2922	62,400 PSI

Bullet: 130 GR. BAR TSX BT Dia: .277″

Case: WIN Primer: WIN LR Col: 3.300″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	59.1	2825	57,900 PSI	65.7	3110	64,300 PSI
Magpro	58.8	2839	56,200 PSI	65.3	3096	62,500 PSI
Hunter	51.0	2862	58,100 PSI	56.6	3145	64,500 PSI
A-4350	50.7	2815	57,800 PSI	56.4	3112	64,200 PSI
A-2700	48.0	2802	58,000 PSI	53.4	3092	64,400 PSI
Big Game	46.5	2761	58,100 PSI	51.7	3049	64,600 PSI

Bullet: 130 GR. BER VLD Dia: .277″

Case: WIN Primer: WIN LR Col: 3.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	58.3	2823	58,300 PSI	64.8	3128	64,800 PSI
Magpro	57.3	2836	57,900 PSI	63.7	3117	64,400 PSI
A-4350	50.5	2782	57,900 PSI	56.1	3118	64,400 PSI
Hunter	50.2	2907	58,200 PSI	55.8	3147	64,700 PSI
A-2700	48.1	2839	58,000 PSI	53.5	3094	64,400 PSI
Big Game	47.1	2844	58,100 PSI	52.4	3081	64,500 PSI

Bullet: 130 GR. HDY SP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.180″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	61.0	2900	42,900 CUP	64.0C	3025	48,100 CUP
IMR 7977	58.9	2869	46,900 PSI	62.0C	3038	55,100 PSI
IMR 4955	55.8	2812	51,800 PSI	61.0C	3060	63,100 PSI
IMR 7828	56.0	2862	43,800 CUP	60.2	3085	50,300 CUP
H4831	56.0	2843	44,400 CUP	60.0C	3019	51,000 CUP
IMR 4451	52.6	2902	53,000 PSI	56.0	3089	62,900 PSI
Hybrid 100V	51.0	2845	51,000 PSI	56.0C	3066	61,800 PSI
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
W760	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
IMR 4064	43.0	2745	43,100 CUP	47.5	2932	50,000 CUP
IMR 4320	45.6	2850	48,600 CUP	47.0	2916	50,200 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
Trail Boss	14.0	1318	22,800 PSI	19.7	1537	27,100 PSI

Bullet: 130 GR. HDY SST Dia: .277″

Case: WIN Primer: WIN LR Col: 3.235″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-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
A-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: 130 GR. NOS E-TIP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	57.2	2855	58,200 PSI	63.6	3102	64,700 PSI
Magnum	57.2	2787	58,000 PSI	63.6	3066	64,500 PSI
Hunter	49.2	2772	57,900 PSI	54.6	3075	64,400 PSI
A-4350	46.9	2753	57,600 PSI	52.1	3020	64,000 PSI
Big Game	46.0	2718	58,200 PSI	51.1	3013	64,600 PSI
A-2700	45.9	2784	57,700 PSI	51.0	3009	64,100 PSI

Bullet: 130 GR. NOS PART Dia: .277″

Case: WIN Primer: WIN LR Col: 3.285″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	58.5	2852	58,000 PSI	65.0	3127	64,400 PSI
Magpro	57.0	2846	57,900 PSI	63.3	3122	64,400 PSI
A-4350	50.2	2853	58,100 PSI	55.8	3117	64,500 PSI
Hunter	50.0	2833	57,900 PSI	55.6	3112	64,400 PSI
A-2700	48.8	2852	58,300 PSI	54.2	3110	64,800 PSI
Big Game	48.0	2822	57,700 PSI	53.4	3076	64,100 PSI

Bullet: 130 GR. SIE SBT Dia: .277″

Case: WIN Primer: WIN LR Col: 3.275″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	59.2	2854	57,800 PSI	65.8	3144	64,300 PSI
Magpro	57.3	2846	58,100 PSI	63.7	3123	64,500 PSI
A-4350	50.5	2839	57,900 PSI	56.1	3130	64,300 PSI
Hunter	49.8	2870	57,900 PSI	55.4	3127	64,300 PSI
A-2700	48.9	2877	57,900 PSI	54.4	3105	64,400 PSI
Big Game	48.0	2833	57,900 PSI	53.3	3106	64,400 PSI

Bullet: 135 GR. SIE BT Dia: .277″

Case: WIN Primer: WIN LR Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	61.0	2915	43,100 CUP	63.0C	3011	47,600 CUP
IMR 7977	58.9	2876	48,900 PSI	62.0C	3043	56,500 PSI
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 4955	54.8	2794	52,400 PSI	59.9C	3036	63,800 PSI
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 4451	51.4	2878	54,300 PSI	55.3	3060	63,400 PSI
Hybrid 100V	50.0	2830	49,900 PSI	55.0	3056	61,600 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
W760	47.0	2785	45,400 CUP	50.0	2910	50,500 CUP
IMR 4064	43.5	2775	44,500 CUP	47.3	2934	50,700 CUP
IMR 4895	43.0	2755	43,400 CUP	47.7	2972	51,100 CUP
H380	44.0	2667	43,600 CUP	47.0	2803	50,500 CUP
IMR 4166	42.3	2709	49,200 PSI	47.0	2968	63,100 PSI
IMR 4320	43.0	2718	43,500 CUP	46.5	2887	50,300 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. BER VLD Dia: .277″

Case: WIN Primer: WIN LR Col: 3.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	56.2	2728	58,000 PSI	62.4	3008	64,500 PSI
Magpro	55.4	2731	57,900 PSI	61.6	3020	64,300 PSI
A-4350	49.0	2699	58,000 PSI	54.4	3009	64,400 PSI
Hunter	48.7	2777	58,100 PSI	54.1	3027	64,500 PSI
A-2700	46.8	2722	58,400 PSI	52.0	2979	64,900 PSI

Bullet: 140 GR. HDY BTSP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.210″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	57.0	2808	58,100 PSI	63.3	3062	64,600 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	56.7	2731	57,900 PSI	63.0	3022	64,300 PSI
A-4350	50.0	2745	57,800 PSI	55.5	3045	64,300 PSI
Hunter	48.8	2759	58,100 PSI	54.2	3048	64,500 PSI
A-2700	46.9	2704	58,200 PSI	52.1	2977	64,600 PSI

Bullet: 140 GR. SFT A-FRAME Dia: .277″

Case: WIN Primer: WIN LR Col: 3.280″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	59.0	2771	41,800 CUP	63.0C	2979	50,800 CUP
IMR 7977	58.9	2892	51,700 PSI	62.0C	3023	59,500 PSI
IMR 4955	54.0	2713	51,700 PSI	59.0	2955	62,900 PSI
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
Hybrid 100V	50.0	2787	53,600 PSI	54.2C	2964	62,300 PSI
IMR 4831	50.6	2738	44,400 CUP	54.0	2896	50,700 CUP
IMR 4451	49.9	2775	51,600 PSI	53.7	2977	62,700 PSI
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
W760	46.0	2644	42,900 CUP	48.9	2788	49,800 CUP
IMR 4166	41.8	2645	49,400 PSI	46.5	2915	63,600 PSI
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
IMR 4320	41.5	2614	42,700 CUP	44.5	2775	50,000 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: 150 GR. BAR TSX FB Dia: .277″

Case: WIN Primer: WIN LR Col: 3.210″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	56.1	2588	57,600 PSI	62.3	2891	64,000 PSI
Magpro	53.6	2602	57,900 PSI	59.6	2888	64,300 PSI
Hunter	48.0	2638	58,300 PSI	53.3	2874	64,800 PSI
A-4350	44.6	2509	58,100 PSI	49.6	2774	64,600 PSI

Bullet: 150 GR. BER VLD Dia: .277″

Case: WIN Primer: WIN LR Col: 3.275″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	54.8	2640	57,800 PSI	60.9	2908	64,200 PSI
Magpro	54.5	2668	57,900 PSI	60.6	2926	64,300 PSI
A-4350	48.3	2633	58,300 PSI	53.6	2916	64,800 PSI
Hunter	47.4	2660	58,200 PSI	52.7	2908	64,600 PSI

Bullet: 150 GR. HDY SP Dia: .277″

Case: WIN Primer: WIN LR Col: 3.285″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	55.8	2656	58,200 PSI	62.0	2903	64,600 PSI
IMR 7977	56.5	2717	50,600 PSI	60.8C	2940	61,300 PSI
Magpro	54.5	2657	58,000 PSI	60.6	2909	64,500 PSI
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
IMR 4955	51.7	2560	50,000 PSI	56.6	2829	63,900 PSI
H4831	52.0	2651	46,300 CUP	55.7	2804	51,200 CUP
A-4350	48.1	2621	58,100 PSI	53.5	2896	64,600 PSI
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 4451	48.3	2636	52,800 PSI	52.0	2815	62,000 PSI
Hybrid 100V	48.0	2650	53,600 PSI	52.0	2811	61,900 PSI
Hunter	46.7	2609	57,800 PSI	51.9	2863	64,200 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
W760	45.0	2569	45,000 CUP	48.0	2706	51,200 CUP
IMR 4166	40.7	2506	49,700 PSI	45.3	2766	63,800 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: 160 GR. NOS PART Dia: .277″

Case: WIN Primer: WIN LR Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	56.4	2662	50,700 PSI	60.0C	2843	59,800 PSI
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 4955	52.3	2536	50,800 PSI	57.2	2778	63,100 PSI
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
Hybrid 100V	48.0	2578	49,900 PSI	53.0C	2796	63,300 PSI
IMR 4831	48.5	2481	41,800 CUP	52.9	2680	50,300 CUP
IMR 4451	47.7	2526	50,000 PSI	51.3	2751	62,700 PSI
IMR 4350	46.5	2483	42,100 CUP	51.0	2706	50,500 CUP
A-4350	45.4	2559	57,800 PSI	50.4	2769	64,200 PSI
Hunter	45.3	2550	58,400 PSI	50.4	2781	64,900 PSI
A-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 4166	39.9	2434	49,100 PSI	44.3	2681	62,700 PSI
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
IMR 4320	40.0	2453	44,500 CUP	42.8	2584	51,000 CUP

Bullet: 180 GR. BAR JRN Dia: .277″

Case: WIN Primer: WIN LR Col: 3.300″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	50.0	2404	45,100 CUP	54.0	2540	50,600 CUP
IMR 7828	48.0	2307	40,900 CUP	52.8	2529	50,400 CUP
H4831	47.0	2358	46,000 CUP	50.5	2501	51,100 CUP

27 NOSLER

Barrel: 24″ Twist: 1:10″ Trim: 2.575″

Bullet: 129 GR. BAR BT Dia: .277″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 8133	76.0	3121	51,400 PSI	82.3	3385	63,300 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 7977	72.0	3152	53,800 PSI	76.8	3350	63,200 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: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 8133	76.0	3062	50,900 PSI	83.5	3366	63,200 PS
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 7977	71.0	3035	51,000 PSI	78.2	3315	63,300 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: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 8133	77.0	3088	51,600 PSI	83.2	3337	62,900 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

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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 7977	71.0	3037	51,300 PSI	77.5	3274	62,400 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: WIN LR Magnum Col: 3.335″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 8133	77.3	3046	50,000 PSI	82.5	3321	63,500 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 7977	72.0	3044	51,400 PSI	77.8	3276	63,100 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: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 8133	75.0	2985	49,900 PSI	81.0	3250	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 7977	70.0	2939	50,600 PSI	77.0	3205	63,400 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: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	83.0	2988	51,500 PSI	90.0	3233	63,400 PSI
H50BMG	80.0	2879	50,300 PSI	89.0C	3161	63,300 PSI
IMR 8133	73.0	2901	50,500 PSI	80.7	3204	63,100 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 7977	68.0	2870	51,000 PSI	75.0	3115	63,100 PSI
IMR 7828 SSC	66.0	2898	51,600 PSI	73.7	3192	63,500 PSI

Bullet: 165 GR. NOS ABLR Dia: .277″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	81.1	2874	49,200 PSI	88.2	3154	63,100 PSI
H50BMG	80.0	2842	53,700 PSI	85.0C	2962	59,000 PSI
IMR 8133	70.8	2753	49,400 PSI	77.0	3027	62,900 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
IMR 7977	64.0	2695	49,700 PSI	69.8	2951	63,500 PSI

Bullet: 170 GR. BER EOL Dia: .277″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	81.0	2841	50,400 PSI	88.0	3106	63,200 PSI
H50BMG	76.0	2760	51,600 PSI	84.0C	3001	63,500 PSI
IMR 8133	71.0	2801	52,300 PSI	76.5	3008	63,400 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″ Trim: 2.025″

Bullet: 100 GR. SIE HP Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.665″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2700	45.6	2859	56,800 PSI	48.0	3041	59,800 PSI
A-2495	42.1	2954	52,800 PSI	46.8	3246	58,700 PSI
A-4064	41.4	2786	49,400 PSI	46.0	3166	54,900 PSI
A-2520	40.7	3047	54,900 PSI	45.2	3287	61,000 PSI
A-2460	40.6	3022	52,500 PSI	45.1	3271	58,400 PSI
A-5744	27.4	2563	43,700 PSI	38.0	3347	60,600 PSI

Bullet: 120 GR. NOS BT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.765″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2495	40.5	2784	54,700 PSI	45.0	3055	60,800 PSI
A-2520	39.0	2802	54,900 PSI	43.3	3054	61,000 PSI
A-4064	38.7	2603	51,100 PSI	43.0	2958	56,800 PSI
A-2460	38.7	2782	54,500 PSI	43.0	3053	60,600 PSI

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	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
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 4166	41.5	2861	40,600 CUP	44.8	3055	49,000 CUP
IMR 4320	42.0	2861	45,400 CUP	44.7	3001	50,400 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

Bullet: 130 GR. SIE HPBT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.770″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2700	42.8	2612	56,700 PSI	45.0	2779	59,600 PSI
A-2495	38.6	2662	54,900 PSI	42.9	2899	60,900 PSI
A-4064	38.2	2502	54,300 PSI	42.5	2844	60,400 PSI
A-2460	37.3	2655	54,800 PSI	41.5	2897	60,800 PSI

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W760	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
Varget	40.0	2830	43,400 CUP	43.5	3004	50,100 CUP
IMR 4166	40.2	2759	43,200 CUP	43.3	2950	49,500 CUP
IMR 4320	40.0	2709	43,200 CUP	42.5	2863	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

Bullet: 139 GR. HDY SP Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4451	44.0	2655	48,600 PSI	47.4	2850	58,000 PSI
W760	45.5	2710	40,400 CUP	47.0	2810	44,100 CUP
H380	44.0	2674	41,800 CUP	47.0	2807	46,800 CUP
CFE 223	41.4	2666	38,900 CUP	45.0	2847	48,900 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%.

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
BL-C(2)	41.0	2641	41,200 CUP	44.7	2857	49,900 CUP
Varget	40.5	2721	44,700 CUP	43.5	2877	50,000 CUP
IMR 4166	40.4	2722	42,300 CUP	43.5	2879	49,400 CUP
IMR 4320	40.7	2643	43,700 CUP	43.3	2772	49,200 CUP
IMR 4895	40.5	2706	43,600 CUP	43.2	2851	49,900 CUP
IMR 4064	40.0	2682	42,500 CUP	42.5	2847	49,900 CUP
H4895	39.0	2678	42,500 CUP	42.5	2857	50,200 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: REM Primer: FED 210 LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4350	42.8	2467	52,900 PSI	47.5	2803	58,800 PSI
A-2495	38.4	2577	54,600 PSI	42.6	2835	60,700 PSI
A-4064	37.8	2442	52,800 PSI	42.0	2775	58,600 PSI
A-2460	36.0	2574	54,800 PSI	40.1	2811	60,900 PSI

Bullet: 140 GR. BAR TTSX BT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	43.0	2638	53,500 PSI	47.8	2880	59,500 PSI
A-4064	39.0	2575	53,300 PSI	43.4	2791	59,200 PSI
A-2495	37.4	2533	54,800 PSI	41.5	2756	60,900 PSI
A-2520	37.0	2577	54,900 PSI	41.1	2788	61,000 PSI
A-2460	36.3	2570	54,700 PSI	40.4	2784	60,800 PSI

Bullet: 140 GR. SFT A-FRAME Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.750″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W760	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
IMR 4451	42.3	2621	50,700 PSI	45.5C	2798	59,100 PSI
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
IMR 4166	39.3	2665	39,200 CUP	42.3	2841	49,400 CUP
Varget	39.5	2695	43,700 CUP	42.2	2819	49,800 CUP
IMR 4320	39.0	2588	41,400 CUP	41.4	2749	49,800 CUP
IMR 4895	38.5	2596	40,100 CUP	41.0	2752	49,600 CUP
IMR 4064	38.0	2593	41,200 CUP	40.5	2770	50,300 CUP
H4895	38.0	2618	42,000 CUP	40.5	2769	49,700 CUP
IMR 8208 XBR	37.3	2606	43,200 CUP	39.7	2732	48,800 CUP
IMR 3031	36.0	2537	40,700 CUP	38.3	2695	49,600 CUP
Benchmark	36.0	2564	42,600 CUP	38.3	2688	49,300 CUP
H335	35.5	2536	43,800 CUP	37.5	2647	49,800 CUP
Trail Boss	11.0	1211	36,200 CUP	16.0	1472	43,300 CUP

Bullet: 145 GR. SPR SP Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.730″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	44.9	2655	40,000 PSI	51.0C	3014	58,800 PSI
H4350	45.0	2647	42,300 CUP	48.0C	2801	49,800 CUP
IMR 4350	45.0	2668	43,900 CUP	48.0C	2847	50,200 CUP
W760	43.0	2589	41,200 CUP	46.0	2788	49,500 CUP
IMR 4451	42.7	2589	50,000 PSI	45.9C	2771	58,800 PSI
H380	43.0	2603	45,000 CUP	45.5	2716	49,900 CUP
IMR 4166	40.0	2686	51,000 PSI	43.0	2854	60,200 PSI
CFE 223	39.3	2519	36,000 CUP	42.7	2701	47,400 CUP
IMR 4895	40.0	2598	45,700 CUP	42.5	2753	50,700 CUP
IMR 4320	39.5	2606	44,700 CUP	42.0	2737	49,800 CUP
BL-C(2)	39.0	2516	41,700 CUP	41.7	2693	49,600 CUP
Varget	39.0	2639	46,200 CUP	41.5	2745	50,200 CUP
IMR 4064	38.5	2590	45,000 CUP	41.0	2728	50,300 CUP
H4895	38.5	2599	44,400 CUP	41.0	2728	49,800 CUP
IMR 8208 XBR	37.8	2589	43,700 CUP	40.2	2721	50,200 CUP
Benchmark	36.0	2487	40,900 CUP	39.5	2693	50,700 CUP
IMR 3031	36.5	2512	44,000 CUP	38.8	2659	49,800 CUP

Bullet: 150 GR. BAR TSX BT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.735″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	41.6	2550	54,100 PSI	46.2	2782	60,100 PSI
A-2700	40.2	2446	48,000 PSI	44.7	2689	53,400 PSI
A-4064	38.2	2500	54,000 PSI	42.5	2719	60,000 PSI
A-2495	36.8	2457	54,600 PSI	40.9	2675	60,700 PSI

Bullet: 150 GR. BAR TTSX BT Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	44.3	2631	45,500 PSI	49.2C	2891	57,900 PSI
W760	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
IMR 4451	41.4	2469	48,600 PSI	44.6	2662	58,700 PSI
CFE 223	39.5	2501	43,500 CUP	42.0	2668	49,200 CUP
IMR 4320	38.5	2430	42,200 CUP	41.0	2609	49,800 CUP
BL-C(2)	38.5	2463	41,400 CUP	41.0	2630	48,800 CUP
IMR 4895	38.3	2512	44,800 CUP	41.0	2655	50,600 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 4166	36.5	2463	42,800 CUP	39.5	2623	49,500 CUP
H335	35.2	2373	43,500 CUP	37.4	2522	50,400 CUP
IMR 8208 XBR	35.2	2404	44,600 CUP	37.4	2518	50,700 CUP
H4895	34.8	2428	45,200 CUP	37.0	2561	50,700 CUP
IMR 3031	34.8	2400	43,900 CUP	37.0	2553	49,000 CUP
Benchmark	34.8	2369	45,900 CUP	37.0	2506	50,600 CUP

Bullet: 150 GR. NOS E-TIP Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	41.6	2507	53,000 PSI	46.2	2728	58,900 PSI
A-4064	37.7	2440	54,300 PSI	41.9	2658	60,300 PSI
A-2495	36.1	2395	54,900 PSI	40.1	2611	61,000 PSI

Bullet: 150 GR. SIE HPBT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.780″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	44.5	2601	53,900 PSI	49.5	2817	59,900 PSI
A-2700	41.3	2477	57,900 PSI	43.5	2635	61,000 PSI
A-2495	36.4	2453	54,800 PSI	40.5	2677	60,800 PSI

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	43.6	2628	43,100 PSI	48.5	2908	58,900 PSI
IMR 4350	44.0	2637	41,800 CUP	46.5C	2746	46,600 CUP
W760	44.0	2640	43,600 CUP	46.5	2776	50,000 CUP
H380	42.0	2583	43,000 CUP	45.5	2748	49,900 CUP
H4350	42.0	2549	40,600 CUP	45.4	2724	51,500 CUP
IMR 4451	41.1	2525	48,200 PSI	44.2	2726	58,600 PSI
CFE 223	39.9	2529	41,500 CUP	42.5	2688	48,200 CUP
IMR 4320	39.0	2587	43,000 CUP	41.5	2711	49,400 CUP
BL-C(2)	39.0	2559	43,000 CUP	41.5	2699	49,600 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 4895	39.0	2605	44,000 CUP	41.5	2737	50,700 CUP
Varget	38.5	2597	42,400 CUP	41.3	2731	50,000 CUP
IMR 4166	38.3	2570	41,200 CUP	41.3	2755	50,000 CUP
H4895	37.0	2546	43,300 CUP	40.5	2723	50,000 CUP
IMR 4064	38.0	2569	42,600 CUP	40.3	2723	48,800 CUP
IMR 8208 XBR	36.9	2539	43,200 CUP	39.3	2677	49,900 CUP
IMR 3031	36.2	2533	43,000 CUP	38.5	2684	49,900 CUP
Benchmark	36.0	2526	43,300 CUP	38.5	2667	50,200 CUP
H335	35.0	2471	44,700 CUP	37.5	2605	49,900 CUP

Bullet: 154 GR. HDY SP Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	48.0	2550	40,900 CUP	49.5C	2625	44,500 CUP
IMR 4955	45.0	2389	46,000 PSI	49.5C	2624	59,100 PSI
StaBALL 6.5	44.3	2627	44,000 PSI	48.1	2871	59,300 PSI
IMR 4831	44.2	2517	38,400 CUP	47.0C	2655	45,100 CUP
IMR 4350	44.2	2595	43,100 CUP	47.0C	2744	50,200 CUP
W760	43.0	2569	41,200 CUP	46.0	2731	49,600 CUP
Hybrid 100V	42.5	2541	42,900 CUP	46.0C	2713	47,500 CUP
IMR 4451	42.5	2539	50,000 PSI	45.8C	2726	59,100 PSI
H4350	42.3	2531	46,100 CUP	45.0	2645	51,300 CUP
H380	41.5	2462	42,400 CUP	44.0	2627	49,600 CUP
IMR 4320	39.0	2530	44,500 CUP	41.5	2698	50,400 CUP
CFE 223	38.7	2444	39,600 CUP	41.2	2696	47,000 CUP
Varget	38.5	2530	44,100 CUP	41.2	2666	50,300 CUP
IMR 4895	38.4	2532	45,500 CUP	40.8	2687	50,700 CUP
IMR 4166	38.2	2557	50,300 PSI	40.7	2710	59,000 PSI
IMR 4064	38.0	2552	45,600 CUP	40.5	2697	50,700 CUP
BL-C(2)	38.0	2387	40,800 CUP	40.5	2566	49,500 CUP
H4895	37.0	2484	44,200 CUP	39.5	2592	49,900 CUP
IMR 3031	36.7	2498	43,800 CUP	39.0	2624	50,400 CUP
IMR 8208 XBR	36.2	2482	43,200 CUP	38.5	2587	49,100 CUP
Benchmark	36.0	2467	42,900 CUP	38.5	2597	49,500 CUP
H335	35.0	2374	41,700 CUP	37.5	2506	49,000 CUP

Bullet: 160 GR. NOS PART Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	43.7	2490	52,400 PSI	48.5	2695	58,200 PSI
A-4350	41.4	2314	52,500 PSI	46.0	2630	58,300 PSI
Big Game	40.4	2446	54,400 PSI	44.9	2666	60,500 PSI
A-2700	39.9	2311	51,100 PSI	42.0	2458	53,800 PSI
A-4064	36.0	2246	54,900 PSI	40.0	2553	61,000 PSI
A-2495	35.3	2366	54,800 PSI	39.2	2565	60,900 PSI

Bullet: 160 GR. SFT A-FRAME Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-2495	36.0	2334	53,000 PSI	40.0	2551	58,900 PSI

Bullet: 160 GR. SPR SPBT Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	47.5	2547	43,700 CUP	49.5C	2627	47,500 CUP
IMR 4955	43.6	2368	47,200 PSI	47.9C	2573	58,700 PSI
StaBALL 6.5	42.4	2500	40,800 PSI	47.7	2825	59,200 PSI
IMR 4831	43.5	2474	41,300 CUP	46.0C	2626	47,200 CUP
IMR 4350	43.0	2513	43,500 CUP	46.0C	2681	49,300 CUP
W760	42.5	2566	43,300 CUP	45.5	2684	49,600 CUP
Hybrid 100V	41.0	2486	41,300 CUP	45.0C	2690	48,900 CUP
IMR 4451	40.6	2475	49,900 PSI	43.7C	2635	58,300 PSI
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
IMR 4320	38.0	2485	44,900 CUP	40.4	2623	50,800 CUP
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
IMR 4166	36.7	2491	50,400 PSI	39.3	2641	58,800 PSI
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: 162 GR. HDY ELD-M Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.875″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	47.5	2501	39,000 CUP	48.5C	2555	42,400 CUP
IMR 4955	43.9	2390	48,700 PSI	47.8C	2575	59,000 PSI
StaBALL 6.5	42.5	2490	39,500 PSI	47.8	2821	59,000 PSI
IMR 4350	44.0C	2494	40,000 CUP	46.0C	2655	46,900 CUP
IMR 4451	41.9	2506	50,100 PSI	45.1C	2674	58,600 PSI
Hybrid 100V	41.0	2455	40,300 CUP	45.0C	2651	46,900 CUP
W760	43.0	2553	42,100 CUP	45.0	2632	44,500 CUP
H4350	41.4	2443	40,400 CUP	45.0	2622	50,500 CUP
H380	42.5	2508	42,400 CUP	44.0	2590	45,800 CUP
Varget	38.5	2504	43,400 CUP	41.0	2644	49,800 CUP
IMR 4320	38.5	2478	42,300 CUP	41.0	2635	49,900 CUP
IMR 4895	38.0	2471	42,100 CUP	40.6	2650	49,300 CUP
IMR 8208 XBR	36.2	2499	41,000 CUP	40.2	2725	50,800 CUP
IMR 4064	37.0	2463	42,000 CUP	39.5	2624	49,900 CUP
H4895	37.0	2462	43,700 CUP	39.5	2600	49,800 CUP
IMR 4166	36.5	2505	50,200 PSI	39.1	2634	58,600 PSI
H335	36.5	2467	45,200 CUP	38.2	2585	50,100 CUP
Benchmark	36.0	2441	43,100 CUP	38.0	2557	49,200 CUP
IMR 3031	35.7	2452	43,200 CUP	38.0	2598	50,300 CUP

Bullet: 168 GR. BER VLD Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	41.8	2404	49,400 PSI	46.5	2601	54,900 PSI
Big Game	40.6	2421	54,700 PSI	45.2	2660	60,800 PSI
A-4064	37.8	2375	54,700 PSI	42.0	2612	60,700 PSI
A-2495	36.5	2347	54,700 PSI	40.5	2580	60,800 PSI

Bullet: 168 GR. SIE HPBT Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.800

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4350	41.4	2284	53,500 PSI	46.0	2596	59,500 PSI
A-2700	39.9	2157	53,000 PSI	42.0	2451	55,800 PSI

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	47.0	2438	39,700 CUP	49.0C	2545	45,000 CUP
IMR 7828	46.0	2385	40,700 CUP	49.0C	2547	46,700 CUP
IMR 4955	43.7	2352	50,000 PSI	47.6C	2525	59,100 PSI
StaBALL 6.5	42.1	2485	42,600 PSI	47.4	2776	59,300 PSI
IMR 4350	43.7	2469	42,500 CUP	46.5C	2643	49,300 CUP
W760	44.0	2557	44,600 CUP	46.5	2670	49,800 CUP
IMR 4831	44.0	2402	38,500 CUP	46.0C	2517	42,900 CUP
H380	42.0	2458	45,800 CUP	44.5	2565	49,900 CUP
IMR 4451	41.1	2468	51,100 PSI	44.2C	2625	59,100 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H4350	41.6	2431	42,500 CUP	44.2	2551	50,700 CUP
Hybrid 100V	40.0	2443	42,800 CUP	44.0C	2623	48,200 CUP
IMR 4320	38.0	2430	41,300 CUP	40.5C	2565	48,700 CUP
BL-C(2)	38.0	2370	42,700 CUP	40.5	2492	49,500 CUP
Varget	37.5	2430	44,600 CUP	40.0	2540	50,100 CUP
IMR 4895	37.5	2439	42,300 CUP	40.0	2583	49,800 CUP
IMR 4064	37.5	2466	43,200 CUP	39.8	2597	50,200 CUP
IMR 4166	36.5	2467	52,000 PSI	39.2	2599	59,200 PSI
H4895	36.5	2390	45,400 CUP	39.0	2504	49,700 CUP
IMR 3031	36.0	2431	45,200 CUP	38.2	2565	50,100 CUP
Benchmark	36.0	2389	43,500 CUP	38.0	2517	49,400 CUP
IMR 8208 XBR	34.9	2414	46,400 CUP	37.1	2486	49,600 CUP
H335	35.0	2328	44,700 CUP	37.0	2421	49,600 CUP

Bullet: 175 GR. BAR TSX FB Dia: .284″

Case: REM Primer: FED 210 LR Col: 2.735″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
A-4064	35.5	2192	53,300 PSI	39.5	2413	59,300 PSI
A-2495	34.3	2170	54,700 PSI	38.2	2393	60,800 PSI

Bullet: 175 GR. NOS PART Dia: .284″

Case: REM Primer: REM 9 1/2, LR Col: 2.800″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H4831	47.0	2443	46,600 CUP	49.0C	2516	49,400 CUP
IMR 4955	43.0	2266	48,700 PSI	46.8C	2437	59,200 PSI
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
Hybrid 100V	40.0	2359	41,500 CUP	44.0C	2568	48,300 CUP
IMR 4451	40.7	2442	50,400 PSI	43.8C	2598	58,800 PSI
W760	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 4320	38.5	2355	43,900 CUP	41.0	2464	49,700 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
IMR 4166	35.6	2346	49,300 PSI	38.2	2502	59,700 PSI
IMR 3031	35.2	2270	44,900 CUP	37.5	2381	49,700 CUP
Varget	35.0	2231	43,400 CUP	37.5	2344	49,500 CUP
H4895	35.0	2240	44,500 CUP	37.5	2354	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. BAR TSX BT Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.230″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
Magnum	68.6	3003	54,600 PSI	76.3	3332	60,700 PSI
Magpro	67.7	3068	54,500 PSI	75.2	3332	60,500 PSI
A-4350	58.9	3051	54,600 PSI	65.4	3307	60,600 PSI
Hunter	57.6	2966	54,400 PSI	64.0	3283	60,500 PSI

Bullet: 120 GR. HDY HP Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.200″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
A-4350	60.0	2970	53,800 PSI	66.7	3273	59,800 PSI
Hunter	57.6	2928	53,600 PSI	64.0	3220	59,600 PSI

Bullet: 120 GR. HDY SP Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.230″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
IMR 4955	63.9	2994	49,900 PSI	69.5	3222	59,700 PSI
IMR 4350	62.0	3050	49,900 PSI	66.5	3251	59,000 PSI
Hybrid 100V	60.0	3092	50,100 PSI	65.5	3327	59,600 PSI
H4350	62.0	3106	44,700 CUP	65.0	3226	50,100 CUP
W760	61.0	3126	45,500 CUP	64.5	3261	50,700 CUP
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: WIN Primer: WIN LR Magnum Col: 3.185″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 7828	65.0	2943	50,800 PSI	70.0	3159	59,300 PSI
IMR 4955	62.9	2915	51,700 PSI	68.4	3123	60,200 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
IMR 4451	58.3	3031	51,800 PSI	63.4	3228	59,800 PSI
Hybrid 100V	57.0	2931	49,400 PSI	62.5	3157	59,000 PSI
H4350	58.0	2953	45,100 CUP	61.5	3082	50,800 CUP
W760	59.0	2985	46,500 CUP	61.0	3064	49,400 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 BTSP Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.230

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
Magpro	68.3	2921	54,600 PSI	75.8	3207	60,700 PSI
Magnum	67.4	2837	54,700 PSI	74.9	3171	60,800 PSI
A-4350	59.6	2845	54,800 PSI	66.2	3142	60,900 PSI

Bullet: 139 GR. HDY GMX Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 8133	70.0	2859	46,100 PSI	76.0C	3148	59,000 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 7977	64.8	2790	46,400 PSI	70.0C	3064	56,900 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 4955	60.6	2773	50,200 PSI	65.9	3007	60,100 PSI
IMR 4350	59.6	2902	49,300 PSI	63.4	3099	58,500 PSI
Hybrid 100V	58.5	2914	49,800 PSI	62.2	3114	59,500 PSI
IMR 4451	57.3	2909	51,800 PSI	62.3	3114	59,500 PSI
W760	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: WIN Primer: WIN LR Magnum Col: 3.240″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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
A-4350	54.1	2773	54,400 PSI	60.1	2987	60,400 PSI

Bullet: 140 GR. NOS PART Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.250″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 8133	71.8	2940	46,200 PSI	78.0C	3217	58,100 PSI
Retumbo	71.0	2955	46,100 CUP	75.0C	3107	49,400 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	67.1	2835	54,100 PSI	74.6	3116	60,100 PSI
Magpro	65.7	2874	53,200 PSI	73.0	3118	59,200 PSI
IMR 7977	66.5	2891	47,400 PSI	72.0	3175	59,900 PSI
H1000	67.0	2934	46,200 CUP	70.0	3036	50,600 CUP
IMR 7828	64.0	2867	50,000 PSI	69.0	3095	59,200 PSI
IMR 4955	62.0	2840	50,700 PSI	67.4	3061	60,200 PSI
IMR 4831	61.0	2880	52,200 PSI	65.4	3053	59,400 PSI
H4831	61.0	2841	46,300 CUP	64.0	2950	50,200 CUP
Hybrid 100V	57.0	2895	49,100 PSI	63.0	3138	59,800 PSI
IMR 4350	59.0	2877	51,400 PSI	62.8	3045	58,600 PSI
IMR 4451	57.1	2934	50,000 PSI	62.0	3136	58,800 PSI
A-4350	54.6	2773	54,300 PSI	60.7	3000	60,300 PSI
W760	58.0	2897	46,700 CUP	60.2	2967	49,300 CUP
H4350	56.0	2808	45,500 CUP	59.0	2927	50,000 CUP

Bullet: 150 GR. BAR TTSX BT Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.225″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 8133	69.7	2864	48,400 PSI	75.8C	3100	60,000 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 7977	64.0	2788	49,900 PSI	69.2C	3041	59,800 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 4955	59.8	2719	49,900 PSI	65.1	2940	60100 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
Hybrid 100V	56.8	2829	47,800 PSI	60.7	3071	59,000 PSI
IMR 4451	55.2	2842	51,800 PSI	60.0	3005	58,800 PSI

Bullet: 150 GR. NOS E-TIP Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.330″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	51.9	2602	54,600 PSI	57.6	2823	60,700 PSI

Bullet: 150 GR. NOS PART Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.270″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 8133	70.8	2838	45,300 PSI	77.0C	3133	59,200 PSI
Magnum	65.6	2722	54,800 PSI	72.8	3016	60,900 PSI
Retumbo	68.0	2818	43,300 CUP	72.5C	2998	50,300 CUP
Magpro	64.6	2757	53,600 PSI	71.8	3020	59,600 PSI
IMR 7977	65.5	2741	45,400 PSI	70.9C	3042	58,900 PSI
H1000	65.0	2835	46,200 CUP	68.0	2936	49,900 CUP
IMR 7828	62.0	2792	51,700 PSI	66.2	2952	58,500 PSI
IMR 4955	60.6	2747	50,600 PSI	65.9	2952	60,100 PSI
IMR 4831	58.0	2758	51,500 PSI	62.5	2925	59,400 PSI
H4831	59.0	2775	45,300 CUP	62.0	2986	51,100 CUP
A-4350	55.6	2724	54,800 PSI	61.8	2942	60,900 PSI
IMR 4350	57.0	2786	52,400 PSI	60.8	2931	59,400 PSI
IMR 4451	55.8	2861	51,700 PSI	60.7	3045	59,400 PSI
Hybrid 100V	55.0	2746	48,800 PSI	60.0	2975	59,500 PSI
H4350	55.0	2781	45,700 CUP	57.0	2859	50,100 CUP

Bullet: 154 GR. HDY SP Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	66.1	2744	54,600 PSI	73.4	3028	60,700 PSI
Magnum	65.1	2656	54,300 PSI	72.3	2967	60,400 PSI
A-4350	57.9	2680	54,800 PSI	64.4	2935	60,900 PSI

Bullet: 160 GR. BAR TSX FB Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.240″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	66.8	2615	54,800 PSI	74.2	2931	60,900 PSI
Magpro	63.8	2631	54,800 PSI	70.9	2935	60,900 PSI
A-4350	51.5	2530	54,400 PSI	57.2	2709	60,500 PSI

Bullet: 160 GR. NOS PART Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	77.0	2786	52,300 PSI	80.0	2897	58,300 PSI
IMR 8133	69.8	2820	48,800 PSI	75.0C	3035	59,400 PSI
Retumbo	65.0	2756	43,200 CUP	69.5C	2915	49,900 CUP
IMR 7977	63.7	2673	46,700 PSI	68.9	2934	58,500 psi
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 4955	58.7	2646	50,600 PSI	63.9	2846	59,800 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
IMR 4451	54.3	2757	51,900 PSI	59.4	2945	59,700 PSI
Hybrid 100V	53.0	2647	49,600 PSI	58.0	2839	58,300 PSI
H4350	53.0	2651	46,400 CUP	55.5	2745	49,800 CUP

Bullet: 160 GR. SIE SBT Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.245″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	57.6	2654	54,700 PSI	64.0	2898	60,700 PSI

Bullet: 162 GR. HDY ELD-M Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	66.4	2653	54,300 PSI	73.8	2959	60,300 PSI
Magpro	64.3	2672	54,300 PSI	71.5	2967	60,300 PSI
A-4350	57.0	2537	54,500 PSI	63.4	2890	60,500 PSI

Bullet: 162 GR. HDY SPBT Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	77.0	2820	49,800 PSI	80.0	2921	54,400 PSI
IMR 8133	70.2	2846	49,500 PSI	75.5C	3069	60,200 PSI
Retumbo	69.0	2787	43,900 CUP	73.5C	2963	50,500 CUP
H1000	67.0	2800	45,400 CUP	70.0	2905	49,600 CUP
IMR 7977	64.0	2702	47,500 PSI	69.5C	2955	59,300 PSI
IMR 7828	61.0	2724	50,800 PSI	65.0	2882	59,000 PSI
IMR 4955	59.0	2659	50,700 PSI	64.2	2863	60,200 PSI
H4831	60.0	2731	43,300 CUP	64.0	2871	49,800 CUP
IMR 4831	58.0	2710	49,900 PSI	61.8	2877	59,500 PSI
IMR 4350	56.0	2704	49,700 PSI	60.0	2861	58,100 PSI
Hybrid 100V	55.0	2725	49,700 PSI	60.0	2922	59,500 PSI
H4350	55.0	2677	43,400 CUP	58.0	2799	49,400 CUP
IMR 4451	53.9	2755	51,200 PSI	58.7	2938	59,200 PSI

Bullet: 168 GR. BER VLD Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	64.8	2711	54,600 PSI	72.0	2993	60,600 PSI
Magpro	63.2	2741	54,800 PSI	70.2	3001	60,900 PSI
A-4350	57.6	2555	54,400 PSI	64.0	2838	60,400 PSI

Bullet: 168 GR. SIE HPBT Dia: .284″

Case: WIN Primer: WIN LR Magnum Col: 3.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	65.6	2639	54,500 PSI	72.9	2904	60,500 PSI
Magpro	64.7	2604	54,800 PSI	71.9	2930	60,900 PSI
A-4350	58.2	2578	54,100 PSI	64.6	2857	60,100 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: 170 GR. SIE RN   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.270″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	77.0	2688	44,700 PSI	79.0	2826	51,300 PSI
Retumbo	71.0	2752	44,200 CUP	75.0C	2899	50,700 CUP
H1000	69.0	2744	45,600 CUP	71.0	2806	49,400 CUP
IMR 7828	62.0	2680	50,400 PSI	66.0	2839	58,700 PSI
H4831	63.0	2749	46,300 CUP	65.0	2806	48,900 CUP
IMR 4831	59.0	2672	50,500 PSI	63.0	2828	59,100 PSI
IMR 4350	57.0	2669	50,700 PSI	61.5	2829	59,200 PSI
H4350	58.0	2701	44,600 CUP	60.0	2767	48,500 CUP
Hybrid 100V	54.0	2604	49,400 PSI	59.0	2807	59,500 PSI

Bullet: 175 GR. BAR TSX FB   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.240″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magnum	62.0	2604	54,300 PSI	68.9	2844	60,300 PSI
Magpro	60.4	2621	54,400 PSI	67.2	2877	60,500 PSI
A-4350	49.4	2470	54,200 PSI	54.9	2672	60,200 PSI

Bullet: 175 GR. NOS PART   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	74.0	2632	49,300 PSI	77.0	2758	56,200 PSI
IMR 8133	66.2	2683	50,200 PSI	71.2C	2879	59,400 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
IMR 7977	61.9	2576	48,900 PSI	67.3	2822	60,200 PSI
H1000	61.0	2567	45,000 CUP	64.5	2692	50,400 CUP
IMR 4955	56.6	2481	48,600 PSI	61.5	2711	59,700 PSI
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
A-4350	52.1	2534	54,200 PSI	57.9	2740	60,200 PSI
Hybrid 100V	53.0	2567	49,700 PSI	57.5	2740	58,200 PSI
IMR 4350	54.0	2586	52,600 PSI	57.0	2698	58,800 PSI
IMR 4451	50.8	2541	49,400 PSI	55.2	2746	59,400 PSI
H4350	51.0	2504	46,200 CUP	54.0	2617	51,400 CUP

Bullet: 175 GR. SIE SBT   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.245″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	53.5	2597	54,800 PSI	59.5	2782	60,900 PSI

Bullet: 180 GR. BER VLD   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 8133	67.7	2705	50,200 PSI	72.8C	2905	60,200 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 7977	61.9	2573	48,700 PSI	67.0C	2793	59,200 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 4955	56.9	2537	50,900 PSI	61.9	2716	60,200 PSI
IMR 4350	55.5	2622	49,300 PSI	61.0	2837	59,400 PSI
A-4350	53.7	2547	54,200 PSI	59.7	2750	60,200 PSI
Hybrid 100V	53.6	2594	48,800 PSI	59.0	2810	59,700 PSI
H4350	52.0	2553	48,000 PSI	56.0	2752	59,000 PSI
IMR 4451	51.3	2590	51,400 PSI	55.8	2757	59,600 PSI

Bullet: 180 GR. SIE HPBT   Dia: .284″

Case: WIN   Primer: WIN LR Magnum   Col: 3.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	49.8	2505	54,700 PSI	55.4	2688	60,800 PSI

7mm Weatherby Magnum

Barrel: 24″   Twist: 1:10″   Trim: 2.539″

Bullet: 140 GR. SFT SP   Dia: .284″

Case: REM   Primer: FED 215M, LR Mag Match   Col: 3.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 8133	76.3	3021	43,600 CUP	82.0C	3272	52,800 CUP
H1000	75.0	3104	42,800 CUP	79.0C	3273	49,900 CUP
IMR 7977	72.5	3022	44,500 CUP	77.5C	3269	54,800 CUP
IMR 7828	69.0	3098	45,100 CUP	74.0	3326	55,100 CUP
H4831	69.0	3023	43,600 CUP	74.0	3258	54,000 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
Hybrid 100V	60.0	2931	44,800 CUP	66.0	3196	53,300 CUP
Trail Boss	18.5	1365	22,700 CUP	26.5	1529	30,500 CUP

Bullet: 150 GR. NOS PART   Dia: .284″

Case: REM   Primer: FED 215M, LR Mag Match   Col: 3.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 8133	76.3	3029	46,200 CUP	82.0C	3256	55,100 CUP
H1000	75.0	3073	45,400 CUP	79.0C	3223	52,200 CUP
IMR 7977	72.5	2984	46,400 CUP	77.5C	3186	54,500 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
Hybrid 100V	61.0	2967	41,500 CUP	65.5C	3133	53,900 CUP

Bullet: 160 GR. BAR TTSX   Dia: .284″

Case: REM   Primer: FED 215M, LR Mag Match   Col: 3.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
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
Hybrid 100V	58.0	2664	43,200 CUP	63.5C	2888	50,700 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: REM   Primer: FED 215M, LR Mag Match   Col: 3.350″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	78.0	2751	41,600 CUP	80.0	2862	45,200 CUP
IMR 8133	72.1	2785	46,900 CUP	77.5C	2995	55,000 CUP
H1000	70.0	2844	45,000 CUP	74.7C	3022	54,000 CUP
IMR 7977	68.5	2765	46,600 CUP	73.2C	2964	55,000 CUP
IMR 7828	64.0	2773	45,000 CUP	67.5	2942	52,600 CUP
H4831	63.0	2724	43,500 CUP	67.5	2895	53,400 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
Hybrid 100V	57.0	2658	46,000 CUP	62.0C	2826	52,600 CUP

Bullet: 180 GR. BER VLD   Dia: .284″

Case: REM   Primer: FED 215M, LR Mag Match   Col: 3.350″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	75.2	2698	42,800 CUP	81.8C	2927	50,900 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%.

