

**HODGDON**<sup>®</sup>  
BASIC RELOADERS MANUAL 2005





# HODGDON

*Extreme™ Rifle Powders*

Our exclusive line of extruded rifle powders —  
Hodgdon Extreme™ — was developed to give  
shooters consistent performance, load  
after load, in even the most  
extreme heat and cold.



# HODGDON

*New Products*



**XPERIMENTAL PACKS**  
An easy method to find the best load  
for your gun, three packs to choose  
from with 4 convenient 4 oz bottles.



**Triple Seven Pellets**  
Now available in 50 caliber,  
30 grain and 45 caliber, 50 grain.



**The 2004 Annual Manual**  
More than 5,000 loads, many new  
cartridges, articles and more!

# HODGDON

Triple Seven® Powder

The black powder substitute that cleans up with water.



Triple Seven® is a revolutionary black powder substitute that cleans up with water alone...even your hands will come clean with just water. You won't have to worry about any strong smells either...that and the time-consuming

clean-up are both eliminated when you shoot Triple Seven.

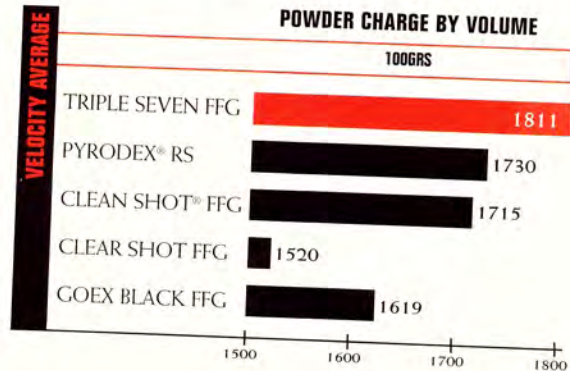
Triple Seven granular powder even delivers higher velocity for flatter, more accurate shooting. Triple Seven Pellets, are designed to have the same velocity as the famous Pyrodex Pellet, so switching over to the quick cleaning Triple Seven Pellet is amazingly easy. Clean up with water, no smell, and with the powder, flatter, more accurate shots. You get it all with Triple Seven.

Now available in granulated powder, 50 caliber, 50 grain Pellets, and new 50 caliber, 30 grain and 45 caliber, 50 grain Pellets. Triple Seven Pellets provide the modern muzzleloader fast, no spill, easy loading with instant ignition.



## GRANULAR COMPARISON TEST (CONDUCTED 10/16/01)

BULLET 50/45 260 gr. Spz. HP/MMP BLACK 50 CAL. SABOT





## Warning

Ballistic data shown in this manual was obtained in Hodgdon's 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, for Pyrodex® or for Triple Seven muzzleloading powder.

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 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.

**USE THIS DATA WITH HODGDON BRAND POWDERS ONLY**

**Reduce data 10% to start and work up. DO NOT EXCEED THE LOADS SHOWN IN THIS GUIDE.**



Charter Members

## Mission Statement

Our mission is to provide quality propellants, other products, and services to sportsmen, governing units, and other businesses in a manner which enhances the quality of life for our stockholders, employees, customers, associates, and suppliers. 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.

## Contents

|   | page  |
|---|-------|
| New Products .....                            | 2, 89 |
| Introduction .....                            | 3     |
| Hodgdon Usage Chart .....                     | 4     |
| Hodgdon Extreme Powder .....                  | 5     |
| Powder Descriptions .....                     | 6-7   |
| Properties and Storage of Powder .....        | 8-11  |
| Rifle Data .....                              | 12-25 |
| Pistol Data .....                             | 26-32 |
| Cowboy Action Data .....                      | 33-41 |
| Shotshell .....                               | 42    |
| Shotshell Warnings .....                      | 43    |
| Shotshell Bushing Charts .....                | 44-45 |
| Shotshell Wad Chart and Notes on Recoil ..... | 46    |
| Shotshell Data .....                          | 47-85 |

January 2005



# Shotgun Usage

|               | 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 |
| CLAYS         | X      |       |       |          | X           |       |       |       |          |             |       |       |       |       |          |
| TITWAD        | X      |       |       |          | X           |       |       |       |          |             |       |       |       |       |          |
| INTERNATIONAL | X      | X     |       |          | X           |       |       |       |          |             |       |       |       |       |          |
| TITEGROUP     | X      |       |       |          | X           |       | X     |       |          |             |       |       |       |       |          |
| UNIVERSAL     | X      | X     | X     |          | X           | X     | X     | X     |          |             | X     |       |       |       |          |
| HS-6          |        |       | X     |          | X           | X     | X     | X     |          |             | X     | X     |       |       |          |
| HS-7          |        |       |       |          |             | X     | X     | X     |          | X           | X     | X     |       |       |          |
| LONGSHOT      | X      | X     | X     |          |             |       |       |       |          | X           | X     | X     | X     | X     |          |
| H110          |        |       |       | X        |             |       |       |       |          | X           | X     | X     | X     | X     |          |
| Lil' GUN      |        |       |       | X        |             |       |       | X     |          |             |       |       |       |       | X        |



# Pistol Usage

|           | TARGET | LIGHT DUTY | MEDIUM DUTY | MAGNUM |
|-----------|--------|------------|-------------|--------|
|           | CLAYS  | X          |             |        |
| TITEGROUP | X      | X          |             |        |
| UNIVERSAL | X      | X          |             |        |
| HP-38     | X      |            | X           |        |
| HS-6      |        | X          | X           |        |
| HS-7      |        | X          | X           |        |
| H110      |        |            | X           | X      |
| H4227     |        |            | X           | X      |
| Lil' GUN  |        |            | X           | X      |



# Rifle Usage

|           | TARGET | SILHOUETTE | LIGHT | MEDIUM | MAGNUM | 50 CAL. |
|-----------|--------|------------|-------|--------|--------|---------|
|           | H4227  |            |       | X      |        |         |
| LIL'GUN   |        |            | X     |        |        |         |
| H4198     |        |            | X     |        |        |         |
| H322      | X      |            | X     |        |        |         |
| BENCHMARK | X      | X          | X     | X      |        |         |
| H335      | X      | X          | X     | X      |        |         |
| H4895     | X      | X          | X     | X      |        |         |
| VARGET    | X      | X          | X     | X      |        |         |
| BL-C(2)   | X      | X          | X     | X      |        |         |
| H380      |        | X          |       | X      |        |         |
| H414      |        | X          |       | X      | X      |         |
| H4350     |        | X          |       | X      | X      |         |
| H450      |        |            |       | X      | X      |         |
| H4831     |        |            |       | X      | X      |         |
| H4831 SC  |        |            |       | X      | X      |         |
| H1000     |        |            |       | X      | X      |         |
| RETUMBO   |        |            |       | X      | X      |         |
| H870      |        |            |       |        | X      |         |
| H50BMG    |        |            |       |        | X      | X       |



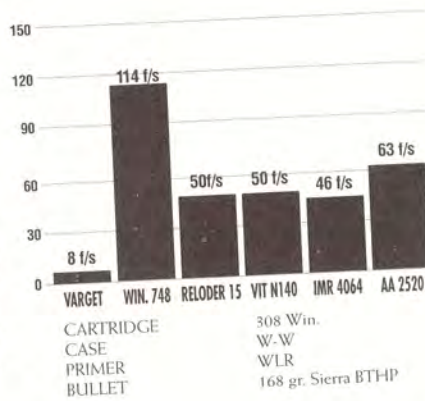
In the shooting world there are two kinds of people. Those who like to plink around, with little or no regard to accuracy and consistency. And then there are those who take the discipline of shooting to a whole new extreme.

Shooters, not unlike yourself, who sense changes in performance with changes in the weather. People who recognize lot differences in certain powders with a single pull of the trigger. For those discriminating few, Hodgdon is proud to offer the Extreme Series. This exclusive line of extruded powders was developed with extreme conditions in mind. They're manufactured so you can't tell the difference in performance from one lot to the next. And whether you're hunting deer in the dead of winter or prairie dogs in the middle of July, you'll get the same consistent performance, load after load. Some would say our obsession with performance is a bit extreme. We couldn't agree more.