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	72.3	2817	47,500 CUP	77.8C	3034	54,800 CUP
IMR 7977	69.5	2764	45,600 CUP	74.2C	2962	54,500 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
Hybrid 100V	56.4	2641	43,900 CUP	61.4	2832	52,600 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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	93.2	3192	48,900 PSI	101.0C	3535	62,500 PSI
H50BMG	90.2	3062	43,900 PSI	97.0C	3346	55,600 PSI
IMR 8133	84.0	3184	46,000 PSI	91.0C	3579	61,600 PSI
H1000	84.0	3268	50,500 PSI	89.4C	3547	63,000 PSI
Retumbo	83.8	3170	44,900 PSI	90.2	3576	62,900 PSI
IMR 7977	82.2	3280	51,000 PSI	87.5	3545	62,700 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 4955	77.8	3313	52,600 PSI	82.8	3566	63,100 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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	90.2	3057	52,100 PSI	96.0	3305	62,500 PSI
H50BMG	88.1	3089	56,600 PSI	93.8C	3244	63,100 PSI
IMR 8133	81.2	3093	51,600 PSI	87.5	3375	63,200 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 7977	76.8	3018	52,800 PSI	81.8	3233	61,900 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 4955	71.3	3038	54,200 PSI	75.8	3227	62,800 PSI
IMR 4831	69.3	3014	53,300 PSI	73.8	3224	62,600 PSI

Bullet: 145 GR. SPR SPBT Dia: .284″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	88.9	3083	52,800 PSI	94.6	3307	62,700 PSI
H50BMG	85.7	3080	57,500 PSI	91.2C	3206	62,900 PSI
IMR 8133	81.7	3057	50,500 PSI	87.9	3356	63,300 PSI
Retumbo	78.3	3089	53,800 PSI	83.4	3275	62,700 PSI
H1000	75.4	3096	57,400 PSI	80.3	3226	63,000 PSI
IMR 7977	75.0	3042	55,200 PSI	79.8	3211	62,600 PSI
IMR 7828	73.3	3098	54,800 PSI	78.0	3260	62,500 PSI
IMR 4955	70.7	3074	56,900 PSI	75.3	3218	63,100 PSI
H4831	70.1	3012	54,000 PSI	74.6	3190	62,800 PSI
IMR 4831	69.9	3040	53,900 PSI	74.4	3220	62,600 PSI

Bullet: 150 GR. BAR TTSX BT Dia: .284″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	88.5	3048	54,400 PSI	94.5	3265	63,500 PSI
H50BMG	81.4	3000	58,800 PSI	86.6C	3103	62,400 PSI
IMR 8133	78.7	3011	51,800 PSI	85.0	3273	62,700 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
IMR 7977	71.6	2965	56,400 PSI	76.2	3111	62,800 PSI

Bullet: 160 GR. NOS PART Dia: .284″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	88.2	3025	55,500 PSI	93.8	3199	63,700 PSI
H50BMG	83.2	2934	55,900 PSI	88.6C	3086	62,800 PSI
IMR 8133	78.2	2956	52,900 PSI	84.3	3189	62,700 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
IMR 7977	73.5	2922	55,900 PSI	78.2	3076	62,600 PSI

Bullet: 162 GR. HDY SPBT Dia: .284″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	89.0	3013	54,100 PSI	94.2	3195	62,600 PSI
H50BMG	83.8	2908	54,200 PSI	90.7C	3103	63,800 PSI
IMR 8133	78.6	2926	50,500 PSI	84.8	3200	62,400 PSI
Retumbo	77.8	2982	53,900 PSI	82.8	3161	62,900 PSI
H1000	76.3	2975	55,100 PSI	81.2	3153	63,500 PSI

Bullet: 175 GR. NOS PART Dia: .284″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	85.7	2873	52,900 PSI	91.2	3085	62,700 PSI
H50BMG	80.9	2850	57,800 PSI	84.8	2955	62,900 PSI
IMR 8133	75.8	2809	51,200 PSI	82.0	3045	63,000 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 7977	71.6	2792	54,600 PSI	77.0	2973	63,400 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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Retumbo	76.6	2804	51,600 PSI	81.5	3017	63,300 PSI
IMR 8133	75.7	2799	51,200 PSI	81.8	3039	62,500 PSI
H1000	74.8	2830	55,100 PSI	79.6	2976	62,400 PSI
IMR 7977	73.7	2761	52,500 PSI	78.5	2957	62,600 PSI
IMR 7828	69.6	2825	54,700 PSI	74.1	2966	62,200 PSI

30 CARBINE

Barrel: 20″ Twist: 1:20″ Trim: 1.285″

Bullet: 85 GR. SIE RN Dia: .308″

Case: WIN Primer: CCI 400 SR Col: 1.625″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	16.5	2293	26,000 CUP	17.5	2458	34,800 CUP
H110	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: REM Primer: WIN SR Col: 1.550″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	15.1	2150	38,200 PSI	16.8	2385	42,500 PSI
A-4100	15.1	2150	38,400 PSI	16.7	2378	42,400 PSI
No. 9	12.4	2127	40,800 PSI	13.8	2325	45,400 PSI

Bullet: 100 GR. SPR SP Dia: .308″

Case: WIN Primer: CCI 400 SR Col: 1.625″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	14.5	2075	28,200 CUP	15.5	2202	36,100 CUP
H110	14.5	2075	28,200 CUP	15.5	2202	36,100 CUP
Lil'Gun	14.0	2032	26,700 CUP	15.0	2132	28,300 CUP
H4227	13.0	1879	28,900 CUP	14.5C	2026	33,600 CUP

Bullet: 110 GR. HDY JRN Dia: .308″

Case: WIN Primer: CCI 400 SR Col: 1.680″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	14.0	2006	32,000 CUP	15.0	2106	36,500 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%.

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4227	13.0	1826	30,100 CUP	14.5C	2003	38,800 CUP
H4227	13.0	1826	30,100 CUP	14.5C	2003	38,800 CUP

Bullet: 110 GR. LC L RN Dia: .308″

Case: REM Primer: WIN SR Col: 1.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	14.0	1957	39,700 PSI	15.5	2173	44,000 PSI
A-4100	14.0	1957	39,900 PSI	15.4	2158	43,900 PSI
No. 9	11.0	1792	40,600 PSI	12.3	1959	45,500 PSI

Bullet: 110 GR. SIE FMJ Dia: .308″

Case: REM Primer: WIN SR Col: 1.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	14.2	1990	38,800 PSI	15.8	2175	43,200 PSI
A-4100	14.2	1990	39,000 PSI	15.7	2167	43,100 PSI
No. 9	11.8	1850	41,600 PSI	13.1	2055	46,200 PSI

Bullet: 115 GR. LY L PT GC Dia: .308″

Case: REM Primer: WIN SR Col: 1.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	12.4	1835	39,500 PSI	13.8	2005	43,900 PSI
A-4100	12.4	1835	39,700 PSI	13.7	1992	43,900 PSI
No. 9	10.0	1678	40,200 PSI	11.2	1834	45,000 PSI

Bullet: 130 GR. LY L PT Dia: .308″

Case: REM Primer: WIN SR Col: 1.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	11.1	1673	37,500 PSI	12.3	1829	41,500 PSI
A-4100	11.1	1673	37,700 PSI	12.2	1822	41,500 PSI
No. 9	9.6	1620	40,600 PSI	10.7	1776	45,200 PSI

300 AAC BLACKOUT

Barrel: 16″ Twist: 1:10″ Trim: 1.363″

Bullet: 110 GR. HDY V-MAX Dia: .308″

Case: REM Primer: WIN SR Col: 2.050″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	18.3	2095	44,700 PSI	21.0	2381	51,400 PSI
Enforcer	17.4	2182	49,100 PSI	19.3	2362	54,500 PSI
A-4100	17.3	2174	47,900 PSI	19.2	2351	53,100 PSI

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.050″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	18.4	2191	38,900 PSI	19.4	2286	48,400 PSI
H110	18.4	2191	38,900 PSI	19.4	2286	48,400 PSI
Trail Boss	4.9	1023	12,400 PSI	6.2	1040	18,600 PSI

Bullet: 115 GR. BER TGT FB Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.050″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	18.3	2134	34,100 PSI	20.3	2336	52,700 PSI
H110	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
Trail Boss	4.5	965	17,100 PSI	5.5	1062	18,400 PSI

Bullet: 125 GR. NOS BT Dia: .308″

Case: REM Primer: WIN SR Col: 2.165″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	19.4	1925	35,400 PSI	21.5	2126	39,300 PSI
A-5744	18.9	1984	46,800 PSI	21.0	2207	52,000 PSI
Enforcer	16.5	2048	49,000 PSI	18.4	2224	54,700 PSI
A-4100	16.5	2045	48,400 PSI	18.3	2217	53,700 PSI

Bullet: 130 GR. BAR TTSX BT Dia: .308″

Case: REM Primer: WIN SR Col: 2.065″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	17.0	1704	40,100 PSI	18.9	1923	44,600 PSI
A-5744	16.7	1718	45,700 PSI	18.5	1940	50,600 PSI
Enforcer	14.4	1808	49,400 PSI	16.0	1998	54,900 PSI
No. 11 FS	14.4	1687	37,700 PSI	16.5	1936	43,300 PSI
A-4100	14.2	1794	48,300 PSI	15.8	1983	53,700 PSI

Bullet: 130 GR. SPR HP Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.005″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	17.1	1942	37,900 PSI	18.6	2083	51,700 PSI
H110	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
Trail Boss				6.4	967	25,800 PSI

Bullet: 135 GR. SIE VAR HP Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.055″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	16.9	1881	38,500 PSI	18.8C	2077	50,800 PSI
H110	16.9	1881	38,500 PSI	18.8C	2077	50,800 PSI
Trail Boss				6.4	869	21,600 PSI

Bullet: 140 GR. NOS HPBT Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.055″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	15.1	1793	31,500 PSI	17.8	2047	52,700 PSI
H110	15.1	1793	31,500 PSI	17.8	2047	52,700 PSI
Lil'Gun	15.1	1922	36,000 PSI	17.8	2139	52,800 PSI
Trail Boss				6.0	929	27,100 PSI

Bullet: 150 GR. HDY IB Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.235″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	18.8	1810	26,600 PSI	20.5C	1940	33,500 PSI
IMR 4227	15.6	1683	34,500 PSI	17.8	1899	48,700 PSI
W296	14.6	1725	34,400 PSI	17.2	1971	52,800 PSI
H110	14.6	1725	34,400 PSI	17.2	1971	52,800 PSI
Lil'Gun	14.6	1855	39,000 PSI	17.2	2062	52,800 PSI
Trail Boss				6.0	871	28,900 PSI

Bullet: 150 GR. SIE FMJBT Dia: .308″

Case: REM Primer: WIN SR Col: 2.140″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	19.5	1877	49,000 PSI	21.7	2057	54,600 PSI
A-5744	17.8	1848	49,200 PSI	19.9	2053	55,000 PSI
Enforcer	15.1	1817	49,700 PSI	16.7	1970	55,000 PSI
A-4100	15.0	1809	48,600 PSI	16.6	1958	53,700 PSI

Bullet: 155 GR. SIE HPBT Dia: .308″

Case: REM Primer: WIN SR Col: 2.190″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	18.6	1817	44,100 PSI	20.7	2010	49,100 PSI
A-5744	17.0	1778	47,500 PSI	18.8	1982	52,500 PSI
No. 11 FS	14.3	1678	47,700 PSI	16.4	1888	54,900 PSI
Enforcer	14.4	1757	47,600 PSI	16.0	1905	52,900 PSI
A-4100	14.4	1749	46,400 PSI	15.9	1891	51,200 PSI

Bullet: 168 GR. HDY BTHP Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	17.4	1653	25,900 PSI	20.0C	1887	41,800 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 4227	15.6	1658	40,200 PSI	17.2	1812	52,500 PSI
W296	14.5	1679	40,600 PSI	16.0	1817	53,300 PSI
H110	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: .308″

Case: REM Primer: WIN SR Col: 2.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	17.8	1667	49,000 PSI	19.7	1840	54,300 PSI
A-5744	16.7	1694	48,900 PSI	18.5	1897	54,200 PSI

Bullet: 175 GR. SIE HPBT Dia: .308″

Case: REM Primer: WIN SR Col: 2.215″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	17.7	1637	49,300 PSI	19.7	1801	54,900 PSI
A-5744	16.5	1679	49,300 PSI	18.4	1868	55,000 PSI

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.215″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	14.5	1652	40,600 PSI	16.0	1785	52,600 PSI
H110	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: REM 7 1/2, SR Magnum Col: 2.210″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	14.1	1624	44,500 PSI	15.6	1736	53,700 PSI
H110	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

Bullet: 190 GR. HDY SUB-X Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.050″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H322				13.0	1058	18,100 PSI
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
W296				9.6	1067	22,400 PSI
H110				9.6	1067	22,400 PSI
Lil'Gun				8.3	1044	23,100 PSI

Bullet: 208 GR. HDY ELD-M Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.260″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296				9.2	1060	22,700 PSI
H110				9.2	1060	22,700 PSI
Lil'Gun				8.2	1050	22,200 PSI

Bullet: 210 GR. BER BTTLR Dia: .308″

Case: REM Primer: WIN SR Col: 2.245″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	14.4	1403	48,800 PSI	16.0	1582	54,200 PSI
A-5744	13.6	1382	48,300 PSI	15.1	1552	53,600 PSI
A-1680				11.7	1104	23,800 PSI
A-5744				11.2	1102	27,500 PSI

Bullet: 220 GR. SIE HPBT Dia: .308″

Case: REM Primer: WIN SR Col: 2.089″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744				10.9	1085	40,700 PSI
A-1680				10.9	1085	36,400 PSI
LT-30				12.5	1055	28,900 PSI
A-1680				10.9	1085	32,300 PSI
A-5744				10.7	1081	37,300 PSI
No. 11 FS				9.4	1099	38,800 PSI

Bullet: 230 GR. BER TACT Dia: .308″

Case: Hornady Primer: REM 7 1/2, SR Magnum Col: 2.260″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE BLK				11.3	1045	20,000 PSI
IMR 4198				10.8	1062	27,900 PSI
H4198				10.8	1066	26,600 PSI
IMR 4227				9.6	1046	33,100 PSI
W296				9.0	1058	32,900 PSI
H110				9.0	1058	32,900 PSI
Lil'Gun				8.2	1068	30,000 PSI

Case: REM Primer: WIN SR Col: 2.260″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744				11.0	1106	37,900 PSI
A-1680				10.9	1106	39,600 PSI
A-1680				10.7	1086	31,600 PSI
No. 11 FS				9.7	1084	40,800 PSI

30-30 WINCHESTER

Barrel: 24″ Twist: 1:12″ Trim: 2.030″

Bullet: 110 GR. HDY RN Dia: .308″

Case: WIN Primer: WIN LR Col: 2.440″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4064	35.1	2380	37,300 PSI	39.0	2705	41,400 PSI
A-2520	34.2	2366	32,100 PSI	38.0	2689	35,700 PSI
A-2460	33.3	2369	33,700 PSI	37.0	2692	37,400 PSI
A-2495	33.3	2375	36,900 PSI	37.0	2699	41,000 PSI
A-2230	32.4	2450	37,400 PSI	36.0	2725	41,500 PSI

Bullet: 110 GR. SPR FP Dia: .308″

Case: WIN Primer: WIN LR Col: 2.415″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
BL-C(2)	36.0	2351	24,500 CUP	39.0	2526	25,400 CUP
H335	35.0	2487	28,800 CUP	38.0	2684	34,300 CUP
Varget	34.5	2365	27,200 CUP	38.0C	2572	31,900 CUP
H4895	34.0	2417	28,600 CUP	37.0	2605	31,100 CUP
IMR 4320	34.3	2322	31,300 CUP	36.5	2435	36,100 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
W748				36.8	2595	33,000 CUP

Bullet: 125 GR. SIE HP/FN Dia: .308″

Case: WIN Primer: WIN LR Col: 2.420″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	34.9	2179	24,100 PSI	38.8	2421	26,800 PSI
A-2460	34.4	2472	37,300 PSI	38.2	2666	41,500 PSI
A-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
A-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
X-Terminator	29.7	2322	37,300 PSI	33.0	2517	41,400 PSI
A-2230	29.7	2322	37,300 PSI	33.0	2517	41,400 PSI
A-2015	29.5	2279	37,700 PSI	32.8	2468	41,900 PSI
A-5744	20.5	1950	30,300 PSI	27.3	2511	40,400 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: 130 GR. SPR FP		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.540″**
Varget	32.5	2312	30,200 CUP	36.0C	2496	35,700 CUP
BL-C(2)	34.0	2305	28,500 CUP	37.5	2473	32,800 CUP
IMR 4320	34.0	2201	33,700 CUP	36.3	2384	37,200 CUP
CFE 223	32.8	2378	31,500 PSI	35.7	2533	37,000 PSI
IMR 4064	33.3	2196	27,200 CUP	35.5C	2424	37,300 CUP
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: 140 GR. HDY MFTX		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.550″**
LVR	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 4320	26.0	1814	29,900 PSI	30.0C	2094	39,500 PSI
IMR 4064	26.0	1909	30,600 PSI	30.0C	2209	41,000 PSI
IMR 4166	26.0	1826	30,300 PSI	30.0C	2134	41,100 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: WIN		**Primer: WIN LR**				**Col: 2.520″**
LVR	35.0	2314	28,700 CUP	38.5C	2512	34,800 CUP
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
W760				35.9	2090	30,000 CUP
Varget	31.0	2172	31,100 CUP	34.5	2349	36,200 CUP
W748				34.5	2310	36,000 CUP
H4895	30.5	2138	27,900 CUP	34.0	2390	36,700 CUP
IMR 4895	31.5	2071	32,200 CUP	33.5	2213	34,300 CUP
A-2520	30.2	2046	35,000 PSI	33.5	2325	38,800 PSI
IMR 4064	31.0	2106	33,300 CUP	33.3	2236	36,200 CUP
H335	29.7	2098	28,700 CUP	33.0	2308	36,200 CUP
A-4064	29.7	1975	36,500 PSI	33.0	2245	40,500 PSI
IMR 4166	29.7	2114	35,700 PSI	32.6	2262	41,300 PSI
IMR 4320	30.5	2062	32,500 CUP	32.5	2127	36,500 CUP
A-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
A-2230	27.9	2185	37,100 PSI	31.0	2375	41,200 PSI
IMR 3031	28.7	2085	28,700 CUP	30.5	2192	36,000 CUP
A-2015	27.5	2142	36,900 PSI	30.5	2341	40,900 PSI
A-2495	27.5	1960	36,600 PSI	30.5	2227	40,600 PSI
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. CAST LFN		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.485″**
H4895	17.5	1351	15,200 CUP	21.0	1562	23,100 CUP
H4198	15.0	1420	15,000 CUP	17.0	1616	20,600 CUP
Trail Boss	6.5	997	20,500 CUP	9.0	1195	29,100 CUP

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 160 GR. HDY FTX		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.535″**
LVR	32.0	2221	31,200 CUP	35.5C	2389	37,500 CUP
CFE 223	31.6	2170	30,700 PSI	34.0	2302	36,700 PSI
A-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
A-4064	28.6	1920	33,000 PSI	31.8	2117	36,700 PSI
W748	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
IMR 4320	28.7	1900	30,900 CUP	31.2	2056	36,400 CUP
BL-C(2)	29.1	1863	27,400 CUP	31.0	2035	35,600 CUP
A-2495	27.8	1937	37,500 PSI	30.9	2148	41,700 PSI
A-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
A-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 4166	27.8	2002	35,600 PSI	29.6	2126	41,400 PSI
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
A-2015	24.9	1933	37,800 PSI	27.7	2095	42,000 PSI
Bullet: 170 GR. LC L RN FP		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.550″**
Big Game	28.6	1799	20,300 PSI	31.8	1999	22,600 PSI
A-4064	27.0	1777	25,700 PSI	30.0	2020	28,600 PSI
A-2520	25.7	1807	26,400 PSI	28.5	2053	29,300 PSI
A-2495	24.8	1771	31,700 PSI	27.5	2013	35,100 PSI
A-2015	24.3	1930	35,500 PSI	27.0	2121	39,400 PSI
A-5744	19.8	1791	29,500 PSI	22.0	2035	32,800 PSI
Bullet: 170 GR. SIE FN		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 2.520″**
LVR	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
CFE 223	32.2	2115	30,600 PSI	35.0	2258	36,800 PSI
W760				33.6	1975	30,000 CUP
Varget	29.5	1976	30,200 CUP	33.0	2168	36,500 CUP
IMR 4320	30.0	1976	35,400 CUP	32.5	2068	36,300 CUP
A-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
A-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
IMR 4166	28.8	1977	36,400 PSI	30.7	2087	40,600 PSI
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
A-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
A-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

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: 170 GR. TS L RN FP GC Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.520″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
X-Terminator	26.2	2089	37,700 PSI	29.1	2234	41,900 PSI
A-2230	26.2	2089	37,700 PSI	29.1	2234	41,900 PSI
LT-32	25.7	2057	36,900 PSI	28.6	2215	41,000 PSI
TAC	25.1	1859	26,500 PSI	27.9	2065	29,500 PSI
A-5744	18.7	1795	31,800 PSI	24.3	2197	41,300 PSI

308 WINCHESTER

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 110 GR. BAR TSX FB Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.690″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
H4895	46.1	3055	40,300 PSI	49.0C	3212	46,200 PSI
H322	46.1	3139	48,100 PSI	49.0C	3334	59,000 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. HDY V-MAX Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.740″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	48.1	3171	55,500 PSI	53.5	3444	61,700 PSI
A-2200	46.7	3138	55,500 PSI	51.9	3392	61,600 PSI
TAC	45.7	3095	55,000 PSI	50.8	3366	61,100 PSI
A-2460	44.7	3118	55,600 PSI	49.7	3388	61,800 PSI
X-Terminator	43.3	3136	55,400 PSI	48.1	3382	61,600 PSI
A-2230	43.3	3136	55,400 PSI	48.1	3382	61,600 PSI
LT-32	40.6	2981	55,300 PSI	45.1	3262	61,500 PSI
A-5744	29.4	2533	43,100 PSI	42.0	3442	61,600 PSI

Bullet: 115 GR. BER FBT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.700″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	48.5	3139	55,100 PSI	53.9	3417	61,200 PSI
TAC	45.6	3036	55,600 PSI	50.7	3340	61,800 PSI
A-2460	45.1	3101	55,300 PSI	50.1	3370	61,500 PSI
X-Terminator	43.6	3078	55,300 PSI	48.5	3340	61,500 PSI
A-2230	43.6	3078	55,300 PSI	48.5	3340	61,500 PSI
A-2200	43.0	3087	55,000 PSI	47.7	3374	61,100 PSI
LT-30	38.9	2891	55,800 PSI	43.2	3186	62,000 PSI

Bullet: 125 GR. NOS BT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.750″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	48.1	3044	52,100 PSI	53.5	3286	57,800 PSI
TAC	46.1	2998	55,400 PSI	51.2	3269	61,500 PSI
A-2460	45.3	3042	55,200 PSI	50.4	3302	61,300 PSI
X-Terminator	45.0	3035	55,700 PSI	50.0	3290	61,900 PSI
A-2230	45.0	3035	55,700 PSI	50.0	3290	61,900 PSI
A-2200	41.6	2952	55,200 PSI	46.3	3231	61,300 PSI

Bullet: 125 GR. SFIRE Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.700″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4895	43.0	2772	42,100 PSI	48.0	3068	55,000 PSI
IMR 8208 XBR	42.0	2830	41,200 PSI	46.5C	3110	54,100 PSI
H335	42.0	2840	42,100 PSI	46.5	3075	52,300 PSI
H4895	42.0	2796	39,500 PSI	46.0C	3034	49,600 PSI
Benchmark	40.0	2736	38,200 PSI	44.5C	3019	52,000 PSI
IMR 3031	39.0	2741	40,600 PSI	43.5C	3007	51,400 PSI
H322	38.0	2760	43,500 PSI	42.5C	2985	52,800 PSI

Case: WIN **Primer: WIN LR** **Col: 2.700″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
TAC	44.6	2960	54,900 PSI	49.6	3224	61,100 PSI
A-2520	44.4	2893	47,700 PSI	49.4	3143	53,000 PSI
X-Terminator	44.1	2992	55,300 PSI	49.0	3236	61,400 PSI
A-2230	44.1	2992	55,300 PSI	49.0	3236	61,400 PSI
A-2460	42.9	2922	49,800 PSI	47.7	3161	55,400 PSI
A-2200	39.9	2886	54,300 PSI	44.3	3150	60,300 PSI

Bullet: 125 GR. SIE SPT Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.700″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4320	48.7	2952	46,400 PSI	53.0C	3167	55,200 PSI
BL-C(2)	48.0	2876	35,900 CUP	52.0	3069	42,600 CUP
W748				52.0	3175	50,000 CUP
IMR 4895	48.0	2969	45,600 PSI	51.8C	3185	55,200 PSI
IMR 4166	45.6	2860	42,800 PSI	50.7C	3113	53,700 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

Case: WIN **Primer: WIN LR** **Col: 2.700″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-2460	43.6	2923	55,300 PSI	48.5	3184	61,400 PSI
X-Terminator	42.9	2948	55,400 PSI	47.7	3195	61,500 PSI
A-2230	42.9	2948	55,400 PSI	47.7	3195	61,500 PSI
A-2200	40.8	2894	55,100 PSI	45.3	3166	61,300 PSI
LT-30	38.2	2767	55,700 PSI	42.5	3015	61,900 PSI

Bullet: 130 GR. BAR TSX BT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.810″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	47.6	2992	55,300 PSI	52.8	3251	61,400 PSI
TAC	45.7	2935	55,300 PSI	50.8	3202	61,500 PSI
A-2460	44.5	2948	55,200 PSI	49.4	3207	61,300 PSI
X-Terminator	43.9	2951	55,000 PSI	48.8	3195	61,100 PSI
A-2230	43.9	2951	55,000 PSI	48.8	3195	61,100 PSI
A-2200	39.9	2833	55,300 PSI	44.3	3107	61,500 PSI

Bullet: 130 GR. SPR HP Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.615″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE 223	52.0	3054	49,600 PSI	54.0	3202	59,500 PSI
IMR 4320	46.8	2819	44,100 PSI	52.0C	3140	59,600 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
Varget	47.0	2975	42,900 CUP	50.0C	3130	50,400 CUP
IMR 4166	44.9	2796	43,200 PSI	50.0C	3059	54,800 PSI
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
H335	43.0	2805	40,400 CUP	46.0	2980	49,700 CUP
Benchmark	41.0	2704	38,800 CUP	46.0	2985	50,100 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

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: 135 GR. BER FBT — Dia: .308″

Case: WIN — **Primer: WIN LR** — **Col: 2.810″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
A-2460	41.7	2799	55,200 PSI	46.4	3031	61,300 PSI
X-Terminator	40.9	2800	55,600 PSI	45.4	3043	61,700 PSI
A-2230	40.9	2800	55,600 PSI	45.4	3043	61,700 PSI
A-2200	38.3	2754	55,500 PSI	42.5	2999	61,700 PSI

Bullet: 150 GR. HDY FMJBT — Dia: .308″

Case: WIN — **Primer: WIN LR** — **Col: 2.735″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2520	43.9	2755	55,300 PSI	48.8	2995	61,500 PSI
TAC	42.4	2715	55,300 PSI	47.1	2957	61,500 PSI
A-2495	41.9	2630	55,500 PSI	46.6	2924	61,700 PSI
A-2460	41.1	2732	55,200 PSI	45.7	2954	61,400 PSI
X-Terminator	40.8	2723	55,700 PSI	45.3	2957	61,800 PSI
A-2230	40.8	2723	55,700 PSI	45.3	2957	61,800 PSI
A-2015	38.6	2604	55,500 PSI	42.8	2829	61,700 PSI
A-2200	37.6	2647	55,200 PSI	41.8	2903	61,300 PSI

Bullet: 150 GR. NOS BT — Dia: .308″

Case: WIN — **Primer: FED 210M, LR Match** — **Col: 2.800″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	48.4	2764	44,500 PSI	51.5	2974	57,000 PSI
IMR 4320	44.1	2658	44,600 PSI	49.0C	2936	59,800 PSI
W748				48.5	2865	48,000 CUP
IMR 4166	43.0	2677	47,800 PSI	48.0C	2934	60,300 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
IMR 8208 XBR	40.0	2604	45,500 PSI	44.5C	2870	60,800 PSI
IMR 3031	40.2	2658	44,300 PSI	43.5C	2881	59,200 PSI
H4895	43.0	2742	43,200 CUP	45.5	2870	51,000 CUP
H335	41.0	2619	42,600 CUP	44.0	2787	51,200 CUP
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
Trail Boss	10.0	1176	25,800 PSI	14.0	1417	27,100 PSI

Bullet: 150 GR. NOS E-TIP — Dia: .308″

Case: WIN — **Primer: WIN LR** — **Col: 2.800″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2520	42.7	2651	55,400 PSI	47.4	2899	61,600 PSI
TAC	40.8	2598	55,200 PSI	45.3	2858	61,300 PSI
A-2495	40.7	2536	54,800 PSI	45.3	2805	60,900 PSI
A-2460	39.9	2629	55,300 PSI	44.3	2867	61,500 PSI
X-Terminator	38.9	2591	55,200 PSI	43.3	2830	61,300 PSI
A-2230	38.9	2591	55,200 PSI	43.3	2830	61,300 PSI
A-2015	37.1	2465	55,400 PSI	41.2	2690	61,600 PSI
A-2200	35.3	2499	54,900 PSI	39.2	2744	61,000 PSI
LT-30	33.7	2404	55,600 PSI	37.5	2632	61,800 PSI

Case: WIN — **Primer: FED 210M, LR Match** — **Col: 2.800″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	49.0	2865	52,300 PSI	51.1	2990	60,400 PSI
IMR 4320	43.7	2637	48,100 PSI	47.6	2876	60,100 PSI
W748	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
IMR 4895	42.7	2684	48,800 PSI	46.5C	2899	60,100 PSI
Varget	42.3	2670	46,700 PSI	46.5C	2914	60,400 PSI
IMR 4166	41.5	2570	48,800 PSI	45.7C	2839	61,400 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

Bullet: 155 GR. SIE HPBT — Dia: .308″

Case: WIN — **Primer: WIN LR** — **Col: 2.775″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2520	43.1	2689	55,400 PSI	47.9	2925	61,600 PSI
A-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
A-2460	40.2	2656	55,300 PSI	44.6	2877	61,400 PSI
X-Terminator	39.7	2638	55,500 PSI	44.1	2867	61,700 PSI
A-2230	39.7	2638	55,500 PSI	44.1	2867	61,700 PSI
A-2015	37.6	2505	54,400 PSI	41.8	2725	60,500 PSI
A-2200	37.3	2587	55,700 PSI	41.5	2819	61,800 PSI

Case: WIN — **Primer: FED 210M, LR Match** — **Col: 2.775″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	49.5	2846	50,900 PSI	51.0	2966	60,500 PSI
W760	48.0	2625	40,500 CUP	51.0	2793	50,200 CUP
IMR 4320	44.0	2622	44,800 PSI	48.5C	2875	58,400 PSI
BL-C(2)	45.0	2658	37,500 CUP	48.0	2867	49,600 CUP
IMR 4895	43.5	2664	45,100 PSI	47.5C	2897	58,200 PSI
IMR 4064	43.0	2602	42,900 PSI	47.5C	2871	56,500 PSI
Varget	44.0	2759	41,300 CUP	47.0C	2909	49,400 CUP
IMR 4166	43.0	2688	52,500 PSI	46.2C	2856	60,900 PSI
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. NOS PART — Dia: .308″

Case: WIN — **Primer: WIN LR** — **Col: 2.810″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4064	42.7	2535	53,700 PSI	47.5	2805	59,700 PSI
A-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
A-2495	40.5	2518	55,200 PSI	45.0	2765	61,300 PSI
A-2460	39.4	2555	55,700 PSI	43.7	2765	61,800 PSI
X-Terminator	38.5	2526	55,500 PSI	42.8	2743	61,600 PSI
A-2230	38.5	2526	55,500 PSI	42.8	2743	61,600 PSI
A-2015	37.1	2423	55,300 PSI	41.2	2631	61,500 PSI
A-2200	36.5	2494	55,200 PSI	40.6	2704	61,400 PSI

Bullet: 165 GR. HDY SP — Dia: .308″

Case: WIN — **Primer: FED 210M, LR Match** — **Col: 2.750″**

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W760	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
IMR 4320	43.0	2536	46,900 PSI	46.5C	2730	58,400 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
IMR 4166	40.2	2487	49,500 PSI	44.9C	2739	61,300 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

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: 168 GR. BAR TSX BT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.810″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-2520	41.3	2514	55,500 PSI	45.8	2737	61,700 PSI
TAC	39.5	2460	55,200 PSI	43.9	2690	61,300 PSI
A-2495	39.1	2378	55,400 PSI	43.4	2641	61,600 PSI
A-2460	38.7	2465	55,000 PSI	43.0	2675	61,100 PSI
X-Terminator	38.3	2444	55,800 PSI	42.6	2671	62,000 PSI
A-2230	38.3	2444	55,800 PSI	42.6	2671	62,000 PSI
A-2015	35.6	2237	55,400 PSI	39.6	2482	61,500 PSI

Bullet: 168 GR. BAR TTSX BT Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
BL-C(2)	43.0	2532	46,000 PSI	46.0	2697	55,000 PSI
IMR 4320	42.0	2490	47,200 PSI	45.5C	2715	60,700 PSI
IMR 4064	43.0	2539	47,400 PSI	45.0C	2743	58,900 PSI
CFE 223	41.0	2444	39,600 PSI	45.0C	2664	49,800 PSI
Varget	41.0	2514	46,100 PSI	45.0C	2737	60,000 PSI
IMR 4166	40.5	2464	46,700 PSI	45.0C	2710	59,300 PSI
IMR 4895	41.0	2514	47,400 PSI	44.0C	2692	57,800 PSI
H4895	39.0	2497	45,100 PSI	43.0C	2727	59,900 PSI
IMR 8208 XBR	39.0	2505	46,500 PSI	43.0C	2724	60,700 PSI
H335	39.0	2500	46,800 PSI	42.0	2661	56,100 PSI
Benchmark	38.0	2458	44,500 PSI	42.0C	2686	59,500 PSI
IMR 3031	38.0	2493	46,600 PSI	41.5C	2693	58,600 PSI

Bullet: 168 GR. SIE HPBT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4064	41.9	2516	55,300 PSI	46.5	2783	61,400 PSI
A-2520	40.1	2519	55,400 PSI	44.5	2741	61,500 PSI
A-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
A-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
A-2230	37.4	2470	55,400 PSI	41.6	2687	61,600 PSI
A-2015	35.8	2368	55,100 PSI	39.8	2575	61,200 PSI
A-2200	34.8	2419	55,500 PSI	38.7	2634	61,600 PSI
LT-30	33.9	2351	55,300 PSI	37.7	2569	61,500 PSI
LT-32	33.7	2349	55,300 PSI	37.5	2555	61,500 PSI
A-5744	25.0	2062	42,900 PSI	35.8	2737	61,500 PSI

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Varget	42.0	2520	41,200 CUP	46.0C	2731	50,600 CUP
IMR 4320	41.5	2463	43,800 PSI	46.0C	2733	59,300 PSI
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
H4895	41.0	2551	38,300 CUP	43.5	2703	49,500 CUP
IMR 4166	38.5	2418	46,400 PSI	43.5C	2704	60,900 PSI
IMR 8208 XBR	39.0	2493	49,000 PSI	43.3	2707	61,500 PSI
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
Benchmark	38.0	2416	38,100 CUP	42.0	2630	49,300 CUP
Titegroup				8.0	1080	25,000 CUP
Clays				8.0	1060	26,800 CUP

Bullet: 175 GR. NOS HPBT Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.810″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4064	41.5	2458	54,900 PSI	46.2	2733	61,100 PSI
A-2520	39.5	2458	55,100 PSI	43.9	2669	61,200 PSI
A-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
A-2460	37.4	2466	55,200 PSI	41.6	2668	61,400 PSI
A-2015	35.6	2312	55,400 PSI	39.6	2510	61,600 PSI

Bullet: 175 GR. SIE HPBT Dia: .308″

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W760	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
BL-C(2)	43.0	2517	39,200 CUP	46.0	2706	50,300 CUP
IMR 4320	42.0	2471	44,000 PSI	45.7C	2687	57,600 PSI
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
IMR 4166	38.9	2416	48,100 PSI	43.1C	2652	60,100 PSI
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. NOS E-TIP Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.810″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	41.6	2224	40,500 PSI	46.2	2461	45,000 PSI
A-2520	40.5	2387	55,700 PSI	45.0	2624	61,800 PSI
TAC	39.0	2349	55,800 PSI	43.3	2579	62,000 PSI
A-2495	38.0	2286	55,300 PSI	42.2	2530	61,500 PSI
A-2460	37.5	2345	55,700 PSI	41.6	2559	61,900 PSI
A-2015	35.1	2174	55,300 PSI	39.0	2379	61,500 PSI

Bullet: 180 GR. SPR GS-SP Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	43.7	2365	45,600 PSI	48.6	2578	50,700 PSI
A-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
A-2495	39.0	2373	55,400 PSI	43.4	2603	61,500 PSI
A-2460	37.4	2372	55,600 PSI	41.6	2573	61,800 PSI
A-2015	35.7	2233	55,300 PSI	39.7	2433	61,400 PSI

Case: WIN **Primer: FED 210M, LR Match** **Col: 2.800″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W760	46.0	2433	39,800 CUP	49.0	2573	47,500 CUP
W748				46.5	2610	48,500 CUP
BL-C(2)	42.0	2460	40,300 CUP	46.0	2660	50,100 CUP
IMR 4320	41.0	2407	43,500 PSI	45.4C	2665	57,900 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
IMR 4166	41.0	2459	49,300 PSI	45.1C	2663	60,500 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: 185 GR. BER VLD-T Dia: .308″

Case: WIN **Primer: WIN LR** **Col: 2.810″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Big Game	43.2	2321	44,900 PSI	48.0	2549	49,900 PSI
A-2520	40.2	2441	55,400 PSI	44.6	2646	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
A-4064	40.1	2332	50,000 PSI	44.5	2580	55,500 PSI
TAC	39.3	2410	55,000 PSI	43.7	2620	61,100 PSI
A-2495	38.9	2333	55,300 PSI	43.2	2586	61,500 PSI
A-2460	37.2	2373	55,300 PSI	41.3	2578	61,400 PSI
A-2015	35.9	2230	55,300 PSI	39.9	2457	61,500 PSI

Bullet: 190 GR. HDY BTSP Dia: .308″

Case: WIN Primer: WIN LR Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	43.4	2336	47,900 PSI	48.2	2578	53,200 PSI
A-4064	40.2	2341	53,300 PSI	44.6	2581	59,100 PSI
A-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
A-2495	37.9	2286	55,400 PSI	42.1	2528	61,600 PSI
A-2460	37.3	2349	55,100 PSI	41.5	2533	61,200 PSI
A-2015	35.4	2192	55,000 PSI	39.3	2398	61,100 PSI

Case: WIN Primer: FED 210M, LR Match Col: 2.740″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W760	45.0	2386	42,100 CUP	48.0	2504	48,700 CUP
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 4320	41.0	2430	50,700 PSI	43.7C	2566	58,800 PSI
IMR 4064	39.4	2365	47,800 PSI	43.7C	2569	59,100 PSI
IMR 4166	38.7	2354	48,500 PSI	43.1C	2562	59,200 PSI
H4895	39.0	2359	40,400 CUP	42.0	2514	49,500 CUP
W748				42.0	2445	49,000 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	39.6	2483	57,700 PSI
Benchmark	37.0	2288	41,100 CUP	39.5	2418	48,500 CUP

Bullet: 190 GR. HDY SUB-X Dia: .308″

Case: WIN Primer: FED 210M, LR Match Col: 2.690″

Powder	Grs.	Vel.	Pressure	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: 190 GR. NOS HPBT Dia: .308″

Case: WIN Primer: WIN LR Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	43.5	2355	47,100 PSI	48.3	2574	52,300 PSI
A-2520	39.2	2388	55,500 PSI	43.6	2599	61,700 PSI
TAC	38.6	2354	55,700 PSI	42.9	2571	61,900 PSI
A-2495	37.8	2305	55,200 PSI	42.0	2545	61,400 PSI
A-2460	37.3	2379	55,500 PSI	41.5	2569	61,700 PSI
A-2015	35.5	2228	55,400 PSI	39.5	2434	61,600 PSI

Bullet: 200 GR. BAR TSX FB Dia: .308″

Case: WIN Primer: WIN LR Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	40.0	2067	45,400 PSI	44.5	2299	50,500 PSI
TAC	38.2	2195	55,500 PSI	42.5	2402	61,700 PSI
A-2520	37.8	2171	55,200 PSI	42.0	2383	61,300 PSI
A-2495	36.0	2068	53,300 PSI	40.0	2281	59,200 PSI
A-2460	35.2	2139	55,300 PSI	39.1	2323	61,500 PSI
A-2015	34.2	1978	55,600 PSI	38.0	2201	61,800 PSI

Bullet: 200 GR. SFT A-FRAME Dia: .308″

Case: WIN Primer: FED 210M, LR Match Col: 2.700″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W760				45.7	2430	46,500 CUP
CFE 223	41.7	2362	48,600 PSI	45.3	2582	60,600 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
W748				43.0	2435	50,000 CUP
IMR 4166	38.9	2305	48,900 PSI	42.7	2494	59,700 PSI
IMR 4064	39.0	2268	46,100 PSI	42.5C	2466	58,400 PSI
IMR 4320	38.3	2222	44,900 PSI	42.5C	2427	56,600 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: 200 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	42.5	2266	45,300 PSI	47.2	2501	50,300 PSI
A-2520	39.8	2358	55,700 PSI	44.2	2555	61,900 PSI
A-4064	39.7	2282	54,000 PSI	44.1	2517	60,000 PSI
TAC	37.2	2256	55,300 PSI	41.3	2462	61,500 PSI
A-2495	37.0	2226	55,200 PSI	41.1	2436	61,400 PSI
A-2460	35.9	2248	55,200 PSI	39.9	2429	61,400 PSI
A-2015	34.1	2091	55,300 PSI	37.9	2303	61,400 PSI

Bullet: 208 GR. HDY ELD-M Dia: .308″

Case: WIN Primer: WIN LR Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	41.1	2183	43,200 PSI	45.7	2412	48,000 PSI
A-4064	38.6	2163	51,500 PSI	42.9	2429	57,300 PSI
TAC	38.0	2286	55,500 PSI	42.2	2482	61,600 PSI
A-2520	37.9	2276	55,100 PSI	42.1	2462	61,200 PSI
A-2495	36.9	2208	55,400 PSI	41.0	2435	61,600 PSI
A-2460	36.2	2285	55,600 PSI	40.3	2464	61,900 PSI
A-2015	34.0	2086	55,000 PSI	37.8	2297	61,100 PSI
A-5744	22.9	1772	43,000 PSI	32.8	2424	61,600 PSI

Case: WIN Primer: FED 210M, LR Match Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W748	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 4320	38.1	2220	47,900 PSI	41.5C	2416	59,600 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
IMR 4166	35.8	2217	51,700 PSI	40.2C	2418	61,200 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: WIN Primer: WIN LR Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	41.3	2167	50,000 PSI	45.8	2413	55,500 PSI
A-4064	38.9	2174	53,500 PSI	43.2	2422	59,400 PSI
A-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
A-2495	36.0	2118	55,400 PSI	40.0	2353	61,600 PSI
A-2460	35.2	2195	55,500 PSI	39.1	2380	61,700 PSI
A-2015	32.8	1991	55,200 PSI	36.5	2218	61,300 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%.