### TEMPERATURE EXTREMES

You live in the "real" world, where 12 point bucks are rare and it's never 70° when you decide to fire your rifle. Where you shoot it's either freezing cold or burning hot. Not exactly ideal conditions for your rifle, or you for that matter. Fortunately, Hodgdon's Extreme powders perform just as well at 125° as they do at 0°. Using an exclusive extrusion process and exacting quality standards, Hodgdon has created a line of propellants that performs better at hot and cold temperatures than any other powder on the market. So when you sight in your rifle this summer, you can count on unbeatable accuracy this winter.

EXTREME VELOCITY SPREAD FOR TEMPERATURES BETWEEN 0°-125°



### LOT CONSISTENCY

Hodgdon goes through painstaking measures to ensure that all powder is consistent from lot to lot. And while the casual user may never notice, you certainly will. No matter when you purchase Hodgdon powder, you can feel confident that the performance you receive from one lot will match that of another.

### SHORT GRAIN METERING

With Hodgdon Extreme powders you get the best of both worlds. On one hand you get extruded performance that outperforms the best long grain powders on the market in any kind of weather. On the other, the shorter grains produced in the extrusion process meter extremely well. That means you can use Extreme powders in progressive loaders for high volume loading. Whether you're loading for targets, big game, plinking or varmints, Hodgdon has an extruded powder that will work for you.

## Smokeless Pistol & Shotgun Powders

► Extreme 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 gauge only, meters superbly and is ideal for 7/8, 1 and 1 1/8 ounce 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. 45 ACP and 38 Special are only two of the cartridges where CLAYS provides "tack driving" target accuracy with flawless functioning.

**INTERNATIONAL™** INTERNATIONAL is the second in the "CLAYS" series of powders. It is positioned in burning speed to accommodate 12 ga., 2 3/4" light, medium and heavy 1 1/8 oz. loads, with some very nice 1oz. listings. Also, it works splendidly in 20 ga., 7/8 oz. target and light field loads. As with CLAYS, clean burning and flawless functioning is 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.

**HP38™** HP38 is a spherical pistol powder that is great for low velocity and mid-range 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. 1 1/4 oz. As with all the "CLAYS" series powders, clean burning and uniformity are part of its attributes.

**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.

► **H4227** H4227 is the fastest of our Extreme Extruded rifle propellants. Because of its' burning speed, it doubles as a magnum pistol powder. Top applications are the 22 Hornet, 357 Maximum, 357 Magnum, 44 Magnum and the mighty 454 Casull. For stability under extreme conditions, H4227 is the top choice.

**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 the 475 Linebaugh. Silhouette shooters claim it is the most accurate 44 powder they have ever used. In addition, H110 is "the" choice for the miniscule 410 Bore shotgun. It handles all 2 1/2", 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, metering, along with poor burning characteristics. Not any more! 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.

## Smokeless Rifle Powders

► Extreme Powders

### 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 7.62 x 39.

► **H322™** This 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 Rem. and 222 Rem., Additionally, it performs superbly in the 308 Winchester with light



## Smokeless Rifle Powders

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 hand-loaders 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 characterize 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 it 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.

**H380™** H380 was an unnamed spherical rifle propellant when the late Bruce Hodgdon first used it. When a 38.0 grain charge behind a 52 grain bullet gave one hole groups from his 22 caliber wildcat (now called the 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.

**H414™** This spherical powder has an extremely wide range of use. From the 22-250 Remington to the 375 H&H, it will give excellent results. It is simply ideal in the 30-06. As with all of our spherical powders, it delivers incredibly consistent charge weights through nearly any type of powder measure. H414 yields similar results to H4350 in most cartridges, although charge weights will vary.

▶ **H4350** This Extreme Extruded propellant is a burning speed that 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!

▶ **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 rate in 1950. Since that time it has become a favorite for cartridges like 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, 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.

▶ **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 Magnum, 300 Remington Ultra Magnum, 30-378 Weatherby Magnum, etc. RETUMBO adds 40-100 fps more velocity to these cartridges when compared to other normal magnum powders. In addition, it is an Extreme Powder, making it perfect for big game hunting under all types of conditions.

**H870™** This spherical powder is great for heavy bullets in big, overbore magnum loads. H870 is also used in the 50 caliber BMG and is the only surplus powder left in the canister line. Because it is inexpensive, it is frequently used in large capacity cases where economy is a major consideration.

▶ **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, H50BMG 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!



## Properties

### ▶ Smokeless Powders

Smokeless powders, or propellants, are essentially mixtures of chemicals designed to burn under controlled conditions at the proper rate to propel a projectile from a gun.

Smokeless powders are made in three forms:

1. Thin, circular flakes or wafers
2. Small cylinders
3. Small spheres

Single-base smokeless powders derive their main source of energy from nitrocellulose.

The energy released from double-base smokeless powders is derived from both nitrocellulose and nitroglycerin.

All smokeless powders are extremely flammable; by design, they are intended to burn rapidly and vigorously when ignited.

Oxygen from the air is not necessary for the combustion of smokeless powders since they contain sufficient built-in oxygen to burn completely, even in an enclosed space such as the chamber of a firearm.

In effect, ignition occurs when the powder granules are heated above their ignition temperature. This can occur by exposing powder to:

1. A flame such as a match or primer flash.
2. An electrical spark or the sparks from welding, grinding, etc.
3. Heat from an electric hot plate or a fire directed against or near a closed container even if the powder itself is not exposed to the flame.

When smokeless powder burns, a great deal of gas at high temperature is formed. If the powder is confined, this gas will create pressure in the surrounding structure. The rate of gas generation is such, however, that the pressure can be kept at a low level if sufficient space is available or if the gas can escape.

In this respect smokeless powder differs from blasting agents or high explosives such as dynamite or blasting gelatin, although smokeless powder may contain chemical ingredients common to some of these products.

High explosives such as dynamite are made to detonate, that is, to change from solid state to gaseous state with evolution of intense heat at such a rapid rate that shock waves are propagated through any medium in contact with them. Such shock waves exert pressure on anything they contact, and, as a matter of practical consideration, it is almost impossible to satisfactorily vent away the effects of a detonation involving any appreciable quantity of dynamite.

Smokeless powder differs considerably in its burning characteristics from common "black powder."

Black powder burns essentially at the same rate out in the open (unconfined) as when in a gun.

When ignited in an unconfined state, smokeless powder burns inefficiently with an orange-colored flame. It produces a considerable amount of light brown noxious smelling smoke. It leaves a residue of ash and partially burned powder. The flame is hot enough to cause severe burns.

The opposite is true when it burns under pressure as in a cartridge fired in a gun. Then it produces very little smoke, a small glow, and leaves very little or no residue. The burning rate of smokeless powder increases with increased pressure.

### *continued Smokeless Powder Properties*

If burning smokeless powder is confined, gas pressure will rise and eventually can cause the container to burst. Under such circumstances, the bursting of a strong container creates effects similar to an explosion.

For this reason, the Department of Transportation (formerly Interstate Commerce Commission) sets specifications for shipping containers for propellants and requires tests of loaded containers – under actual fire conditions – before approving them for use.

When smokeless powder in D.O.T. approved containers is ignited during such tests, container seams split open or lids pop off – to release gases and powder from confinement at low pressure.

### ► Smokeless Powders

## How to check for deterioration

Although modern smokeless powders are basically free from deterioration under proper storage conditions, safe practices require a recognition of the signs of deterioration and its possible effects.

Powder deterioration can be checked by opening the cap on the container and smelling the contents. Powder undergoing deterioration has an irritating acidic odor. (Don't confuse this with common solvent odors such as alcohol, ether and acetone.)

Check to make certain that powder is not exposed to extreme heat as this may cause deterioration. Such exposure produces an acidity which accelerates further reaction and has been known, because of the heat generated by the reaction, to cause spontaneous combustion.

Never salvage powder from old cartridges and do not attempt to blend salvaged powder with new powder. Don't accumulate old powder stocks.

The best way to dispose of deteriorated smokeless powder is to burn it out in the open at an isolated location in small shallow piles (not over 1" deep). The quantity burned in any one pile should never exceed one pound. Use an ignition train of slow burning combustible material so that the person may retreat to a safe distance before powder is ignited. For more instructions call Hodgdon Powder.