308 WINCHESTER SERVICE RIFLE

Barrel: 24″ Twist: 1:12″ Trim: 2.005″

Bullet: 150 GR. NOS BT Dia: .308″

Case: WIN Primer: FED 210M , LR Match Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4166	43.0	2677	47,800 PSI	44.5	2754	51,500 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

Bullet: 155 GR. SIE HPBT Dia: .308″

Case: WIN Primer: FED 210M , LR Match Col: 2.775″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
BL-C(2)	45.0	2658	37,500 CUP	46.4	2755	43,000 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
IMR 4166	42.0	2635	50,000 PSI	43.2	2700	53,000 PSI
H4895	41.8	2680	39,000 CUP	43.0	2735	42,000 CUP

Bullet: 168 GR. SIE HPBT Dia: .308″

Case: WIN Primer: FED 210M , LR Match Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
BL-C(2)	44.0	2569	39,400 CUP	45.2	2643	43,600 CUP
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
IMR 4166	38.5	2418	46,400 PSI	40.7	2543	52,800 PSI

Bullet: 175 GR. SIE HPBT Dia: .308″

Case: WIN Primer: FED 210M , LR Match Col: 2.800″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Varget	42.0	2583	42,600 CUP	43.0	2619	44,600 CUP
IMR 4166	41.0	2459	49,300 PSI	42.0	2508	52,000 PSI
H4895	40.0	2454	41,200 CUP	40.8	2500	44,000 CUP

30-06 SPRINGFIELD

Barrel: 24″ Twist: 1:10″ Trim: 2.484″

Bullet: 110 GR. BAR TTSX FB Dia: .308″

Case: REM Primer: WIN LR Col: 3.218″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	59.6	3019	44,100 PSI	66.2	3304	49,000 PSI
Big Game	58.4	3173	46,000 PSI	64.9	3409	51,100 PSI
A-2700	56.5	2916	40,400 PSI	62.8	3210	44,900 PSI
A-4064	54.5	3140	52,300 PSI	60.6	3466	58,100 PSI
TAC	52.4	3211	53,600 PSI	58.2	3507	59,600 PSI
A-2520	51.6	3195	53,300 PSI	57.3	3484	59,200 PSI

Bullet: 110 GR. HDY SP Dia: .308″

Case: WIN Primer: WIN LR Col: 3.170″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W760	57.0	3044	39,200 CUP	62.5	3268	46,900 CUP
IMR 4320	57.0	3285	49,400 PSI	60.5	3470	58,100 PSI
BL-C(2)	54.0	3108	36,200 CUP	60.0	3396	45,000 CUP
IMR 4895	56.0	3303	48,200 PSI	59.8	3505	57,300 PSI
CFE 223	55.6	3224	50,600 PSI	59.0	3370	56,400 PSI
Varget	55.0	3308	44,400 CUP	59.0	3452	48,500 CUP
IMR 4064	55.0	3263	47,900 PSI	58.5	3453	56,400 PSI
H4895	51.0	3155	39,000 CUP	57.0	3431	49,300 CUP
IMR 8208 XBR	52.6	3223	46,200 PSI	56.0	3415	57,500 PSI
H335	50.0	3168	43,500 CUP	55.5	3367	48,100 CUP
Benchmark	51.5	3242	45,600 CUP	55.0	3396	49,800 CUP
IMR 3031	51.0	3252	47,200 PSI	54.9	3471	57,800 PSI
W748				52.7	3320	47,000 CUP

Bullet: 110 GR. HDY V-MAX Dia: .308″

Case: REM Primer: WIN LR Col: 3.170″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	61.2	3113	48,700 PSI	68.0	3415	54,100 PSI
Big Game	59.0	3236	53,800 PSI	65.5	3522	59,800 PSI
A-2700	57.7	3038	47,700 PSI	64.1	3349	53,000 PSI
A-4064	53.9	3080	53,500 PSI	59.9	3431	59,400 PSI
TAC	49.8	3185	53,600 PSI	55.3	3404	59,600 PSI
A-2520	49.1	3150	53,500 PSI	54.6	3387	59,500 PSI

Bullet: 115 GR. BER FBT Dia: .308″

Case: REM Primer: WIN LR Col: 3.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	61.7	3126	49,400 PSI	68.6	3406	54,900 PSI
Big Game	59.4	3228	53,900 PSI	66.0	3506	59,900 PSI
A-2700	57.8	3023	47,000 PSI	64.2	3318	52,200 PSI
A-4064	54.0	3076	53,200 PSI	59.9	3399	59,100 PSI
A-2520	49.4	3141	53,400 PSI	54.9	3365	59,300 PSI
TAC	48.6	3103	53,700 PSI	54.0	3336	59,600 PSI

Bullet: 125 GR. SIE SPT Dia: .308″

Case: REM Primer: WIN LR Col: 3.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	61.4	3031	50,100 PSI	68.3	3314	55,700 PSI
A-2700	58.8	3018	53,300 PSI	65.3	3319	59,200 PSI
Big Game	57.2	3059	53,900 PSI	63.5	3331	59,900 PSI
A-4064	52.7	2949	53,700 PSI	58.6	3273	59,600 PSI

Case: WIN Primer: WIN LR Col: 3.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W760	57.0	2952	40,300 CUP	62.5	3181	46,700 CUP
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
IMR 4320	54.0	3125	49,100 PSI	57.5	3307	57,900 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 4166	53.0	3109	51,200 PSI	56.8	3286	59,000 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
W748				51.0	3060	46,000 CUP

Bullet: 130 GR. BAR TSX BT Dia: .308″

Case: REM Primer: WIN LR Col: 3.218″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	59.6	2925	47,200 PSI	66.3	3187	52,400 PSI
Big Game	58.1	3054	53,700 PSI	64.5	3324	59,700 PSI
A-2700	56.4	2901	45,100 PSI	62.6	3133	50,100 PSI
A-4064	51.7	2918	53,100 PSI	57.4	3215	59,000 PSI
TAC	48.9	2942	53,300 PSI	54.3	3204	59,200 PSI
A-2520	48.7	2934	53,500 PSI	54.2	3196	59,500 PSI

Bullet: 130 GR. SPR HP Dia: .308″

Case: WIN Primer: WIN LR Col: 3.060″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
IMR 4166	51.7	3003	49,200 PSI	55.3	3213	59,200 PSI
IMR 4895	51.0	3074	50,800 PSI	54.7	3234	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
IMR 4320	51.0	3094	55,600 PSI	54.5	3197	57,700 PSI
IMR 4064	51.0	3070	49,500 PSI	54.5	3243	58,200 PSI
Varget	49.0	2979	41,300 CUP	53.5	3154	48,400 CUP
H335	48.0	2912	39,600 CUP	53.5	3158	48,600 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: REM Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	60.3	2985	51,300 PSI	67.0	3223	57,000 PSI
Big Game	53.4	2924	53,300 PSI	59.3	3148	59,300 PSI
A-2700	53.1	2815	53,600 PSI	59.0	3116	59,600 PSI
A-4064	49.6	2839	53,700 PSI	55.1	3117	59,600 PSI

Bullet: 140 GR. BAR MPG Dia: .308″

Case: REM Primer: WIN LR Col: 3.270″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	55.3	2756	48,800 PSI	61.4	3024	54,200 PSI
Big Game	53.6	2875	53,700 PSI	59.5	3113	59,700 PSI
A-2700	51.6	2782	53,100 PSI	57.3	3043	59,000 PSI
A-4064	46.8	2709	53,500 PSI	52.0	2995	59,500 PSI
A-2520	44.8	2689	53,700 PSI	49.7	2975	59,600 PSI
TAC	43.8	2682	53,400 PSI	48.6	2947	59,300 PSI

Bullet: 150 GR. HDY FMJBT Dia: .308″

Case: REM Primer: WIN LR Col: 3.185″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	57.6	2880	50,300 PSI	64.0	3111	55,900 PSI
Big Game	53.9	2884	53,900 PSI	59.9	3115	59,900 PSI
A-4350	53.7	2594	41,900 PSI	59.6	2886	46,600 PSI
A-2700	53.7	2797	53,700 PSI	59.6	3070	59,600 PSI
A-4064	49.8	2804	53,700 PSI	55.3	3062	59,700 PSI

Bullet: 150 GR. NOS BT Dia: .308″

Case: WIN Primer: WIN LR Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	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
W760	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
IMR 4451	53.7	2747	49,000 PSI	57.8C	2969	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
IMR 4320	49.0	2850	51,600 PSI	52.3	3016	58,000 PSI
H335	47.0	2785	42,500 CUP	51.5	2982	49,200 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
H4895	46.0	2806	44,400 CUP	51.0	2976	48,500 CUP
IMR 4166	47.0	2755	49,200 PSI	50.9	2935	58,100 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
W748				48.0	2810	46,000 CUP
IMR 3031	43.0	2697	47,600 PSI	46.7	2887	59,300 PSI
Trail Boss	13.3	1061	14,700 PSI	19.0	1477	26,400 PSI

Bullet: 150 GR. NOS E-TIP Dia: .308″

Case: WIN Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	57.3	2826	53,100 PSI	63.6	3082	59,000 PSI
H4350	54.0	2747	47,000 PSI	57.8C	2927	57,700 PSI
IMR 4451	54.0	2798	52,700 PSI	57.5C	2947	58,900 PSI
IMR 4350	54.0	2744	48,800 PSI	57.5C	2930	57,300 PSI
W760	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
Big Game	50.9	2747	53,900 PSI	56.6	2995	59,800 PSI
A-2700	50.9	2749	53,700 PSI	56.6	2988	59,700 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
IMR 4320	48.0	2695	48,400 PSI	52.0	2897	58,100 PSI
W748	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
A-4064	45.2	2630	53,400 PSI	50.3	2897	59,300 PSI
Varget	46.0	2697	49,900 PSI	49.5	2860	58,000 PSI
IMR 4166	45.3	2729	50,400 PSI	49.3	2921	59,100 PSI
H335	44.0	2671	51,600 PSI	48.0	2842	59,200 PSI
Benchmark	44.0	2631	46,400 PSI	48.0	2850	58,600 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: 155 GR. BER VLD Dia: .308″

Case: REM Primer: WIN LR Col: 3.320″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	57.9	2837	53,100 PSI	64.3	3092	59,000 PSI
Big Game	51.8	2782	53,500 PSI	57.6	3007	59,500 PSI
A-2700	51.3	2699	53,400 PSI	57.0	2963	59,300 PSI
A-4064	48.1	2703	53,700 PSI	53.5	2975	59,700 PSI

Bullet: 155 GR. SIE HPBT Dia: .308″

Case: REM Primer: WIN LR Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	58.5	2904	53,800 PSI	65.0	3135	59,800 PSI
A-2700	55.0	2804	53,500 PSI	61.1	3062	59,500 PSI
A-4350	54.2	2592	43,400 PSI	60.2C	2877	48,300 PSI
Big Game	52.8	2820	53,700 PSI	58.7	3038	59,700 PSI
A-4064	49.1	2748	53,500 PSI	54.6	2998	59,500 PSI

Case: WIN Primer: WIN LR Col: 3.250″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	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
IMR 4350	56.0	2784	45,800 PSI	60.0C	2959	53,800 PSI
IMR 4451	55.0	2748	48,500 PSI	59.2C	2988	59,600 PSI
StaBALL 6.5	57.0	2800	43,400 PSI	62.0	3085	59,500 PSI
H380	53.0	2789	40,100 CUP	59.0	3009	47,800 CUP
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 4320	49.0	2823	50,800 PSI	53.0	2976	57,900 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
IMR 4166	47.4	2743	47,800 PSI	51.5	2959	58,900 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. BAR MRX Dia: .308″

Case: REM Primer: WIN LR Col: 3.205″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	55.5	2687	49,900 PSI	61.7	2924	55,400 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
A-2700	51.3	2638	53,700 PSI	57.0	2913	59,600 PSI
A-4350	51.1	2404	43,400 PSI	56.8	2709	48,200 PSI
Big Game	50.7	2669	53,800 PSI	56.4	2910	59,700 PSI
A-4064	47.1	2578	53,500 PSI	52.3	2855	59,400 PSI

Bullet: 165 GR. HDY GMX Dia: .308″

Case: WIN Primer: WIN LR Col: 3.225″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
StaBALL 6.5	52.5	2733	50,400 PSI	57.1	2942	59,600 PSI
Hybrid 100V	52.5	2653	48,600 PSI	56.7C	2818	56,700 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
IMR 4451	50.4	2532	48,200 PSI	54.3C	2751	58,300 PSI
W760	50.0	2656	52,400 PSI	53.1	2773	58,500 PSI
IMR 4320	45.6	2515	45,800 PSI	49.6	2731	58,700 PSI
Varget	44.5	2526	46,600 PSI	48.3	2724	59,000 PSI
IMR 4166	45.0	2607	49,700 PSI	48.2	2788	59,500 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
CFE 223	43.9	2531	51,200 PSI	46.7	2672	57,500 PSI
H4895	43.4	2595	50,300 PSI	46.7	2712	57,100 PSI
IMR 3031	41.0	2510	46,400 PSI	44.1	2685	58,100 PSI

Bullet: 165 GR. NOS PART Dia: .308″

Case: REM Primer: WIN LR Col: 3.305″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	55.7	2746	53,900 PSI	61.9	2991	59,800 PSI
A-4350	53.3	2626	53,400 PSI	59.3	2908	59,300 PSI
A-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
A-4064	45.8	2577	53,400 PSI	50.8	2836	59,400 PSI

Bullet: 165 GR. SIE SPBT Dia: .308″

Case: WIN Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Suprform	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
IMR 4451	53.3	2658	49,100 PSI	57.4	2858	59,200 PSI
Hybrid 100V	53.0	2648	46,000 PSI	57.0C	2801	52,800 PSI
W760	51.0	2678	38,400 CUP	56.5	2877	49,700 CUP
H380	51.0	2669	41,700 CUP	56.5	2892	50,000 CUP
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
IMR 4320	48.0	2727	50,700 PSI	51.2	2869	58,600 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 4166	45.1	2625	47,800 PSI	49.1	2832	58,900 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. BAR TTSX BT Dia: .308″

Case: REM Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	55.5	2661	50,600 PSI	61.6	2902	56,300 PSI
Big Game	50.6	2648	53,700 PSI	56.2	2870	59,700 PSI
A-4350	49.6	2407	47,000 PSI	55.1	2697	52,300 PSI
A-2700	48.5	2557	53,600 PSI	53.9	2817	59,500 PSI
A-4064	45.9	2523	54,000 PSI	51.0	2790	60,000 PSI

Bullet: 168 GR. BER VLD Dia: .308″

Case: REM Primer: WIN LR Col: 3.330″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	54.8	2721	53,500 PSI	60.9	2964	59,400 PSI
A-4350	53.6	2589	49,900 PSI	59.5	2874	55,500 PSI
A-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
A-4064	46.4	2610	53,200 PSI	51.5	2840	59,100 PSI

Bullet: 168 GR. HDY HPBT Dia: .308″

Case: WIN Primer: WIN LR Col: 3.230″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Hybrid 100V	52.0	2645	50,400 PSI	57.0C	2817	57,400 PSI
IMR 4451	52.7	2646	50,200 PSI	56.7	2837	59,300 PSI
W760	53.0	2686	40,300 CUP	56.5	2839	49,700 CUP
H380	51.0	2648	42,800 CUP	56.5	2859	49,700 CUP
IMR 4895	48.0	2719	49,900 PSI	51.2	2859	58,200 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 4320	46.0	2646	48,900 PSI	49.7	2816	58,400 PSI
IMR 4166	44.7	2610	49,200 PSI	48.6	2794	59,200 PSI
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: 175 GR. SIE HPBT Dia: .308″

Case: REM Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Hunter	53.3	2646	53,800 PSI	59.2	2883	59,800 PSI
A-4350	52.7	2573	50,700 PSI	58.5	2828	56,300 PSI
A-2700	49.6	2596	53,600 PSI	55.1	2818	59,600 PSI
Big Game	48.7	2607	53,400 PSI	54.1	2806	59,300 PSI
A-4064	45.8	2572	53,500 PSI	50.9	2790	59,500 PSI

Case: WIN Primer: WIN LR Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4831	57.0	2535	38,300 CUP	61.5C	2719	44,400 CUP
IMR 4955	56.7	2650	49,400 PSI	61.0C	2845	59,200 PSI
H4350	55.0	2661	42,100 CUP	59.0	2842	48,700 CUP
Suprform	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
W760	52.5	2622	40,700 CUP	56.2	2794	49,200 CUP
IMR 4451	52.0	2548	47,500 PSI	56.0	2762	58,900 PSI
Hybrid 100V	50.0	2543	47,400 PSI	55.0C	2757	57,600 PSI
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
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
IMR 4320	45.5	2533	48,000 PSI	48.5	2697	58,200 PSI
IMR 4166	44.4	2605	48,600 PSI	48.3	2782	56,800 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

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
H335	43.0	2566	46,600 CUP	45.7	2667	49,400 CUP
Bullet: 180 GR. BAR TSX BT		**Dia: .308″**				
Case: REM		**Primer: WIN LR**				**Col: 3.218″**
Hunter	54.4	2615	49,500 PSI	60.4	2838	55,000 PSI
Big Game	51.2	2634	53,500 PSI	56.9	2842	59,500 PSI
A-4350	50.1	2446	46,000 PSI	55.7	2685	51,100 PSI
A-2700	48.3	2519	53,100 PSI	53.7	2768	59,000 PSI
A-4064	45.6	2510	53,300 PSI	50.7	2743	59,300 PSI
Bullet: 180 GR. HDY SST		**Dia: .308″**				
Case: REM		**Primer: WIN LR**				**Col: 3.220″**
Hunter	54.5	2650	53,100 PSI	60.5	2869	59,000 PSI
A-4350	50.3	2407	46,500 PSI	55.9	2678	51,700 PSI
Big Game	48.8	2557	53,600 PSI	54.2	2768	59,600 PSI
A-2700	48.4	2520	53,400 PSI	53.8	2761	59,300 PSI
A-4064	45.2	2491	53,500 PSI	50.3	2723	59,400 PSI
Bullet: 180 GR. SIE SPBT		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 3.300″**
IMR 7977	58.3	2513	47,700 PSI	62.0C	2686	56,600 PSI
IMR 4955	56.7	2635	50,200 PSI	61.0C	2828	60,000 PSI
H4831	54.0	2447	34,700 CUP	60.0C	2710	44,300 CUP
Suprform	54.0	2628	46,200 PSI	59.7	2840	57,600 PSI
H4350	52.0	2543	37,800 CUP	57.5	2798	49,300 CUP
StaBALL 6.5	52.6	2663	49,700 PSI	57.2	2857	59,600 PSI
Hybrid 100V	53.0	2585	47,000 PSI	57.0C	2742	55,200 PSI
IMR 4831	53.0	2563	47,300 PSI	56.8C	2749	57,100 PSI
IMR 4350	53.0	2586	48,300 PSI	56.5C	2752	57,200 PSI
IMR 4451	51.7	2574	50,900 PSI	55.6	2752	59,600 PSI
W760	50.0	2528	39,200 CUP	55.5	2743	48,700 CUP
H380	48.0	2490	39,900 CUP	53.0	2682	48,700 CUP
IMR 4166	45.5	2575	50,800 PSI	48.8	2724	58,800 PSI
IMR 4064	45.5	2550	48,900 PSI	48.7	2700	58,200 PSI
BL-C(2)	44.0	2456	39,200 CUP	48.5	2634	48,100 CUP
IMR 4895	45.0	2555	49,500 PSI	48.0	2680	56,800 PSI
IMR 4320	45.0	2525	49,900 PSI	47.8	2661	58,000 PSI
Varget	44.0	2533	41,900 CUP	47.0	2668	50,000 CUP
Benchmark	43.0	2550	45,600 CUP	46.0	2660	49,000 CUP
H335	42.0	2455	41,900 CUP	46.0	2621	49,200 CUP
H4895	41.0	2427	38,100 CUP	46.0	2638	48,800 CUP
Bullet: 185 GR. BER VLD-T		**Dia: .308″**				
Case: REM		**Primer: WIN LR**				**Col: 3.340″**
Hunter	52.4	2584	53,800 PSI	58.2	2815	59,800 PSI
A-4350	52.0	2503	51,300 PSI	57.7	2757	57,000 PSI
A-2700	48.4	2498	53,300 PSI	53.7	2727	59,200 PSI
Big Game	47.4	2499	53,400 PSI	52.7	2710	59,400 PSI
A-4064	44.5	2464	53,500 PSI	49.4	2683	59,500 PSI
Bullet: 190 GR. HDY BTSP		**Dia: .308″**				
Case: REM		**Primer: WIN LR**				**Col: 3.220″**
Hunter	52.7	2557	53,700 PSI	58.6	2782	59,700 PSI
A-4350	50.2	2404	49,400 PSI	55.7	2655	54,900 PSI
A-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
A-4064	44.5	2427	53,500 PSI	49.5	2649	59,500 PSI
Case: WIN		**Primer: WIN LR**				**Col: 3.220″**
IMR 7977	57.5	2432	49,600 PSI	61.2C	2591	57,700 PSI
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 4955	54.4	2476	47,600 PSI	58.5C	2703	59,800 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 4831	51.0	2445	46,300 PSI	55.0C	2639	57,000 PSI
IMR 4350	51.0	2466	47,200 PSI	54.5	2647	58,500 PSI
IMR 4451	49.9	2453	51,500 PSI	53.7	2615	59,400 PSI
Hybrid 100V	49.0	2456	49,300 PSI	53.5C	2639	58,300 PSI
W760	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
IMR 4064	45.0	2485	50,900 PSI	47.7	2593	57,600 PSI
IMR 4166	43.9	2431	48,900 PSI	47.0	2608	59,200 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: REM		**Primer: WIN LR**				**Col: 3.218″**
Hunter	50.7	2389	46,300 PSI	56.3	2585	51,400 PSI
Big Game	48.1	2418	53,400 PSI	53.5	2626	59,300 PSI
A-2700	46.6	2374	53,600 PSI	51.7	2589	59,600 PSI
A-4350	46.3	2283	46,400 PSI	51.4	2445	51,600 PSI
A-4064	43.4	2341	53,400 PSI	48.2	2536	59,400 PSI
Bullet: 200 GR. NOS AB		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 3.300″**
H1000	57.0	2329	35,800 CUP	61.0C	2487	42,200 CUP
IMR 7977	56.4	2343	48,600 PSI	60.0C	2504	57,300 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 4955	53.1	2412	49,100 PSI	57.2C	2590	59,100 PSI
IMR 4831	51.0	2375	46,600 PSI	54.2C	2550	56,800 PSI
H4350	50.0	2412	40,400 CUP	53.7C	2580	48,400 CUP
IMR 4350	50.0	2364	45,900 PSI	53.5	2550	57,200 PSI
StaBALL 6.5	49.2	2458	49,400 PSI	53.5	2653	59,700 PSI
IMR 4451	49.0	2348	49,300 PSI	52.7	2533	59,900 PSI
Hybrid 100V	48.0	2384	50,000 PSI	52.0C	2542	57,900 PSI
W760	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
IMR 4166	43.2	2361	50,300 PSI	46.2	2517	59,200 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: REM		**Primer: WIN LR**				**Col: 3.340″**
Hunter	49.6	2381	53,700 PSI	55.1	2601	59,700 PSI
A-4350	49.2	2237	50,600 PSI	54.7	2522	56,200 PSI
A-2700	44.9	2246	53,900 PSI	49.8	2506	59,800 PSI
Big Game	44.4	2284	53,900 PSI	49.4	2500	60,000 PSI
A-4064	43.1	2261	53,800 PSI	47.9	2494	59,800 PSI
Bullet: 208 GR. HDY ELD-M		**Dia: .308″**				
Case: WIN		**Primer: WIN LR**				**Col: 3.285″**
IMR 7977	57.3	2364	48,200 PSI	61.0C	2521	57,200 PSI
IMR 4955	53.6	2414	49,400 PSI	57.7C	2604	59,100 PSI
IMR 7828	52.2	2239	43,600 PSI	57.0C	2442	53,100 PSI
H4831	52.1	2301	47,100 PSI	58.0C	2511	58,700 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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Hybrid 100V	47.3	2292	45,100 PSI	52.0C	2519	58,300 PSI
W760	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
IMR 4064	42.5	2250	47,400 PSI	45.5	2404	57,000 PSI
IMR 4166	42.4	2341	48,500 PSI	45.4	2495	59,200 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: 210 GR. BER VLD-H Dia: .308″

Case: REM Primer: WIN LR Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	49.5	2384	53,200 PSI	55.0	2594	59,100 PSI
A-4350	48.2	2324	53,300 PSI	53.6	2541	59,300 PSI
A-2700	44.5	2293	53,400 PSI	49.5	2496	59,400 PSI
Big Game	44.3	2292	53,700 PSI	49.3	2491	59,600 PSI
A-4064	41.7	2259	53,600 PSI	46.4	2458	59,600 PSI

Bullet: 220 GR. HDY JRN Dia: .308″

Case: WIN Primer: WIN LR Col: 3.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	58.0	2293	36,500 CUP	61.0C	2412	43,600 CUP
IMR 7977	56.2	2291	48,900 PSI	59.8C	2445	58,500 PSI
H4831	54.0	2342	43,300 CUP	57.5C	2458	48,600 CUP
IMR 7828	53.0	2288	48,600 PSI	58.0	2476	59,700 PSI
IMR 4955	52.8	2306	48,200 PSI	56.8C	2485	59,200 PSI
IMR 4831	50.0	2275	47,300 PSI	54.0	2438	57,200 PSI
H4350	50.0	2318	43,400 CUP	53.0	2435	49,200 CUP
StaBALL 6.5	49.5	2331	48,300 PSI	54.0	2523	59,500 PSI
IMR 4350	49.0	2287	49,500 PSI	52.5	2425	57,300 PSI
Hybrid 100V	47.0	2258	48,100 PSI	52.0C	2448	58,600 PSI
W760	47.0	2215	39,000 CUP	52.0	2408	49,500 CUP
IMR 4064	43.0	2241	52,200 PSI	45.5	2325	56,700 PSI
IMR 4166	42.2	2235	49,300 PSI	45.2	2380	58,800 PSI
Varget	42.0	2279	44,000 CUP	45.0	2382	49,400 CUP

Bullet: 225 GR. HDY BTHP-M Dia: .308″

Case: REM Primer: WIN LR Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4350	48.2	2167	51,300 PSI	53.6	2413	57,000 PSI
Hunter	47.1	2232	53,400 PSI	52.4	2461	59,400 PSI
A-2700	43.9	2146	54,000 PSI	48.8	2399	60,000 PSI
Big Game	42.8	2142	53,300 PSI	47.6	2357	59,200 PSI
A-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″

Bullet: 110 GR. BAR TTSX FB Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.805″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Big Game	67.8	3429	58,000 PSI	75.4	3780	64,500 PSI
A-2700	66.7	3265	52,200 PSI	74.1	3661	58,000 PSI
A-4064	62.9	3316	57,700 PSI	69.9	3709	64,100 PSI

Bullet: 125 GR. HDY SST Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.835″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	68.4	3270	58,000 PSI	76.0	3572	64,500 PSI
A-2700	65.2	3224	58,300 PSI	72.4	3548	64,700 PSI
Big Game	63.7	3217	58,100 PSI	70.8	3513	64,600 PSI
A-4064	59.6	3186	57,600 PSI	66.2	3491	64,000 PSI
A-5744	38.0	2736	45,600 PSI	50.6	3416	60,800 PSI

Bullet: 135 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.775″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	70.5	3247	56,600 PSI	76.6	3471	61,500 PSI
A-2700	67.6	3182	59,100 PSI	73.5	3478	64,300 PSI
Big Game	66.4	3217	59,100 PSI	72.2	3458	64,300 PSI
A-4064	61.7	3139	58,900 PSI	67.8	3441	64,700 PSI

Bullet: 150 GR. HDY BTSP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	71.7	2925	55,500 PSI	79.8	3285	61,800 PSI
A-4350	63.5	2950	57,000 PSI	70.8	3285	63,500 PSI
A-2700	61.0	2900	56,100 PSI	68.0	3220	62,500 PSI

Bullet: 150 GR. HDY SST Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.840″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	65.8	3026	58,200 PSI	71.5	3236	63,200 PSI
Big Game	61.2	2949	55,100 PSI	68.0	3272	61,300 PSI

Bullet: 150 GR. NOS E-TIP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	64.5	2992	57,800 PSI	71.7	3254	64,200 PSI
A-4350	60.8	2827	50,000 PSI	67.6	3075	55,600 PSI
A-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
A-4064	54.0	2864	57,900 PSI	60.0	3124	64,400 PSI

Bullet: 150 GR. SPR GS-SP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.780″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
IMR 4451	63.6	3033	52,900 PSI	67.7	3248	63,300 PSI
Hybrid 100V	63.0	2948	49,400 PSI	67.0C	3127	57,700 PSI
H4350	63.0	3040	55,700 PSI	67.0	3187	63,200 PSI
W760	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 4320	57.0	3004	54,000 PSI	61.0	3172	63,900 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
IMR 4166	55.9	3033	54,000 PSI	59.5	3200	62,800 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
Trail Boss	16.3	1473	26,400 PSI	23.3	1758	31,600 PSI

Bullet: 155 GR. BER VLD-H Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	66.5	3032	58,300 PSI	73.9	3298	64,800 PSI
A-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
A-4064	59.1	2947	59,700 PSI	64.3	3197	64,900 PSI

Bullet: 165 GR. HDY GMX Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.840″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	63.3	2862	57,300 PSI	70.3	3090	63,700 PSI
Suprform	64.0	2952	51,600 PSI	69.0C	3169	62,700 PSI
Hybrid 100V	58.0	2867	51,600 PSI	63.0C	3099	63,300 PSI
H4350	58.0	2821	52,400 PSI	62.0C	2986	61,300 PSI
StaBALL 6.5	62.0	2871	48,500 PSI	67.4	3135	63,300 PSI
A-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

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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4451	59.6	2927	56,000 PSI	63.5	3088	63,200 PSI
A-2700	58.9	2855	60,400 PSI	63.3	3046	64,900 PSI
W760	58.0	2860	53,400 PSI	62.5	3043	62,900 PSI
H380	57.0	2800	52,500 PSI	61.8	2993	62,300 PSI
A-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 4166	50.4	2785	50,900 PSI	54.5	2996	62,700 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: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Suprform	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
Hybrid 100V	62.0	2957	51,600 PSI	68.0C	3175	63,100 PSI
H4350	61.0	2898	54,800 PSI	65.5	3047	63,600 PSI
IMR 4451	60.6	2856	50,200 PSI	65.2C	3108	63,300 PSI
W760	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 4166	53.2	2849	52,400 PSI	57.6	3053	63,400 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: 168 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.840″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4955	66.8	2906	53,100 PSI	71.2C	3112	63,900 PSI
H4831	65.0	2848	53,400 PSI	69.5C	3015	63,200 PSI
StaBALL 6.5	64.0	2929	49,900 PSI	69.3	3170	63,400 PSI
Hybrid 100V	62.0	2921	49,800 PSI	67.7C	3144	61,100 PSI
Big Game	59.6	2819	56,600 PSI	65.5	3101	62,200 PSI
W760	61.0	2919	54,600 PSI	65.0	3074	63,200 PSI
IMR 4451	60.7	2862	50,900 PSI	65.0C	3078	62,600 PSI
H4350	61.0	2908	56,000 PSI	64.5	3034	63,700 PSI
H380	59.0	2865	56,000 PSI	62.0	2985	63,300 PSI
IMR 4166	53.0	2834	51,600 PSI	57.4	3033	62,300 PSI
IMR 8208 XBR	51.5	2853	56,400 PSI	54.8	2970	63,400 PSI

Bullet: 175 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4955	65.8	2862	54,100 PSI	70.1C	3051	63,700 PSI
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
Hybrid 100V	61.0	2878	51,000 PSI	66.5C	3085	61,700 PSI
H4350	61.0	2839	53,300 PSI	65.0	3009	63,400 PSI
W760	61.0	2868	53,900 PSI	65.0	3032	63,200 PSI
IMR 4451	59.4	2816	51,700 PSI	63.9	3031	63,600 PSI
H380	60.0	2859	57,600 PSI	63.0	2954	63,200 PSI
IMR 4166	52.1	2773	52,000 PSI	56.4	2970	63,100 PSI

Bullet: 180 GR. SIE SBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	68.3	2733	53,900 PSI	76.0	3028	60,000 PSI
A-4350	60.3	2722	55,200 PSI	67.0	3024	61,300 PSI
A-2700	58.5	2683	55,000 PSI	65.0	2981	61,100 PSI
Big Game	58.5	2720	58,300 PSI	63.6	2930	63,300 PSI

Bullet: 180 GR. NOS E-TIP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4955	63.4	2782	55,300 PSI	67.5C	2945	63,500 PSI
StaBALL 6.5	60.0	2681	46,200 PSI	66.5	3019	63,300 PSI
IMR 4350	60.0	2748	52,600 PSI	64.0C	2963	62,400 PSI
H4350	59.0	2751	54,900 PSI	63.7C	2925	63,800 PSI
IMR 4451	57.8	2759	55,000 PSI	62.2	2947	63,500 PSI
H380	57.0	2648	51,700 PSI	61.5	2809	59,700 PSI

Bullet: 180 GR. SFT SCIR Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
IMR 4955	63.9	2797	55,800 PSI	68.0C	2957	63,500 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
Hybrid 100V	59.0	2728	50,200 PSI	64.0C	2918	59,800 PSI
H4350	60.0	2799	55,700 PSI	64.0	2950	63,900 PSI
IMR 4451	59.2	2727	52,900 PSI	63.7C	2935	62,700 PSI
W760	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

Bullet: 190 GR. BER VLD Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	61.8	2750	59,100 PSI	67.9	2953	64,900 PSI
A-2700	60.7	2704	59,400 PSI	66.0	2913	64,500 PSI
Big Game	58.3	2692	59,800 PSI	63.4	2874	65,000 PSI
A-4064	55.6	2672	59,800 PSI	60.5	2875	65,000 PSI

Bullet: 190 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7828	64.0	2703	52,100 PSI	69.0C*	2891	63,300 PSI
IMR 4955	62.8	2724	53,300 PSI	66.9C	2904	63,400 PSI
H4831	62.0	2704	53,800 PSI	66.5C	2858	63,400 PSI
StaBALL 6.5	59.8	2643	45,500 PSI	66.3	2963	62,700 PSI
Hybrid 100V	60.0	2790	52,000 PSI	64.5C	2951	61,000 PSI
IMR 4831	60.0	2679	49,300 PSI	64.0C	2867	61,700 PSI
IMR 4350	60.0	2755	53,200 PSI	64.0C	2920	63,700 PSI
Hunter	57.6	2662	58,200 PSI	64.0	2955	64,700 PSI
W760	59.0	2765	55,600 PSI	62.5	2896	63,800 PSI
IMR 4451	57.1	2707	53,500 PSI	61.4	2873	62,500 PSI
H4350	57.5	2736	56,200 PSI	61.0	2853	63,400 PSI

Bullet: 200 GR. BAR LRX BT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	59.7	2622	59,000 PSI	65.6	2827	64,900 PSI
A-2700	57.2	2569	58,900 PSI	62.9	2795	64,700 PSI
Big Game	55.5	2569	58,500 PSI	61.6	2766	65,000 PSI
A-4064	51.2	2454	58,400 PSI	56.9	2691	64,900 PSI

Bullet: 200 GR. NOS PART Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.850″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4350	56.7	2540	54,700 PSI	63.0	2822	60,800 PSI
Big Game	57.3	2654	57,800 PSI	62.3	2796	62,800 PSI
A-2700	55.8	2514	54,500 PSI	62.0	2793	60,600 PSI

Bullet: 200 GR. SFT A-FRAME Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.790″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	70.0	2660	51,600 PSI	72.0C	2737	57,200 PSI
IMR 7977	67.4	2604	50,900 PSI	71.0C	2776	61,100 PSI
IMR 7828	63.0	2580	50,000 PSI	67.5C*	2793	63,100 PSI
IMR 4955	62.7	2656	54,700 PSI	66.8C	2825	63,600 PSI
H4831	63.0	2678	56,000 PSI	66.5C	2802	63,700 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
StaBALL 6.5	58.7	2523	45,800 PSI	65.2	2847	61,700 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
H4350	58.0	2666	55,000 PSI	62.0	2792	63,200 PSI
W760	58.0	2678	55,700 PSI	61.0	2803	63,200 PSI

Bullet: 208 GR. HDY ELD-M Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.900″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	62.0	2420	42,900 PSI	69.0C	2670	55,900 PSI
IMR 7977	65.0	2537	49,200 PSI	68.5C	2681	56,800 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 4955	62.3	2636	54,900 PSI	66.3C	2797	63,500 PSI
StaBALL 6.5	58.0	2506	45,400 PSI	64.5	2818	62,700 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
H4350	56.4	2612	55,400 PSI	60.7	2748	62,800 PSI
W760	55.6	2567	52,500 PSI	59.8	2732	62,100 PSI

Bullet: 210 GR. BER VLD-H Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Hunter	59.5	2610	59,100 PSI	65.4	2787	65,000 PSI
A-4064	52.3	2496	59,000 PSI	57.5	2694	64,800PSI

Bullet: 210 GR. NOS ABLR Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	64.0	2513	46,300 PSI	68.0C	2668	54,100 PSI
IMR 7977	62.0	2410	44,400 PSI	67.0C	2679	57,900 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
IMR 4955	57.1	2472	52,500 PSI	64.1C	2692	63,700 PSI
StaBALL 6.5	57.0	2482	45,000 PSI	63.5	2792	62,200 PSI
Hybrid 100V	53.0	2434	44,100 PSI	61.7C	2805	63,100 PSI
H4350	51.0	2360	42,900 PSI	60.5	2734	61,700 PSI

Bullet: 220 GR. NOS PART Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.815″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Magpro	67.6	2481	54,500 PSI	73.4	2702	59,300 PSI
A-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
A-5744	33.0	2038	47,400 PSI	42.8	2467	61,500 PSI

Bullet: 220 GR. HDY ELD-X Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.860″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	60.8	2406	46,200 PSI	67.5C	2655	60,300 PSI
IMR 7977	58.5	2324	45,100 PSI	66.5C	2642	62,000 PSI
H4831	56.5	2417	49,300 PSI	63.5C	2653	61,200 PSI
IMR 4955	55.6	2366	51,500 PSI	62.5C	2599	63,700 PSI
StaBALL 6.5	55.3	2431	50,100 PSI	61.5	2672	63,100 PSI
Hybrid 100V	53.8	2456	50,600 PSI	59.8C	2687	63,400 PSI
H4350	52.2	2445	53,500 PSI	58.7	2634	63,800 PSI

Bullet: 220 GR. HDY RN Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 2.830″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	69.0	2597	57,200 PSI	72.5C	2689	63,000 PSI
IMR 7977	65.2	2517	53,200 PSI	70.2	2704	63,600 PSI
IMR 4955	60.7	2511	54,000 PSI	64.6C	2672	63,600 PSI
H4831	60.0	2520	55,600 PSI	64.3C	2646	63,500 PSI
Hybrid 100V	57.0	2522	49,300 PSI	62.0C	2711	61,400 PSI
W760	55.0	2484	54,000 PSI	59.0	2624	63,600 PSI
H4350	54.0	2476	54,100 PSI	58.0	2602	63,300 PSI

300 WINCHESTER MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.610″

Bullet: 150 GR. HDY SST Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
A-4350	69.5	2987	57,400 PSI	77.2	3368	63,800 PSI
A-2700	65.3	3023	57,400 PSI	72.5	3311	63,700 PSI

Bullet: 150 GR. BAR TTSX BT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 3.325″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7828 SSC	78.0	3120	51,100 PSI	83.0C*	3321	60,000 PSI
IMR 7977	76.5	2992	48,200 PSI	80.0C	3127	53,700 PSI
H4831	75.0	2985	46,300 PSI	80.0C	3182	50,100 PSI
IMR 4955	74.2	3076	52,900 PSI	79.0C	3279	62,600 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
Hybrid 100V	68.0	3140	50,700 PSI	73.0C	3340	59,900 PSI
IMR 4451	67.1	3019	51,900 PSI	72.2	3264	62,500 PSI
W760	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
IMR 4166	58.2	2972	52,600 PSI	62.0	3138	60,900 PSI

Bullet: 150 GR. SIE SP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	80.0	3004	46,500 CUP	85.0C	3255	52,200 CUP
IMR 7977	76.4	3035	49,900 PSI	82.2C	3269	59,300 PSI
IMR 7828	75.0	2913	46,200 PSI	80.0C	3148	55,600 PSI
IMR 4955	73.7	3008	50,200 PSI	78.5	3242	61,400 PSI
IMR 4831	73.0	3037	51,300 PSI	78.0C	3289	63,300 PSI
H4831	73.0	3025	45,700 CUP	78.0	3207	52,700 CUP
IMR 4350	69.0	3003	50,100 PSI	74.0	3254	61,500 PSI
Hybrid 100V	67.0	3026	49,800 PSI	73.5	3289	62,700 PSI
IMR 4451	67.9	3046	52,700 PSI	73.1	3261	61,900 PSI
H4350	68.0	3052	47,100 CUP	72.0	3205	52,500 CUP
W760	62.0	2973	47,400 CUP	68.0	3145	52,500 CUP
IMR 4064	61.0	3028	52,900 PSI	65.5	3205	62,200 PSI
IMR 4895	61.0	2980	50,700 PSI	65.5	3196	62,300 PSI
H380	62.0	2903	46,000 CUP	65.0	3031	52,200 CUP
IMR 4166	57.5	2914	48,200 PSI	62.5	3178	62,300 PSI
IMR 8208 XBR	57.0	2987	52,600 PSI	61.5	3156	60,800 PSI
H4895	57.0	2991	47,300 CUP	61.0	3124	52,500 CUP
Varget	56.0	2952	43,300 CUP	60.0	3108	51,400 CUP
Trail Boss	18.0	1302	18,400 PSI	25.5	1687	28,600 PSI

Bullet: 155 GR. SIE HPBT Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H1000	80.0	2992	41,300 CUP	85.0C	3160	47,400 CUP
IMR 7977	76.0	3006	48,800 PSI	81.8C	3273	60,700 PSI
IMR 7828	75.0	2943	47,500 PSI	80.0C	3188	58,100 PSI
H4831	74.0	2964	43,600 CUP	79.0C	3166	51,500 CUP
IMR 4955	73.2	3001	50,600 PSI	77.9	3239	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
IMR 4831	71.0	2963	48,100 PSI	76.5C	3226	61,600 PSI
IMR 4350	70.0	3064	51,600 PSI	74.5	3273	63,300 PSI
H4350	69.0	3013	45,100 CUP	74.0	3215	52,400 CUP
Hybrid 100V	68.0	3049	51,900 PSI	74.0	3274	63,200 PSI
IMR 4451	67.4	3017	50,200 PSI	73.3	3290	63,000 PSI
W760	67.0	2986	44,500 CUP	71.5	3157	51,300 CUP
IMR 4895	61.0	3002	50,900 PSI	65.5	3210	63,100 PSI
H380	61.0	2869	44,300 CUP	65.0	3025	51,900 CUP
IMR 4064	61.0	3014	52,000 PSI	65.0	3195	61,900 PSI
IMR 4166	57.3	2938	50,100 PSI	62.3	3161	63,100 PSI
IMR 8208 XBR	58.0	2997	55,000 PSI	61.5	3117	60,700 PSI
Varget	55.0	2897	42,400 CUP	59.7	3090	52,000 CUP
H4895	55.0	2919	43,700 CUP	59.0	3078	52,200 CUP

Bullet: 165 GR. NOS AB Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-4350	66.2	2830	56,900 PSI	73.6	3197	63,300 PSI
A-2700	62.1	2873	57,200 PSI	69.0	3140	63,600 PSI

Bullet: 165 GR. SPR SP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	79.0	2957	44,600 CUP	84.0	3117	51,300 CUP
IMR 7977	75.5	2908	48,600 PSI	81.2C	3192	62,200 PSI
IMR 7828	74.0	2884	49,500 PSI	79.5C	3127	60,600 PSI
IMR 4955	71.5	2906	52,600 PSI	76.5C	3122	62,900 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
Hybrid 100V	66.0	2905	50,700 PSI	72.0	3144	62,500 PSI
IMR 4451	65.0	2882	51,700 PSI	70.7	3115	62,000 PSI
H4350	66.0	2910	46,900 CUP	70.0	3042	51,900 CUP
W760	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
IMR 4166	57.0	2878	54,500 PSI	61.9	3054	62,500 PSI
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. NOS E-TIP Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	77.0	2864	54,900 PSI	85.5	3139	61,000 PSI
Magpro	75.9	2911	54,100 PSI	84.4	3149	60,200 PSI
Hunter	66.1	2854	57,200 PSI	73.4	3136	63,500 PSI
A-4350	64.1	2850	56,700 PSI	71.3	3084	63,100 PSI
A-2700	58.8	2807	56,900 PSI	65.4	3009	63,300 PSI

Bullet: 168 GR. SIE HPBT Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
A-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
A-2700	62.2	2790	56,800 PSI	69.1	3067	63,100 PSI

Bullet: 175 GR. SIE HPBT Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	78.6	2861	57,600 PSI	87.3	3170	63,900 PSI
Magpro	74.3	2809	57,100 PSI	82.5	3126	63,400 PSI
A-4350	66.7	2765	57,200 PSI	74.1	3113	63,500 PSI
Hunter	64.3	2831	56,800 PSI	71.5	3083	63,200 PSI
A-2700	61.2	2740	57,300 PSI	68.0	3022	63,700 PSI

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	77.0	2820	43,100 CUP	82.0C	3008	51,800 CUP
IMR 7977	74.4	2914	51,100 PSI	80.0C	3131	62,900 PSI
IMR 7828 SSC	71.1	2703	42,700 PSI	79.0C	3051	58,900 PSI
H4831	72.0	2843	46,600 CUP	76.5	3006	53,100 CUP
IMR 4831	69.5	2889	49,600 PSI	75.5C	3150	63,200 PSI
IMR 4955	70.3	2841	52,300 PSI	75.2	3051	62,900 PSI
IMR 4350	68.3	2910	51,900 PSI	72.7	3106	63,000 PSI
H4350	66.0	2832	45,800 CUP	71.0	2992	52,700 CUP
Hybrid 100V	65.0	2837	49,900 PSI	70.5	3068	62,300 PSI
IMR 4451	64.2	2830	51,300 PSI	69.8	3061	62,500 PSI
W760	63.0	2830	48,200 CUP	67.5	2972	53,300 CUP

Bullet: 180 GR. NOS E-TIP Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	74.6	2821	53,300 PSI	79.4C	2984	62,400 PSI
IMR 7977	70.4	2768	51,000 PSI	75.8C	2981	61,900 PSI
IMR 7828	68.4	2811	52,700 PSI	73.5C	2995	61,600 PSI
IMR 4955	67.9	2749	53,700 PSI	72.7C	2945	62,600 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
Hybrid 100V	58.9	2679	47,700 PSI	66.0	2941	60,800 PSI
IMR 4451	60.2	2670	51,800 PSI	65.5	2915	62,500 PSI
W760	60.0	2760	56,000 PSI	62.8	2849	60,600 PSI

Bullet: 180 GR. SIE SBT Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	77.8	2863	57,400 PSI	86.5	3193	63,800 PSI
Magpro	72.5	2801	54,800 PSI	84.4	3154	63,800 PSI
A-4350	66.7	2758	57,300 PSI	74.2	3086	63,800 PSI
Hunter	65.0	2839	57,500 PSI	72.2	3076	63,900 PSI

Bullet: 180 GR. SPR MT-SP Dia: .308″

Case: WIN Primer: WIN LR Magnum Col: 3.285″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	86.0	2824	52,500 PSI	88.0	2892	56,800 PSI
H1000	76.0	2883	46,800 CUP	81.0C	3042	52,900 CUP
IMR 7828	73.0	2770	49,700 PSI	78.5C	3034	62,000 PSI
IMR 7977	70.1	2757	50,400 PSI	75.4	2969	60,400 PSI
IMR 4831	69.0	2766	50,100 PSI	74.0C	3025	63,200 PSI
IMR 4955	67.8	2744	50,900 PSI	73.7	2984	62,900 PSI
H4831	69.0	2851	48,500 CUP	73.0C	2966	53,200 CUP
IMR 4350	66.0	2746	50,100 PSI	71.0	2974	61,200 PSI
Hybrid 100V	62.0	2775	50,200 PSI	67.7	2998	62,400 PSI
H4350	63.0	2787	46,400 CUP	67.0	2918	53,100 CUP
IMR 4451	61.3	2739	52,400 PSI	66.7	2944	62,500 PSI
W760	58.0	2722	48,200 CUP	62.0	2845	52,300 CUP

Bullet: 185 GR. BER VLD Dia: .308″

Case: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	76.3	2761	55,400 PSI	84.7	3092	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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magpro	75.6	2833	57,500 PSI	84.0	3114	63,900 PSI
Hunter	66.2	2837	57,300 PSI	73.6	3054	63,700 PSI

Bullet: 190 GR. HDY BTSP   Dia: .308″

Case: WIN   Primer: FED 215, LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	77.4	2817	57,100 PSI	86.0	3117	63,500 PSI
Magpro	76.0	2846	56,600 PSI	84.4	3083	62,800 PSI
Hunter	63.6	2728	57,100 PSI	70.6	2955	63,400 PSI

Case: WIN   Primer: WIN LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H1000	76.0	2822	44,900 CUP	81.0C	2990	52,800 CUP
IMR 7828	71.0	2676	46,700 PSI	76.5C	2975	61,000 PSI
IMR 7977	71.0	2748	50,500 PSI	76.4C	2963	61,400 PSI
IMR 4955	67.5	2689	50,900 PSI	73.4	2937	63,100 PSI
H4831	69.0	2795	48,400 CUP	73.0C	2923	53,600 CUP
IMR 4831	68.0	2741	51,000 PSI	72.5	2951	61,200 PSI
IMR 4350	65.0	2739	49,900 PSI	69.7	2959	61,500 PSI
Hybrid 100V	63.5	2811	56,200 PSI	67.5	2933	62,800 PSI
IMR 4451	62.0	2727	52,800 PSI	67.4	2933	62,500 PSI
H4350	63.0	2735	46,600 CUP	67.0	2863	53,400 CUP

Bullet: 200 GR. NOS PART   Dia: .308″

Case: WIN   Primer: FED 215, LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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

Case: WIN   Primer: WIN LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
IMR 8133	75.5	2702	47,000 PSI	82.0C	2965	59,500 PSI
H1000	74.0	2725	45,500 CUP	79.0C	2883	52,800 CUP
IMR 7977	71.3	2727	53,800 PSI	76.7C	2910	62,500 PSI
IMR 7828	71.0	2645	48,200 PSI	76.0C	2851	58,400 PSI
IMR 4955	67.1	2630	51,700 PSI	73.0C	2850	63,500 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
IMR 4451	61.3	2648	53,700 PSI	66.7	2839	63,000 PSI
H4350	63.0	2646	47,800 CUP	66.0	2753	51,700 CUP
Hybrid 100V	61.0	2636	49,400 PSI	66.0	2820	59,400 PSI

Bullet: 208 GR. HDY ELD-M   Dia: .308″

Case: WIN   Primer: WIN LR Magnum   Col: 3.420″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 8133	74.5	2680	47,500 PSI	81.0C	2950	61,300 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
IMR 7977	69.9	2645	50,600 PSI	75.2C	2852	61,700 PSI
IMR 7828	68.0	2635	47,400 PSI	74.0C	2899	62,000 PSI
IMR 4955	67.1	2621	48,700 PSI	73.0C	2857	62,300 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
Hybrid 100V	61.4	2620	50,100 PSI	66.7	2831	62,400 PSI
H4350	60.4	2655	53,600 PSI	65.7	2813	62,000 PSI

Bullet: 210 GR. BER VLD   Dia: .308″

Case: WIN   Primer: FED 215, LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: WIN   Primer: WIN LR Magnum   Col: 3.340″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 8133	72.0	2614	50,500 PSI	80.0C	2864	62,900 PSI
Retumbo	73.0	2620	49,000 PSI	80.0C	2870	62,800 PSI
H1000	70.2	2614	49,500 PSI	77.7C	2876	63,200 PSI
IMR 7977	69.8	2574	49,900 PSI	77.3C	2823	63,100 PSI
H4831	65.7	2616	52,200 PSI	72.2	2821	63,000 PSI
IMR 4955	64.8	2559	49,200 PSI	71.3	2810	63,000 PSI
IMR 4831	63.6	2576	63,200 PSI	70.2	2806	63,200 PSI
Hybrid 100V	60.2	2572	51,100 PSI	66.3	2785	62,900 PSI

Bullet: 230 GR. BER TACT   Dia: .308″

Case: WIN   Primer: WIN LR Magnum   Col: 3.395″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
US 869	77.7	2423	41,700 PSI	83.5C	2610	50,200 PSI
IMR 8133	72.3	2596	49,800 PSI	78.6C	2835	62,900 PSI
Retumbo	71.6	2520	44,700 PSI	77.0C	2714	55,200 PSI
H1000	69.1	2471	44,200 PSI	76.0C	2721	58,200 PSI
IMR 7977	68.2	2543	53,400 PSI	73.4C	2724	62,900 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 4955	64.2	2495	50,000 PSI	69.8C	2701	62,900 PSI
IMR 4831	62.9	2553	51,500 PSI	68.7	2739	61,600 PSI
Hybrid 100V	59.5	2506	51,800 PSI	64.3	2690	62,600 PSI

Bullet: 240 GR. SIE HPBT   Dia: .308″

Case: WIN   Primer: FED 215, LR Magnum   Col: 3.470″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	68.8	2448	57,500 PSI	76.4	2709	63,800 PSI
Magpro	68.3	2506	57,400 PSI	75.9	2728	63,800 PSI
Hunter	56.7	2354	57,200 PSI	62.9	2535	63,400 PSI

300 PRC

Barrel: 24″   Twist: 1:8.5″   Trim: 2.565″

Bullet: 115 GR. LGH CC   Dia: .308″

Case: Hornady   Primer: FED 215M, LR Mag Match   Col: 3.315″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-4350	79.3	3396	58,200 PSI	88.1	3826	64,700 PSI
Hunter	74.9	3447	57,400 PSI	83.2	3752	63,800 PSI
A-5744	49.5	3229	52,100 PSI	59.6	3722	62,800 PSI

Bullet: 150 GR. SFT SCIR   Dia: .308″

Case: Hornady   Primer: WIN LR Magnum   Col: 3.515″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H1000	81.4	3060	47,000 PSI	89.5C	3354	62,500 PSI
IMR 7977	78.1	3002	47,300 PSI	84.9	3313	62,900 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
IMR 4955	74.3	3060	48,900 PSI	80.0	3320	62,100 PSI

Bullet: 168 GR. HDY ELD-M   Dia: .308″

Case: Hornady   Primer: FED 215M, LR Mag Match   Col: 3.390″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
A-5744	45.6	2761	54,300 PSI	52.5	3046	62,600 PSI

Bullet: 168 GR. SIE TMK   Dia: .308″

Case: Hornady   Primer: WIN LR Magnum   Col: 3.500″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
IMR 8133	80.1	2857	43,700 PSI	86.7C	3188	60,500 PSI
IMR 7828 SSC	78.6	3020	53,300 PSI	82.4	3192	62,500 PSI
IMR 7977	77.7	2920	47,900 PSI	82.4	3162	62,400 PSI
IMR 4955	72.8	2959	49,300 PSI	78.8	3204	63,200 PSI

Bullet: 175 GR. BAR LRX BT Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.425″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 7977	75.2	2848	49,500 PSI	81.2C	3093	62,800 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
IMR 4955	70.5	2868	49,900 PSI	76.2	3100	62,500 PSI
Suprform	68.7	2928	53,000 PSI	72.0	3072	61,400 PSI

Bullet: 180 GR. NOS E-TIP Dia: .308″

Case: Hornady **Primer: FED 215, LR Magnum** **Col: 3.650″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	76.4	2812	50,400 PSI	82.2	3057	62,700 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 7977	71.6	2720	49,600 PSI	77.3	2976	62,200 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: FED 215, LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	79.7	2818	48,300 PSI	84.5	3053	62,300 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 7977	74.6	2736	47,300 PSI	80.7	2995	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
IMR 4955	69.9	2783	50,100 PSI	75.6	3002	63,000 PSI

Bullet: 200 GR. SFT A-FRAME Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.450″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	76.7	2662	49,100 PSI	82.5	2896	61,800 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 7977	72.0	2574	48,700 PSI	77.5	2833	62,700 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
IMR 4955	68.6	2709	55,500 PSI	72.8	2846	63,000 PSI

Bullet: 210 GR. NOS ABLR Dia: .308″

Case: Hornady **Primer: FED 215, LR Magnum** **Col: 3.650″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	75.4	2636	48,600 PSI	80.5	2866	62,500 PSI
H1000	74.2	2686	51,400 PSI	79.4	2861	62,900 PSI
Retumbo	74.3	2666	47,100 PSI	78.3	2873	62,500 PSI
IMR 7977	71.9	2609	49,800 PSI	77.2	2834	63,600 PSI
IMR 7828 SSC	70.1	2655	50,300 PSI	75.4	2870	63,700 PSI
IMR 4955	67.9	2693	55,500 PSI	72.6	2826	63,100 PSI

Bullet: 215 GR. BER HYB TGT Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	76.0	2613	48,100 PSI	82.0	2861	62,500 PSI
Retumbo	74.6	2607	46,000 PSI	80.6	2871	63,100 PSI
H1000	74.0	2652	49,800 PSI	79.2	2868	63,000 PSI
IMR 7977	72.0	2574	48,700 PSI	77.5	2807	62,900 PSI
IMR 7828 SSC	67.0	2590	50,600 PSI	73.0	2802	62,500 PSI
IMR 4955	64.0	2507	48,300 PSI	69.8	2747	62,100 PSI

Bullet: 220 GR. HDY ELD-X Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.575″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	73.2	2572	48,300 PSI	79.2C	2810	62,700 PSI
H1000	72.2	2626	50,600 PSI	78.0	2812	62,300 PSI
Retumbo	70.7	2590	48,100 PSI	76.4	2803	62,800 PSI
IMR 7977	69.4	2549	49,600 PSI	74.8	2741	62,300 PSI
IMR 7828 SSC	67.6	2602	52,300 PSI	73.0	2778	62,800 PSI

Bullet: 230 GR. HDY A-TIP Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.685″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	81.0	2515	48,500 PSI	88.1C	2790	63,400 PSI
IMR 8133	72.9	2521	47,800 PSI	79.3	2788	63,600 PSI
Retumbo	71.4	2518	46,100 PSI	77.6C	2779	63,900 PSI
H1000	71.1	2603	54,900 PSI	77.3	2757	63,300 PSI
IMR 7977	69.2	2515	51,100 PSI	75.4	2720	63,900 PSI
Suprform	61.8	2479	50,000 PSI	66.5	2668	62,800 PSI

Bullet: 250 GR. HDY A-TIP Dia: .308″

Case: Hornady **Primer: WIN LR Magnum** **Col: 3.685″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	79.8	2514	50,700 PSI	86.8C	2728	63,300 PSI
IMR 8133	70.5	2447	50,400 PSI	76.7	2652	63,400 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 7977	65.9	2363	49,000 PSI	72.5	2587	63,200 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: 130 GR. BAR TSX BT Dia: .308″

Case: Nosler **Primer: WIN LR Magnum** **Col: 3.340″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	85.5	3170	44,700 PSI	95.0C	3580	62,300 PSI
H1000	84.7	3232	47,300 PSI	94.1C	3559	62,700 PSI
Retumbo	83.7	3246	48,400 PSI	93.0C	3565	63,500 PSI
IMR 7977	80.9	3204	47,500 PSI	89.9C	3576	63,700 PSI
H4831	78.9	3234	49,300 PSI	87.7	3527	63,500 PSI
IMR 7828	79.2	3277	49,900 PSI	87.0	3582	63,200 PSI
IMR 4955	77.6	3263	49,000 PSI	85.3	3567	63,400 PSI

Bullet: 150 GR. NOS AB Dia: .308″

Case: Nosler **Primer: FED 215, LR Magnum** **Col: 3.340″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum** **Col: 3.340″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	83.0	3009	46,800 PSI	91.0C	3331	60,800 PSI
Retumbo	80.3	3054	47,800 PSI	88.2	3336	62,000 PSI
H1000	80.4	3102	51,600 PSI	88.2	3343	63,500 PSI
IMR 7977	77.2	3035	50,300 PSI	84.7	3322	63,000 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
IMR 4955	73.5	3045	49,700 PSI	80.8	3329	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%.

Bullet: 165 GR. HDY SST Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.275″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 A-FRAME Dia: .308″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	87.8	2851	46,700 PSI	96.5C	3203	63,300 PSI
IMR 8133	82.0	2909	47,600 PSI	89.0	3225	62,300 PSI
Retumbo	79.1	2927	47,200 PSI	86.9C	3236	63,500 PSI
H1000	79.0	2925	48,800 PSI	86.8	3216	63,300 PSI
IMR 7977	76.2	2890	48,600 PSI	83.4	3189	63,100 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
IMR 4955	72.5	2970	52,800 PSI	79.1	3185	63,600 PSI

Bullet: 168 GR. BAR TTSX BT Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	86.1	2850	50,100 PSI	94.6C	3156	63,500 PSI
IMR 8133	77.7	2852	48,600 PSI	85.4C	3183	63,500 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
IMR 7977	70.8	2799	50,000 PSI	77.8	3074	63,000 PSI
H4831	68.3	2827	51,900 PSI	75.0	3070	63,400 PSI
IMR 4955	67.3	2842	51,800 PSI	74.0	3093	63,200 PSI
IMR 7828	66.4	2770	47,400 PSI	73.0	3099	62,400 PSI

Bullet: 168 GR. SIE TMK Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	80.3	2928	58,300 PSI	89.2	3253	64,800 PSI
Magpro	78.3	2937	58,300 PSI	87.0	3251	64,800 PSI

Bullet: 175 GR. SIE TMK Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	78.8	2874	58,500 PSI	87.6	3188	65,000 PSI
Magpro	76.1	2884	58,400 PSI	84.6	3181	64,800 PSI

Bullet: 180 GR. BAR TTSX BT Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	79.1	2823	58,400 PSI	87.9	3138	64,900 PSI
Magpro	76.6	2851	58,400 PSI	85.1	3140	64,000 PSI

Bullet: 180 GR. SIE SPBT Dia: .308″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	86.0	2825	49,400 PSI	94.5C	3105	62,800 PSI
IMR 8133	77.5	2824	48,300 PSI	85.5C	3128	63,300 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 7977	74.0	2840	51,400 PSI	81.0	3077	63,700 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
IMR 4955	69.0	2820	50,200 PSI	76.0	3069	63,300 PSI

Bullet: 200 GR. BAR LRX BT Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	81.4	2686	50,800 PSI	89.5	2943	63,600 PSI
IMR 8133	71.4	2662	51,800 PSI	77.7C	2832	59,400 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
IMR 7977	65.8	2569	50,700 PSI	72.4	2819	63,000 PSI
H4831	66.0	2685	55,300 PSI	71.0	2833	63,300 PSI
IMR 4955	63.5	2629	53,000 PSI	68.5	2807	63,300 PSI

Bullet: 200 GR. NOS AB Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	75.9	2701	58,400 PSI	84.4	2986	64,800 PSI
Magpro	73.8	2721	58,400 PSI	82.0	2998	64,900 PSI

Bullet: 210 GR. BER VLD Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	83.4	2621	47,400 PSI	91.7C	2885	60,100 PSI
IMR 8133	76.6	2666	49,900 PSI	83.3C	2901	62,000 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 7977	71.3	2614	49,800 PSI	76.7	2852	62,700 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: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	82.3	2596	49,200 PSI	90.5	2855	62,600 PSI
IMR 8133	74.6	2626	51,900 PSI	82.0C	2854	63,500 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 7977	69.2	2573	52,700 PSI	76.0	2784	63,800 PSI
IMR 7828	65.8	2582	52,100 PSI	72.3	2788	63,900 PSI

Bullet: 230 GR. BER TACT Dia: .308″

Case: Nosler Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
LRT	82.3	2653	58,500 PSI	91.5	2919	65,000 PSI
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

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
US 869	82.8	2581	48,600 PSI	90.0C	2812	60,800 PSI
IMR 8133	75.1	2582	50,600 PSI	82.6C	2824	63,800 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 7977	68.8	2481	48,400 PSI	75.7	2746	63,600 PSI
IMR 7828	66.4	2552	50,900 PSI	73.0	2761	63,200 PSI

300 WEATHERBY MAGNUM

Barrel: 24″ Twist: 1:10″ Trim: 2.810″

Bullet: 150 GR. BAR TSX Dia: .308″

Case: REM Primer: FED 215M, LR Mag Match Col: 3.570″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 4955	77.0	3131	46,600 CUP	82.9	3368	54,400 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

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 4451	71.3	3035	44,400 CUP	77.6	3298	53,400 CUP
Hybrid 100V	70.0	3103	42,500 CUP	76.5	3310	49,100 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
Trail Boss	19.0	1334	20,300 CUP	27.5	1656	28,900 CUP

Bullet: 165 GR. NOS BT Dia: .308″

Case: REM Primer: FED 215M, LR Mag Match Col: 3.560″

H1000	84.0	3014	45,600 CUP	89.7C	3216	54,200 CUP
IMR 7977	81.8	2908	43,600 CUP	88.0C	3153	52,800 CUP
IMR 7828	77.0	2957	46,800 CUP	82.0	3145	53,400 CUP
IMR 4955	74.7	2983	45,800 CUP	80.3	3188	53,600 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
Hybrid 100V	71.0	2995	45,400 CUP	78.0	3236	53,800 CUP
IMR 4451	69.9	2866	44,200 CUP	76.0	3148	54,000 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
W760	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: REM Primer: FED 215M, LR Mag Match Col: 3.590″

H1000	82.0	2959	44,100 CUP	88.0C	3197	53,700 CUP
IMR 7977	81.3	2924	45,800 CUP	86.5C	3135	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 4955	74.2	2940	46,400 CUP	79.8	3188	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
IMR 4451	70.2	2879	47,200 CUP	75.5	3118	54,600 CUP
Hybrid 100V	68.0	2923	45,000 CUP	74.0	3150	53,700 CUP
H4350	66.0	2898	46,900 CUP	72.5	3099	53,800 CUP
W760	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: REM Primer: FED 215M, LR Mag Match Col: 3.560″

H1000	83.0	2971	43,800 CUP	88.5C	3151	53,500 CUP
IMR 7977	80.9	2866	44,300 CUP	87.0C	3098	53,200 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 4955	74.4	2915	45,700 CUP	80.9	3149	54,500 CUP
Hybrid 100V	70.0	2954	46.100 CUP	77.0	3171	54,600 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 4451	69.0	2831	46,500 CUP	75.0	3041	53,900 CUP
IMR 4350	68.0	2865	46,200 CUP	72.6	3018	53,000 CUP
W760	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. NOS AB Dia: .308″

Case: REM Primer: FED 215M, LR Mag Match Col: 3.590″

IMR 8133	81.2	2659	40,900 CUP	87.5C	2926	50,500 CUP
Retumbo	79.0	2753	45,800 CUP	84.5C	2942	53,100 CUP
IMR 7977	78.1	2720	44,900 CUP	84.0C	2939	53,600 CUP
H1000	77.0	2709	45,800 CUP	83.0C	2884	53,700 CUP
IMR 4955	70.4	2734	46,900 CUP	75.8	2904	53,800 CUP
H4831	70.0	2702	49,300 CUP	75.0	2839	54,400 CUP
Hybrid 100V	68.0	2737	45,900 CUP	73.5	2940	54,000 CUP
IMR 4451	66.5	2634	46,700 CUP	72.3	2857	54,200 CUP

Bullet: 200 GR. SFT A-FRAME Dia: .308″

Case: REM Primer: FED 215M, LR Mag Match Col: 3.510″

IMR 8133	81.6	2643	40,300 CUP	87.5C	2910	50,300 CUP
IMR 7977	80.2	2707	43,700 CUP	85.8C	2961	54,000 CUP
Retumbo	80.0	2764	46,100 CUP	85.5C	2981	54,400 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 4955	71.8	2732	45,600 CUP	77.3	2929	54,100 CUP
IMR 4451	67.6	2642	45,700 CUP	73.5	2860	54,100 CUP
IMR 4831	68.0	2641	45,800 CUP	73.0	2806	53,400 CUP
Hybrid 100V	67.0	2699	44,900 CUP	73.0	2906	53,200 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: REM Primer: FED 215M, LR Mag Match Col: 3.565″

IMR 8133	81.2	2633	42,700 CUP	87.5C	2867	52,800 CUP
Retumbo	79.0	2679	45,900 CUP	84.0C	2853	54,000 CUP
IMR 7977	77.6	2601	42,800 CUP	83.0C	2815	53,900 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
IMR 4955	66.8	2539	44,500 CUP	74.0	2757	54,100 CUP
Hybrid 100V	65.0	2579	45,100 CUP	71.0	2762	53,900 CUP
IMR 4451	64.3	2501	46,200 CUP	70.7	2710	54,500 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. BAR TSX BT Dia: .308″

Case: REM Primer: FED 215, LR Magnum Col: 3.600″

LRT	101.4	3184	57,500 PSI	112.6	3531	63,900 PSI
Magnum	92.1	3108	56,400 PSI	102.3	3453	62,600 PSI

Bullet: 150 GR. SIE SPBT Dia: .308″

Case: REM Primer: REM 9 1/2, LR Mag Col: 3.530″

Retumbo	100.0	3343	52,600 PSI	106.0C	3531	60,800 PSI
IMR 8133	97.5	3254	52,800 PSI	104.0	3510	63,500 PSI
H1000	98.0	3258	53,100 PSI	102.0	3457	62,900 PSI
IMR 7977	95.5	3238	51,100 PSI	101.7	3515	63,700 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

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 PART		**Dia: .308″**				
Case: REM		**Primer: FED 215, LR Magnum**				**Col: 3.600″**
LRT	98.6	3049	57,900 PSI	109.5	3381	64,400 PSI
Magnum	90.0	2967	53,900 PSI	100.0	3297	59,900 PSI
Magpro	86.0	3115	56,800 PSI	96.5	3402	63,700 PSI
Bullet: 165 GR. SFT A-FRAME		**Dia: .308″**				
Case: REM		**Primer: REM 9 1/2, LR Mag**				**Col: 3.530″**
Retumbo	97.0	3241	54,200 PSI	103.0C	3414	62,300 PSI
IMR 8133	95.5	3131	53,400 PSI	102.0	3361	63,400 PSI
IMR 7977	92.3	3074	49,600 PSI	98.8	3360	63,600 PSI
H1000	94.0	3135	53,300 PSI	98.0	3321	62,500 PSI
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 TSX BT		**Dia: .308″**				
Case: REM		**Primer: FED 215, LR Magnum**				**Col: 3.600″**
LRT	94.3	2927	57,700 PSI	104.8	3228	64,100 PSI
Magnum	85.3	2835	56,100 PSI	94.8	3150	62,300 PSI
Bullet: 180 GR. BAR TTSX BT		**Dia: .308″**				
Case: REM		**Primer: REM 9 1/2, LR Mag**				**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
IMR 7977	88.5	3022	56,400 PSI	94.3	3193	63,600 PSI
IMR 8133	86.5	2950	54,600 PSI	92.5	3135	62,600 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: REM		**Primer: REM 9 1/2, LR Mag**				**Col: 3.530″**
US 869	104.0	2994	53,800 PSI	107.0	3070	57,300 PSI
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
IMR 8133	91.5	3032	53,600 PSI	98.0	3253	63,200 PSI
H1000	91.0	3018	52,300 PSI	96.0	3218	62,800 PSI
IMR 7977	91.0	3007	51,100 PSI	96.4	3224	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 SPBT		**Dia: .308″**				
Case: REM		**Primer: REM 9 1/2, LR Mag**				**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
IMR 8133	89.5	2968	54,600 PSI	95.5	3158	63,400 PSI
IMR 7977	87.6	2898	51,700 PSI	93.2	3119	62,600 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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 200 GR. NOS AB		**Dia: .308″**				
Case: REM		**Primer: REM 9 1/2, LR Mag**				**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
IMR 8133	86.5	2843	54,000 PSI	92.5	3050	63,400 PSI
IMR 7977	84.5	2800	51,700 PSI	90.9	3022	62,800 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: REM		**Primer: REM 9 1/2, LR Mag**				**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
IMR 8133	85.0	2722	54,700 PSI	90.0	2892	63,100 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 7977	81.6	2689	54,200 PSI	87.2	2824	60,700 PSI
IMR 7828	77.5	2600	53,400 PSI	82.5	2774	63,200 PSI
338 FEDERAL						
Barrel: 24″		Twist: 1:10″	Trim: 2.005″			
Bullet: 160 GR. BAR TTSX		**Dia: .338″**				
Case: FED		**Primer: FED 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
H322	44.6	2761	52,400 PSI	48.5C	2937	61,800 PSI
H335	43.8	2579	39,900 PSI	48.7	2814	49,700 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 NOS AB		**Dia: .338″**				
Case: FED		**Primer: FED 210M, LR Match**				**Col: 2.810″**
CFE 223	46.0	2408	32,700 PSI	50.0	2620	42,100 PSI
W748	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
IMR 8208 XBR	44.6	2641	49,600 PSI	48.5C	2811	59,900 PSI
H4895	43.0	2486	42,400 PSI	47.0C	2682	50,800 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
Benchmark	42.0	2532	47,900 PSI	47.0C	2768	61,300 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		**Dia: .338″**				
Case: FED		**Primer: FED 210M, LR Match**				**Col: 2.800″**
CFE 223	47.5	2488	39,800 PSI	50.5	2624	46,200 PSI
W748	44.0	2477	45,200 PSI	49.0	2665	53,100 PSI
BL-C(2)	44.0	2386	41,600 PSI	49.0	2597	51,100 PSI
IMR 8208 XBR	44.2	2601	51,800 PSI	47.0C	2721	59,500 PSI
Varget	42.0	2364	43,000 PSI	47.0C	2607	54,700 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 4166	41.4	2363	47,000 PSI	45.5C	2581	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
IMR 3031	39.0	2410	47,200 PSI	44.0C	2666	60,000 PSI
Benchmark	39.0	2416	48,000 PSI	44.0C	2637	60,100 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H322	39.0	2447	49,400 PSI	43.3C	2645	59,700 PSI

Bullet: 185 GR. BAR TSX BT Dia: .338″

Case: WIN Primer: WIN LR Col: 2.783″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
TAC	43.4	2485	51,200 PSI	48.3	2708	57,000 PSI
X-Terminator	43.0	2520	54,000 PSI	47.8	2757	60,000 PSI
A-2230	40.9	2484	53,700 PSI	45.5	2683	59,800 PSI
A-2015	38.9	2408	52,200 PSI	43.2	2593	58,000 PSI

Bullet: 200 GR. HDY SP Dia: .338″

Case: WIN Primer: WIN LR Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
TAC	43.8	2467	54,000 PSI	48.7	2664	60,000 PSI
X-Terminator	42.4	2476	53,300 PSI	47.1	2656	59,300 PSI
A-2230	40.4	2376	54,100 PSI	44.8	2605	60,000 PSI
A-2015	39.2	2369	53,700 PSI	43.5	2532	59,600 PSI
A-5744	32.6	2200	54,000 PSI	36.2	2426	60,000 PSI
A-5744		0	0	24.0	1675	0

Case: FED Primer: FED 210M, LR Match Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE 223	45.8	2326	33,600 PSI	50.0	2545	44,900 PSI
W748	44.0	2322	37,300 PSI	50.0	2584	49,500 PSI
BL-C(2)	45.0	2289	36,900 PSI	49.0	2442	43,300 PSI
H335	42.0	2389	44,400 PSI	47.0	2606	56,400 PSI
IMR 8208 XBR	44.0	2504	50,200 PSI	47.0C	2657	60,300 PSI
Varget	42.0	2264	40,400 PSI	47.0C	2510	52,100 PSI
IMR 4895	42.0	2296	41,400 PSI	47.0C	2535	52,100 PSI
H4895	42.0	2350	42,600 PSI	47.0C	2597	55,100 PSI
IMR 4166	41.8	2323	47,800 PSI	46.0C	2543	58,800 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
Benchmark	40.0	2309	43,200 PSI	45.0C	2584	59,700 PSI
H322	40.0	2412	49,500 PSI	44.5	2596	59,300 PSI

Bullet: 210 GR. SFT SCIR Dia: .338″

Case: FED Primer: FED 210M, LR Match Col: 2.820″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LVR	45.0	2468	48,800 PSI	49.0C	2622	56,400 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
W748	41.0	2289	42,200 PSI	45.7	2534	56,300 PSI
IMR 4895	40.0	2195	39,500 PSI	45.0C	2482	53,900 PSI
H4895	40.0	2281	41,600 PSI	45.0C	2551	58,100 PSI
IMR 4166	39.9	2270	50,500 PSI	43.9C	2466	60,900 PSI
IMR 8208 XBR	40.7	2402	52,000 PSI	43.3C	2508	59,400 PSI
IMR 4064	40.0	2254	42,200 PSI	43.0C	2394	48,800 PSI
Benchmark	38.0	2277	45,900 PSI	43.0C	2514	60,800 PSI
IMR 3031	38.0	2267	43,700 PSI	42.5C	2499	57,000 PSI
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 SBT GK Dia: .338″

Case: WIN Primer: WIN LR Col: 2.800″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
TAC	42.0	2371	53,500 PSI	46.7	2564	59,500 PSI
X-Terminator	39.9	2349	53,900 PSI	44.3	2532	59,900 PSI
A-2230	39.0	2317	53,900 PSI	43.3	2503	59,800 PSI
A-2015	37.0	2242	53,800 PSI	41.1	2399	59,800 PSI

Bullet: 215 GR. SIE SP Dia: .338″

Case: FED Primer: FED 210M, LR Match Col: 2.810″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LVR	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
BL-C(2)	43.0	2242	39,000 PSI	47.0	2428	47,900 PSI
W748	41.0	2218	38,000 PSI	46.0	2445	48,900 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
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
IMR 4166	40.2	2264	50,400 PSI	44.2C	2447	59,100 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. NOS AB Dia: .338″

Case: WIN Primer: WIN LR Col: 2.815″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
TAC	39.7	2135	53,800 PSI	44.1	2384	59,800 PSI
X-Terminator	38.8	2197	51,800 PSI	43.1	2436	57,500 PSI
A-2230	38.3	2261	53,900 PSI	42.5	2427	59,900 PSI

Bullet: 225 GR. SFT A-FRAME Dia: .338″

Case: FED Primer: FED 210M, LR Match Col: 2.750″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LVR	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
CFE 223	43.2	2278	47,700 PSI	46.0	2423	57,900 PSI
W748	41.0	2199	42,000 PSI	46.0	2453	57,400 PSI
Varget	41.0	2149	43,100 PSI	46.0C	2410	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 4166	39.4	2141	48,100 PSI	43.4C	2351	60,100 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

33 Nosler

Barrel: 24″ Twist: 1:10″ Trim: 2.440″

Bullet: 180 GR. NOS AB Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	82.0	2994	50,900 PSI	86.0C	3145	58,500 PSI
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 4955	79.0	3054	52,400 PSI	83.0C	3231	61,900 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
IMR 4451	74.0	3041	52,300 PSI	78.0	3231	62,000 PSI
W760	73.0	3074	53,200 PSI	78.5	3255	62,500 PSI

Bullet: 185 GR. BAR TSX Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 7977	81.5	2973	52,000 PSI	84.9C	3115	59,400 PSI
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 4955	77.6	2970	51,300 PSI	81.5	3169	62,100 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

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 4451	73.0	2996	52,800 PSI	76.9	3174	62,500 PSI
W760	72.2	3053	55,300 PSI	76.0	3181	62,000 PSI

Bullet: 200 GR. NOS E-TIP Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 7977	80.0	2892	53,900 PSI	83.4C	3003	60,700 PSI
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 4955	76.2	2909	53,900 PSI	80.3	3077	62,800 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
IMR 4451	71.1	2887	52,900 PSI	74.9	3056	62,400 PSI
W760	69.9	2900	52,900 PSI	74.4	3072	62,500 PSI

Bullet: 210 GR. NOS PART Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.300″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	81.7	2842	51,800 PSI	87.0C	3025	62,300 PSI
IMR 7977	78.2	2788	51,200 PSI	83.2C	2998	62,100 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 4955	73.5	2805	52,200 PSI	78.2	2989	62,200 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
IMR 4451	69.2	2822	54,000 PSI	73.6	2982	62,200 PSI
H414	67.0	2770	52,400 PSI	71.0	2953	62,100 PSI

Bullet: 215 GR. SIE SBT Dia: .338″

Case: Nosler Primer: WIN LR Magnum 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
IMR 7977	80.8	2798	53,600 PSI	85.1C	2953	61,800 PSI
IMR 7828	77.7	2775	49,800 PSI	81.8	2989	62,100 PSI
H4831	77.7	2786	51,900 PSI	82.7	2966	62,600 PSI
IMR 4831	75.5	2814	51,500 PSI	78.9	2993	62,000 PSI
IMR 4955	74.5	2766	51,600 PSI	79.3	2959	61,700 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
IMR 4451	70.5	2780	52,500 PSI	75.0	2972	62,400 PSI

Bullet: 225 GR. HDY SST Dia: .338″

Case: Nosler Primer: WIN LR Magnum 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
IMR 7977	78.2	2702	53,700 PSI	82.3C	2864	62,700 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 4955	73.1	2653	50,300 PSI	77.0	2851	61,700 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
IMR 4451	68.3	2660	51,800 PSI	72.7	2857	62,400 PSI

Bullet: 250 GR. HDY BTHP Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.400″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	81.7	2680	52,800 PSI	86.0C	2819	60,200 PSI
Retumbo	79.1	2694	55,100 PSI	83.9C	2824	62,300 PSI
H1000	79.4	2688	53,000 PSI	84.0C	2832	62,100 PSI
IMR 7977	76.5	2656	54,400 PSI	81.0C	2793	62,300 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
IMR 4955	69.9	2580	52,200 PSI	74.0	2747	62,100 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
IMR 4451	66.5	2619	53,500 PSI	70.4	2754	62,500 PSI

Bullet: 265 GR. BAR LRX BT Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.450″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	77.9	2552	53,300 PSI	82.0C	2671	60,000 PSI
Retumbo	71.7	2518	53,600 PSI	76.7C	2650	62,100 PSI
H1000	73.9	2536	53,800 PSI	79.0C	2684	62,600 PSI
IMR 7977	70.7	2461	52,400 PSI	75.6	2626	62,300 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 4955	65.1	2427	52,100 PSI	69.8	2601	62,400 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
IMR 4451	61.8	2449	54,900 PSI	65.4	2571	62,200 PSI

Bullet: 275 GR. SFT A-FRAME Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.280″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	77.4	2519	53,500 PSI	81.5C	2651	61,100 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 7977	70.8	2418	53,200 PSI	75.0	2558	61,600 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 4955	65.0	2409	53,400 PSI	69.0	2541	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
IMR 4451	60.5	2358	51,700 PSI	64.1	2509	62,000 PSI

Bullet: 300 GR. NOS AB Dia: .338″

Case: Nosler Primer: WIN LR Magnum Col: 3.400″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	78.0	2441	50,700 PSI	83.0C	2608	61,400 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 7977	71.6	2384	51,100 PSI	76.6C	2548	62,200 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 4955	67.0	2418	54,900 PSI	70.4	2532	62,600 PSI
H4350	64.3	2426	51,900 PSI	67.9	2557	61,600 PSI
IMR 4350	63.8	2394	52,800 PSI	68.1	2530	62,300 PSI
IMR 4451	61.2	2341	51,700 PSI	65.2	2479	61,700 PSI

338 Winchester Magnum

Barrel: 24″ Twist: 1:10″ Trim: 2.490″

Bullet: 160 GR. BAR TTSX Dia: .338″

Case: WIN Primer: WIN LR Magnum 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
W760	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

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. NOS BT		**Dia: .338″**				
Case: WIN		**Primer: WIN LR Magnum**				**Col: 3.340″**
H4831	70.0	2776	35,200 CUP	78.0C	3067	49,100 CUP
IMR 4955	71.5	2861	51,100 PSI	77.0C	3100	62,800 PSI
IMR 4350	70.5	2848	40,800 CUP	75.0C	3038	48,300 CUP
IMR 4831	70.0	2822	39,000 CUP	75.0C	3034	47,500 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
IMR 4451	67.2	2841	48,500 PSI	72.7	3094	61,900 PSI
W760	66.0	2914	43,200 CUP	72.0	3107	51,800 CUP
H380	65.0	2886	44,200 CUP	72.5	3111	51,100 CUP
IMR 4895	62.5	2896	43,000 CUP	66.5	3059	51,200 CUP
IMR 4320	60.6	2808	42,500 CUP	64.5	2972	49,800 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: WIN		**Primer: WIN LR Magnum**				**Col: 3.290″**
IMR 4955	70.5	2847	53,200 PSI	75.8C	3040	62,700 PSI
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
IMR 4451	66.7	2822	50,000 PSI	72.2	3048	61,500 PSI
W760	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
Hybrid 100V	65.0	2774	40,600 CUP	70.0C	2947	45,800 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 4320	59.7	2822	48,900 CUP	63.5	2942	51,800 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: WIN		**Primer: WIN LR Magnum**				**Col: 3.300″**
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
IMR 4955	68.3	2707	50,800 PSI	73.5	2916	62,400 PSI
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
Hybrid 100V	65.0	2684	40,600 CUP	70.0C	2870	46,100 CUP
W760	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
IMR 4320	57.0	2678	46,200 CUP	60.5	2784	51,300 CUP
Varget	53.0	2597	39,100 CUP	58.5	2805	51,100 CUP
Bullet: 210 GR. BAR TSX BT		**Dia: .338″**				
Case: WIN		**Primer: FED 215, LR Magnum**				**Col: 3.315″**
A-4350	64.2	2566	56,300 PSI	71.3	2895	62,500 PSI
Big Game	62.9	2624	56,800 PSI	69.9	2915	63,100 PSI
A-2700	61.2	2560	56,300 PSI	68.0	2800	62,500 PSI
Bullet: 210 GR. NOS PART		**Dia: .338″**				
Case: WIN		**Primer: WIN LR Magnum**				**Col: 3.330″**
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
Hybrid 100V	68.0	2759	45,200 CUP	72.0C	2887	48,400 CUP
IMR 4350	67.0	2711	44,200 CUP	71.5C	2894	52,800 CUP
IMR 4955	66.5	2662	52,800 PSI	71.5	2844	62,700 PSI
H4350	63.0	2618	41,500 CUP	70.0	2855	51,800 CUP
IMR 4451	63.7	2647	50,500 PSI	68.9	2857	61,900 PSI
StaBALL 6.5	62.0	2648	51,400 PSI	68.6	2865	62,300 PSI
W760	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: WIN		**Primer: WIN LR Magnum**				**Col: 3.340″**
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 4955	67.1	2635	51,500 PSI	72.2C	2838	62,900 PSI
IMR 4350	67.0	2643	44,200 CUP	71.5	2845	52,900 CUP
IMR 4451	64.2	2655	51,700 PSI	69.5	2857	62,900 PSI
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: WIN		**Primer: WIN LR Magnum**				**Col: 3.340″**
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 4955	67.4	2562	50,300 PSI	72.5C	2779	62,300 PSI
IMR 4350	67.0	2657	43,600 CUP	72.0C	2832	52,000 CUP
Hybrid 100V	67.0	2693	46,200 CUP	71.0C	2815	49,400 CUP
H4350	63.0	2571	41,100 CUP	69.5	2785	51,700 CUP
IMR 4451	64.2	2570	50,000 PSI	69.4	2777	61,900 PSI
StaBALL 6.5	63.5	2613	52,500 PSI	69.0	2787	61,700 PSI
W760	62.0	2611	43,200 CUP	69.0	2811	51,700 CUP
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
IMR 4320	55.5	2540	48,300 CUP	59.0	2642	51,000 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
Bullet: 225 GR. HDY SST		**Dia: .338″**				
Case: WIN		**Primer: FED 215, LR Magnum**				**Col: 3.340″**
A-4350	62.1	2471	57,600 PSI	69.0	2809	64,000 PSI
A-2700	62.7	2541	58,800 PSI	66.0	2703	61,900 PSI
Bullet: 250 GR. HDY SP		**Dia: .338″**				
Case: WIN		**Primer: WIN LR Magnum**				**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 7977	69.5	2346	44,300 PSI	75.5C	2592	57,700 PSI
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

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	65.0	2468	45,800 CUP	69.5C	2634	52,400 CUP
IMR 4955	64.8	2440	50,500 PSI	69.7	2641	62,200 PSI
Hybrid 100V	63.0	2475	34,700 CUP	68.0C	2643	50,500 CUP
IMR 4451	61.7	2419	49,300 PSI	66.8	2631	62,400 PSI
H4350	61.0	2448	42,000 CUP	67.5	2657	51,900 CUP
W760	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: WIN Primer: FED 215, LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4350	58.5	2276	54,600 PSI	65.0	2586	60,700 PSI
A-2700	59.9	2394	59,700 PSI	63.0	2547	62,800 PSI

Bullet: 265 GR. BAR TTSX BT Dia: .338″

Case: WIN Primer: WIN LR Magnum Col: 3.450″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 7977	63.7	2251	49,200 PSI	69.3C	2426	58,100 PSI
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
Hybrid 100V	58.0	2324	44,600 CUP	63.0C	2496	52,000 CUP
IMR 4831	58.0	2287	43,100 CUP	62.5C	2426	49,600 CUP
IMR 4955	57.8	2299	54,700 PSI	62.2	2440	62,200 PSI
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
IMR 4451	55.1	2267	53,500 PSI	59.6	2430	62,500 PSI
StaBALL 6.5	53.0	2259	51,400 PSI	58.0	2445	62,400 PSI
W760	52.2	2223	45,200 CUP	55.5	2329	50,200 CUP

Bullet: 275 GR. SPR SP Dia: .338″

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	70.0	2402	43,400 CUP	76.0 C	2564	51,100 CUP
IMR 7977	67.7	2334	51,200 PSI	73.6C	2505	61,000 PSI
IMR 7828	63.0	2263	42,000 CUP	68.0C	2454	52,700 CUP
H4831	62.0	2304	42,600 CUP	69.0	2502	52,300 CUP
IMR 4831	61.0	2304	47,000 CUP	65.5C	2465	53,100 CUP
IMR 4955	60.2	2286	51,100 PSI	65.2	2461	62,400 PSI
Hybrid 100V	60.0	2327	43,800 CUP	65.0C	2472	50,900 CUP
IMR 4451	58.5	2280	51,400 PSI	63.3	2449	62,400 PSI
H4350	57.0	2259	41,100 CUP	63.5	2447	52,100 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
W760	56.0	2269	44,800 CUP	62.0	2445	52,500 CUP

Bullet: 300 GR. SIE HPBT Dia: .338″

Case: WIN Primer: WIN LR Magnum Col: 3.340″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	66.0	2241	42,200 CUP	70.0C	2347	46,900 CUP
IMR 7828	64.0	2274	45,500 CUP	68.0C*	2434	52,600 CUP
H4831	63.0	2255	45,900 CUP	69.0C	2422	52,800 CUP
IMR 7977	62.7	2118	44,100 PSI	68.2C	2315	55,200 PSI
IMR 4831	62.0	2293	46,900 CUP	67.0C	2441	53,200 CUP
IMR 4955	59.3	2223	53,200 PSI	64.2C	2387	62,600 PSI
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
IMR 4451	55.5	2185	51,500 PSI	60.0	2336	61,300 PSI

338 LAPUA MAGNUM

Barrel: 24″ Twist: 1:9″ Trim: 2.714″

Bullet: 160 GR. BAR TTSX BT Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.565″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 4955	94.5	3303	52,700 PSI	101.0C	3537	63,500 PSI
IMR 4831	93.0	3346	51,500 PSI	99.0	3589	62,500 PSI
Hybrid 100V	90.0	3413	54,000 PSI	96.3C	3606	62,400 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
W760	87.4	3341	54,700 PSI	93.0	3502	62,400 PSI

Bullet: 185 GR. BAR TSX Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.530″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H1000	100.0	3051	49,300 PSI	106.0C	3218	57,300 PSI
IMR 7828	94.0	3133	54,200 PSI	100.0	3312	62,000 PSI
H4831	93.7	3085	52,500 PSI	100.0	3281	61,500 PSI
IMR 4955	89.0	3100	53,600 PSI	95.0	3296	63,500 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
Hybrid 100V	85.2	3198	54,600 PSI	90.6	3354	62,100 PSI
H4350	85.0	3120	53,200 PSI	90.4	3311	63,400 PSI
W760	81.8	3124	56,100 PSI	87.0	3247	62,400 PSI

Bullet: 200 GR. NOS E-TIP Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.720″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magpro	95.3	3108	58,400 PSI	105.9	3342	64,900 PSI
Magnum	94.5	2993	58,400 PSI	104.9	3319	64,900 PSI

Bullet: 200 GR. NOS PART Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.740″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	97.2	3053	58,300 PSI	108.0	3376	64,700 PSI
Magpro	95.7	3112	57,800 PSI	106.4	3381	64,200 PSI

Bullet: 200 GR. SPR SP Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.525″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 8133	98.0	2922	49,500 PSI	106.0C	3183	60,700 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
IMR 4955	86.5	2968	54,000 PSI	92.5	3150	63,000 PSI
IMR 4831	85.5	2970	47,600 CUP	91.0	3162	53,100 CUP
H4831	83.0	2855	44,900 CUP	92.0	3086	53,200 CUP
IMR 4350	83.0	3001	47,400 CUP	88.0	3161	52,700 CUP
Hybrid 100V	81.0	2975	47,100 CUP	88.0	3155	53,200 CUP
H4350	79.0	2925	45,900 CUP	85.5	3099	52,500 CUP

Bullet: 210 GR. BAR TSX-BT Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.525″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	93.0	2921	58,300 PSI	103.4	3226	64,900 PSI
Magpro	92.8	2985	58,400 PSI	103.2	3236	64,900 PSI

Bullet: 210 GR. NOS PART Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.525″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Magnum	95.0	2946	58,200 PSI	105.5	3268	64,600 PSI
Magpro	89.5	2955	57,900 PSI	99.4	3224	64,300 PSI

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.525″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Retumbo	92.0	2846	42,100 CUP	102.0C	3142	52,600 CUP
IMR 8133	95.0	2881	51,400 PSI	103.0	3132	62,800 PSI
H1000	90.0	2800	42,900 CUP	99.5	3052	52,500 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%.