### ► Smokeless Powders

## Consideration for Storage

Smokeless powder is intended to function by burning, so it must be protected against accidental exposure to flame, sparks or high temperatures.

For these reasons, it is desirable that storage enclosures be made of insulating materials to protect the powder from external heat sources.

Once smokeless powder begins to burn, it will normally continue to burn (and generate gas pressure) until it is consumed.

D.O.T. approved containers are constructed to open up at low internal pressures to avoid the effects normally produced by the rupture or bursting of a strong container.

Storage enclosures for smokeless powder should be constructed in a similar manner:

1. Of fire-resistant and heat-insulating materials to protect contents from external heat.
2. Sufficiently large to satisfactorily vent the gaseous products of combustion which would result if the quantity of smokeless powder within the enclosure accidentally ignited.

If a small, tightly enclosed storage enclosure is loaded to capacity with containers of smokeless powder, the walls of the enclosure will expand or move outwards to release the gas pressure – if the powder in storage is accidentally ignited.

Under such conditions, the effects of the release of gas pressure are similar or identical to the effects produced by an explosion.

Hence only the smallest practical quantities of smokeless powder should be kept in storage, and then in strict compliance with all applicable regulations and recommendations of the National Fire Protection Association.

## Recommendations for Storage Smokeless Powders

**STORE IN A COOL, DRY PLACE.** Be sure the storage area selected is free from any possible sources of excess heat and is isolated from open flame, furnaces, hot water heaters, etc. Do not store smokeless powder where it will be exposed to the sun's rays. Avoid storage in areas where mechanical or electrical equipment is in operation. Restrict from the storage areas heat or sparks which may result from improper, defective or overloaded electrical circuits.

**DO NOT STORE SMOKELESS POWDER IN THE SAME AREA WITH SOLVENTS, FLAMMABLE GASES OR HIGHLY COMBUSTIBLE MATERIALS.**

**STORE ONLY IN DEPARTMENT OF TRANSPORTATION APPROVED CONTAINERS.** Do not transfer the powder from an approved container into one which is not approved

**DO NOT SMOKE IN AREAS WHERE POWDER IS STORED OR USED.** Place appropriate "No Smoking" signs in these areas.

**DO NOT SUBJECT THE STORAGE CABINETS TO CLOSE CONFINEMENT. STORAGE CABINETS SHOULD BE CONSTRUCTED OF INSULATING MATERIALS AND WITH A WEAK WALL, SEAMS OR JOINTS TO PROVIDE AN EASY MEANS OF SELF-VENTING.**

**DO NOT KEEP OLD OR SALVAGED POWDERS.** Check old powders for deterioration regularly. Destroy deteriorated powders immediately.

**OBEY ALL REGULATIONS REGARDING QUANTITY AND METHODS OF STORING.** Do not store all your powders in one place. If you can, maintain separate storage locations. Many small containers are safer than one or more large containers.

**KEEP YOUR STORAGE AND USE AREA CLEAN.** Clean up spilled powder promptly. Make sure the surrounding area is free of trash or other readily combustible materials.

## 10-3 Smokeless Propellants Smokeless Powders

**10-3.1** Quantities of smokeless propellants not exceeding 25 lb (11.3 kg), in shipping containers approved by the U.S. Department of Transportation, may be transported in a private vehicle.

**10-3.2** Quantities of smokeless propellants exceeding 25 lb (11.3 kg) but not exceeding 50 lb (22.7 kg), transported in a private vehicle, shall be transported in a portable magazine having wood walls of at least 1 in. (25.4 mm) nominal thickness.

**10-3.3** Transportation of more than 50 lb (22.7 kg) of smokeless propellants in a private vehicle is prohibited.

**10-3.4** Commercial shipments of smokeless propellants in quantities not exceeding 100 lb (45.4 kg) are classified for transportation purposes as flammable solids when packaged according to U.S. Department of Transportation Hazardous Materials Regulations (Title 49, *Code of Federal Regulations*, Part 173.197a), and shall be transported accordingly.

**10-3.5** Commercial shipments of smokeless propellants exceeding 100 lb (45.4 kg) or not packaged in accordance with the regulations cited in 10-3.4 shall be transported according to U.S. Department of Transportation regulations for Class B propellant explosives.