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 7828	88.0	2920	47,300 CUP	93.4	3099	52,900 CUP
IMR 4955	84.0	2898	54,500 PSI	89.5	3057	62,300 PSI
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
Hybrid 100V	77.0	2760	45,200 CUP	84.0	2948	52,500 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: WIN LR Magnum Col: 3.625″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: FED 215M, LR Mag Match Col: 3.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 8133	96.5	2846	48,900 PSI	104.5	3130	62,500 PSI
Retumbo	94.0	2849	43,700 CUP	104.0C	3125	51,900 CUP
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
IMR 4955	85.0	2862	52,300 PSI	91.0	3056	62,000 PSI
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. BAR TSX FB Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.525″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	90.7	2792	58,100 PSI	100.7	3081	64,500 PSI
Magpro	89.5	2828	58,300 PSI	99.5	3108	64,800 PSI

Bullet: 225 GR. NOS PART Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: FED 215M, LR Mag Match Col: 3.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
IMR 8133	94.5	2804	50,600 PSI	102.0	3039	61,700 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 4955	83.0	2791	53,500 PSI	89.0	2966	62,700 PSI
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
Hybrid 100V	76.0	2760	45,300 CUP	83.0	2942	52,700 CUP
H4350	74.0	2715	45,200 CUP	82.5	2936	52,800 CUP

Bullet: 230 GR. LGH MMF Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.655″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	92.7	2882	57,900 PSI	103.0	3170	64,300 PSI
Magpro	90.9	2937	58,100 PSI	101.1	3210	64,600 PSI

Bullet: 245 GR. LGH M-HYB Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.970″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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. BAR TSX-FB Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.525″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Magnum	88.9	2677	58,500 PSI	98.7	2957	64,900 PSI
Magpro	85.1	2675	58,300 PSI	94.6	2940	64,800 PSI

Bullet: 250 GR. HDY SP Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
US 869	101.5	2728	47,000 CUP	108.0	2879	51,100 CUP
IMR 8133	93.0	2666	49,500 PSI	100.5C	2916	61,600 PSI
Retumbo	90.0	2620	43,200 CUP	98.0C	2853	52,000 CUP
IMR 7977	89.2	2691	49,200 PSI	97.0	2927	61,300 PSI
H1000	88.0	2567	41,400 CUP	98.0C	2838	52,800 CUP
IMR 7828	83.0	2636	46,200 CUP	88.5	2802	52,100 CUP
IMR 4955	81.0	2641	52,000 PSI	86.5	2811	61,600 PSI
IMR 4831	80.0	2657	47,700 CUP	85.0	2801	52,900 CUP
H4831	79.0	2600	46,100 CUP	85.0	2740	52,200 CUP
Hybrid 100V	75.0	2619	45,500 CUP	81.0	2765	52,200 CUP
H4350	74.0	2615	48,300 CUP	78.0	2742	52,300 CUP

Bullet: 265 GR. BAR TAC-TX Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.670″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
LRT	92.3	2736	57,500 PSI	102.5	2935	63,900 PSI
Magnum	88.0	2628	58,400 PSI	97.8	2889	64,900 PSI
Magpro	83.6	2584	58,100 PSI	92.9	2864	64,600 PSI

Bullet: 265 GR. BAR TTSX BT Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.685″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
US 869	93.8	2518	48,400 PSI	100.0	2677	55,900 PSI
IMR 8133	83.5	2551	53,500 PSI	91.5C	2731	60,900 PSI
IMR 7977	81.2	2558	51,600 PSI	83.5	2698	60,100 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 4955	73.5	2507	55,100 PSI	78.5	2630	61,600 PSI
IMR 4831	70.5	2503	53,800 PSI	75.0	2634	62,300 PSI

Bullet: 275 GR. SFT A-FRAME Dia: .338″

Case: Norma Primer: FED 215M, LR Mag Match Col: 3.460″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
US 869	99.0	2636	46,200 CUP	104.5	2761	52,200 CUP
IMR 8133	84.5	2461	48,800 PSI	92.0C	2687	61,900 PSI
H1000	83.0	2444	43,500 CUP	91.5C	2648	52,600 CUP
IMR 7977	81.8	2518	51,600 PSI	89.0	2719	61,700 PSI
Retumbo	80.0	2421	41,800 CUP	89.0	2671	52,700 CUP
IMR 4955	74.5	2414	51,200 PSI	81.0	2591	60,700 PSI
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-M Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.750″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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. BER HYB Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.825″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
LRT	92.7	2598	57,500 PSI	103.0	2837	63,800 PSI
Magnum	82.4	2476	58,100 PSI	91.5	2732	64,500 PSI
Magpro	80.3	2497	58,200 PSI	89.2	2737	64,700 PSI

Bullet: 300 GR. SIE HPBT Dia: .338″

Case: Lapua Primer: WIN LR Magnum Col: 3.680″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
LRT	90.9	2592	57,400 PSI	101.0	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

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: Norma **Primer: FED 215M, LR Mag Match** **Col: 3.680″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
US 869	98.5	2567	47,500 CUP	104.0	2677	51,500 CUP
IMR 8133	86.0	2394	48,200 PSI	94.5C	2644	61,700 PSI
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
IMR 7977	85.5	2482	50,900 PSI	93.0	2688	62,600 PSI
IMR 4955	75.5	2419	54,100 PSI	82.5	2571	62,800 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: 24″ Twist: 1:16″ Trim: 1.700″

Bullet: 125 GR. BAR TAC-XP Dia: .355″

Case: WIN **Primer: WIN SR** **Col: 2.050″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	23.7	2352	41,300 PSI	26.3	2543	51,800 PSI
H110	23.7	2352	41,300 PSI	26.3	2543	51,800 PSI

Bullet: 147 GR. HDY XTP Dia: .355″

Case: WIN **Primer: WIN SR** **Col: 2.000″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W296	27.0	2368	41,900 PSI	28.2	2495	52,100 PSI
H110	27.0	2368	41,900 PSI	28.2	2495	52,100 PSI
Lil'Gun	27.0	2347	36,400 PSI	28.5	2455	40,500 PSI
IMR 4227	24.0	2066	38,000 PSI	27.5C	2276	45,800 PSI

Bullet: 170 GR. HDY SP Dia: .355″

Case: WIN **Primer: WIN SR** **Col: 2.240″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	27.0	1857	24,000 PSI	30.0C	2075	31,000 PSI
Lil'Gun	27.0	2239	43,500 PSI	27.9	2307	45,900 PSI
IMR 4227	25.0	1946	38,500 PSI	27.4C	2122	50,900 PSI
W296	24.0	2049	40,600 PSI	26.7	2221	51,600 PSI
H110	24.0	2049	40,600 PSI	26.7	2221	51,600 PSI

Bullet: 180 GR. WIN PP Dia: .355″

Case: WIN **Primer: WIN SR** **Col: 2.110″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	24.7	1691	21,000 PSI	27.5C	1889	28,100 PSI
Lil'Gun	23.0	2049	41,300 PSI	25.5	2213	50,600 PSI
IMR 4227	22.7	1880	42,100 PSI	24.7	2032	51,200 PSI
W296	22.0	1894	36,700 PSI	24.0	2079	51,100 PSI
H110	22.0	1894	36,700 PSI	24.0	2079	51,100 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 LR** **Col: 3.200″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Varget	52.0	2199	33,900 CUP	58.0C	2436	47,200 CUP
IMR 4895	52.0	2185	39,200 CUP	58.0C	2438	48,700 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 LR** **Col: 3.280″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4350	63.0	2322	38,500 CUP	67.0C	2438	44,600 CUP
BL-C(2)	60.0	2338	39,600 CUP	66.0	2548	47,400 CUP
IMR 4350	58.0	2117	38,400 CUP	64.0C	2347	47,600 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 4320	51.0	2151	39,200 CUP	56.0	2328	47,900 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 LR** **Col: 3.225″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4350	64.0	2321	40,800 CUP	67.0C	2407	46,300 CUP
W760	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
W748	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
H335	51.0	2178	41,300 CUP	55.0	2323	48,100 CUP
H4895	51.0	2131	39,000 CUP	55.5	2331	47,800 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/SS Dia: .366″

Case: Norma **Primer: CCI 200 LR** **Col: 3.150″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4350	60.0	2142	40,000 CUP	64.0C	2288	48,100 CUP
W760	59.0	2136	41,500 CUP	62.0C	2242	46,200 CUP
Hybrid 100V	56.0	2041	39,300 CUP	60.0C	2158	42,600 CUP
BL-C(2)	54.0	2140	42,900 CUP	57.5	2211	47,900 CUP
Varget	52.0	2083	42,000 CUP	56.0	2194	47,800 CUP
W748	52.0	2096	36,700 CUP	56.5	2234	44,500 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 4320	50.0	2039	38,700 CUP	54.0C	2184	47,900 CUP
H4895	47.0	1979	40,200 CUP	52.0	2133	48,200 CUP
IMR 3031	46.0	2002	37,200 CUP	52.0C	2230	48,600 CUP

375 H & H Magnum

Barrel: 24″ Twist: 1:12″ Trim: 2.840″

Bullet: 200 GR. SIE JFP Dia: .375″

Case: REM **Primer: WIN LR Magnum** **Col: 3.350″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: REM **Primer: WIN LR Magnum** **Col: 3.600″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
StaBALL 6.5	83.0	2721	42,800 CUP	91.5C	2926	48,500 CUP
W760	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
Varget	65.0	2718	43,600 CUP	71.5	2874	51,400 CUP
IMR 4064	65.0	2641	42,700 CUP	71.5	2824	50,900 CUP

Bullet: 250 GR. SFT AF/SS Dia: .375″

Case: REM **Primer: WIN LR Magnum** **Col: 3.555″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W760	77.0	2750	44,500 CUP	82.5	2820	48,800 CUP
H4350	76.0	2641	44,000 CUP	83.0C	2841	51,200 CUP
StaBALL 6.5	73.8	2579	44,600 CUP	82.0	2789	50,100 CUP
IMR 4350	71.0	2423	41,300 CUP	79.0C	2695	48,400 CUP
IMR 4451	69.3	2401	43,500 CUP	77.0	2699	51,300 CUP

Bullet: 260 GR. NOS PART Dia: .375″

Case: REM **Primer: WIN LR Magnum** **Col: 3.580″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4831	76.0	2371	41,800 CUP	83.0C	2616	46,300 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4831	76.0	2508	44,200 CUP	83.0C	2727	49,900 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
Hybrid 100V	73.0	2542	44,800 CUP	77.0C	2700	48,500 CUP
IMR 4451	68.4	2376	42,500 CUP	76.0	2637	51,200 CUP
W760	67.0	2459	43,000 CUP	74.5	2663	50,300 CUP

Bullet: 270 GR. BAR TSX Dia: .375″

Case: REM Primer: WIN LR Magnum Col: 3.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W760	72.0	2511	46,300 CUP	79.0	2650	48,400 CUP
StaBALL 6.5	71.0	2442	42,600 CUP	79.0C	2653	51,500 CUP
IMR 4350	69.0	2300	39,500 CUP	76.0C	2555	46,700 CUP
Hybrid 100V	69.0	2304	40,000 CUP	75.0C	2517	45,300 CUP
H4350	69.0	2379	41,600 CUP	75.0C	2563	44,400 CUP
IMR 4451	67.2	2311	43,400 CUP	74.7C	2569	51,400 CUP

Bullet: 300 GR. SFT AF/SS Dia: .375″

Case: REM Primer: WIN LR Magnum Col: 3.570″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W760	69.0	2314	40,600 CUP	75.0	2484	44,200 CUP
IMR 4350	67.5	2253	43,200 CUP	75.0C	2481	47,800 CUP
IMR 4451	67.0	2258	43,500 CUP	74.5C	2499	49,700 CUP
Hybrid 100V	65.7	2194	40,400 CUP	73.0C	2406	44,300 CUP

44-40 WINCHESTER

Barrel: 20″ Twist: 1:36″ Trim: 1.295″

Bullet: 200 GR. LEAD RNFP Dia: .428″

Case: WIN Primer: WIN LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.6	950	10,000 PSI	7.3	1069	11,100 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: 1:38″ Trim: 1.280″

Bullet: 165 GR. LRNFP CAST Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.500″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.5	1009	7,700 CUP	7.2	1138	11,500 CUP
Titegroup	5.3	1127	11,800 CUP	6.5	1280	16,400 CUP
Clays	4.4	949	8,500 CUP	5.5	1147	15,500 CUP

Bullet: 180 GR. HDY XTP Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H110	29.0	2170	21,800 CUP	31.5	2286	29,900 CUP
H4227	27.5	2005	24,000 CUP	29.0	2114	31,200 CUP

Bullet: 185 GR. LRNFP CAST Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.540″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.4	993	8,400 CUP	7.4	1180	12,600 CUP
Titegroup	5.3	1072	9,500 CUP	6.6	1248	16,500 CUP
Clays	4.2	859	8,900 CUP	6.0	1162	18,400 CUP

Bullet: 200 GR. LRNFP CAST Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.570″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.8	1065	10,500 CUP	7.8	1209	15,400 CUP
Titegroup	5.0	1004	11,000 CUP	6.6	1217	17,300 CUP
Clays	4.2	874	8,500 CUP	6.4	1172	20,200 CUP

Bullet: 200 GR. NOS JHP Dia: .429″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H110	27.5	2064	29,000 CUP	28.5	2106	37,800 CUP
IMR 4227	25.0	1840	29,800 CUP	27.0	1982	37,800 CUP

Bullet: 210 GR. SIE JHC Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H110	26.0	1969	29,900 CUP	27.0	2030	31,100 CUP
IMR 4227	25.0	1843	29,200 CUP	27.0	1970	37,600 CUP

Bullet: 225 GR. HDY FTX Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.665″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4227	19.8	1330	26,800 PSI	22.0	1484	34,500 PSI
W296	19.4	1480	26,700 PSI	21.5	1669	33,400 PSI
H110	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

Bullet: 240 GR. LSWC CAST Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.620″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.5	927	11,700 CUP	10.2	1374	37,500 CUP
HP-38	5.5	907	12,000 CUP	11.0	1437	38,100 CUP
Titegroup	4.7	908	11,100 CUP	10.0	1423	38,400 CUP
Clays	4.3	839	14,000 CUP	6.2	1062	21,800 CUP

Bullet: 240 GR. NOS JHP Dia: .429″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H110	23.0	1750	25,200 CUP	24.0	1817	36,200 CUP
IMR 4227	22.0	1624	28,400 CUP	24.0	1778	36,100 CUP

Bullet: 270 GR. SPR GDSP Dia: .429″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4227	20.5	1476	28,400 CUP	22.5	1638	37,400 CUP
H110	19.5	1502	29,300 CUP	21.5	1637	37,700 CUP

Bullet: 280 GR. SFT AF/HP Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.700″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4227	20.0	1354	27,600 CUP	22.0	1544	37,800 CUP
H110	18.5	1358	27,000 CUP	20.5	1510	36,100 CUP

Bullet: 300 GR. HDY XTP Dia: .430″

Case: WIN Primer: REM 2 1/2, LP Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
IMR 4227	18.0	1318	30,600 CUP	20.0	1452	38,600 CUP
H110	18.0	1393	35,100 CUP	19.0	1473	38,800 CUP

444 MARLIN

Barrel: 24″ Twist: 1:38″ Trim: 2.215″

Bullet: 200 GR. BAR XFB Dia: .429″

Case: REM Primer: REM 9 1/2, LR Col: 2.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: REM Primer: REM 9 1/2, LR Col: 2.550″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
H335	49.0	1891	25,500 CUP	52.0	2031	34,500 CUP
Benchmark	49.0	2028	34,500 CUP	52.0C	2127	38,100 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

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: 240 GR. SIE JHP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.535″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 260 GR. FA JFP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.550″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 JFP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.550″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
H4895	50.0	1944	29,300 CUP	53.0C	2080	34,800 CUP
Benchmark	49.0	1911	31,000 CUP	53.0C	2139	40,700 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 JFP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.540″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: REM **Primer: REM 9 1/2, LR** **Col: 2.520″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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/HP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.620″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H335	49.5	1983	36,100 CUP	52.8	2109	42,000 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
H4895	47.0	1875	30,300 CUP	52.0C	2089	37,600 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
IMR 4198	38.7	1907	36,500 CUP	42.0	2050	42,500 CUP
H4198	38.0	1938	37,300 CUP	42.5	2108	42,300 CUP

Bullet: 300 GR. SFT AF/HP Dia: .430″

Case: REM **Primer: REM 9 1/2, LR** **Col: 2.620″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Varget	47.0	1784	30,700 CUP	50.0C	1914	35,700 CUP
H4895	47.0	1839	33,600 CUP	50.0C	1931	35,600 CUP
IMR 4895	46.6	1762	33,300 CUP	50.6C	1915	38,300 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: 16″ Twist: 1:24″ Trim: 1.695″

Bullet: 200 GR. HDY FTX Dia: .451″

Case: Hornady **Primer: WIN SR** **Col: 2.190″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	39.4	2236	35,600 PSI	43.8	2531	39,500 PSI
A-4100	39.4	2236	35,600 PSI	43.8	2531	39,500 PSI
A-5744	38.0	2052	35,800 PSI	42.2	2273	39,800 PSI
No. 9	36.1	2252	35,300 PSI	40.2	2472	39,300 PSI

Bullet: 200 GR. SIE FPJ Dia: .451″

Case: Hornady **Primer: WIN SR** **Col: 2.000″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	40.5	2334	35,500 PSI	45.0	2522	39,500 PSI
A-4100	40.5	2334	35,500 PSI	45.0	2522	39,500 PSI
A-5744	40.1	2104	35,800 PSI	44.5	2336	39,800 PSI
No. 9	35.3	2289	35,200 PSI	39.2	2417	39,200 PSI

Bullet: 225 GR. HDY FTX Dia: .452″

Case: Starline **Primer: WIN SR** **Col: 2.150″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN SR** **Col: 2.150″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	36.5	2082	35,400 PSI	40.5	2332	39,300 PSI
A-4100	36.5	2082	35,400 PSI	40.5	2332	39,300 PSI
A-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: .451″

Case: Hornady **Primer: WIN SR** **Col: 2.135″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	48.3	2231	35,700 PSI	53.7	2430	39,700 PSI
A-5744	38.5	1954	35,900 PSI	42.8	2196	39,800 PSI
Enforcer	34.3	2080	35,300 PSI	38.2	2226	39,200 PSI
A-4100	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. HDY FTX Dia: .452″

Case: Starline **Primer: WIN SR** **Col: 2.225″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 250 GR. NOS HP Dia: .451″

Case: Hornady **Primer: WIN SR** **Col: 2.025″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	42.2	1970	35,200 PSI	46.9	2207	39,200 PSI
A-5744	35.2	1837	35,800 PSI	39.1	2042	39,800 PSI
Enforcer	34.6	1963	34,600 PSI	38.5	2147	38,400 PSI
A-4100	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: 275 GR. BAR TSX-FB Dia: .452″

Case: Starline **Primer: WIN SR** **Col: 2.225″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

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 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: .451″

Case: Hornady Primer: WIN SR Col: 2.085″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	37.5	1741	35,300 PSI	41.7	1900	39,300 PSI
A-5744	31.8	1617	35,800 PSI	35.4	1808	39,700 PSI
Enforcer	28.4	1640	35,200 PSI	31.6	1788	39,100 PSI
A-4100	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/HP Dia: .452″

Case: Starline Primer: WIN SR Col: 2.065″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN SR Col: 2.190″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	32.1	1529	35,700 PSI	35.7	1720	39,700 PSI
A-5744	31.6	1536	35,500 PSI	35.1	1733	39,500 PSI
Enforcer	24.2	1427	35,900 PSI	26.9	1598	39,900 PSI
A-4100	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: WIN LP Col: 2.125″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
LT-30	38.7	1648	28,100 PSI	43.0	1867	31,200 PSI
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 TSX-FN Dia: .458″

Case: Starline Primer: WIN LP Col: 2.015″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	42.9	1766	31,400 PSI	47.7	1968	34,900 PSI
X-Terminator	40.3	1591	31,400 PSI	44.7	1740	34,900 PSI
A-2230	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
A-1680	37.8	1782	31,100 PSI	42.0	1961	34,600 PSI
A-5744	33.6	1679	31,000 PSI	37.4	1844	34,500 PSI
Enforcer	25.3	1635	31,100 PSI	28.1	1750	34,500 PSI
A-4100	25.3	1635	31,100 PSI	28.1	1750	34,500 PSI

Bullet: 300 GR. BAR TTSX BT Dia: .458″

Case: Starline Primer: WIN LP Col: 2.245″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	35.4	1672	24,600 CUP	37.3	1794	33,800 CUP
H4198	33.1	1534	24,600 CUP	36.1C	1727	39,000 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. NOS RN BT Dia: .458″

Case: Starline Primer: WIN LP Col: 2.040″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE BLK	38.0	1748	23,300 CUP	41.0	1892	39,500 CUP
H4198	35.6	1590	25,600 CUP	38.2	1787	39,100 CUP
IMR 4198	34.8	1631	25,400 CUP	38.2	1768	39,400 CUP
IMR 4227	28.2	1518	28,000 CUP	33.3	1716	40,000 CUP

Bullet: 325 GR. HDY FTX Dia: .458″

Case: Starline Primer: WIN LP Col: 2.160″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	38.1	1561	31,200 PSI	42.3	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	39.3	1644	30,500 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
A-1680	32.3	1581	31,000 PSI	35.9	1752	34,400 PSI
A-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: 350 GR. HDY RN Dia: .458″

Case: Starline Primer: WIN LP Col: 2.040″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	39.0	1564	31,200 PSI	43.3	1745	34,700 PSI
LT-32	37.7	1427	27,500 PSI	41.9	1610	30,600 PSI
LT-30	36.4	1480	31,200 PSI	40.4	1663	34,700 PSI
A-1680	32.5	1552	30,800 PSI	36.1	1708	34,200 PSI
A-5744	30.4	1479	31,400 PSI	33.8	1630	34,900 PSI

Bullet: 350 GR. SFT AF/HP Dia: .458″

Case: Starline Primer: WIN LP Col: 2.050″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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. BAR BSTR Dia: .458″

Case: Starline Primer: WIN LP Col: 2.030″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	33.8	1443	30,900 PSI	37.6	1580	34,400 PSI
LT-32	32.0	1228	30,200 PSI	35.6	1390	33,600 PSI
LT-30	30.2	1227	30,800 PSI	33.5	1383	34,200 PSI
A-1680	28.2	1281	31,000 PSI	31.3	1437	34,400 PSI
A-5744	25.7	1245	31,000 PSI	28.6	1402	34,400 PSI

Bullet: 400 GR. SPR FN Dia: .458″

Case: Starline Primer: WIN LP Col: 2.040″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	37.4	1492	31,200 PSI	41.6	1649	34,700 PSI
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
A-1680	31.5	1448	31,200 PSI	35.0	1570	34,600 PSI
IMR 4198	31.2	1323	22,900 CUP	33.9	1490	39,200 CUP
A-5744	28.6	1392	31,400 PSI	31.8	1538	34,900 PSI
IMR 4227	26.9	1261	25,600 CUP	29.5	1391	39,100 CUP

Bullet: 570 GR. LGH CF Dia: .458″

Case: Starline Primer: WIN LP Col: 2.795″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	19.1	758	30,000 PSI	21.3	901	33,300 PSI
A-5744	17.5	701	29,800 PSI	19.5	823	33,100 PSI

45-70 GOVERNMENT (LEVER ACTIONS)*

Barrel: 24″ Twist: 1:20″ Trim: 2.095″

Bullet: 250 GR. BAR TSX FN Dia: .458″

Case: REM Primer: WIN LR Col: 2.525″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-2200	47.3	1847	20,300 PSI	55.0	2142	23,700 PSI
LT-30	44.3	1771	23,400 PSI	52.1	2069	27,500 PSI
A-5744	31.9	1556	23,500 PSI	37.5	1851	27,700 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: WIN		**Primer: CCI 200 LR**				**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 Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.525″**
LT-32	47.4	1736	22,900 PSI	57.8	2099	27,900 PSI
A-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
X-Terminator	42.0	1740	25,400 PSI	46.0	1900	27,800 PSI
A-2230	42.0	1740	25,400 PSI	46.0	1900	27,800 PSI
A-5744	36.7	1712	24,500 PSI	40.8	1874	27,200 PSI
Case: WIN		**Primer: CCI 200 LR**				**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 8208 XBR	60.0	2023	25,400 CUP	65.0C	2240	32,900 CUP
IMR 4895	58.5	1800	19,900 CUP	65.0C	2087	30,000 CUP
IMR 3031	58.0	1971	21,900 CUP	64.0C	2196	29,500 CUP
IMR 4166	56.2	1957	26,700 PSI	64.0	2230	37,200 PSI
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″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.590″**
A-2200	45.3	1772	25,100 PSI	50.4	1956	27,900 PSI
LT-32	40.7	1524	20,800 PSI	49.0	1831	25,100 PSI
LT-30	40.8	1611	23,400 PSI	48.0	1879	27,500 PSI
A-2015	39.2	1504	23,700 PSI	46.1	1757	27,800 PSI
X-Terminator	37.5	1484	25,000 PSI	41.6	1622	27,800 PSI
A-2230	37.5	1484	25,000 PSI	41.6	1622	27,800 PSI
A-5744	29.0	1423	23,500 PSI	34.1	1672	27,600 PSI

Bullet: 350 GR. HDY JRN Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
A-2015	47.3	1703	25,000 PSI	52.5	1890	27,800 PSI
A-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
X-Terminator	37.7	1487	24,900 PSI	41.8	1626	27,600 PSI
A-2230	37.7	1487	24,900 PSI	41.8	1626	27,600 PSI
A-5744	33.8	1529	25,000 PSI	37.5	1676	27,700 PSI
Case: WIN		**Primer: CCI 200 LR**				**Col: 2.550″**
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
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
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
H4895	53.0	1784	21,700 CUP	59.0C	2045	32,900 CUP
IMR 4166	52.2	1775	26,800 PSI	58.7C	2022	37,600 PSI
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 TSX FN Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.515″**
A-2200	40.1	1583	25,800 PSI	42.3	1654	27,200 PSI
A-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
X-Terminator	34.1	1327	24,700 PSI	37.9	1453	27,400 PSI
A-2230	34.1	1327	24700 PSI	37.9	1453	27,400 PSI

Bullet: 400 GR. SPR JFP Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: WIN		**Primer: CCI 200 LR**				**Col: 2.540″**
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
IMR 4166	49.0	1645	28,000 PSI	56.0C	1873	38,100 PSI
IMR 3031	51.0	1809	26,900 CUP	55.0C	1971	37,300 CUP
Varget	50.0	1655	18,600 CUP	55.0C	1845	25,000 CUP
H4895	50.0	1614	19,200 CUP	55.0C	1859	26,500 CUP
H322	50.0	1767	23,700 CUP	55.0C	1984	39,200 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. CP WLNGC Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
A-2015	44.3	1666	24,700 PSI	49.2	1817	27,400 PSI
A-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
X-Terminator	35.5	1490	24,800 PSI	39.4	1604	27,500 PSI
A-2230	35.5	1490	24,800 PSI	39.4	1604	27,500 PSI

Bullet: 420 GR. CP LFNGC Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
A-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
A-2230	38.0	1523	24,700 PSI	42.2	1646	27,400 PSI
A-5744	29.3	1401	24,300 PSI	32.5	1538	27,000 PSI

Bullet: 460 GR. CP WLNGC Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
A-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
X-Terminator	34.4	1404	24,600 PSI	38.2	1511	27,300 PSI
A-2230	34.4	1404	24,600 PSI	38.2	1511	27,300 PSI
A-5744	27.5	1321	24,500 PSI	30.5	1444	27,200 PSI

Bullet: 473 GR. LGH SLD Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.850″**
A-2200	36.3	1339	26,200 PSI	38.2	1408	27,600 PSI
X-Terminator	31.7	1044	24,800 PSI	35.2	1196	27,600 PSI
A-2230	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. HDY RN Dia: .458″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
A-2015	34.7	1350	25,100 PSI	38.5	1510	27,900 PSI
X-Terminator	30.0	1150	23,600 PSI	35.0	1320	27,500 PSI
A-2230	30.0	1150	23,600 PSI	35.0	1320	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%.

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 500 GR. LC FP		**Dia: .458″**				
Case: REM		**Primer: WIN LR**				**Col: 2.550″**
X-Terminator	33.3	1320	24,800 PSI	37.0	1450	27,500 PSI
A-2230	33.3	1320	24,800 PSI	37.0	1450	27,500 PSI
A-5744	25.2	1265	25,100 PSI	28.0	1400	27,900 PSI
Bullet: 500 GR. MCB RNFP		**Dia: .458″**				
Case: REM		**Primer: WIN LR**				**Col: 2.700″**
A-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
A-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″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 250 GR. BAR TSX FN		**Dia: .458″**				
Case: WIN		**Primer: CCI 200 LR**				**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. BAR TTSX		**Dia: .458″**				
Case: WIN		**Primer: CCI 200 LR**				**Col: 2.775″**
H4198	53.0	2346	39,800 CUP	56.0C	2445	46,700 CUP
IMR 4198	50.0	2207	37,700 CUP	53.0C	2323	45,000 CUP
Bullet: 300 GR. SIE HP		**Dia: .458″**				
Case: WIN		**Primer: CCI 200 LR**				**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: 325 GR. HDY FTX		**Dia: .458″**				
Case: WIN		**Primer: CCI 200 LR**				**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: WIN		**Primer: CCI 200 LR**				**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: 400 GR. SPR JFP		**Dia: .458″**				
Case: WIN		**Primer: CCI 200 LR**				**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

470 NITRO EXPRESS

Barrel: 24″ Twist: 1:20″ Trim: 3.240″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 500 GR. WDLGH RN		**Dia: .475″**				
Case: Hornady	**Primer: FED 215M, LR Mag Match**					**Col: 3.875″**
Retumbo	118.0	2088	30,600 PSI	125.0C	2202	34,800 PSI
IMR 8133	118.0	2047	33,800 PSI	125.0C	2201	39,700 PSI
H1000	118.0	2172	33,900 PSI	124.0C	2300	40,500 PSI
IMR 7977	114.3	2011	29,600 PSI	123.0C	2205	37,200 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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4350	99.0	2111	35,700 PSI	105.0	2229	40,800 PSI
IMR 4451	96.5	2158	37,500 PSI	102.7	2240	40,200 PSI
H4350	95.0	2134	36,900 PSI	100.0	2234	41,700 PSI
Trail Boss				45.5	1257	

50 BROWNING MACHINE GUN

Barrel: 45″ Twist: 1:16.5″ Trim: 3.900″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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%.

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure

FN 5.7x28MM

Barrel: 5″ Twist: 1:9″ Trim: 1.130″

Bullet: 35 GR. HDY V-MAX Dia: .224″

Case: FNH Primer: WIN SP, Small Pistol Col: 1.490″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.580″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.490″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.490″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.580″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: 1.015″

Bullet: 35 GR. HDY V-MAX Dia: .224″

Case: Armscor Primer: CCI 500, Small Pistol Col: 1.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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
A-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. ARMSCOR HP Dia: .224″

Case: Armscor Primer: CCI 500, Small Pistol Col: 1.150″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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
A-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 Primer: CCI 500, Small Pistol Col: 1.285″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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
A-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 (7.65x21 PARABELLUM)

Barrel: 6″ Twist: 1:11″ Trim: .845″

Bullet: 86 GR. HDY RN SP Dia: .308″

Case: Fiocchi Primer: WIN SP, Small Pistol Col: 1.175″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.170″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 Primer: WIN SP, Small Pistol Col: 1.180″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: CCI 400, Small Rifle Col: 1.625″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: CCI 400, Small Rifle Col: 1.625″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: CCI 400, Small Rifle Col: 1.680″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

32 H&R MAG

Barrel: 5″ Twist: 1:16″ Trim: 1.070″

Bullet: 77 GR. CAST LFP Dia: .314″

Case: FED Primer: FED 100, Small P Col: 1.335″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W572	3.4	828	8,400 CUP	4.0	1013	13,000 CUP
800-X	3.3	792	7,400 CUP	4.1	985	11,400 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
W244	2.5	749	7,800 CUP	3.3	987	11,700 CUP
WSF	3.4	831	8,800 CUP	3.8	926	11,100 CUP
W231	2.4	797	6,700 CUP	3.4	998	12,300 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: 85 GR. HDY HP Dia: .312″

Case: FED Primer: FED 100, Small P Col: 1.290″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4227	8.5	989	19,300 CUP	9.5	1151	21,000 CUP
Lil'Gun	10.5	1163	13,700 CUP	12.0	1263	16,800 CUP
Longshot	4.0	948	11,500 CUP	5.0	1167	20,200 CUP
800-X	4.7	1067	16,600 CUP	5.3	1156	19,900 CUP
HS-6	5.2	902	17,100 CUP	5.6	1146	20,200 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
W244	3.6	980	15,000 CUP	4.1	1111	20,300 CUP
WSF	4.2	1030	15,900 CUP	4.8	1147	20,400 CUP
W231	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

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. SIE JHP **Dia: .312″**

Case: FED **Primer: FED 100, Small P** **Col: 1.340″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	9.5	1042	15,000 CUP	10.0	1079	17,000 CUP
Lil'Gun	10.0	1156	14,900 CUP	11.5	1227	18,000 CUP
Longshot	4.0	945	12,100 CUP	5.0	1139	19,500 CUP
W572	4.0	920	14,000 CUP	4.7	1098	20,600 CUP
800-X	4.2	973	14,900 CUP	5.0	1130	21,000 CUP
HS-6	5.4	1026	16,400 CUP	6.0	1140	20,200 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
Universal	3.7	1008	16,900 CUP	4.0	1072	20,000 CUP
W244	3.5	945	15,100 CUP	4.1	1070	20,200 CUP
WSF	4.0	966	15,900 CUP	4.5	1065	19,500 CUP
W231	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: FED **Primer: FED 100, Small P** **Col: 1.345″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	9.0	980	15,700 CUP	10.0	1060	19,300 CUP
Lil'Gun	10.0	1151	17,900 CUP	11.0	1208	19,900 CUP
Longshot	4.0	903	13,900 CUP	4.7	1056	19,300 CUP
800-X	4.2	900	14,600 CUP	4.7	1035	20,200 CUP
HS-6	4.8	885	15,800 CUP	5.4	1023	20,200 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
WSF	3.8	858	15,100 CUP	4.3	1000	20,300 CUP
W231	3.3	860	15,600 CUP	3.7	947	19,400 CUP
Titegroup	2.8	833	15,000 CUP	3.3	956	19,900 CUP
700-X	3.1	857	15,900 CUP	3.5	976	20,200 CUP

32-20 Winchester

Barrel: 5.5″ Twist: 1:20″ Trim: 1.305″

Bullet: 77 GR. LFP **Dia: .314″**

Case: REM **Primer: WIN SP, Small Pistol** **Col: 1.555″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W231	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: REM **Primer: WIN SP, Small Pistol** **Col: 1.550″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Bullet: 90 GR. CAST LRNFP **Dia: .314″**

Case: REM **Primer: WIN SP, Small Pistol** **Col: 1.490″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W231	3.2	833	11,900 CUP	3.5	969	16,000 CUP
Trail Boss	2.5	785	11,400 CUP	2.8	830	13,900 CUP
Titegroup	3.0	937	12,300 CUP	3.4	1012	15,800 CUP

Bullet: 100 GR. REM JFP **Dia: .312″**

Case: REM **Primer: WIN SP, Small Pistol** **Col: 1.580″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: REM **Primer: WIN SP, Small Pistol** **Col: 1.580″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Universal	3.0	808	14,200 CUP	3.2	869	16,000 CUP
W231	3.2	839	11,100 CUP	3.5	915	15,600 CUP
Trail Boss	2.2	642	11,300 CUP	2.5	707	15,300 CUP
Titegroup	2.7	815	12,900 CUP	3.0	857	15,300 CUP

327 Federal Mag

Barrel: 5″ Twist: 1:16″ Trim: 1.190″

Bullet: 77 GR. CAST LFP **Dia: .314″**

Case: FED **Primer: FED 200, Small P Mag** **Col: 1.460″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
AutoComp	5.9	1251	17,700 PSI	6.7	1393	21,900 PSI
W572	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
W231	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
W244	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
Trail Boss	3.0	919	12,300 PSI	3.5	1024	18,700 PSI

Bullet: 78 GR. LC LRN **Dia: .313″**

Case: FED **Primer: WIN SP, Small Pistol** **Col: 1.454″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 85 GR. HDY XTP **Dia: .312″**

Case: FED **Primer: WIN SP, Small Pistol** **Col: 1.450″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: FED **Primer: FED 200, Small P Mag** **Col: 1.450″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	7.6	1402	30,800 PSI	8.5	1561	41,600 PSI
800-X	6.7	1376	25,300 PSI	7.5	1548	36,700 PSI
CFE Pistol	6.7	1474	33,400 PSI	7.5	1600	41,200 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
W244	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
W231	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

Bullet: 90 GR. CAST LRNFP **Dia: .312″**

Case: FED **Primer: FED 200, Small P Mag** **Col: 1.460″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
AutoComp	5.5	1210	19,900 PSI	6.3	1348	28,700 PSI
W231	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
Trail Boss	2.7	789	11,200 PSI	3.2	890	14,800 PSI

Bullet: 90 GR. HDY LSWC **Dia: .314″**

Case: FED **Primer: WIN SP, Small Pistol** **Col: 1.487″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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. LHBWC **Dia: .314″**