**10-3.6** Smokeless propellants shall be stored in shipping containers specified by U.S. Department of Transportation Hazardous Materials Regulations.

**10-3.7** Smokeless propellants intended for personal use in quantities not exceeding 20 lb (9.1 kg) may be stored in original containers in residences. Quantities exceeding 20 lb (9.1 kg), but not exceeding 50 lb (22.7 kg), may be stored in residences if kept in a wooden box or cabinet having walls of at least 1 in. (25.4 mm) nominal thickness.

**10-3.8** Not more than 20 lb (9.1 kg) of smokeless propellants, in containers of 1 lb (0.45 kg) maximum capacity, shall be displayed in commercial establishments.

**10-3.9** Commercial stocks of smokeless propellants shall be stored as follows:

- a) Quantities exceeding 20 lb (9.1 kg), but not exceeding 100 lb (45.4 kg), shall be stored in portable wooden boxes having walls of at least 1 in. (25.4 mm) thickness.
- b) Quantities exceeding 100 lb (45.4 kg), but not exceeding 800 lb (363 kg), shall be stored in nonportable storage cabinets having walls of at least 1 in (25.4 mm) thickness. Not more than 400 lb (181 kg) may be stored in any one cabinet and cabinets shall be separated by a distance of at least 25 ft (7.63 m) or by a fire partition having a fire resistance of at least 1 hour.
- c) Quantities exceeding 800 lb (363 kg), but not exceeding 5,000 lb (2268 kg), may be stored in a building if the following requirements are met:
  1. The warehouse or storage room shall not be accessible to unauthorized personnel.
  2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least 1 in. (25.4 mm) thick and having shelves with no more than 3 ft. (0.92 m) separation between shelves.
  3. No more than 400 lb. (181 kg) shall be stored in any one cabinet..
  4. Cabinets shall be located against walls of the storage room or warehouse with at least 40 ft (12.2 m) between cabinets.
  5. Separation between cabinets may be reduced to 20 ft (6.1 m) if barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades shall extend at least 10 ft. (3 m) outward, shall be firmly attached to the wall, and shall be constructed of 1/4 in. (6.4 mm) boiler plate, 2 in. (51 mm) thick wood, brick, or concrete block.
  6. Smokeless propellant shall be separated from materials classified by the U.S. Department of Transportation as flammable liquids, flammable solids, and oxidizing materials by a distance of 25 ft. (7.63 m) or by a fire partition having a fire resistance of at least 1 hour.
  7. The building shall be protected by an automatic sprinkler system installed according to NFPA 13, *Standard for the Installation of Sprinkler Systems*.
- d) Smokeless propellants not stored according to (a), (b) and (c) above shall be stored in a Type 4 magazine constructed and located according to Chapter 6.

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# RIFLE data

Chris Hodgdon  
Hodgdon Powder Co., Inc.

Dear Sir;

Thank you for the fine powders that you and your company make! I have been using them for years. At current time I load 38 grains of h335 with a Hornady 180 grain fired with a CCI 250 mag. primer in the .35 Remington case. The rifle I use is the Remington Mod. 760. Enclosed is a picture of a 8 point that I took at app. 167 yards this past season. I also use h4198 in the .222 Rem. It gives me good groups and has been used for every thing from turkeys to varmits.

Most of all I like your misson statement!!! Not many people are willing to stand for Christ these days it seems. Keep up the good work and count on me to keep using your powders!

Daniel K. Helms



# RIFLE data

The loads shown in this section should be followed just as they are printed. These loads are like recipes. The closer they are followed, the better the resultant load.

**NEVER Exceed the Loads Listed in This Publication**

For all brands of 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.