Case: FED **Primer: FED 200, Small P Mag** **Col: 1.200″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Universal	2.4	721	9,100 PSI	2.8	869	12,500 PSI
W244	2.3	769	10,600 PSI	2.7	878	13,600 PSI
W231	2.3	781	14,600 PSI	2.7	878	15,000 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
700-X	2.2	810	12,700 PSI	2.5	885	14,200 PSI
Titegroup	2.0	773	13,200 PSI	2.3	859	14,000 PSI
Clays	1.9	792	17,800 PSI	2.2	856	20,600 PSI
Bullet: 90 GR. SIE JHC		**Dia: .312″**				
Case: FED		**Primer: FED 200, Small P Mag**				**Col: 1.460″**
HS-6	8.0	1337	23,400 PSI	8.8	1491	36,400 PSI
W572	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
800-X	6.5	1321	24,900 PSI	7.2	1446	31,700 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
W244	5.7	1342	29,100 PSI	6.4	1492	41,600 PSI
W231	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: FED		**Primer: WIN SP, Small Pistol**				**Col: 1.450″**
No. 9	11.7	1417	33,300 PSI	13.0	1574	37,000 PSI
Enforcer	12.2	1370	27,000 PSI	13.6	1522	30,000 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
Case: FED		**Primer: FED 200, Small P Mag**				**Col: 1.450″**
Lil'Gun	12.7	1347	25,600 PSI	14.0	1431	27,900 PSI
W296	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
800-X	6.0	1252	28,900 PSI	6.9	1434	39,400 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
W244	5.3	1269	32,100 PSI	6.0	1407	42,500 PSI
W231	4.8	1146	31,100 PSI	5.4	1261	39,800 PSI
Universal	4.5	1087	28,000 PSI	5.4	1250	40,800 PSI
Titegroup	4.3	1102	33,300 PSI	5.2	1261	42,800 PSI
Bullet: 115 GR. LC LFP		**Dia: .313″**				
Case: FED		**Primer: WIN 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
Bullet: 115 GR. MEI LRNFP		**Dia: .312″**				
Case: FED		**Primer: FED 200, Small P Mag**				**Col: 1.460″**
AutoComp	4.7	1062	22,100 PSI	5.5	1194	33,500 PSI
W572	4.6	1068	23,500 PSI	5.4	1222	33,800 PSI
W231	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
W244	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
Trail Boss	2.5	733	15,200 PSI	3.0	804	19,600 PSI

380 AUTO

Barrel: 3.75″ Twist: 1:16″ Trim: .675″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 56 GR. PLYCS ARX		**Dia: .355″**				
Case: REM		**Primer: CCI 500, Small Pistol**				**Col: .975″**
W572	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
W244	3.4	1113	16,700 PSI	4.0	1297	20,200 PSI
W231	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. PLYCS RNP		**Dia: .355″**				
Case: REM		**Primer: CCI 500, Small Pistol**				**Col: .975″**
W572	4.5	1134	16,900 PSI	5.2	1272	20,300 PSI
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
W244	3.2	1058	16,100 PSI	3.8	1234	20,300 PSI
W231	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. LGH XD		**Dia: .355″**				
Case: REM		**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
W572	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
W244	3.4	1005	14,600 PSI	4.0	1214	20,400 PSI
W231	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: REM		**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
W572	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
W244	3.0	933	16,100 PSI	3.5	1066	19,900 PSI
W231	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: REM		**Primer: CCI 500, Small Pistol**				**Col: .980″**
W572	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
W244	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
W231	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: WIN		**Primer: CCI 500, Small Pistol**				**Col: .970″**
No. 5	3.6	807	18,100 PSI	4.0	897	20,100 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
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
Solo 1000	2.5	847	18,300 PSI	2.9	963	21,500 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 XTP Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: .960″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Case: REM Primer: CCI 500, Small Pistol Col: .960″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W244	3.2	930	15,600 PSI	3.7	1061	19,800 PSI
AutoComp	4.1	893	11,200 CUP	4.5	1012	15,000 CUP
CFE Pistol	3.7	880	11,900 PSI	4.2	1010	19,500 PSI
Titegroup	2.7	826	10,800 CUP	3.2	970	15,600 CUP
W231	3.2	917	13,900 CUP	3.5	957	15,400 CUP
Universal	3.2	815	10,700 CUP	3.6	955	15,700 CUP
700-X				2.9	895	15,900 CUP
800-X				4.1	870	15,500 CUP

Bullet: 95 GR. SIE FMJ Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: .945″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: REM Primer: CCI 500, Small Pistol Col: .970″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
AutoComp	3.9	816	10,600 CUP	4.3	937	14,100 CUP
W572	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
W244	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
W231	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. BERB RNHB Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: .960″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	2.6	765	18,200 PSI	3.0	868	21,500 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: REM Primer: CCI 500, Small Pistol Col: .980″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
AutoComp	3.8	822	11,000 CUP	4.2	934	14,400 CUP
800-X				4.0	840	14,700 CUP
CFE Pistol	3.3	794	12,400 PSI	4.0	955	19,800 PSI
W244	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
W231	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. RAIN RN Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: .960″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	4.2	801	18,300 PSI	5.0	948	21,500 PSI
Silhouette	3.7	819	18,200 PSI	4.4	973	21,400 PSI
True Blue	3.7	820	18,300 PSI	4.4	941	21,500 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
Solo 1000	2.5	772	18,200 PSI	3.0	879	21,500 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: WIN Primer: CCI 500, Small Pistol Col: .965″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	2.5	747	18,300 PSI	2.9	854	21,500 PSI

9MM LUGER

Barrel: 4″ Twist: 1:10″ Trim: .750″

Bullet: 65 GR. PLYCS ARX Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.155″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
W244	4.8	1400	27,000 PSI	5.5	1562	33,400 PSI
W231	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. PLYCS RNP Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.125″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W231	4.8	1384	26,300 PSI	5.6	1537	33,100 PSI
W244	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: WIN Primer: CCI 500, Small Pistol Col: 1.025″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Longshot	5.7	1239	31,100 PSI	6.6	1327	33,500 PSI
W572	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
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
W244	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
W231	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: WIN Primer: CCI 500, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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

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
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
W244	4.3	1114	27,200 PSI	4.9	1271	32,900 PSI
W231	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. HDY XTP Dia: .355″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.070″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	4.5	1176	31,300 PSI	5.0	1249	34,800 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: 90 GR. SPR GDHP Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.010″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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
W231	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
W244	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: 95 GR. BAR TAC-XP Dia: .355″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	4.1	1072	30,800 PSI	4.6	1156	34,200 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

Case: WIN Primer: CCI 500, Small Pistol Col: 1.125″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
Titegroup	3.9	1156	28,700 PSI	4.6	1299	33,200 PSI
W244	4.4	1158	26,100 PSI	5.0	1297	33,300 PSI
Longshot	5.5	1162	26,800 PSI	6.5	1277	27,900 PSI
HS-6	6.0	1104	24,900 PSI	6.7	1249	30,700 PSI
W231	4.1	1103	26,600 PSI	4.7	1240	32,600 PSI

Bullet: 95 GR. SIE FMJ Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.020″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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
W231	4.8	1189	26,300 CUP	5.3	1273	31,400 CUP
Universal	4.6	1182	26,800 CUP	5.2	1292	31,700 CUP
W244	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: 100 GR. SPR FMJ Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.050″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W231	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. BAR XPB Dia: .355″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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. BERB RNDS Dia: .355″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.130″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
No. 2	4.2	1043	31,400 PSI	4.7	1103	34,900 PSI
ZIP	4.1	1005	30,800 PSI	4.6	1089	34,200 PSI
Solo 1000	4.0	1004	30,700 PSI	4.4	1057	34,100 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. LC LRN Dia: .356″

Case: WIN Primer: WIN 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
Solo 1000	4.0	1066	31,500 PSI	4.5	1122	35,000 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. LRN Dia: .356″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.100″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
CFE Pistol	4.9	1124	28,800 PSI	5.4	1209	33,800 PSI
800-X	4.5	1004	24,000 PSI	5.3	1128	28,200 PSI
W572	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
W231	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
W244	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

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: 115 GR. NOS JHP **Dia: .355″**

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.100″**

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
Solo 1000	4.0	999	31,200 PSI	4.5	1053	34,700 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: WIN **Primer: WIN 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
Solo 1000	4.1	1030	31,400 PSI	4.6	1085	34,900 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: 115 GR. SPR GDHP **Dia: .355″**

Case: WIN **Primer: CCI 500, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
AutoComp	5.1	1078	28,200 PSI	5.6	1161	32,500 PSI
W231	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
W244	4.2	1071	25,400 PSI	4.7	1197	33,100 PSI
Clays	3.7	1066	30,900 CUP	3.9	1095	32,600 CUP

Bullet: 118 GR. LGH XD **Dia: .355″**

Case: WIN **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
W572	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
W244	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. BERB HBRN TP **Dia: .356″**

Case: WIN **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
W572	5.3	1131	27,200 PSI	5.8	1212	32,600 PSI
800-X	5.2	1060	27,700 PSI	5.7	1114	30,400 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
W244	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
W231	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. BERB RN **Dia: .355″**

Case: WIN **Primer: WIN 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
Solo 1000	3.6	892	30,900 PSI	4.0	978	34,400 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: WIN **Primer: WIN 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
Silhouette	4.6	945	29,700 PSI	5.4	1072	34,900 PSI
True Blue	4.7	892	29,500 PSI	5.5	1060	34,500 PSI
ZIP	3.3	888	31,400 PSI	3.7	967	34,900 PSI
No. 2	3.3	877	31,100 PSI	3.6	938	34,500 PSI
Solo 1000	3.2	868	31,400 PSI	3.6	935	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

Case: WIN **Primer: CCI 500, Small Pistol** **Col: 1.060″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Longshot	4.8	1051	26,200 PSI	6.2	1209	32,900 PSI
CFE Pistol	4.5	1061	27,300 PSI	5.1	1181	33,600 PSI
HS-6	5.6	1050	28,100 PSI	6.1	1136	33,100 PSI
W572	4.3	996	25,600 PSI	5.1	1126	32,500 PSI
Universal	4.0	993	25,400 PSI	4.5	1126	33,300 PSI
W244	3.7	968	26,000 PSI	4.2	1090	33,000 PSI
Titegroup	3.4	953	26,700 PSI	3.9	1069	32,800 PSI
W231	3.7	957	26,300 PSI	4.2	1050	33,600 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

Bullet: 124 GR. LC LRN **Dia: .356″**

Case: WIN **Primer: WIN 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
Solo 1000	3.3	950	31,000 PSI	3.7	1007	34,400 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. SPR GDHP **Dia: .355″**

Case: WIN **Primer: WIN 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

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	3.8	888	30,800 PSI	4.2	979	34,200 PSI
Solo 1000	3.4	847	31,100 PSI	3.8	941	34,600 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: WIN Primer: WIN 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
Solo 1000	3.1	827	29,500 PSI	3.6	945	34,300 PSI
Nitro 100 NF	2.6	761	29,300 PSI	3.0	864	33,800 PSI

Bullet: 125 GR. LCN Dia: .356″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.125″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
800-X	4.5	1015	24,900 PSI	5.0	1051	26,200 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
W231	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
W244	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: WIN Primer: CCI 500, Small Pistol Col: 1.090″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
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
Universal	4.3	1031	26,900 CUP	4.9	1118	30,600 CUP
W231	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
W244	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: WIN Primer: WIN SP, Small Pistol Col: 1.035″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	3.4	882	31,300 PSI	3.8	953	34,800 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: 135 GR. ACME RN CTD Dia: .356″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	5.3	969	27,100 PSI	5.9	1080	33,400 PSI
Longshot	4.5	964	25,000 PSI	5.5	1112	32,900 PSI
W572	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
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
W231	3.6	937	28,400 PSI	4.2	1028	33,200 PSI
W244	3.6	934	27,300 PSI	4.1	1044	33,200 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

Bullet: 145 GR. ACME RN CTD Dia: .356″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.150″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	4.5	852	25,500 PSI	5.3	995	33,100 PSI
Longshot	4.1	907	27,500 PSI	4.9	1049	33,200 PSI
W572	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
W244	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

Bullet: 147 GR. HDY XTP Dia: .355″

Case: WIN Primer: CCI 500, Small Pistol Col: 1.100″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
CFE Pistol	3.7	864	26,700 PSI	4.2	963	33,000 PSI
W572	3.5	855	25,600 PSI	4.1	957	32,200 PSI
800-X	3.5	808	25,600 PSI	4.0	883	28,900 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
W244	3.0	827	26,200 PSI	3.4	931	33,000 PSI
W231	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 LFP Dia: .356″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.145″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	3.2	867	30,700 PSI	3.5	923	34,100 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. SPR TMJ Dia: .355″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.130″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	5.3	818	29,600 PSI	6.2	948	34,900 PSI
No. 5	4.3	826	29,700 PSI	5.1	938	35,000 PSI
True Blue	4.0	819	29,400 PSI	4.7	932	34,600 PSI
Silhouette	4.2	880	31,300 PSI	4.7	955	34,800 PSI
No. 2	3.3	814	31,400 PSI	3.6	869	34,900 PSI
ZIP	3.2	784	31,100 PSI	3.5	857	34,500 PSI
Solo 1000	3.1	780	31,100 PSI	3.5	843	34,600 PSI
Nitro 100 NF	2.5	737	31,000 PSI	2.8	782	34,400 PSI
Competition	2.5	709	29,500 PSI	2.8	777	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%.

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure

38 SUPER AUTO +P

Barrel: 5″ Twist: 1:16″ Trim: .895″

Bullet: 90 GR. SFIRE RHFP Dia: .355″

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.260″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Silhouette	7.7	1441	32,800 PSI	8.5	1601	36,400 PSI
No. 5	7.7	1379	32,500 PSI	8.5	1532	36,100 PSI
True Blue	7.3	1344	32,700 PSI	8.1	1493	36,300 PSI
No. 2	6.1	1305	32,300 PSI	6.8	1450	35,900 PSI
ZIP	5.5	1310	32,300 PSI	6.1	1455	35,900 PSI

Bullet: 100 GR. SFIRE RHFP Dia: .355″

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.260″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	7.2	1287	32,400 PSI	8.0	1430	36,000 PSI
Silhouette	6.9	1333	32,200 PSI	7.7	1481	35,800 PSI
True Blue	6.6	1236	32,200 PSI	7.3	1373	35,800 PSI
No. 2	5.6	1204	32,500 PSI	6.2	1338	36,100 PSI
ZIP	5.0	1207	32,800 PSI	5.6	1341	36,400 PSI

Bullet: 100 GR. SPR JHP Dia: .355″

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.215″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	8.5	1284	25,500 CUP	9.4	1347	32,500 CUP
W231	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: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.245″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
AutoComp	5.7	1152	27,400 CUP	6.2	1238	32,000 CUP
W231	5.7	1198	29,000 CUP	6.1	1261	32,700 CUP
W244	5.2	1187	27,300 PSI	6.0	1317	34,900 PSI
800-X				5.9	1015	21,900 CUP
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. LC LRN Dia: .356″

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.240″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	9.9	1367	32,100 PSI	11.0	1519	35,700 PSI
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

Bullet: 115 GR. LRN Dia: .356″

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.250″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	7.8	1204	24,700 CUP	8.7	1307	31,100 CUP
Longshot	6.5	1180	20,400 CUP	7.3	1289	30,900 CUP
W572	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
W244	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
W231	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: WIN **Primer: WIN SP, Small Pistol** **Col: 1.240″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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. LGH XD Dia: .355″

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.260″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	4.6	993	28,300 PSI	5.2	1136	34,500 PSI
W231	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. BERB HBRN TP Dia: .356″

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.250″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	5.8	1160	26,100 PSI	6.7	1297	35,300 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
W244	5.0	1119	24,800 PSI	5.8	1255	34,800 PSI
W231	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: WIN **Primer: WIN SP, Small Pistol** **Col: 1.270″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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 LRN Dia: .356″

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.270″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Silhouette	6.5	1220	32,400 PSI	7.2	1355	36,000 PSI
True Blue	6.7	1193	31,600 PSI	7.4	1326	35,100 PSI

Bullet: 125 GR. CAST LCN Dia: .356″

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.230″**

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W231	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
W244	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

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
Clays	3.9	1014	27,300 CUP	4.4	1063	31,600 CUP

Bullet: 125 GR. HDY HAP **Dia: .356″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.210″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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
W244	4.6	1103	27,200 PSI	5.4	1234	34,900 PSI
W231	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″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.275″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	5.9	1171	27,700 PSI	6.7	1287	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
W244	4.9	1092	26,100 PSI	5.8	1250	35,100 PSI
W231	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. BERB RN **Dia: .355″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.270″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	10.5	1119	25,400 CUP	12.0C	1204	28,300 CUP
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
AutoComp	5.3	1035	25,800 CUP	5.8	1109	31,100 CUP
W244	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″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.275″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	5.4	1133	26,300 PSI	6.1	1236	34,600 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
W231	4.8	1045	27,600 CUP	5.4	1120	31,900 CUP
W244	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″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.260″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
LIL'GUN	10.0	1111	22,200 CUP	11.0	1207	28,100 CUP
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
W572	5.2	1052	29,400 PSI	5.9	1147	34,700 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
W244	4.4	982	26,700 PSI	5.1	1110	34,200 PSI
W231	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 LRN **Dia: .356″**

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.270″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Silhouette	6.0	1096	32,400 PSI	6.7	1218	36,000 PSI
True Blue	6.0	1063	31,900 PSI	6.7	1181	35,400 PSI
No. 2	4.6	1026	30,900 PSI	5.4	1112	36,200 PSI

Bullet: 147 GR. SPR TMJ **Dia: .355″**

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.270″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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. CAST LRN **Dia: .356″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.230″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W231	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
W244	3.9	967	26,700 PSI	4.5	1076	34,400 PSI

Bullet: 150 GR. SIE JFP **Dia: .356″**

Case: REM **Primer: REM 1 1/2, Small Pistol** **Col: 1.265″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W231	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. PLYCS ARX **Dia: .357″**

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.475″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
W244	4.6	1197	13,100 PSI	5.4	1359	16,900 PSI
W231	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

Bullet: 84 GR. PLYCS RNP **Dia: .357″**

Case: WIN **Primer: WIN SP, Small Pistol** **Col: 1.475″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
W231	5.4	1230	13,600 PSI	6.0	1338	16,200 PSI
W244	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

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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure

Bullet: 90 GR. CAST LRNFP   Dia: .358″

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.325″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Trail Boss	3.0	740	7,800 PSI	5.0	904	8,100 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. LGH XD   Dia: .357″

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.530″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	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: WIN   Primer: WIN SP, Small Pistol   Col: 1.430″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	4.1	622	14,100 PSI	4.4	789	16,200 PSI

Bullet: 110 GR. BAR TAC-XP   Dia: .357″

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.500″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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   Primer: WIN SP, Small Pistol   Col: 1.455″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.455″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	5.0	1070	12,700 PSI	5.6	1205	16,900 PSI
Universal	5.0	968	11,800 CUP	5.6	1143	16,700 CUP
W231	4.6	948	12,600 CUP	5.5	1096	16,300 CUP
Titegroup	4.3	1011	12,100 CUP	4.8	1109	16,000 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   Primer: WIN SP, Small Pistol   Col: 1.435″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Solo 1000	4.3	1013	15,300 PSI	4.8	1083	17,000 PSI
Nitro 100 NF	3.3	909	15,200 PSI	3.6	978	16,800 PSI

Bullet: 120 GR. LGH XD   Dia: .357″

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.440″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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   Primer: WIN SP, Small Pistol   Col: 1.455″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN   Primer: WIN SP, Small Pistol   Col: 1.445″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	5.0	972	13,300 PSI	5.8	1112	16,000 PSI
Trail Boss	3.0	753	11,600 PSI	5.3	952	13,400 PSI
W244	4.4	994	13,400 PSI	5.2	1142	16,600 PSI
W231	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   Primer: WIN SP, Small Pistol   Col: 1.455″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	6.1	981	14,900 PSI	6.8	1081	16,700 PSI
Silhouette	5.8	1039	15,600 PSI	6.2	1109	16,800 PSI
True Blue	5.6	995	15,300 PSI	6.2	1081	16,900 PSI
No. 2	4.3	933	15,100 PSI	4.8	1017	16,900 PSI

Case: WIN   Primer: WIN SP, Small Pistol   Col: 1.455″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Universal	4.7	918	12,600 CUP	5.2	1019	17,000 CUP
W244	4.7	951	14,000 PSI	5.2	1077	16,600 PSI
W231	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 LFN   Dia: .358″

Case: Starline   Primer: WIN SP, Small Pistol   Col: 1.440″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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. SIE JHC   Dia: .357″

Case: Starline   Primer: WIN SP, Small Pistol   Col: 1.447″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	6.1	966	15,200 PSI	6.8	1055	17,000 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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 LRNFP Dia: .358″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.460″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	4.6	1035	14,000 PSI	5.1	1129	16,800 PSI
W231	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

Bullet: 135 GR. CAST LRNFP Dia: .358″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.418″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W244	4.2	968	13,300 PSI	4.8	1067	15,900 PSI
W231	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: WIN Primer: WIN SP, Small Pistol Col: 1.450″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	4.2	955	13,600 PSI	4.9	1072	16,800 PSI
W231	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
Trail Boss	3.0	697	11,200 PSI	3.7	806	13,400 PSI
Clays	2.5	706	10,700 PSI	3.4	862	16,200 PSI

Bullet: 140 GR. HDY XTP Dia: .357″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.445″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	5.5	889	14,800 PSI	6.2	976	16,600 PSI
Silhouette	5.3	937	15,500 PSI	5.6	1003	16,500 PSI
True Blue	5.1	886	15,200 PSI	5.6	974	16,800 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
W572	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
W231	4.2	809	13,900 CUP	4.6	861	15,800 CUP
W244	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 LFN Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.445″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
ZIP	4.1	945	15,000 PSI	4.5	1050	16,600 PSI
Competition	3.1	850	15,100 PSI	3.4	944	16,800 PSI

Bullet: 140 GR. LC LFP Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.435″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN SP, Small Pistol Col: 1.445″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN SP, Small Pistol Col: 1.370″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W231	4.0	773	12,700 CUP	4.5	876	15,500 CUP
W244	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: WIN Primer: WIN SP, Small Pistol Col: 1.160″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W231	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
W572	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
W244	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
Clays	2.3	784	10,900 CUP	2.5	836	13,200 CUP
Trail Boss	2.0	625	15,100 PSI	2.3	675	15,700 PSI

Bullet: 148 GR. LC L WCDBB Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 2	2.6	634	13,900 PSI	2.9	720	15,500 PSI
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
Solo 1000	2.8	796	15,100 PSI	3.1	851	16,800 PSI

Bullet: 148 GR. LC LBBWC Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.231″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
ZIP	3.2	835	14,900 PSI	3.6	928	16,500 PSI
Competition	2.3	727	14,800 PSI	2.5	808	16,400 PSI

Bullet: 150 GR. NOS JHP Dia: .357″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.450″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	5.9	715	15,100 PSI	6.5	813	16,600 PSI
No. 2	4.2	751	15,200 PSI	4.7	853	17,000 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%.

Bullet: 158 GR. BERB FP Dia: .357″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	5.2	807	15,000 PSI	5.8	897	16,800 PSI
Silhouette	4.8	817	15,200 PSI	5.3	891	16,700 PSI
True Blue	4.6	754	15,000 PSI	5.2	837	16,900 PSI
No. 2	3.6	709	14,500 PSI	4.0	800	16,300 PSI

Bullet: 158 GR. CAST LSWC Dia: .358″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.475″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	9.0	887	12,100 CUP	10.0	983	15,700 CUP
HS-6	5.7	928	13,700 CUP	6.3	1010	16,200 CUP
CFE Pistol	4.8	960	13,900 PSI	5.3	1048	16,100 PSI
AutoComp	4.8	870	14,300 PSI	5.3	984	16,800 PSI
W572	3.7	776	13,400 PSI	4.5	926	16,400 PSI
Universal	3.5	756	9,600 CUP	4.5	974	16,700 CUP
Trail Boss	2.7	661	11,400 PSI	4.2	804	13,700 PSI
W244	3.6	862	13,400 PSI	4.0	955	16,100 PSI
Titegroup	3.2	815	11,500 CUP	3.8	920	15,400 CUP
W231	3.1	782	11,900 CUP	3.7	834	14,600 CUP
WST	3.3	705	12,800 PSI	3.7	770	15,700 PSI
Clays	2.8	812	12,900 CUP	3.1	871	15,100 CUP

Bullet: 158 GR. HDY XTP Dia: .357″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.455″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	5.2	740	14,800 PSI	5.8	841	16,500 PSI
Silhouette	5.2	902	15,200 PSI	5.6	969	16,400 PSI
True Blue	4.8	813	14,900 PSI	5.3	903	16,600 PSI
ZIP	3.7	756	14,700 PSI	4.1	840	16,400 PSI
No. 2	3.6	665	14,900 PSI	4.0	756	16,500 PSI
Competition	2.9	665	15,100 PSI	3.2	739	16,700 PSI

Case: WIN Primer: WIN SP, Small Pistol Col: 1.455″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	9.0	769	12,400 CUP	10.0	864	15,500 CUP
HS-6	5.6	761	13,400 CUP	6.2	862	16,300 CUP
CFE Pistol	4.6	816	13,600 PSI	5.0	914	16,200 PSI
AutoComp	4.5	751	14,000 PSI	4.9	865	16,800 PSI
W572	3.8	574	13,300 PSI	4.5	770	16,600 PSI
Universal	4.0	678	12,600 CUP	4.4	778	16,200 CUP
W231	3.8	661	12,600 CUP	4.3	779	15,900 CUP
Titegroup	3.5	704	12,400 CUP	3.9	798	15,900 CUP
W244	3.4	665	14,300 PSI	3.8	772	16,200 PSI
700-X	3.2	688	13,000 PSI	3.7	798	15,900 PSI
Clays	3.0	633	13,400 CUP	3.1	721	16,600 CUP

Bullet: 158 GR. LC LSWC Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.470″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Silhouette	5.2	972	15,500 PSI	5.6	1046	16,700 PSI
True Blue	5.0	912	14,800 PSI	5.6	1013	16,500 PSI
ZIP	3.8	870	14,800 PSI	4.2	967	16,400 PSI
Solo 1000	3.2	813	15,000 PSI	3.6	871	16,800 PSI
Nitro 100 NF	2.4	737	14,400 PSI	2.7	789	16,300 PSI

Bullet: 158 GR. MCB LSWC Dia: .358″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.481″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	5.3	827	14,500 PSI	5.9	940	16,100 PSI
No. 2	3.6	764	12,700 PSI	4.0	868	14,100 PSI

Bullet: 158 GR. MEI CAST LSWC Dia: .358″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.475″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE Pistol	4.4	927	13,800 PSI	5.0	1029	16,700 PSI
700-X	3.0	795	13,700 PSI	3.4	867	15,800 PSI

Bullet: 158 GR. NOS HP Dia: .357″

Case: Starline Primer: WIN SP, Small Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	5.0	795	14,800 PSI	5.6	882	16,600 PSI
Silhouette	4.8	841	15,300 PSI	5.2	913	16,600 PSI
True Blue	4.6	797	15,300 PSI	5.1	879	16,800 PSI
No. 2	3.6	718	15,000 PSI	4.0	806	16,500 PSI

Bullet: 170 GR. SIE JHC Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.450″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	8.8	762	12,900 CUP	9.8	888	15,900 CUP
HS-6	5.3	710	12,200 CUP	5.9	832	16,100 CUP
AutoComp	4.3	736	14,300 PSI	4.8	820	16,000 PSI
Universal	3.8	744	14,100 CUP	4.2	823	16,100 CUP
W231	3.8	683	12,200 CUP	4.1	752	15,800 CUP
Titegroup	3.0	635	11,100 CUP	3.6	764	16,000 CUP
700-X	3.1	639	14,100 PSI	3.5	735	16,700 PSI

38 SPECIAL +P

Barrel: 7.7″ Twist: 1:18.75″ Trim: 1.145″

Bullet: 77 GR. PLYCS ARX Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.475″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572				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
W244				5.5	1389	17,800 PSI
W231				5.4	1355	17,600 PSI
Titegroup				5.1	1412	18,300 PSI

Bullet: 84 GR. PLYCS RNP Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.475″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572				7.6	1515	18,100 PSI
AutoComp				7.5	1506	18,200 PSI
CFE Pistol				7.4	1516	18,100 PSI
Universal				6.5	1469	18,100 PSI
W231				6.1	1392	18,200 PSI
W244				6.0	1424	17,900 PSI
Titegroup				5.6	1416	17,800 PSI

Bullet: 100 GR. LGH XD Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.530″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6				9.4	1267	18,300 PSI
Longshot				7.8	1268	17,900 PSI
AutoComp				7.3	1224	18,000 PSI
W572				7.1	1205	17,600 PSI
CFE Pistol				7.0	1222	17,800 PSI
Universal				7.0	1222	18,200 PSI
W244				5.9	1136	18,100 PSI
Titegroup				5.4	1110	18,500 PSI

Bullet: 105 GR. CEB RAPTOR Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6				6.9	1007	18,300 PSI
Longshot				6.5	1071	18,200 PSI
W572				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
W244				4.7	929	18,200 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Bullet: 110 GR. BAR TAC-XP Dia: .357″						
Case: WIN Primer: WIN 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
W572				6.0	1173	18,500 PSI
CFE Pistol				6.0	1199	18,500 PSI
Universal				6.0	1130	18,300 PSI
Bullet: 110 GR. BAR XPB Dia: .357″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.515″						
No. 7				8.1	1165	18,100 PSI
No. 5				6.6	1140	17,900 PSI
Silhouette				6.3	1165	18,300 PSI
True Blue				6.2	1081	18,100 PSI
ZIP				4.9	1019	18,100 PSI
No. 2				4.6	1005	18,100 PSI
Bullet: 110 GR. HDY XTP Dia: .357″						
Case: WIN Primer: WIN 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
W572				6.6	1216	18,400 PSI
W244				6.2	1274	18,400 PSI
Universal				6.0	1204	18,700 CUP
W231				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: REM Primer: WIN SP, Small Pistol Col: 1.435″						
No. 5				7.9	1302	20,000 PSI
True Blue				7.4	1279	19,800 PSI
Silhouette				7.1	1304	19,800 PSI
No. 2				5.3	1183	20,000 PSI
Solo 1000				5.2	1153	20,000 PSI
Nitro 100 NF				4.0	1053	20,000 PSI
Bullet: 120 GR. LGH XD Dia: .357″						
Case: WIN Primer: WIN SP, Small Pistol Col: 1.440″						
HS-6				7.3	913	17,900 PSI
Longshot				6.6	964	18,100 PSI
AutoComp				5.5	849	18,100 PSI
W572				5.4	835	18,400 PSI
Universal				5.4	774	17,400 PSI
CFE Pistol				5.3	886	18,300 PSI
Bullet: 125 GR. HDY HP/XTP Dia: .357″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.455″						
No. 5				7.5	1184	19,800 PSI
True Blue				6.9	1174	20,000 PSI
Silhouette				6.7	1188	20,000 PSI
No. 2				5.3	1098	19,900 PSI
Bullet: 125 GR. HDY XTP Dia: .357″						
Case: WIN Primer: WIN 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
W244				5.6	1124	18,400 PSI
Universal				5.4	1072	18,900 CUP
W231				5.3	1018	19,800 CUP
Titegroup				5.0	1069	18,700 CUP
700-X				4.4	1023	18,100 PSI
Bullet: 125 GR. RAIN HP Dia: .357″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.440″						
No. 5				7.8	1204	19,300 PSI
True Blue				7.2	1200	19,800 PSI
Silhouette				7.1	1232	20,000 PSI
ZIP				5.5	1121	20,000 PSI
No. 2				5.1	1074	19,800 PSI
Solo 1000				5.0	1054	20,000 PSI
Nitro 100 NF				3.9	954	20,000 PSI
Bullet: 125 GR. REM GSBR Dia: .357″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.440″						
No. 5				7.8	1219	20,000 PSI
Silhouette				7.1	1226	19,800 PSI
True Blue				7.0	1199	20,000 PSI
No. 2				5.4	1119	19,800 PSI
Bullet: 140 GR. HDY XTP Dia: .357″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.440″						
No. 5				6.8	1071	19,900 PSI
True Blue				6.3	1071	19,900 PSI
Silhouette				6.2	1095	20,000 PSI
No. 2				4.7	979	19,600 PSI
Case: WIN Primer: WIN 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
W572				5.7	987	18,600 PSI
AutoComp				5.7	1031	18,000 PSI
Universal				5.1	1022	19,100 CUP
W244				4.9	994	17,900 PSI
W231				4.9	892	18,600 CUP
Titegroup				4.6	984	19,300 CUP
700-X				4.1	913	18,200 PSI
Bullet: 140 GR. LC LFP Dia: .358″						
Case: REM Primer: WIN SP, Small Pistol Col: 1.435″						
No. 5				6.8	1128	20,000 PSI
Silhouette				6.1	1150	19,800 PSI
True Blue				6.0	1116	19,900 PSI
No. 2				4.7	1055	20,000 PSI
Nitro 100 NF				3.4	948	20,000 PSI
Bullet: 146 GR. SPR JHP Dia: .357″						
Case: WIN Primer: WIN 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
W231				4.9	975	17,700 CUP
Universal				4.7	987	18,100 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
Titegroup				4.4	981	19,300 CUP
W244				4.3	924	18,200 PSI
700-X				3.8	854	17,400 PSI

Bullet: 148 GR. BERB DEWC Dia: .357″

Case: REM Primer: WIN SP, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5				5.0	843	19,900 PSI
Silhouette				4.6	883	19,900 PSI
True Blue				4.4	818	19,900 PSI

Bullet: 148 GR. LC LWC SGG Dia: .357″

Case: REM Primer: WIN SP, Small Pistol Col: 1.231″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Solo 1000				3.5	914	19,900 PSI
Nitro 100 NF				2.7	856	20,000 PSI

Bullet: 158 GR. BERB FP Dia: .357″

Case: REM Primer: WIN SP, Small Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5				6.4	980	19,900 PSI
Silhouette				5.8	985	19,900 PSI
True Blue				5.7	920	19,900 PSI
No. 2				4.4	880	19,900 PSI
ZIP				4.3	849	19,900 PSI
Solo 1000				4.0	796	19,800 PSI
Nitro 100 NF				3.3	712	20,000 PSI

Bullet: 158 GR. HDY XTP Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.455″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227				11.0	964	17,600 CUP
HS-6				6.6	926	18,700 CUP
Longshot				5.5	965	17,000 PSI
CFE Pistol				5.4	986	18,500 PSI
AutoComp				5.0	885	17,000 PSI
Universal				4.7	837	19,200 CUP
W231				4.6	807	18,100 CUP
Titegroup				4.3	905	19,300 CUP
W244				4.0	815	17,800 PSI
700-X				4.0	866	18,500 PSI

Bullet: 158 GR. LC LSWC Dia: .358″

Case: REM Primer: WIN SP, Small Pistol Col: 1.460″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Solo 1000				4.0	941	20,000 PSI
Nitro 100 NF				3.0	851	19,300 PSI

Bullet: 158 GR. NOS HP Dia: .357″

Case: REM Primer: WIN SP, Small Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5				6.2	983	19,900 PSI
True Blue				5.7	978	20,000 PSI
Silhouette				5.6	1002	19,900 PSI
No. 2				4.3	889	19,900 PSI

Bullet: 170 GR. SIE JHC Dia: .357″

Case: WIN Primer: WIN SP, Small Pistol Col: 1.450″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W231				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

Bullet: 230 GR. BADMAN L B-PIN Dia: .357″

Case: REM Primer: WIN SP, Small Pistol Col: 1.460″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7				5.2	767	20,000 PSI
No. 5				4.4	740	20,000 PSI

Bullet: 230 GR. PENN L T-HEAD Dia: .358″

Case: REM Primer: WIN SP, Small Pistol Col: 1.505″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9				6.7	855	20,000 PSI
True Blue				4.0	723	19,900 PSI

357 SIG

Barrel: 4″ Twist: 1:16″ Trim: .860″

Bullet: 90 GR. CEB RAPTOR Dia: .355″

Case: FED Primer: WIN SP, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	8.8	1411	29,900 PSI	10.1	1591	37,800 PSI
W572	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
W244	6.3	1374	30,000 PSI	7.4	1566	38,800 PSI
W231	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: FED Primer: WIN SP, Small Pistol Col: 1.135″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	9.8	1484	28,200 PSI	10.8	1634	38,700 PSI
W572	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
W244	7.2	1468	27,000 PSI	8.1	1629	37,900 PSI
W231	6.6	1404	29,000 PSI	7.3	1509	37,500 PSI

Bullet: 95 GR. BAR TAC-XP Dia: .355″

Case: FED Primer: WIN SP, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	8.8	1410	29,400 PSI	10.1	1593	38,200 PSI
W572	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
W244	6.3	1378	29,200 PSI	7.3	1555	38,600 PSI
W231	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 LC LRN Dia: .356″

Case: Win Primer: WIN SP, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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	34,600 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: Win Primer: WIN SP, Small Pistol Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

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. BAR TAC-XP Dia: .355″						
Case: FED	**Primer: WIN 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
W572	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
W244	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
W231	5.2	1162	30,000 PSI	6.0	1277	38,200 PSI
Bullet: 115 GR. HDY XTP Dia: .355″						
Case: FED	**Primer: WIN 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
W572	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
W244	6.1	1272	28,900 PSI	6.9	1387	38,300 PSI
Bullet: 118 GR. LGH XD Dia: .355″						
Case: FED	**Primer: WIN 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
W572	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
W244	5.4	1139	28,800 PSI	6.5	1288	39,100 PSI
W231	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: FED	**Primer: WIN 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
W572	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
W244	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 XPB Dia: .355″						
Case: Win	**Primer: WIN 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: Win	**Primer: WIN 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: Win	**Primer: WIN 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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 125 GR. BAR TAC-XP Dia: .355″						
Case: FED	**Primer: WIN 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
W572	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
W244	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. SPR GD-HP Dia: .355″						
Case: FED	**Primer: WIN SP, Small Pistol**				**Col: 1.135″**	
800-X				10.0C	1438	36,100 PSI
W572	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
W244	6.1	1196	27,400 PSI	7.0	1340	38,100 PSI
Bullet: 147 GR HDY XTP Dia: .355″						
Case: Win	**Primer: WIN 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
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
Bullet: 147 GR LC LRN Dia: .356″						
Case: Win	**Primer: WIN SP, Small Pistol**				**Col: 1.140″**	
No. 9	9.4	1029	29,500 PSI	10.5	1170	33,000 PSI
No. 7	8.6	1071	35,800 PSI	9.6	1218	40,000 PSI
Bullet: 147 GR MCB L RNBB Dia: .356″						
Case: Win	**Primer: WIN SP, Small Pistol**				**Col: 1.140″**	
No. 2	4.2	923	32,900 PSI	4.7	1049	36,800 PSI
Bullet: 147 GR. HDY XTP Dia: .355″						
Case: FED	**Primer: WIN SP, Small Pistol**				**Col: 1.140″**	
800-X				9.0	1317	38,000 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
W572	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
W244	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

357 MAG

Barrel: 10″ Twist: 1:18.75″ Trim: 1.285″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 110 GR. HDY XTP Dia: .357″						
Case: WIN	**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**	
No. 9	15.3	1478	30,900 PSI	16.9	1677	34,100 PSI
ZIP	7.7	1373	28,700 PSI	8.6	1525	32,100 PSI
No. 2	7.2	1227	29,600 PSI	8.4	1374	34,900 PSI
Bullet: 110 GR. SIE JHC Dia: .357″						
Case: WIN	**Primer: WIN SPM, Small P Mag**				**Col: 1.575″**	
No. 7	11.6	1362	29,200 PSI	12.9	1548	32,500 PSI
No. 5	9.9	1355	29,200 PSI	11.0	1540	32,400 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: 125 GR. BAR XPB		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.585″**
Enforcer	14.9	1575	31,100 PSI	16.5	1750	34,500 PSI
A-4100	14.7	1372	30,600 PSI	16.4	1525	34,000 PSI
No. 9	12.6	1399	30,000 PSI	14.0	1554	33,300 PSI
No. 7	9.0	1220	30,600 PSI	10.0	1355	34,000 PSI
No. 5	7.5	1166	30,600 PSI	8.3	1295	34,000 PSI
Bullet: 125 GR. HDY XTP		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
Enforcer	16.2	1500	29,300 PSI	18.0	1667	32,600 PSI
A-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
No. 5	9.6	1273	30,200 PSI	10.6	1446	33,400 PSI
No. 2	6.8	1096	29,600 PSI	8.0	1248	34,900 PSI
Bullet: 125 GR. LC LFP		**Dia: .358″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.575″**
True Blue	7.7	1246	29,600 PSI	9.1	1414	34,900 PSI
No. 2	6.4	1178	29,700 PSI	7.6	1307	35,000 PSI
ZIP	6.0	1142	29,700 PSI	7.0	1294	35,000 PSI
Solo 1000	5.9	1112	29,700 PSI	7.0	1236	35,000 PSI
Bullet: 125 GR. RAIN HP		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.560″**
No. 2	6.7	1125	29,200 PSI	7.9	1270	34,300 PSI
Solo 1000	6.3	1077	29,100 PSI	7.4	1213	34,200 PSI
ZIP	6.2	1097	29,600 PSI	7.3	1263	34,800 PSI
Bullet: 130 GR. MEI CAST LRNFP				**Dia: .358″**		
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
W244	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: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
W572	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
W244	4.7	1114	16,700 PSI	6.4	1360	26,400 PSI
W231	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: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.590″**
Enforcer	13.1	1377	30,600 PSI	14.5	1530	34,000 PSI
A-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. SIE JHC		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
Enforcer	14.4	1311	30,800 PSI	16.0	1457	34,200 PSI
A-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
Bullet: 140 GR. SIE JHP		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	9.1	1202	30,400 PSI	10.1	1366	33,700 PSI
Bullet: 140 GR. HDY CBOY		**Dia: .358″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.550″**
AutoComp	3.6	793	8,800 PSI	4.3	883	9,900 PSI
W572	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
W231	2.9	718	8,500 PSI	3.7	897	11,200 PSI
W244	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: WIN		**Primer: WIN SPM, Small P 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
W572	5.9	1144	23,200 PSI	7.2	1371	33,400 PSI
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
W244	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: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.590″**
W296	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
W572	6.9	1210	24,000 PSI	8.5	1442	33,700 PSI
W231	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	34700 PSI
W244	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. LGH XP		**Dia: .357″**				
Case: WIN		**Primer: WIN SPM, Small P Mag**				**Col: 1.580″**
Lil'Gun	15.5	1425	23,700 PSI	18.7	1639	27,500 PSI
W296	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
W572	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
W244	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

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: 146 GR. SPR JHP Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.535″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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
W572	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
W231	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
W244	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: 147 GR. MCB LFPBB Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.580″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9	11.9	1151	29,600 PSI	13.2	1308	32,800 PSI
No. 7	9.5	1085	31,100 PSI	10.5	1234	34,300 PSI

Bullet: 148 GR. HDY LHBWC Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.290″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
AutoComp	4.0	943	18,000 PSI	4.7	1064	24,300 PSI
W572	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
W244	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
W231	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: WIN Primer: WIN SPM, Small P Mag Col: 1.610″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	6.0	990	12,900 CUP	7.0	1106	15,500 CUP
W572	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
Universal	4.0	890	15,700 CUP	6.2	1247	33,400 CUP
W244	3.9	922	14,800 PSI	6.0	1250	27,800 PSI
W231	3.4	796	12,600 CUP	5.0	1109	23,900 CUP
Titegroup	4.5	1028	19,300 CUP	5.0	1108	24,900 CUP
700-X	3.4	867	13,100 PSI	4.9	1137	24,400 PSI
Clays	3.2	867	14,400 CUP	4.6	1079	33,600 CUP
Trail Boss	3.2	754	16,500 CUP	4.2	865	20,400 CUP

Bullet: 158 GR. HDY XTP Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.580″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	16.0	1504	24,100 CUP	18.0	1577	25,800 CUP
W296	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
A-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
No. 5	8.6	1097	29,400 PSI	9.7	1256	33,200 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
W572	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
W231	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
W244	5.5	1061	26,200 PSI	6.2	1204	33,100 PSI
Titegroup	5.4	1135	32,600 CUP	6.1	1229	41,900 CUP
700-X	4.5	949	21,900 PSI	5.7	1149	31,200 PSI

Bullet: 158 GR. LC LSWC Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.580″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9	11.2	1104	29,100 PSI	12.4	1255	32,200 PSI
No. 7	9.1	1041	29,900 PSI	10.1	1183	33,200 PSI
No. 5	8.0	1100	30,700 PSI	9.0	1220	34,500 PSI

Bullet: 165 GR. CEB SOLID Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.570″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	14.0	1259	25,800 PSI	17.0	1444	28,400 PSI
IMR 4227	12.0	773	25,600 PSI	14.4C	1082	32,700 PSI
W296	12.5	1071	25,200 PSI	14.1	1277	32,400 PSI
H110	12.5	1071	25,200 PSI	14.1	1277	32,400 PSI
HS-6	6.8	751	24,200 PSI	7.9	1038	32,900 PSI
Longshot	6.0	740	23,300 PSI	7.0	1032	32,700 PSI
W572	5.9	681	25,700 PSI	6.8	999	33,000 PSI
AutoComp	5.8	681	23,500 PSI	6.7	971	33,300 PSI
CFE Pistol	5.7	671	24,000 PSI	6.6	956	33,200 PSI
W244	5.0	598	25,400 PSI	5.8	865	33,000 PSI

Bullet: 170 GR. SIE FMJ Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.585″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	13.7	1134	28,800 PSI	16.1	1364	33,900 PSI
No. 9	11.2	1092	31,700 PSI	12.4	1241	35,100 PSI
TCM	10.2	992	28,400 PSI	12.0	1201	33,400 PSI
No. 7	8.7	1010	31,200 PSI	9.7	1147	34,800 PSI

Bullet: 170 GR. SIE JHC Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.580″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	15.0	1422	25,100 CUP	17.0	1576	35,500 CUP
W296	14.0	1328	25,900 CUP	15.5	1497	40,800 CUP
H110	14.0	1328	25,900 CUP	15.5	1497	40,800 CUP
H4227	13.0	1272	32,300 CUP	14.5	1395	41,200 CUP
HS-6	8.0	1181	30,900 CUP	9.2	1321	42,900 CUP
Longshot	6.8	1182	32,700 CUP	7.9	1322	42,600 CUP
Titegroup	5.4	1031	34,700 CUP	6.0	1156	41,800 CUP
700-X	4.0	833	22,100 PSI	5.2	1107	32,200 PSI

Bullet: 180 GR. CPB LWFNGC Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.575″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9	10.4	1008	28,100 PSI	11.6	1145	31,400 PSI
No. 7	8.3	938	30,500 PSI	9.2	1067	33,900 PSI
ZIP	5.6	1042	29,500 PSI	6.2	1158	32,700 PSI

Bullet: 180 GR. NOS PART Dia: .357″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.575″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	13.0	1279	27,500 CUP	15.0	1422	34,500 CUP
H4227	12.7	1247	36,900 CUP	13.7	1308	40,900 CUP
W296	13.0	1352	36,800 CUP	13.5	1396	39,100 CUP
H110	13.0	1352	36,800 CUP	13.5	1396	39,100 CUP
Longshot	6.1	1025	32,700 CUP	7.2	1167	41,700 CUP
W572	5.4	882	27,100 PSI	6.1	1024	33,700 PSI
AutoComp	5.3	869	27,700 PSI	5.9	997	33,700 PSI
CFE Pistol	5.2	903	27,200 PSI	5.8	1018	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%.

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Titegroup	5.0	948	38,100 CUP	5.5	1020	40,300 CUP
W244	4.4	763	25,800 PSI	5.2	934	32,900 PSI
700-X	4.0	668	25,500 PSI	4.7	846	32,500 PSI

Bullet: 187 GR. CPB LFNGC Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4100	11.7	1074	29,700 PSI	13.8	1222	35,000 PSI
Enforcer	11.7	1074	29,700 PSI	13.8	1222	35,000 PSI
No. 9	9.5	1047	29,700 PSI	11.1	1195	35,000 PSI
No. 7	7.4	935	29,700 PSI	8.7	1091	34,900 PSI
No. 5	6.8	922	29,600 PSI	8.0	1064	34,800 PSI
True Blue	6.3	929	29,200 PSI	7.4	1063	34,400 PSI
No. 2	5.2	855	29,700 PSI	6.1	963	35,000 PSI
ZIP	4.8	827	29,100 PSI	5.6	945	34,300 PSI
Solo 1000	4.6	791	29,300 PSI	5.4	886	34,500 PSI

Bullet: 200 GR. CPB LWLNGC Dia: .358″

Case: WIN Primer: WIN SPM, Small P Mag Col: 1.615″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	12.0	1092	29,300 PSI	14.1	1272	34,500 PSI
TCM	9.3	997	28,800 PSI	10.9	1158	33,900 PSI
No. 2	4.6	781	29,700 PSI	5.4	884	34,900 PSI

9 x 18mm Makarov

Barrel: 4″ Twist: 1:10″ Trim: .708″

Bullet: 90 GR. SPR FP Dia: .364″

Case: WIN Primer: WIN SP, Small Pistol Col: .970″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W231	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: WIN Primer: WIN SP, Small Pistol Col: .965″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Universal	3.6	923	20,100 PSI	4.0	1030	23,800 PSI
W231	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. PLYCS ARX Dia: .400″

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.135″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W572	9.1	1469	25,200 PSI	10.8	1673	33,200 PSI
AutoComp	8.0	1440	25,500 PSI	9.3	1652	32,700 PSI
CFE Pistol	8.0	1503	27,200 PSI	9.2	1668	33,200 PSI
Universal	6.6	1424	26,300 PSI	7.8	1607	32,400 PSI
W244	5.8	1332	24,900 PSI	6.8	1520	33,200 PSI
W231	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. PLYCS RNP Dia: .400″

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.135″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W572	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
W244	5.6	1285	25,000 PSI	6.6	1458	33,200 PSI
W231	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: 105 GR. SFIRE RHFP Dia: .400″

Case: Win Primer: WIN SP, Small Pistol Col: 1.120″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Silhouette	8.3	1306	30,800 PSI	9.2	1451	34200 PSI
No. 5	8.1	1201	29,900 PSI	9.0	1334	33,200 PSI
True Blue	7.4	1168	29,800 PSI	8.2	1298	33,100 PSI
No. 2	5.6	1136	30,900 PSI	6.2	1262	34,300 PSI

Bullet: 115 GR. LGH XD Dia: .400″

Case: Win Primer: WIN SP, Small Pistol Col: 1.125″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.125″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	5.8	1173	27,200 PSI	6.6	1315	33,300 PSI
W231	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

Bullet: 120 GR. CEB RAPTOR Dia: .400″

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.120″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W572	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
W244	4.8	1035	26,900 PSI	5.4	1151	33,100 PSI
W231	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: 125 GR. SFIRE Dia: .400″

Case: Win Primer: WIN SP, Small Pistol Col: 1.120″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	6.5	1013	30,900 PSI	7.2	1125	34,300 PSI
Silhouette	6.2	1040	29,400 PSI	6.9	1156	32,700 PSI
True Blue	5.8	970	29,800 PSI	6.4	1078	33,100 PSI
No. 2	4.6	949	31,300 PSI	5.1	1054	34,700 PSI

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.120″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W572	5.8	1120	28,300 PSI	6.8	1229	33,200 PSI
CFE Pistol	5.6	1077	21,800 PSI	6.4	1237	32,800 PSI
W244	4.8	1100	26,100 PSI	5.5	1221	32,600 PSI
W231	4.8	1060	29,500 PSI	5.4	1132	31,500 PSI
Universal	4.7	1059	23,500 PSI	5.3	1172	32,300 PSI
700-X	4.6	1069	27,900 PSI	5.2	1143	31,200 PSI
Titegroup	4.3	1041	24,700 PSI	4.8	1145	31,300 PSI

Bullet: 135 GR. NOS JHP Dia: .400″

Case: Win Primer: WIN SP, Small Pistol Col: 1.125″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Case: Hornady Primer: WIN SP, Small Pistol Col: 1.125″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W572	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
W231	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
W244	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

Bullet: 135 GR. RAIN FP   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.115″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	9.4	1148	29,100 PSI	11.1	1293	34,200 PSI
No. 5	8.1	1102	29,600 PSI	9.5	1270	34,900 PSI
Silhouette	7.4	1139	29,600 PSI	8.7	1309	34,900 PSI
True Blue	7.2	1087	29,700 PSI	8.4	1250	35,000 PSI
No. 2	5.7	1106	29,500 PSI	6.7	1204	34,700 PSI
ZIP	5.3	1045	29,200 PSI	6.3	1204	34,400 PSI
Solo 1000	5.2	1072	29,500 PSI	6.1	1184	34,800 PSI
Nitro 100 NF	4.3	1017	29,600 PSI	5.0	1121	34,800 PSI
Competition	4.2	1015	29,100 PSI	5.0	1109	34,300 PSI

Bullet: 140 GR. BAR TAC-XP   Dia: .400″

Case: Hornady   Primer: WIN SP, Small Pistol   Col: 1.135″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W572	5.5	1033	27,900 PSI	6.0	1117	33,900 PSI
W244	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
W231	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: 140 GR. BAR XPB   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.135″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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. LC LTCBB   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.120″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	9.0	1030	30,300 PSI	10.0	1171	33,700 PSI
True Blue	7.7	1125	30,300 PSI	8.5	1250	33,400 PSI
Silhouette	7.3	1132	29,900 PSI	8.1	1258	33,300 PSI
No. 5	7.2	1038	31,400 PSI	8.0	1179	34,900 PSI
No. 2	5.9	1016	29,900 PSI	6.6	1155	33,400 PSI
ZIP	5.8	1113	30,700 PSI	6.4	1237	33,800 PSI
Competition	4.1	1039	29,000 PSI	4.9	1119	34,100 PSI

Bullet: 150 GR. NOS JHP   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.125″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	9.2	1000	30,900 PSI	10.2	1136	34,300 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
Silhouette	7.0	1110	30,600 PSI	7.5	1190	32,800 PSI
No. 2	5.9	988	31,200 PSI	6.6	1098	34,900 PSI

Case: Hornady   Primer: WIN SP, Small Pistol   Col: 1.125″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W572	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
W244	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
W231	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

Bullet: 155 GR. BAR TAC-XP   Dia: .400″

Case: Hornady   Primer: WIN SP, Small Pistol   Col: 1.135″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W572	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
W244	3.8	863	26,400 PSI	4.3	955	33,300 PSI
Titegroup	3.5	850	25,700 PSI	4.0	967	32,800 PSI

Bullet: 155 GR. BAR XPB   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.135″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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. BERB FP   Dia: .400″

Case: Hornady   Primer: WIN SP, Small Pistol   Col: 1.125″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W572	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
W244	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
W231	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. BERB HBRN   Dia: .400″

Case: Win   Primer: WIN SP, Small Pistol   Col: 1.125″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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

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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Bullet: 155 GR. BERB RS	**Dia: .400″**					
Case: Win		**Primer: WIN 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: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.125″**
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
Case: Hornady		**Primer: WIN 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
W572	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
Universal	5.7	1056	23,900 PSI	6.2	1138	31,800 PSI
W244	5.1	1032	24,800 PSI	6.0	1155	33,100 PSI
W231	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: 155 GR. LC LRNSWC	**Dia: .401″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.130″**
No. 5	6.8	1019	31,700 PSI	7.5	1158	35,000 PSI
Silhouette	6.5	1036	30,700 PSI	7.2	1151	34,100 PSI
True Blue	6.5	963	30,200 PSI	7.2	1070	33,500 PSI
No. 2	5.7	982	30,900 PSI	6.3	1116	34,100 PSI
ZIP	5.1	1005	28,400 PSI	5.7	1117	31,700 PSI
Competition	3.6	941	29,100 PSI	4.2	1015	34,200 PSI
Bullet: 155 GR. RAIN FP	**Dia: .400″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.125″**
No. 7	9.3	998	31,000 PSI	10.3	1135	34,300 PSI
No. 5	6.9	963	28,800 PSI	7.7	1095	32,100 PSI
Competition	4.0	914	28,400 PSI	4.7	1008	33,400 PSI
Bullet: 165 GR. BERB FP	**Dia: .400″**					
Case: Hornady		**Primer: WIN 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
W572	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
W244	5.0	986	25,400 PSI	5.7	1101	33,000 PSI
WST	4.8	944	27,600 PSI	5.5	1003	30,700 PSI
Universal	4.8	951	24,200 PSI	5.4	1051	30,500 PSI
W231	4.7	933	25,200 PSI	5.4	1049	33,400 PSI
Titegroup	4.5	960	24,300 PSI	5.1	1060	31,800 PSI
700-X	4.6	994	28,100 PSI	5.0	1043	32,100 PSI
Clays	3.4	829	27,500 PSI	3.7	888	32,000 PSI
Bullet: 165 GR. RAIN RNFP	**Dia: .400″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.115″**
No. 7	7.9	965	29,100 PSI	9.3	1107	34,300 PSI
No. 5	6.5	912	29,700 PSI	7.6	1066	35,000 PSI
Silhouette	6.1	978	29,300 PSI	7.2	1118	34,500 PSI
True Blue	5.9	924	29,500 PSI	6.9	1056	34,700 PSI
No. 2	4.6	915	29,600 PSI	5.4	1014	34,800 PSI
Solo 1000	4.4	917	29,600 PSI	5.1	1009	34,800 PSI
ZIP	4.3	901	29,500 PSI	5.1	1016	34,700 PSI
Competition	3.6	844	29,400 PSI	4.2	943	34,600 PSI
Nitro 100 NF	3.4	837	29,300 PSI	4.0	923	34,500 PSI
Bullet: 165 GR. SIE JHP	**Dia: .400″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.125″**
No. 7	7.5	940	29,400 PSI	8.8	1086	34,600 PSI
No. 5	6.2	886	29,200 PSI	7.3	1049	34,400 PSI
Silhouette	5.9	942	29,600 PSI	6.9	1101	34,900 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
No. 2	4.5	897	29,700 PSI	5.3	996	34,900 PSI
Case: Hornady		**Primer: WIN SP, Small Pistol**				**Col: 1.125″**
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
W572	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
W244	4.9	994	26,100 PSI	5.5	1092	32,600 PSI
700-X	5.0	997	28,000 PSI	5.5	1066	32,900 PSI
W231	4.8	946	28,100 PSI	5.3	1001	32,500 PSI
WST	4.5	916	26,400 PSI	5.1	995	33,300 PSI
Titegroup	4.6	961	27,000 PSI	5.1	1047	33,600 PSI
Clays	3.5	851	29,900 PSI	3.9	897	33,300 PSI
Bullet: 170 GR. LC LSWC	**Dia: .401″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.130″**
True Blue	5.9	878	29,100 PSI	6.6	975	32,500 PSI
Silhouette	5.5	932	30,800 PSI	6.1	1035	34,200 PSI
No. 5	5.5	868	31,600 PSI	6.1	986	35,000 PSI
ZIP	4.0	873	31,000 PSI	4.4	970	34,500 PSI
Competition	3.1	839	29,500 PSI	3.6	917	34,700 PSI
Bullet: 175 GR. MCB LSWC	**Dia: .401″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.115″**
No. 7	7.6	892	31,700 PSI	8.4	1014	35,000 PSI
No. 2	4.8	858	31,000 PSI	5.3	975	34,200 PSI
Bullet: 180 GR. BERB FP	**Dia: .400″**					
Case: Win		**Primer: WIN SP, Small Pistol**				**Col: 1.125″**
No. 7	6.8	865	29,600 PSI	8.0	1001	34,800 PSI
No. 5	5.7	828	29,500 PSI	6.7	960	34,800 PSI
Silhouette	5.4	885	29,600 PSI	6.3	1032	34,800 PSI
True Blue	5.2	844	29,600 PSI	6.1	967	34,800 PSI
No. 2	4.0	823	29,400 PSI	4.8	920	34,600 PSI
Competition	3.2	791	29,500 PSI	3.7	863	34,700 PSI
Nitro 100 NF	3.0	754	29,600 PSI	3.5	834	34,800 PSI
Competition	2.9	736	26,900 PSI	3.4	816	31,500 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%.

Case: Hornady **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Longshot	6.3	1013	26,200 PSI	7.5	1150	33,400 PSI
HS-6	6.6	924	25,400 PSI	7.4	1041	31,800 PSI
CFE Pistol	5.9	1007	25,500 PSI	6.5	1092	32,600 PSI
AutoComp	5.7	971	26,700 PSI	6.2	1060	33,000 PSI
W572	5.4	952	28,000 PSI	6.0	1033	32,900 PSI
WSF	5.5	952	27,600 PSI	6.0	1020	33,500 PSI
W244	4.8	974	27,400 PSI	5.3	1041	32,900 PSI
Universal	4.6	925	28,300 PSI	5.1	1002	33,100 PSI
W231	4.4	872	26,400 PSI	5.1	984	33,500 PSI
WST	4.4	868	26,900 PSI	4.9	932	32,000 PSI
Titegroup	4.2	901	27,400 PSI	4.7	988	31,900 PSI
700-X	4.2	900	25,800 PSI	4.7	986	33,500 PSI
Clays	3.0	732	25,400 PSI	3.4	809	32,100 PSI

Bullet: 180 GR. HDY XTP Dia: .400″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	7.7	861	31,300 PSI	8.5	978	34,600 PSI
No. 5	5.9	849	29,100 PSI	6.6	965	32,500 PSI
No. 2	4.8	828	31,200 PSI	5.3	920	34,500 PSI
ZIP	4.1	845	31,900 PSI	4.5	921	35,000 PSI

Case: Hornady **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Longshot	6.5	1009	25,000 PSI	8.0	1159	32,300 PSI
HS-6	6.1	876	25,900 PSI	6.9	976	32,500 PSI
AutoComp	5.8	975	27,700 PSI	6.3	1053	33,200 PSI
CFE Pistol	5.4	949	25,800 PSI	6.0	1051	32,200 PSI
Universal	5.0	973	26,500 PSI	5.8	1046	33,400 PSI
WSF	5.4	946	28,000 PSI	5.8	1013	32,900 PSI
W244	4.5	929	28,000 PSI	5.0	1006	33,100 PSI
W231	4.1	797	23,800 PSI	5.0	947	32,900 PSI
700-X	4.3	904	27,700 PSI	4.8	966	32,500 PSI
Titegroup	4.2	877	26,500 PSI	4.7	978	33,300 PSI
WST	3.9	830	28,300 PSI	4.3	888	32,400 PSI
Clays	3.0	727	26,000 PSI	3.5	847	34,300 PSI

Bullet: 180 GR. LC LTC Dia: .401″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.120″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	5.4	858	31,500 PSI	6.0	975	35,000 PSI
Silhouette	5.3	895	30,700 PSI	5.9	994	34,100 PSI
True Blue	5.1	853	30,600 PSI	5.7	948	34,100 PSI
ZIP	3.7	842	30,700 PSI	4.1	935	34,100 PSI
Competition	2.8	766	26,400 PSI	3.3	849	31,000 PSI

Bullet: 180 GR. RAIN RNFP Dia: .400″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.120″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 2	4.3	794	29,900 PSI	4.8	903	33,400 PSI
ZIP	3.9	818	29,200 PSI	4.6	925	34,300 PSI
Solo 1000	3.8	830	29,600 PSI	4.5	907	34,800 PSI
Nitro 100 NF	3.0	743	29,100 PSI	3.5	822	34,200 PSI
Competition	2.9	723	26,500 PSI	3.4	795	31,100 PSI

Bullet: 180 GR. SIE JHP Dia: .400″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.135″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	7.2	870	28,600 PSI	8.5	1023	33,800 PSI
Silhouette	5.5	920	29,500 PSI	6.2	1020	33,200 PSI

Bullet: 185 GR. LC LRNSWC Dia: .401″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.174″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	7.4	871	31,600 PSI	8.2	990	35,000 PSI
No. 2	4.6	829	29,800 PSI	5.1	942	33,000 PSI
Competition	2.9	770	26,700 PSI	3.5	861	31,400 PSI

Bullet: 190 GR. SIE FPJ Dia: .400″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	7.7	848	30,700 PSI	8.6	964	34,300 PSI
No. 5	6.0	828	31,300 PSI	6.7	950	35,000 PSI

Bullet: 200 GR. HDY XTP Dia: .400″

Case: Win **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	6.7	748	31,700 PSI	7.4	850	35,000 PSI
True Blue	5.4	802	29,000 PSI	6.0	891	32,200 PSI
Silhouette	4.8	800	27900 PSI	5.6	920	32,600 PSI

Case: Hornady **Primer: WIN SP, Small Pistol** **Col: 1.125″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	5.5	810	27,000 PSI	6.3	900	32,800 PSI
Longshot	5.0	836	23,900 PSI	6.0	954	32,500 PSI
AutoComp	4.8	838	27,900 PSI	5.2	894	32,100 PSI
CFE Pistol	4.4	833	27,800 PSI	4.8	897	33,500 PSI
WSF	4.4	786	27,300 PSI	4.8	867	33,100 PSI
Universal	4.0	824	25,000 PSI	4.7	903	33,600 PSI
W231	3.9	737	25,900 PSI	4.7	857	33,400 PSI
W244	3.8	809	27,300 PSI	4.3	894	33,200 PSI
700-X	3.5	744	27,000 PSI	3.9	810	30,700 PSI
Titegroup	3.4	744	27,200 PSI	3.8	822	31,700 PSI
WST	3.0	654	25,300 PSI	3.4	733	31,100 PSI

10MM AUTO

Barrel: 5″ Twist: 1:16″ Trim: .987″

Bullet: 135 GR. NOS JHP Dia: .400″

Case: WIN **Primer: WIN LP, Large Pistol** **Col: 1.260″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	12.2	1299	31,300 PSI	13.6	1476	34,900 PSI
Silhouette	9.9	1440	32,300 PSI	11.0	1575	35,900 PSI

Bullet: 140 GR. LC LTCBB Dia: .401″

Case: WIN **Primer: WIN LP, Large Pistol** **Col: 1.250″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 150 GR. SIE JHP Dia: .400″

Case: WIN **Primer: WIN LP, Large Pistol** **Col: 1.245″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	11.7	1236	32,800 PSI	13.0	1405	36,400 PSI
Silhouette	8.7	1290	31,500 PSI	9.8	1395	35,500 PSI

Bullet: 155 GR. BAR TAC-XP Dia: .400″

Case: WIN **Primer: WIN LP, Large Pistol** **Col: 1.260″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Universal	5.2	1018	25,200 PSI	6.2	1178	36,200 PSI
W244	4.9	1011	27,000 PSI	5.9	1150	36,000 PSI
W231	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: WIN **Primer: WIN LP, Large Pistol** **Col: 1.260″**

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
800-X				9.8	1350	30,000 PSI
Silhouette	8.8	1255	32,100 PSI	9.7	1355	35,400 PSI
CFE Pistol	8.2	1269	26,300 PSI	9.2	1409	34,900 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

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	6.5	1135	22,600 PSI	7.5	1279	35,200 PSI
W244	6.6	1192	27,800 PSI	7.5	1325	34,900 PSI
W231	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: WIN Primer: WIN LP, Large Pistol Col: 1.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
No. 5	8.7	1122	32,500 PSI	9.7	1275	36,200 PSI

Bullet: 170 GR. LC LSWC Dia: .401″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 9	12.2	1131	31,300 PSI	13.6	1285	34,900 PSI
No. 7	9.9	1120	32,000 PSI	11.0	1273	35,500 PSI
No. 5	7.8	1085	28,500 PSI	8.7	1233	31,800 PSI
Silhouette	7.4	1175	30,800 PSI	8.2	1220	34,100 PSI

Bullet: 175 GR. MCB LSWCBB Dia: .401″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.245″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	9.4	1055	31,800 PSI	10.4	1199	35,200 PSI
No. 5	7.5	1026	28,500 PSI	8.3	1166	31,500 PSI

Bullet: 180 GR. HDY XTP Dia: .400″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN LP, Large Pistol Col: 1.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Longshot	8.5	1221	31,000 PSI	9.5	1287	34,600 PSI
HS-6	7.4	940	22,000 PSI	9.4	1127	35,800 PSI
800-X				8.7	1210	30,000 PSI
Silhouette	7.5	1110	30,700 PSI	8.4	1210	34,400 PSI
AutoComp	7.0	1119	29,800 PSI	7.7	1199	36,000 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
W244	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
W231	5.2	944	29,700 PSI	5.8	1061	34,900 PSI

Bullet: 185 GR. LC LRNSWC Dia: .401″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.245″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN LP, Large Pistol Col: 1.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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. HDY FMJ Dia: .400″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X				7.8	1130	32,500 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
W244	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

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W231	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: WIN Primer: WIN LP, Large Pistol Col: 1.250″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: 200 GR. LC LTC Dia: .401″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 9	10.6	1018	32,500 PSI	11.8	1157	36,200 PSI
Silhouette	5.8	980	29,600 PSI	6.7	1000	34,300 PSI

Bullet: 220 GR. RROCK LEAD FP Dia: .400″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.260″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE Pistol	4.9	878	27,700 PSI	5.8	983	36,800 PSI
W572	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
W244	4.2	842	28,100 PSI	5.0	941	36,800 PSI

41 REM Mag

Barrel: 10.125″ Twist: 1:18.75″ Trim: 1.280″

Bullet: 170 GR. SIE JHC Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.580″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Bullet: 180 GR. BAR XPB Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.590″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: 200 GR. MCB LSWCBB Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.675″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: 210 GR. HDY XTP Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.575″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

Bullet: 210 GR. NOS JHP Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.580″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-5744	20.7	1321	31,900 PSI	23.0	1468	35,400 PSI
No. 11 FS	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
A-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: 215 GR. LC LSWC Dia: .412″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	18.2	1411	25,700 PSI	21.4	1643	30,300 PSI
A-4100	19.0	1450	32,000 PSI	21.1	1601	35,500 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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	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: 220 GR. RAIN FP Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.590″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 9	14.7	1240	30,800 PSI	16.3	1409	34,100 PSI
No. 7	12.1	1174	30,400 PSI	13.4	1335	33,700 PSI
No. 5	9.7	1129	31,500 PSI	10.8	1283	35,100 PSI

Bullet: 240 GR. LY LRN Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.710″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4100	18.6	1395	31,400 PSI	20.7	1575	35,000 PSI
Enforcer	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. CAST LSWC Dia: .410″

Case: REM Primer: WIN LP, Large Pistol Col: 1.630″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H110	18.5	1372	22,800 CUP	21.0	1563	37,400 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
Trail Boss	3.5	683	12,600 CUP	6.0	834	16,100 CUP

Bullet: 245 GR. LHG WFN Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.6

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	13.0	961	29,000 PSI	15.3	1166	34,100 PSI
A-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: 250 GR. CPB LWFNPB Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.674″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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
A-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. WFNGC Dia: .410″

Case: REM Primer: WIN LP, Large Pistol Col: 1.540″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
W296	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
Trail Boss	3.7	611	14,600 CUP	5.0	748	20,300 CUP

Bullet: 255 GR. CPB LWFNGC Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.662″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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
A-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. WFNGC Dia: .410″

Case: REM Primer: WIN LP, Large Pistol Col: 1.660″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	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. TS LWNFPGC Dia: .411″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.720″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	16.6	1275	29,600 PSI	19.5	1473	34,900 PSI
Enforcer	17.2	1319	31,800 PSI	19.1	1466	35,300 PSI
TCM	13.2	1223	29,400 PSI	15.6	1405	34,600 PSI

Bullet: 265 GR. CPB LWFNGC Dia: .410″

Case: REM Primer: Fed 155M, Large P Mag Match Col: 1.710″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-4100	17.1	1306	31,300 PSI	19.0	1451	34,800 PSI
No. 9	13.5	1218	31,300 PSI	15.0	1354	34,800 PSI

Bullet: 265 GR. WLNGC Dia: .410″

Case: REM Primer: WIN LP, Large Pistol Col: 1.710″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Lil'Gun	20.0	1479	28,700 CUP	21.3	1558	35,400 CUP
W296	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

44-40 WIN

Barrel: 6″ Twist: 1:36″ Trim: 1.295″

Bullet: 160 GR. CAST LFP Dia: .430″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
800-X	8.0	870	9,400 CUP	8.8	965	12,600 CUP
Universal	6.6	722	10,000 PSI	7.3	777	11,100 PSI
W231	5.5	711	9,800 PSI	6.5	820	12,400 PSI
Trail Boss	5.5	723	7,800 PSI	6.5	826	11,900 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 REM Mag

Barrel: 8.275″ Twist: 1:20″ Trim: 1.280″

Bullet: 180 GR. HDY XTP Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	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: REM Primer: WIN LP, Large Pistol Col: 1.585″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	24.3	1683	29,300 PSI	27.0	1870	32,500 PSI
A-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: 200 GR. BAR XPB Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Enforcer	20.3	1428	29,400 PSI	22.5	1587	32,700 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%.

	Starting Loads			Maximum Loads		
Powder	**Grs.**	**Vel.**	**Pressure**	**Grs.**	**Vel.**	**Pressure**
A-4100	20.1	1414	29,000 PSI	22.3	1571	32,200 PSI
No. 11 FS	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: REM		**Primer: WIN 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. MCB LRNFP			**Dia: .429″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.565″**
Enforcer	22.6	1500	23,400 PSI	25.1	1667	26,000 PSI
A-4100	22.6	1500	23,300 PSI	24.9	1650	25,600 PSI
No. 7	15.3	1229	31,400 PSI	17.0	1397	34,800 PSI
Bullet: 200 GR. NOS JHP			**Dia: .429″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.595″**
No. 11 FS	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: 220 GR. BERB FP			**Dia: .430″**			
Case: WIN		**Primer: REM 2 1/2, Large Pistol**				**Col: 1.610″**
W244	7.3	972	17,200 PSI	9.4	1204	22,800 PSI
W231	6.8	811	12,600 PSI	9.4	1104	20,700 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: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.577″**
Enforcer	22.6	1527	29,900 PSI	26.6	1781	35,200 PSI
A-4100	22.5	1519	29,500 PSI	26.5	1771	34,800 PSI
Bullet: 220 GR. LHG XP			**Dia: .429″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.600″**
No. 11 FS	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
A-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: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.600″**
Enforcer	18.0	1274	32,200 PSI	20.0	1416	35,700 PSI
A-4100	17.9	1262	31,700 PSI	19.9	1402	35,200 PSI
No. 11 FS	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: WIN		**Primer: REM 2 1/2, Large Pistol**				**Col: 1.665″**
IMR 4227	19.8	1130	26,800 PSI	22.0	1307	34,500 PSI
W296	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: WIN		**Primer: REM 2 1/2, Large Pistol**				**Col: 1.575″**
IMR 4227	23.0	1383	27,400 CUP	25.5	1537	35,700 CUP
W296	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
800-X				15.4	1525	39,800 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
W572	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
W231	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
W244	8.7	1205	27,900 PSI	10.3	1290	34,800 PSI
700-X				9.8	1235	40,000 CUP
Bullet: 240 GR. BSC LRNFP			**Dia: .429″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.577″**
Enforcer	19.9	1392	30,300 PSI	23.5	1604	35,600 PSI
A-4100	19.8	1382	29,600 PSI	23.3	1591	34,900 PSI
Bullet: 240 GR. HDY XTP			**Dia: .429″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.600″**
A-5744	21.6	1243	31,500 PSI	24.0	1413	35,000 PSI
A-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	31400 PSI	16.1	1302	34,800 PSI
Bullet: 240 GR. LC LSWC			**Dia: .431″**			
Case: REM		**Primer: WIN LP, Large Pistol**				**Col: 1.610″**
A-5744	21.6	1272	31,100 PSI	24.0	1446	34,500 PSI
A-4100	19.3	1287	31,700 PSI	21.4	1407	35,200 PSI
Enforcer	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. LSWC CAST			**Dia: .430″**			
Case: WIN		**Primer: REM 2 1/2, Large Pistol**				**Col: 1.620″**
IMR 4227				22.0C	1310	33,300 CUP
800-X				13.4	1395	39,600 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
W572	9.5	1168	23,500 PSI	11.4	1327	33,700 PSI
W231	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
W244	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
Trail Boss	6.0	828	19,100 PSI	7.3	917	21,600 PSI
Clays	4.3	759	14,000 CUP	6.2	940	21,800 CUP
Bullet: 240 GR. NOS JHP			**Dia: .429″**			
Case: WIN		**Primer: REM 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
W296	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
800-X				14.2	1415	39,600 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
AutoComp	10.0	1129	26,000 PSI	11.5	1250	34,100 PSI
W231	8.0	1021	23,800 CUP	11.0	1272	37,800 CUP
W244	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

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: 240 GR. NOS JSP Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.590″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	19.8	1368	32,000 PSI	22.0	1520	35,600 PSI
A-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. RAIN FP Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.575″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9	16.7	1220	31,300 PSI	18.6	1386	34,800 PSI
No. 7	14.0	1163	29,000 PSI	15.6	1322	32,500 PSI

Bullet: 240 GR. SIE JHC Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.590″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	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: 255 GR. CPB LWFNGC Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.610″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	18.5	1285	23,400 PSI	20.6	1428	26,100 PSI
A-4100	18.5	1285	23,300 PSI	20.5	1414	25,700 PSI

Bullet: 270 GR. SPR GDSP Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	18.9	1218	31,400 PSI	21.0	1370	34,900 PSI
A-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

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4227	20.5	1275	28,400 CUP	22.5	1425	37,400 CUP
W296	19.5	1295	29,300 CUP	21.5	1421	37,700 CUP
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
W572	9.1	1075	27,400 PSI	10.3	1185	33,600 PSI
W231	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
W244	8.1	1067	29,000 PSI	9.3	1183	34,900 PSI

Bullet: 280 GR. SFT JHP Dia: .430″

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	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
W572	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
W231	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
W244	8.0	994	26,000 PSI	9.4	1136	34,800 PSI

Bullet: 300 GR. CPB LWFNGC Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.590″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	16.7	1225	29,600 PSI	18.5	1361	32,800 PSI
A-4100	16.7	1225	29,300 PSI	18.4	1347	32,300 PSI

Bullet: 300 GR. HDY XTP Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	18.0	1048	28,300 PSI	20.0	1191	31,400 PSI
Enforcer	16.2	1170	31,900 PSI	18.0	1300	35,500 PSI
A-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

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4227	18.0	1180	30,600 CUP	20.0	1312	38,600 CUP
W296	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
W231	8.0	966	29,400 CUP	10.0	1149	38,100 CUP
Titegroup	8.6	1079	34,200 CUP	9.6	1186	38,400 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
CFE Pistol	7.6	876	27,600 PSI	8.7	987	34,800 PSI
W244	6.7	882	28,300 PSI	7.8	991	34,900 PSI

Bullet: 300 GR. LC LTC Dia: .431″

Case: REM Primer: WIN LP, Large Pistol Col: 1.605″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	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: REM Primer: WIN LP, Large Pistol Col: 1.735″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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

Bullet: 320 GR. CPB LWLNGC Dia: .429″

Case: REM Primer: WIN LP, Large Pistol Col: 1.695″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	17.1	1170	30,600 PSI	20.2	1349	35,900 PSI
Enforcer	16.4	1179	29,100 PSI	18.2	1310	32,300 PSI
A-4100	16.4	1179	28,900 PSI	18.1	1297	31,800 PSI
A-5744	16.2	952	25,000 PSI	18.0	1082	27,800 PSI
No. 9	14.6	1070	31,100 PSI	16.3	1216	34,600 PSI
True Blue	9.7	972	29,200 PSI	10.8	1080	32,500 PSI

Bullet: 325 GR. BTB LFN GC Dia: .430″

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.730″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4227	17.0	1041	19,200 CUP	21.0C	1278	34,200 CUP
W296	20.0	1264	30,800 CUP	22.0	1368	38,100 CUP
H110	20.0	1264	30,800 CUP	22.0	1368	38,100 CUP
Lil'Gun	17.0	1217	29,400 CUP	20.0	1360	38,600 CUP
HS-6	13.0	1155	33,200 CUP	14.0	1218	38,000 CUP
Longshot	10.0	1069	28,500 CUP	11.8	1195	38,700 CUP
W231	9.0	1035	32,100 CUP	10.3	1125	38,700 CUP
CFE Pistol	9.0	997	27,500 PSI	10.2	1093	35,200 PSI
AutoComp	9.0	1008	26,100 PSI	10.0	1075	30,900 PSI
Universal	8.0	942	27,700 CUP	10.0	1090	38,000 CUP
Titegroup	8.0	1001	28,700 CUP	9.2	1091	38,300 CUP
W244	7.7	991	27,800 PSI	8.8	1088	35,200 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%.

Bullet: 330 GR. BTB LFN GC Dia: .430″

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.730″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4227	18.0	1132	25,900 CUP	20.7C	1278	34,200 CUP
W296	19.0	1239	30,200 CUP	20.8	1350	38,800 CUP
H110	19.0	1239	30,200 CUP	20.8	1350	38,800 CUP
Lil'Gun	16.0	1186	29,800 CUP	19.0	1332	38,000 CUP
HS-6	12.0	1098	29,900 CUP	13.6	1202	39,000 CUP
Longshot	9.5	1026	27,600 CUP	11.3	1158	38,700 CUP
W572	8.6	995	28,200 PSI	9.8	1087	35,200 PSI
AutoComp	8.8	976	25,200 PSI	9.8	1056	30,900 PSI
CFE Pistol	8.6	978	28,500 PSI	9.7	1057	35,100 PSI
W231	8.5	992	33,700 CUP	9.7	1081	38,700 CUP
Universal	8.0	943	27,800 CUP	9.5	1058	37,000 CUP
Titegroup	7.5	952	29,700 CUP	8.5	1035	38,000 CUP
W244	7.3	962	28,200 PSI	8.4	1052	34,900 PSI

Bullet: 355 GR. BTB LFN GC Dia: .430″

Case: WIN Primer: REM 2 1/2, Large Pistol Col: 1.710″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
IMR 4227	17.5	1125	28,100 CUP	19.0	1223	37,800 CUP
W296	17.5	1168	29,300 CUP	18.8	1245	38,000 CUP
H110	17.5	1168	29,300 CUP	18.8	1245	38,000 CUP
Lil'Gun	16.0	1178	31,700 CUP	17.5	1247	37,900 CUP
HS-6	11.0	1019	26,800 CUP	12.0	1091	37,400 CUP
Longshot	9.0	987	28,400 CUP	10.5	1096	37,800 CUP
Universal	7.8	922	30,700 CUP	8.8	991	37,300 CUP
W231	7.8	928	31,000 CUP	8.8	1001	38,700 CUP
W572	7.6	909	28,400 PSI	8.7	1001	35,200 PSI
AutoComp	7.8	906	25,600 PSI	8.5	959	29,900 PSI
CFE Pistol	7.6	896	29,000 PSI	8.3	953	34,000 PSI
Titegroup	7.0	907	29,900 CUP	8.2	994	37,600 CUP
W244	6.4	878	26,800 PSI	7.4	967	34,600 PSI

45 S&W (SCHOFIELD)

Barrel: 5″ Twist: 1:16″ Trim: 1.095″

Bullet: 200 GR. LRNFP Dia: .452″

Case: Starline Primer: WIN LP, Large Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Universal	6.0	773	9,100 CUP	7.0	938	13,100 CUP
W231	5.2	745	8,800 CUP	6.2	877	13,000 CUP
Trail Boss	4.0	684	9,000 CUP	5.0	791	13,200 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. LRNFP Dia: .452″

Case: Starline Primer: WIN LP, Large Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Universal	5.5	738	9,400 CUP	6.0	816	11,400 CUP
W231	5.0	719	9,900 CUP	5.7	816	12,700 CUP
Trail Boss	4.0	649	9,000 CUP	5.0	739	13,000 CUP
Titegroup	4.5	702	7,800 CUP	5.8	866	12,300 CUP
Clays	4.0	697	9,400 CUP	4.7	783	13,600 CUP

Bullet: 250 GR. LRNFP Dia: .452″

Case: Starline Primer: WIN LP, Large Pistol Col: 1.430″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Universal	6.0	724	9,900 CUP	6.3	830	13,800 CUP
W231	4.5	664	10,100 CUP	5.2	741	12,100 CUP
Trail Boss	3.5	537	7,300 CUP	4.8	685	13,200 CUP
Titegroup	4.5	716	7,900 CUP	5.3	811	11,600 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. PLYCS ARX Dia: .452″

Case: WIN Primer: FED 150, Large Pistol Col: 1.260″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
W244	6.4	1135	14,600 PSI	7.1	1260	20,100 PSI
Titegroup	5.6	1126	14,100 PSI	6.5	1255	20,000 PSI

Bullet: 120 GR. LGH XD Dia: .451″

Case: WIN Primer: FED 150, Large Pistol Col: 1.230″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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
W231	7.0	1063	16,400 PSI	8.2	1259	20,000 PSI
W244	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: 120 GR. LHG XP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.232″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: 135 GR. PLYCS RNP Dia: .452″

Case: WIN Primer: FED 150, Large Pistol Col: 1.260″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	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
W244	6.1	1043	13,700 PSI	7.0	1200	20,300 PSI
Titegroup	5.6	1074	14,900 PSI	6.5	1204	20,100 PSI

Bullet: 140 GR. SFIRE RHFP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.210″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	8.7	1044	18,300 PSI	9.7	1160	20,400 PSI
Silhouette	8.0	1060	17,500 PSI	8.9	1178	19,400 PSI
True Blue	7.7	1009	18,200 PSI	8.6	1121	20,300 PSI
ZIP	6.2	1022	18,100 PSI	6.9	1136	20,100 PSI
No. 2	5.2	978	18,400 PSI	5.8	1087	20,500 PSI

Bullet: 150 GR. CEB RAPTOR Dia: .4515″

Case: WIN Primer: FED 150, Large Pistol Col: 1.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W572	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
W244	5.8	883	15,800 PSI	6.5	1013	20,000 PSI
W231	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

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. CAST LSWC   Dia: .451″

Case: WIN   Primer: FED 150, Large Pistol   Col: 1.230″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
800-X	7.8	1019	13,600 CUP	8.5	1117	17,000 CUP
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
W244	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
W231	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: 155 GR. LC LSWC   Dia: .452″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.240″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
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
Solo 1000	5.9	1029	17,300 PSI	6.5	1170	19,100 PSI
Competition	4.5	950	17,300 PSI	5.0	1056	19,200 PSI

Bullet: 155 GR. SFIRE   Dia: .451″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.220″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 5	7.3	923	17,500 PSI	8.1	1025	19,400 PSI
Silhouette	7.1	990	18,700 PSI	7.9	1100	20,700 PSI
True Blue	6.8	916	18,300 PSI	7.6	1018	20,300 PSI
ZIP	5.2	901	17,100 PSI	5.8	1001	19,000 PSI
No. 2	4.6	882	18,400 PSI	5.1	980	20,400 PSI

Case: WIN   Primer: FED 150, Large Pistol   Col: 1.220″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W572	6.5	933	15,700 PSI	7.7	1130	19,700 PSI
CFE Pistol	6.3	890	15,200 PSI	7.1	1024	18,400 PSI
AutoComp	6.2	875	15,000 PSI	7.0	1000	18,600 PSI
W231	5.6	944	13,800 CUP	6.2	1057	16,700 CUP
W244	5.5	964	15,400 PSI	6.1	1068	19,700 PSI
Universal	5.4	828	12,300 CUP	6.0	1050	16,900 CUP
700-X	5.3	955	14,500 CUP	5.8	1045	16,200 CUP
Titegroup	5.0	974	13,600 CUP	5.5	1036	16,900 CUP

Bullet: 160 GR. BAR TAC-XP   Dia: .451″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	8.8	934	17600 PSI	10.4	1082	20700 PSI
No. 5	7.3	946	17300 PSI	8.5	1086	20300 PSI
True Blue	6.8	948	17300 PSI	7.9	1081	20400 PSI
Silhouette	6.7	961	17400 PSI	7.9	1125	20400 PSI
No. 2	4.7	923	17600 PSI	5.5	1016	20700 PSI

Case: WIN   Primer: FED 150, Large Pistol   Col: 1.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	7.6	951	17,200 PSI	8.5	1048	20,000 PSI
800-X	7.2	1046	17,800 PSI	7.6	1078	18,800 PSI
CFE Pistol	6.7	1034	16,900 PSI	7.6	1154	20,000 PSI
W572	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
W244	5.1	971	16,700 PSI	5.5	1034	19,500 PSI
W231	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. LHG CF   Dia: .451″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.235″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: REM   Primer: FED 150, Large Pistol   Col: 1.130″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
Solo 1000	5.3	931	16,000 PSI	5.9	1059	17,800 PSI

Bullet: 180 GR. LC LSWC   Dia: .452″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.267″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Silhouette	8.0	991	16,400 PSI	8.9	1101	18,300 PSI
True Blue	7.7	947	17,600 PSI	8.5	1052	19,500 PSI
ZIP	6.0	957	18,500 PSI	6.7	1063	20,500 PSI
Competition	4.2	861	17,600 PSI	4.7	957	19,600 PSI

Bullet: 180 GR. LFP   Dia: .452″

Case: WIN   Primer: FED 150, Large Pistol   Col: 1.140″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	7.8	805	10,900 CUP	9.0	961	16,600 CUP
Longshot	6.5	788	9,800 CUP	8.0	1015	16,900 CUP
800-X	7.2	925	13,100 CUP	8.0	1031	16,800 CUP
CFE Pistol	7.1	1006	15,500 PSI	8.0	1114	19,500 PSI
W572	6.8	965	14,800 PSI	7.6	1076	18,800 PSI
AutoComp	6.8	903	12,800 CUP	7.6	1008	16,500 CUP
WSF	6.6	887	12,200 CUP	7.3	1003	16,500 CUP
Universal	5.3	755	11,100 CUP	6.4	1019	17,600 CUP
W244	5.2	944	15,300 PSI	6.2	1058	19,300 PSI
W231	5.0	778	11,300 CUP	6.0	950	16,800 CUP
700-X	5.0	903	13,300 CUP	5.6	982	16,000 CUP
Titegroup	4.2	771	10,200 CUP	5.2	946	16,600 CUP
Trail Boss	3.5	664	7,100 CUP	5.0	852	13,700 CUP
WST	4.4	846	13,300 CUP	4.9	912	16,100 CUP
Clays	3.8	783	11,600 CUP	4.5	910	16,700 CUP
Titewad	3.7	855	14,800 PSI	4.3	948	19,200 PSI

Bullet: 185 GR. BAR TAC-XP   Dia: .451″

Case: REM   Primer: FED 150, Large Pistol   Col: 1.235″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 7	8.1	827	18,100 PSI	9.0	919	20,200 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
ZIP	4.8	803	18,000 PSI	5.3	892	20,000 PSI
No. 2	4.5	770	18,200 PSI	5.0	856	20,300 PSI

Case: WIN   Primer: FED 150, Large Pistol   Col: 1.235″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
HS-6	7.1	862	15,600 PSI	8.0	971	20,100 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
W572	5.4	841	13,600 PSI	6.4	1012	20,200 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W244	4.7	836	16,300 PSI	5.3	931	20,200 PSI
W231	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

Bullet: 185 GR. BERB FP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.195″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	10.1	909	17,700 PSI	11.9	1096	20,800 PSI
No. 5	8.2	924	17,300 PSI	9.7	1079	20,400 PSI
True Blue	7.7	936	17,800 PSI	9.1	1091	20,900 PSI
Silhouette	7.7	930	17,500 PSI	9.1	1095	20,600 PSI
ZIP	6.0	929	17,200 PSI	7.1	1066	20,200 PSI
No. 2	5.4	892	17,700 PSI	6.3	1014	20,900 PSI
Solo 1000	5.1	917	17,700 PSI	6.0	1021	20,800 PSI
Competition	4.4	866	17,400 PSI	5.2	980	20,400 PSI
Nitro 100 NF	4.3	891	17,600 PSI	5.0	978	20,700 PSI

Bullet: 185 GR. BERB HBRN Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.270″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	10.8	920	17,700 PSI	12.7	1109	20,900 PSI
No. 5	8.8	916	17,400 PSI	10.3	1088	20,400 PSI
Silhouette	8.3	929	17,600 PSI	9.7	1123	20,700 PSI
True Blue	8.1	954	17,400 PSI	9.6	1091	20,500 PSI
ZIP	6.5	944	17,200 PSI	7.6	1087	20,300 PSI
No. 2	6.0	880	17,200 PSI	7.0	1014	20,200 PSI
Solo 1000	5.5	903	17,700 PSI	6.5	1021	20,900 PSI
Competition	4.6	872	17,600 PSI	5.4	977	20,700 PSI
Nitro 100 NF	4.5	877	17,500 PSI	5.3	977	20,600 PSI

Bullet: 185 GR. BERB SWC Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.195″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	9.7	904	17,400 PSI	11.4	1073	20,500 PSI
No. 5	8.0	926	17,300 PSI	9.4	1080	20,400 PSI
Silhouette	7.5	949	17,700 PSI	8.9	1116	20,800 PSI
True Blue	7.5	942	17,800 PSI	8.8	1086	21,000 PSI
ZIP	5.8	884	17,100 PSI	6.8	1041	20,100 PSI
No. 2	5.4	913	17,600 PSI	6.4	1022	20,700 PSI
Solo 1000	5.0	863	17,600 PSI	5.9	998	20,700 PSI
Competition	4.2	848	17,400 PSI	4.9	952	20,400 PSI
Nitro 100 NF	3.9	861	17,200 PSI	4.6	937	20,200 PSI

Bullet: 185 GR. HDY JSWC Dia: .451″

Case: WIN Primer: FED 150, Large Pistol Col: 1.135″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	8.6	888	12,200 CUP	9.5	996	16,800 CUP
Longshot	7.2	919	11,300 CUP	8.2	1044	17,000 CUP
CFE Pistol	7.1	1008	15,800 PSI	8.1	1139	19,700 PSI
800-X	7.1	883	13,600 CUP	7.9	991	16,700 CUP
WSF	6.8	886	13,400 CUP	7.5	981	17,400 CUP
AutoComp	6.7	856	12,600 CUP	7.4	958	16,200 CUP
Universal	6.0	908	13,100 CUP	6.4	977	16,800 CUP
W244	5.5	915	15,000 PSI	6.2	1022	19,600 PSI
W231	5.0	762	12,000 CUP	5.9	906	15,800 CUP
Titegroup	5.0	892	14,600 CUP	5.5	956	17,000 CUP
700-X	4.9	873	14,000 CUP	5.5	959	17,100 CUP
WST	4.4	794	14,100 CUP	4.9	866	16,500 CUP
Clays	4.5	855	14,500 CUP	4.9	981	17,400 CUP
Titewad	3.5	754	14,900 PSI	4.2	887	19,400 PSI

Bullet: 185 GR. HDY XTP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	9.2	970	17,900 PSI	10.2	1102	19,900 PSI
Silhouette	8.9	1037	18,800 PSI	9.9	1152	20,900 PSI
True Blue	8.5	980	18,700 PSI	9.4	1089	20,800 PSI
ZIP	6.6	946	17,600 PSI	7.3	1051	19,600 PSI
Competition	4.6	847	18,500 PSI	5.1	941	20,500 PSI

Bullet: 185 GR. MCB LSWC Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	8.0	925	16,600 PSI	8.9	1050	18,500 PSI
No. 2	5.6	895	16,700 PSI	6.2	1000	18,500 PSI

Bullet: 185 GR. NOS JHP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.200″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	8.2	929	17,800 PSI	9.7	1071	21,000 PSI
No. 2	5.7	948	17,700 PSI	6.7	1106	20,800 PSI
Competition	4.3	845	17,700 PSI	5.1	954	20,900 PSI

Bullet: 185 GR. RAIN HP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.220″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	10.0	915	17,800 PSI	11.7	1092	20,900 PSI
No. 5	8.1	940	17,600 PSI	9.5	1080	20,700 PSI
Silhouette	7.8	926	17,600 PSI	9.1	1092	20,700 PSI
True Blue	7.6	924	17,300 PSI	9.0	1068	20,400 PSI
No. 2	5.6	885	17,500 PSI	6.6	1011	20,600 PSI

Bullet: 185 GR. REM GSBR Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.225″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Solo 1000	5.2	883	17,500 PSI	6.1	1008	20,600 PSI
Competition	4.4	882	17,400 PSI	5.1	967	20,400 PSI
Nitro 100 NF	4.2	845	17,700 PSI	4.9	940	20,800 PSI

Bullet: 185 GR. SIE JHP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.210″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	11.7	962	16,200 PSI	13.0	1093	18,000 PSI
Solo 1000	5.5	862	17,500 PSI	6.1	980	19,400 PSI

Bullet: 200 GR. BERB HP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.205″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Solo 1000	4.8	811	17,600 PSI	5.6	947	20,700 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. BERB FP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.205″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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

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%.

	Starting Loads			Maximum Loads		
Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Solo 1000	4.8	830	17,300 PSI	5.7	943	20,300 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. BERB SWC Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.210″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	7.5	868	17,100 PSI	8.8	1010	20,100 PSI
True Blue	7.0	884	17,400 PSI	8.2	1009	20,400 PSI
Silhouette	6.9	886	17,200 PSI	8.2	1032	20,200 PSI
ZIP	5.5	908	17,600 PSI	6.5	1013	20,700 PSI
No. 2	5.1	845	17,600 PSI	6.0	958	20,700 PSI
Solo 1000	4.8	824	17,000 PSI	5.6	950	20,000 PSI
Competition	4.0	838	17,800 PSI	4.7	919	21,000 PSI
Nitro 100 NF	3.7	828	17,400 PSI	4.4	895	20,400 PSI

Bullet: 200 GR. CAST LSWC Dia: .451″

Case: WIN Primer: FED 150, Large Pistol Col: 1.225″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X	6.9	861	12,200 CUP	7.7	958	15,700 CUP
W572	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
W244	5.1	880	15,500 PSI	5.8	992	19,800 PSI
W231	4.4	771	11,000 CUP	5.6	914	16,900 CUP
Trail Boss	3.5	652	9,200 CUP	5.5	816	16,100 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. HDY FMJ CT Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.230″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
Silhouette	7.6	937	18,200 PSI	8.4	1041	20,200 PSI
True Blue	7.2	866	17,500 PSI	8.0	962	19,500 PSI
ZIP	5.8	879	18,600 PSI	6.4	977	20,700 PSI
Competition	4.0	774	18,500 PSI	4.4	860	20,600 PSI

Bullet: 200 GR. HDY XTP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.225″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	10.8	912	17,300 PSI	12.0	1036	19,200 PSI
Solo 1000	5.2	804	16,900 PSI	5.8	914	18,800 PSI
No. 2	5.1	855	17,500 PSI	5.8	970	19,900 PSI

Bullet: 200 GR. LC LSWC Dia: .452″

Case: REM Primer: FED 150, Large Pistol Col: 1.190″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	10.4	899	16,900 PSI	11.5	1022	18,700 PSI
No. 5	7.8	902	17,400 PSI	8.7	1025	19,400 PSI
Silhouette	7.6	964	18,300 PSI	8.4	1071	20,300 PSI
ZIP	5.6	897	18,300 PSI	6.2	997	20,300 PSI
No. 2	5.2	826	15,600 PSI	5.8	939	17,400 PSI
Solo 1000	4.8	838	16,600 PSI	5.3	952	18,300 PSI
Competition	3.9	806	18,000 PSI	4.3	896	20,000 PSI

Bullet: 200 GR. LHG XP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.235″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	7.0	769	18,800 PSI	7.8	869	20,900 PSI
Silhouette	6.5	789	18,600 PSI	7.2	900	20,700 PSI
True Blue	6.3	760	18,600 PSI	7.0	846	20,600 PSI

Bullet: 200 GR. SIE FPJ Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.155″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 5	7.6	854	17,500 PSI	8.9	996	20,500 PSI
Competition	4.0	782	17,500 PSI	4.7	881	20,700 PSI

Bullet: 200 GR. SPR JHP Dia: .451″

Case: WIN Primer: FED 150, Large Pistol Col: 1.155″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X	6.8	877	13,600 CUP	7.4	954	16,600 CUP
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
W244	5.2	862	15,300 PSI	5.9	957	19,700 PSI
W231	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. BERB RN Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.237″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
Silhouette	6.6	811	17,800 PSI	7.8	957	20,900 PSI
True Blue	6.6	820	17,500 PSI	7.8	933	20,600 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
Solo 1000	4.4	760	17,600 PSI	5.1	846	20,700 PSI
Nitro 100 NF	3.7	753	17,800 PSI	4.4	829	20,900 PSI

Bullet: 230 GR. HDY FMJ FP Dia: .451″

Case: WIN Primer: FED 150, Large Pistol Col: 1.200″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	8.0	790	14,400 CUP	8.2	825	15,400 CUP
800-X	6.3	817	13,300 CUP	7.0	900	16,900 CUP
Longshot	6.3	848	14,100 CUP	6.8	908	17,200 CUP
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
W244	5.1	793	15,300 PSI	5.6	885	19,700 PSI
W231	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. HDY XTP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.210″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 7	7.8	743	17,800 PSI	9.2	895	20,900 PSI
No. 5	6.6	751	17,800 PSI	7.7	869	21,000 PSI
Silhouette	6.2	785	17,700 PSI	7.3	916	20,900 PSI
True Blue	5.8	722	17,800 PSI	6.8	851	20,900 PSI
ZIP	4.5	703	17,600 PSI	5.3	816	20,700 PSI
No. 2	4.3	697	17,800 PSI	5.1	799	21,000 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Solo 1000	4.0	695	17,500 PSI	4.7	789	20,600 PSI
Competition	3.3	672	17,600 PSI	3.9	746	20,700 PSI
Nitro 100 NF	3.3	664	17,600 PSI	3.8	741	20,700 PSI

Bullet: 230 GR. LC LRN Dia: .452″

Case: REM Primer: FED 150, Large Pistol Col: 1.230″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Nitro 100 NF	3.6	770	18,800 PSI	4.0	823	20,900 PSI

Bullet: 230 GR. LC LRN Dia: .452″

Case: REM Primer: FED 150, Large Pistol Col: 1.230″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	9.9	862	17,500 PSI	11.0	979	19,400 PSI
No. 2	5.0	766	15,400 PSI	5.6	870	17,200 PSI
Solo 1000	4.6	790	16,500 PSI	5.1	898	18,300 PSI

Bullet: 230 GR. LC LSWC Dia: .452″

Case: REM Primer: FED 150, Large Pistol Col: 1.267″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
True Blue	6.7	822	17,500 PSI	7.4	913	19,500 PSI
ZIP	5.2	824	18,300 PSI	5.8	915	20,300 PSI
Competition	3.6	725	17,300 PSI	4.0	805	19,200 PSI

Bullet: 230 GR. LRN Dia: .452″

Case: WIN Primer: FED 150, Large Pistol Col: 1.200″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
HS-6	7.0	751	12,900 CUP	8.0	859	16,600 CUP

Case: WIN Primer: FED 150, Large Pistol Col: 1.200″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
800-X	6.5	867	15,100 CUP	7.0	939	17,300 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
W572	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
W231	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
W244	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
Trail Boss	3.5	658	11,200 CUP	4.5	761	15,100 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. NOS FMJ Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.250″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 5	7.8	816	17,300 PSI	8.7	927	19,300 PSI
Solo 1000	4.9	746	16,800 PSI	5.5	848	18,900 PSI

Bullet: 230 GR. RAIN HP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.237″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	8.3	778	17,600 PSI	9.8	930	20,700 PSI
No. 5	7.0	807	17,700 PSI	8.2	934	20,800 PSI
True Blue	6.4	807	17,700 PSI	7.6	925	20,800 PSI
Silhouette	6.4	808	17,400 PSI	7.5	943	20,500 PSI
ZIP	5.0	748	17,400 PSI	5.9	862	20,500 PSI
No. 2	4.6	721	17,600 PSI	5.4	831	20,700 PSI
Solo 1000	4.3	705	17,200 PSI	5.1	802	20,200 PSI
Competition	3.7	642	17,600 PSI	4.4	747	20,700 PSI
Nitro 100 NF	3.5	610	17,200 PSI	4.1	728	20,200 PSI

Bullet: 230 GR. SIE FMJ Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.250″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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. BERB FP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.200″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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

Bullet: 250 GR. RAIN FP Dia: .451″

Case: REM Primer: FED 150, Large Pistol Col: 1.212″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
No. 7	7.5	731	17,100 PSI	8.8	863	20,100 PSI
No. 5	6.2	737	17,800 PSI	7.3	864	20,900 PSI
True Blue	5.8	739	17,700 PSI	6.8	854	20,900 PSI
Silhouette	5.8	766	17,600 PSI	6.8	893	20,700 PSI
No. 2	4.1	680	17,500 PSI	4.8	780	20,600 PSI

45 Colt

Barrel: 7.25″ Twist: 1:16″ Trim: 1.280″

Bullet: 180 GR. CAST LRNFP Dia: .452″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.540″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Universal	6.5	791	7,100 CUP	9.2	1161	13,900 CUP
W244	6.8	914	8,100 PSI	9.1	1201	13,500 PSI
W231	6.0	838	6,500 CUP	8.2	1087	13,900 CUP
Trail Boss	6.0	818	9,400 PSI	7.3	935	12,700 PSI
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. CAST LRNFP Dia: .452″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W572	8.3	886	9,200 PSI	9.8	1080	13,300 PSI
800-X	7.2	842	8,700 PSI	9.3	1042	13,500 PSI
W244	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
W231	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
Trail Boss	5.5	706	8,000 PSI	6.5	855	11,000 PSI
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: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
W572	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
800-X	6.5	808	10,200 PSI	8.8	996	13,400 PSI
W231	7.8	956	11,000 CUP	8.7	1048	14,000 CUP
W244	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: 200 GR. LC LRNFP Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.586″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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
Solo 1000	6.0	897	11,800 PSI	7.1	989	13,900 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
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: 215 GR. CAST LRNFP   Dia: .452″

Case: WIN   Primer: WIN LP, Large Pistol   Col: 1.650″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
CFE Pistol	8.2	919	10,100 PSI	9.5	1037	12,400 PSI
800-X	7.5	845	10,600 PSI	9.2	995	13,200 PSI
W572	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
W244	6.5	839	7,700 PSI	8.6	1091	13,200 PSI
W231	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
Trail Boss	5.5	725	8,100 PSI	6.5	820	10,300 PSI
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. HDY FTX   Dia: .452″

Case: WIN   Primer: WIN LP, Large Pistol   Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	8.8	790	9200 PSI	10.8	987	13,200 PSI
800-X	6.2	654	7800 PSI	8.9	937	12,800 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
W231	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: WIN   Primer: WIN LP, Large Pistol   Col: 1.580″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
800-X	6.2	746	9,100 PSI	9.0	1003	13,200 PSI
Universal	6.5	761	7,600 CUP	8.1	975	13,800 CUP
W244	6.0	849	9,000 PSI	7.7	1044	13,500 PSI
W231	5.8	738	7,300 CUP	7.3	941	13,700 CUP
Trail Boss	5.5	685	9,100 PSI	6.5	802	12,400 PSI
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: WIN   Primer: WIN LP, Large Pistol   Col: 1.600″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X	6.5	778	9,100 PSI	8.0	911	13,300 PSI
Universal	6.5	742	9,200 CUP	7.8	941	13,000 CUP
W572	7.1	851	11,800 PSI	7.6	898	13,600 PSI
W244	6.1	807	9,400 PSI	7.4	972	13,400 PSI
W231	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
Trail Boss	4.5	606	8,800 PSI	5.8	727	12,700 PSI
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: WIN   Primer: WIN LP, Large Pistol   Col: 1.595″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X	6.0	646	10,800 PSI	7.4	790	13,100 PSI
W231	6.5	692	10,500 CUP	7.3	797	14,000 CUP
W572	6.7	692	11,900 PSI	7.1	742	13,400 PSI
W244	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 LSWC   Dia: .452″

Case: REM   Primer: REM 2 1/2, Large Pistol   Col: 1.604″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
Solo 1000	5.2	760	11,800 PSI	6.1	845	13,900 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: WIN   Primer: WIN LP, Large Pistol   Col: 1.595″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
800-X	6.0	611	10,300 PSI	7.6	803	13,600 PSI
W231	6.5	722	12,000 CUP	7.1	787	14,000 CUP
W244	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 LFP   Dia: .452″

Case: REM   Primer: REM 2 1/2, Large Pistol   Col: 1.565″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-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
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
Solo 1000	4.1	645	11,400 PSI	4.8	712	13,400 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: WIN   Primer: WIN LP, Large Pistol   Col: 1.670″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
HS-6	9.0	616	9,600 CUP	10.0	730	13,700 CUP
W572	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
W244	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: 135 GR. LHG XD   Dia: .452″

Case: REM   Primer: REM 2 1/2, Large Pistol   Col: 1.630″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 9	29.2	1679	24,100 PSI	34.3	2040	28,300 PSI
No. 7	18.8	1593	24,600 PSI	22.2	1842	28,900 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: 200 GR. LC LRNFP Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.586″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
ZIP	11.0	1276	25,500 PSI	12.9	1450	29,900 PSI
No. 2	10.4	1231	25,300 PSI	12.3	1398	29,900 PSI
Solo 1000	9.7	1206	25,300 PSI	11.4	1350	29,700 PSI
Competition	8.3	1160	25,200 PSI	9.8	1284	29,800 PSI
Nitro 100 NF	8.0	1152	25,300 PSI	9.4	1272	29,700 PSI

Bullet: 225 GR. BAR XPB Dia: .451″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.600″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
Enforcer	21.2	1351	26,500 PSI	23.5	1501	29,500 PSI
No. 9	18.0	1226	25,500 PSI	20.0	1362	28,300 PSI
No. 7	14.6	1161	24,900 PSI	16.2	1290	27,700 PSI

Case: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
IMR 4227	20.9	1077	19,900 CUP	24.9	1312	29,800 CUP
W296	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: WIN Primer: WIN LP, Large Pistol Col: 1.700″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
Lil'Gun	26.5	1551	28,500 PSI	27.5	1594	30,100 PSI
W296	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: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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: WIN Primer: WIN LP, Large Pistol Col: 1.600″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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: 255 GR. LC LSWC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.604″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
No. 11 FS	24.2	1287	24,700 PSI	28.4	1549	29,000 PSI
A-5744	23.8	1205	25,500 PSI	28.0	1396	30,000 PSI
Enforcer	22.9	1265	25,400 PSI	27.0	1559	30,000 PSI
A-4100	22.9	1265	25,500 PSI	26.8	1547	29,900 PSI
No. 9	20.6	1303	25,500 PSI	24.2	1524	30,000 PSI
TCM	18.7	1282	24,600 PSI	22.0	1457	29,000 PSI
No. 7	15.4	1196	25,500 PSI	18.1	1400	30,000 PSI
No. 5	13.2	1223	25,400 PSI	15.5	1410	29,900 PSI
True Blue	12.1	1196	25,600 PSI	14.2	1354	30,000 PSI
Silhouette	11.8	1144	25,500 PSI	13.8	1322	29,900 PSI
ZIP	9.4	1111	25,600 PSI	11.0	1263	30,000 PSI
No. 2	9.0	1066	25,300 PSI	10.6	1207	29,800 PSI
Solo 1000	8.3	1044	25,300 PSI	9.8	1174	29,900 PSI
Nitro 100 NF	6.9	998	25,400 PSI	8.1	1114	29,900 PSI
Competition	6.9	983	25,100 PSI	8.1	1093	29,500 PSI

Bullet: 260 GR. NOS PART Dia: .451″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.650″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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. LC LFP Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.566″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-5744	19.4	1021	24,700 PSI	22.8	1182	29,000 PSI
No. 11 FS	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
A-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
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
Solo 1000	6.4	857	24,700 PSI	7.5	961	29,000 PSI
Nitro 100 NF	5.5	835	25,300 PSI	6.5	935	29,900 PSI
Competition	5.5	824	25,300 PSI	6.5	914	29,900 PSI

Bullet: 300 GR. SPR JFP Dia: .451″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.650″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
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: 320 GR. BME PUNCH Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.640″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
A-5744	18.6	902	24,800 PSI	21.8	1076	29,000 PSI
Enforcer	17.8	1040	25,100 PSI	21.0	1255	29,700 PSI
A-4100	17.8	1040	25,100 PSI	20.9	1241	29,500 PSI
No. 9	15.9	1058	25,200 PSI	18.7	1214	29,700 PSI

Bullet: 325 GR. CPB LFN PB Dia: .452″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.680″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H110	21.0	1109	18,100 CUP	24.0	1266	27,400 CUP
H4227	20.0	1053	22,300 CUP	23.0	1189	28,000 CUP
Lil'Gun	17.0	1061	20,700 CUP	20.5	1235	29,700 CUP

Bullet: 325 GR. MBW LSWCGCDC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.570″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
No. 11 FS	17.1	1031	24,600 PSI	20.2	1223	29,000 PSI
TCM	14.7	1030	25,200 PSI	17.3	1191	29,700 PSI

Bullet: 335 GR. CPB LFN GC Dia: .452″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.680″

Powder	Starting Grs.	Starting Vel.	Starting Pressure	Maximum Grs.	Maximum Vel.	Maximum Pressure
H110	20.5	1109	19,200 CUP	23.5	1240	28,000 CUP
H4227	20.0	1011	21,100 CUP	22.5C	1155	28,300 CUP
Lil'Gun	17.0	1052	20,100 CUP	20.0	1206	29,600 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: 335 GR. CPB LWLNGC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.665″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	19.7	1124	25,500 PSI	23.2	1317	30,000 PSI
TCM	15.2	1048	24,300 PSI	17.9	1220	28,600 PSI

Bullet: 360 GR. CPB LFN GC Dia: .452″

Case: WIN Primer: WIN LP, Large Pistol Col: 1.680″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	19.5	1004	21,100 CUP	22.0C	1167	29,800 CUP
H110	18.0	1012	20,200 CUP	21.0	1151	28,300 CUP
Lil'Gun	15.5	984	22,400 CUP	18.0	1131	29,700 CUP

Bullet: 360 GR. CPB LWLNGC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.670″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	17.9	1059	25,300 PSI	21.1	1231	29,800 PSI
TCM	14.4	981	24,300 PSI	16.9	1163	28,500 PSI

Bullet: 395 GR. CPB LWLNGC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.670″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	15.5	954	25,400 PSI	18.2	1120	29,900 PSI
A-4100	13.9	936	24,800 PSI	16.1	1042	28,700 PSI
TCM	13.2	914	24,300 PSI	15.6	1073	28,600 PSI
No. 7	10.3	845	24,400 PSI	12.2	970	28,900 PSI

Bullet: 395 GR. LC LWLNGC Dia: .452″

Case: REM Primer: REM 2 1/2, Large Pistol Col: 1.658″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	16.0	844	25,000 PSI	18.8	985	29,400 PSI
Enforcer	13.9	936	24,600 PSI	16.3	1064	28,900 PSI

454 CASULL

Barrel: 9.375″ Twist: 1:24″ Trim: 1.380″

Bullet: 240 GR. FA JHP Dia: .452″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.765″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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: 1.680″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	32.4	1498	38,000 PSI	36.0	1702	42,200 PSI
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
A-4100	28.6	1639	38,300 PSI	31.8	1822	42,600 PSI
A-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

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.680″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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: WIN SR, Small Rifle Col: 1.780″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	26.0	1580	40,800 CUP	28.5C	1685	50,000 CUP
W296	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: WIN SR, Small Rifle Col: 1.700″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 JFP Dia: .452″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.765″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	27.0	1575	48,200 PSI	30.0	1750	53,500 PSI
A-4100	26.8	1559	47,400 PSI	29.8	1733	52,700 PSI

Bullet: 260 GR. SPR JHP Dia: .451″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.675″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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 JFP Dia: .452″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.775″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	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: 1.760″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-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
A-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″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	25.2	1463	46,300 PSI	28.0	1625	51,400 PSI
A-4100	25.0	1448	45,600 PSI	27.8	1609	50,600 PSI

Bullet: 325 GR. CPB LFN PB Dia: .452″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.760″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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
Trail Boss	5.0	636	13,600 CUP	7.0	798	23,700 CUP

Bullet: 325 GR. SFT HP Dia: .451″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.750″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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: WIN SR, Small Rifle Col: 1.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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
Trail Boss	4.8	618	15,500 CUP	6.8	778	25,600 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: 335 GR. CPB LWLNGC Dia: .452″

Case: Hornady Primer: CCI 400, Small Rifle Col: 1.760″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	23.4	1377	48,000 PSI	26.0	1530	53,400 PSI
A-4100	23.2	1363	47,300 PSI	25.8	1515	52,500 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: WIN SR, Small Rifle Col: 1.760″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	21.0	1205	31,000 CUP	24.0	1406	48,300 CUP
W296	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
Trail Boss	5.0	615	18,000 CUP	6.0	699	27,300 CUP

Bullet: 360 GR. CPB LWLNGC Dia: .452″

Case: Hornady Primer: CCI 400, Small Rifle Col: 1.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	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: 370 GR. CPB LWLNGC Dia: .452″

Case: Hornady Primer: CCI 400, Small Rifle Col: 1.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	21.6	1258	43,400 PSI	24.0	1398	48,200 PSI
A-4100	21.4	1245	42,700 PSI	23.8	1384	47,500 PSI

Bullet: 395 GR. CPB LFN GC Dia: .452″

Case: Freedom Arms Primer: WIN SR, Small Rifle Col: 1.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	18.0	1076	29,600 CUP	21.0	1269	48,300 CUP
W296	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
Trail Boss	4.0	519	19,200 CUP	5.0	607	23,600 CUP

Bullet: 395 GR. CPB LWLNGC Dia: .452″

Case: Hornady Primer: CCI 400, Small Rifle Col: 1.770″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	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
A-4100	19.7	1181	42,800 PSI	21.8	1312	47,600 PSI

460 S&W MAG

Barrel: 10.743″ Twist: 1:20″ Trim: 1.790″

Bullet: 200 GR. BAR XPB Dia: .451″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.320″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	42.3	2050	42,500 PSI	47.0	2278	47,200 PSI
No. 9	41.4	2168	51,000 PSI	46.0	2409	56,700 PSI

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.320″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H110	45.0	2237	38,500 PSI	46.5	2315	42,900 PSI
H4227	41.0	2077	35,200 PSI	45.5C	2238	42,200 PSI
Longshot	20.0	1752	30,300 PSI	27.0	2161	56,500 PSI

Bullet: 225 GR. BAR X Dia: .451″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.110″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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 Dia: .452″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	45.0	1713	48,000 PSI	50.0	1985	53,300 PSI
Enforcer	42.0	1936	53,200 PSI	47.0	2195	59,500 PSI
A-4100	41.4	1895	52,800 PSI	46.0	2145	58,700 PSI
A-5744	40.0	1836	52,900 PSI	44.0	2035	58,200 PSI
No. 9	34.0	1820	53,100 PSI	38.0	2000	59,300 PSI

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	40.0	2018	43,200 PSI	45.0C	2198	51,800 PSI
W296	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

Bullet: 250 GR. BAR X Dia: .451″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Lil'Gun	39.0	1945	41,400 PSI	42.0	2044	43,600 PSI
W296	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: Hornady Primer: WIN LR, Large Rifle Col: 2.175″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	41.5	1628	46,500 PSI	46.0	1860	51,500 PSI
Enforcer	38.3	1895	52,200 PSI	42.5	2092	57,900 PSI
A-4100	36.9	1843	52,400 PSI	41.0	2048	58,200 PSI
A-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

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.175″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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
H4227	38.0	1939	45,000 PSI	43.0C	2098	51,300 PSI

Bullet: 265 GR. SFT HP Dia: .451″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.180″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	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: 275 GR. BAR XPB Dia: .452″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.289″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
4100	34.9	1757	48,000 PSI	38.7	1952	53,300 PSI
No. 9	34.2	1805	52,000 PSI	38.0	2006	57,800 PSI

Bullet: 300 GR. HDY XTP MAG Dia: .452″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.160″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
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
W296	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: WIN LR, Large Rifle Col: 2.187″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Enforcer	35.6	1855	49,500 PSI	39.8	2042	55,400 PSI
A-4100	35.1	1820	52,000 PSI	39.0	2042	57,800 PSI

Bullet: 300 GR. SIE JSP Dia: .452″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.208″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	40.5	1590	51,300 PSI	45.0	1810	57,000 PSI
A-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. CPB LFN PB Dia: .452″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.200″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE BLK	45.5	1716	30,200 PSI	50.0C	1912	38,600 PSI
W296	38.0	1810	45,300 PSI	42.0	1953	54,900 PSI
H110	38.0	1810	45,300 PSI	42.0	1953	54,900 PSI
Lil'Gun	39.0	1843	43,700 PSI	42.0	1925	46,400 PSI
H4227	34.0	1790	51,100 PSI	38.0	1897	56,400 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
Titegroup	15.0	1353	48,200 PSI	17.6	1470	55,100 PSI
Trail Boss	7.0	734	16,500 PSI	11.0	914	20,400 PSI

Bullet: 325 GR. SFT HP Dia: .451″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.175″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	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: WIN LR, Large Rifle Col: 2.180″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	38.0	1500	54,000 PSI	42.0	1684	59,700 PSI
No. 11 FS	33.3	1572	51,000 PSI	39.2	1863	60,000 PSI
A-5744	32.0	1500	52,300 PSI	36.5	1710	59,600 PSI
A-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: WIN LRM, Large Rifle Mag Col: 2.180″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	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
Trail Boss	7.0	726	17,700 PSI	10.0	887	22,200 PSI

Bullet: 360 GR. CPB LWLNGC Dia: .452″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.199″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
A-1680	36.0	1400	52,400 PSI	39.5	1600	57,500 PSI
No. 11 FS	31.5	1533	50,900 PSI	37.1	1775	59,900 PSI
A-5744	31.5	1480	53,800 PSI	35.0	1640	59,800 PSI
A-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: WIN LRM, Large Rifle Mag Col: 2.190″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	35.0	1713	47,600 PSI	38.0	1836	56,900 PSI
H110	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
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
Trail Boss	7.0	712	19,600 PSI	9.0	827	24,200 PSI

Bullet: 395 GR. CPB WLN GC Dia: .452″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.185″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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
W296	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
Trail Boss	7.0	695	21,100 PSI	8.0	754	24,000 PSI

480 RUGER

Barrel: 7 1/2″ Twist: 1:18″ Trim: 1.275″

Bullet: 275 GR. BAR XPB Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.695″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: Hornady Primer: WIN LP, Large Pistol Col: 1.640″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN LP, Large Pistol Col: 1.620″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4227	24.0	1295	32,600 PSI	27.2	1477	45,600 PSI
W296	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
Enforcer	22.9	1372	39,000 PSI	25.4	1524	43,300 PSI
A-4100	22.7	1358	38,400 PSI	25.2	1509	42,600 PSI
Lil'Gun	22.5	1416	39,300 PSI	25.1	1525	45,200 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: WIN LP, Large Pistol Col: 1.630″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
IMR 4227	25.0	1363	38,500 PSI	28.0C	1485	46,500 PSI
W296	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
Longshot	13.0	1221	37,300 PSI	14.5	1313	45,400 PSI
Titegroup	9.7	1101	37,100 PSI	10.8	1172	45,000 PSI
Trail Boss	5.0	621	16,700 PSI	6.5	740	22,700 PSI

Bullet: 355 GR. TS WNFPGC Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.615″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
No. 11 FS	23.1	1257	34,800 PSI	27.2	1472	41,000 PSI
Enforcer	21.9	1299	36,200 PSI	24.3	1443	40,100 PSI
A-4100	21.7	1286	35,600 PSI	24.1	1429	39,500 PSI

Bullet: 370 GR. CPB LFNPB Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.660″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
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: WIN LP, Large Pistol Col: 1.640″

Powder	Grs.	Vel.	Pressure	Grs.	Vel.	Pressure
H4227	22.5	1248	32,800 PSI	26.0C	1427	45,900 PSI
W296	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
Trail Boss	4.5	597	16,000 PSI	5.7	689	20,900 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: 375 GR. CPB LFNGC Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.625″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 11 FS	20.7	1196	35,600 PSI	24.3	1375	41,800 PSI
Enforcer	19.7	1220	37,500 PSI	21.9	1356	41,600 PSI
A-4100	19.6	1208	36,900 PSI	21.7	1342	41,000 PSI

Bullet: 390 GR. CPB LFNPB Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.680″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
No. 9	18.4	1180	40,800 PSI	20.5	1300	45,500 PSI
No. 7	14.8	1150	41,800 PSI	16.5	1260	46,600 PSI

Bullet: 400 GR. HDY XTP Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.620″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	18.0	1026	31,600 PSI	21.0	1211	46,100 PSI
W296	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
A-4100	18.5	1158	39,900 PSI	20.5	1265	44,300 PSI
Enforcer	18.5	1158	39,900 PSI	20.5	1265	44,300 PSI
No. 9	17.0	1130	39,900 PSI	19.0	1240	44,600 PSI
Lil'Gun	15.0	1067	34,200 PSI	18.0	1229	45,600 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

Bullet: 405 GR. CPB (w/GCK) Dia: .475″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.620″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
W296	20.0	1213	35,500 PSI	22.3	1328	45,200 PSI
H110	20.0	1213	35,500 PSI	22.3	1328	45,200 PSI
H4227	19.0	1112	33,200 PSI	21.7	1255	45,500 PSI
Lil'Gun	19.0	1219	34,400 PSI	21.0	1337	43,900 PSI
Longshot	10.0	1023	33,400 PSI	11.8	1140	46,100 PSI
Titegroup	7.5	927	36,100 PSI	8.8	1019	46,500 PSI
Trail Boss	3.5	469	15,200 PSI	5.5	645	25,700 PSI

Bullet: 420 GR. BTB LFN GC Dia: .476″

Case: Hornady Primer: WIN LP, Large Pistol Col: 1.640″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
H4227	19.5	1125	39,100 PSI	21.3C	1214	46,400 PSI
W296	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
Trail Boss	3.5	467	16,200 PSI	5.0	597	24,300 PSI

500 S&W MAG

Barrel: 10″ Twist: 1:18″ Trim: 1.615″

Bullet: 275 GR. BAR XPB Dia: .500″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.085″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE BLK	46.0	1616	22,500 PSI	54.0C	1861	31,000 PSI
W296	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: 275 GR. RAIN HP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 1.965″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	46.5	1771	43,600 PSI	54.7	2079	51,300 PSI
Enforcer	42.4	1822	40,100 PSI	49.9	2111	47,200 PSI
A-4100	42.1	1813	39,300 PSI	49.6	2099	46,400 PSI
No. 2	23.0	1671	46,800 PSI	27.0	1833	55,000 PSI

Bullet: 300 GR. HDY FTX Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.175″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	48.5	1661	31,500 PSI	53.9	1852	35,000 PSI
No. 11 FS	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
A-4100	41.3	1826	46,500 PSI	48.6	2127	54,700 PSI
A-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: 300 GR. RAIN FP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.005″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	45.2	1691	43,900 PSI	53.2	2003	51,600 PSI
Enforcer	42.5	1824	44,200 PSI	50.0	2085	52,000 PSI
A-4100	42.3	1817	43,600 PSI	49.8	2076	51,300 PSI
No. 9	37.9	1777	38,000 PSI	44.6	1977	44,800 PSI
No. 2	21.7	1561	46,300 PSI	25.6	1705	54,600 PSI

Bullet: 325 GR. BAR XPB Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.290″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-4100	38.0	1680	51,600 PSI	42.0	1820	57,000 PSI
Enforcer	38.0	1680	51,600 PSI	42.0	1820	57,000 PSI

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.290″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE BLK	46.9	1540	22,800 PSI	54.0C	1793	31,200 PSI
W296	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: 335 GR. RAIN HP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 1.960″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-5744	41.7	1585	45,100 PSI	49.0	1880	53,000 PSI
Enforcer	38.3	1718	44,500 PSI	45.0	1930	52,300 PSI
A-4100	38.0	1709	43,700 PSI	44.7	1917	51,400 PSI
No. 9	37.6	1773	49,100 PSI	41.8	1909	54,600 PSI
No. 2	20.0	1432	47,000 PSI	23.5	1579	55,200 PSI

Bullet: 350 GR. HDY XTP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 1.985″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	48.2	1626	38,400 PSI	53.6	1820	42,700 PSI
A-5744	42.0	1599	45,600 PSI	49.4	1868	53,600 PSI
Enforcer	38.2	1685	46,700 PSI	45.0	1914	55,000 PSI
A-4100	38.1	1682	46,300 PSI	44.9	1909	54,500 PSI
No. 9	37.6	1749	49,300 PSI	41.8	1878	54,800 PSI

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 1.985″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
CFE BLK	46.0	1528	24,600 PSI	54.0C	1836	35,700 PSI
W296	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. MBW LLFNGC Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 1.950″

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
A-1680	47.0	1635	35,100 PSI	52.3	1837	39,100 PSI
A-5744	40.4	1379	41,600 PSI	47.5	1831	48,900 PSI
Enforcer	38.7	1706	46,200 PSI	45.5	1979	54,300 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-4100	38.7	1701	45,900 PSI	45.4	1973	53,800 PSI
No. 9	35.1	1676	42,100 PSI	44.3	1917	53,200 PSI

Bullet: 350 GR. SIE JHP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.050″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	50.1	1651	38,800 PSI	55.7	1849	43,200 PSI
A-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. 11 FS	40.3	1661	47,900 PSI	46.3	1882	55,000 PSI
A-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 LGC Dia: .500″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.020″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE BLK	46.0	1470	22,300 PSI	54.0C	1752	31,600 PSI
W296	44.5	1801	42,800 PSI	47.0	1909	49,900 PSI
H110	44.5	1801	42,800 PSI	47.0	1909	49,900 PSI
Lil'Gun	41.0	1831	44,900 PSI	44.5	1949	50,400 PSI
H4227	40.0	1688	38,700 PSI	42.0	1784	48,900 PSI
Longshot	21.5	1476	42,000 PSI	23.3	1576	50,000 PSI
Titegroup	16.0	1326	40,600 PSI	18.5	1431	49,600 PSI
Trail Boss	8.0	746	13,500 PSI	12.0	926	19,000 PSI

Bullet: 370 GR. CPB LWFNGC Dia: .501″

Case: Hornady Primer: WIN LR, Large Rifle Col: 1.995″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	47.4	1628	37,400 PSI	52.7	1826	41,600 PSI
A-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
A-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: Hornady Primer: WIN LR, Large Rifle Col: 2.290″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	38.0	1250	33,000 PSI	42.0	1450	36,500 PSI
No. 11 FS	36.0	1544	51,000 PSI	39.9	1695	56,700 PSI
A-4100	33.0	1475	50,200 PSI	37.5	1665	57,000 PSI
Enforcer	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

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.290″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE BLK	41.6	1431	24,900 PSI	49.0C	1641	35,300 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

Bullet: 385 GR. REM. HP Dia: .500″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.150″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
W296	39.0	1648	38,700 PSI	42.5	1794	47,300 PSI
H110	39.0	1648	38,700 PSI	42.5	1794	47,300 PSI
H4227	37.0	1644	41,900 PSI	41.0	1788	51,800 PSI
Lil'Gun	38.0	1727	42,700 PSI	41.0	1852	51,100 PSI
Longshot	20.0	1398	39,900 PSI	23.0	1523	49,300 PSI
Titegroup	15.5	1250	38,300 PSI	18.5	1396	49,500 PSI

Bullet: 400 GR. BAR FNFB Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.030″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	40.3	1451	37,200 PSI	44.8	1582	41,300 PSI
A-5744	36.8	1408	45,300 PSI	43.2	1662	53,200 PSI
Enforcer	32.8	1545	47,100 PSI	38.5	1718	55,200 PSI
A-4100	32.1	1527	45,400 PSI	37.8	1694	53,500 PSI
No. 9	29.3	1496	46,400 PSI	34.4	1673	54,500 PSI

Bullet: 400 GR. SIE JSP Dia: .500″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.050″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	45.0	1506	39,400 PSI	50.0	1699	43,800 PSI
A-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
A-4100	35.5	1554	45,400 PSI	41.8	1738	53,500 PSI
No. 9	31.5	1527	45,200 PSI	37.0	1669	53,100 PSI

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.050″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE BLK	44.2	1481	27,500 PSI	52.0C	1759	40,900 PSI
W296	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

Bullet: 410 GR. MBW LLFNGC Dia: .501″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.085″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	47.5	1637	43,900 PSI	52.8	1813	48,800 PSI
A-5744	40.1	1508	46,500 PSI	47.2	1753	54,700 PSI
No. 11 FS	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
A-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 LGC Dia: .500″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.025″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE BLK	41.6	1473	28,300 PSI	49.0C	1672	36,600 PSI
W296	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
H4227	34.0	1496	41,900 PSI	37.0	1609	49,400 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
Trail Boss	7.0	643	14,600 PSI	10.0	799	21,200 PSI

Bullet: 440 GR. MBW LLFNGC Dia: .501″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.105″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	44.7	1541	42,800 PSI	49.7	1722	47,500 PSI
A-5744	38.1	1435	46,200 PSI	44.8	1669	54,300 PSI
No. 11 FS	36.7	1474	48,500 PSI	42.2	1682	55,800 PSI
Enforcer	33.4	1476	46,400 PSI	39.4	1659	54,700 PSI
A-4100	33.4	1474	46,200 PSI	39.3	1656	54,400 PSI
No. 9	31.0	1475	46,200 PSI	36.4	1626	54,300 PSI

Bullet: 450 GR. MTB LLFNGC Dia: .501″

Case: Hornady Primer: WIN LR, Large Rifle Col: 2.050″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	42.2	1537	45,900 PSI	46.9	1697	51,000 PSI
A-5744	35.8	1401	46,500 PSI	42.1	1641	54,700 PSI
Enforcer	31.0	1466	46,800 PSI	36.4	1639	55,000 PSI
A-4100	30.6	1454	46,700 PSI	36.0	1625	55,000 PSI
No. 9	28.2	1463	47,000 PSI	33.1	1597	55,200 PSI

Bullet: 500 GR. HDY SP Dia: .500″

Case: Starline Primer: WIN LRM, Large Rifle Mag Col: 2.065″

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
CFE BLK	40.8	1444	36,700 PSI	48.0C	1628	51,100 PSI
W296	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
H4227	30.0	1360	42,300 PSI	32.2	1436	49,300 PSI
Lil'Gun	27.0	1356	41,700 PSI	30.0	1463	50,100 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.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
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: WIN LR, Large Rifle** **Col: 2.070″**

Powder	Starting Loads Grs.	Starting Loads Vel.	Starting Loads Pressure	Maximum Loads Grs.	Maximum Loads Vel.	Maximum Loads Pressure
A-1680	39.4	1405	49,300 PSI	43.7	1533	54,700 PSI
A-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
A-4100	28.1	1301	43,600 PSI	33.0	1458	51,200 PSI
No. 11 FS	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

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%.