For those loads listed where a starting load is not shown, start 10% 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), **H110 Loads should not be reduced more than 3%.**

Reduce H110 Loads 3% and work up from there. H110 if reduced too much will cause inconsistent ignition. In some cases it will lodge a bullet in the barrel, causing a hazardous situation (Barrel Obstruction). This may cause severe personal injury or death to users or bystanders. **DO NOT REDUCE H110 LOADS BY MORE THAN 3%.**

**H4831SC** has the same ballistic performance as H4831.

## Brands

BAR - Barnes  
 BER - Berger  
 BLX - Bull-X  
 FA - Freedom Arms  
 HDY - Hornady  
 NOS - Nosler  
 REM - Remington  
 SIE - Sierra  
 SFT - Swift  
 SPR - Speer  
 WIN - Winchester

## Primers

LR - Large Rifle  
 LRM - Large Rifle Magnum  
 SR - Small Rifle  
 SRM - Small Rifle Magnum

## Data

C - Compressed Powder Charge  
 PR - Primer  
 BBL - Barrel  
 COL - Cartridge Overall Length  
 REF - Reformed

## Bullets

A-Max - Hornady Match  
 BR - Bench Rest  
 BT - Ballistic Tip  
 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  
 GC - Gas Check  
 GDHP - Gold Dot Hollow Point  
 GDSP - Gold Dot Soft Point  
 GS - Grand Slam  
 HB - Hollow Base  
 HC - Hollow Cavity  
 HP - Hollow Point  
 HPBT - Hollow Point Boat Tail  
 HSP - Hollow Soft Point  
 JFP - Jacketed Flat Point  
 JHC - Jacketed Hollow Cavity  
 JHP - Jacketed Hollow Point  
 JRN - Jacketed Round Nose  
 JSP - Jacketed Soft Point  
 JSWC - Jacketed Semi-Wadcutter  
 LBBWC - Lead Bevel Base Wadcutter  
 LFP - Lead Flat Point  
 LHBWC - Lead Hollow Base Wadcutter  
 LRN - Lead Round Nose  
 LSWC - Lead Semi-Wadcutter  
 MK - Match King  
 MT-SP - Mag Tip Soft Point  
 PSPCL - Pointed Soft Point "Core-Lokt"  
 RN - Round Nose  
 SB - Solid Base  
 SJ - Short Jacket  
 SP - Soft Point, Spitzer, Spire Point  
 SPBT - Soft Point Boat Tail  
 ST - Silvertip  
 TMJ - Totally Metal Jacket  
 UCHP - Uni-cor Hollow Point  
 WC - Wadcutter  
 X - X Bullet  
 XFB - X Flat Base  
 XBT - X Boat Tail  
 XBTC - X Boat Tail Coated

BULLET POWDER GR VEL CUP

**17 REMINGTON**  
BBL: 24"

CASE: REMINGTON  
PR: REMINGTON 7 1/2

25 GR. HDY HP COL: 2.150"

|           |      |      |            |
|-----------|------|------|------------|
| H414      | 27.0 | 3989 | 48,300 CUP |
| H380      | 26.0 | 3950 | 46,100 CUP |
| VARGET    | 24.5 | 4123 | 50,800 CUP |
| BL-C(2)   | 24.0 | 4051 | 49,000 CUP |
| H335      | 21.0 | 3963 | 51,300 CUP |
| H4895     | 23.0 | 4033 | 48,500 CUP |
| BENCHMARK | 23.3 | 4038 | 50,600 CUP |
| H322      | 21.8 | 3921 | 49,700 CUP |

**204 RUGER**  
BBL: 24"

CASE: HORNADY  
PR: FEDERAL 205M

32 GR. HDY V-MAX COL: 2.250"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 29.0 C | 3798 | 47,400 PSI |
| BL-C(2)   | 30.7   | 4081 | 55,500 PSI |
| H335      | 28.3   | 4044 | 54,800 PSI |
| H4895     | 29.0 C | 3980 | 51,100 PSI |
| BENCHMARK | 28.0   | 4047 | 57,100 PSI |
| H322      | 27.5   | 4030 | 56,400 PSI |

35 GR. BER HP COL: 2.240"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 29.0 C | 3812 | 53,100 PSI |
| BL-C(2)   | 30.7   | 3937 | 54,900 PSI |
| H335      | 27.5   | 3915 | 56,600 PSI |
| H4895     | 28.2 C | 3910 | 55,700 PSI |
| BENCHMARK | 26.6   | 3863 | 56,600 PSI |
| H322      | 26.3   | 3828 | 55,400 PSI |

40 GR. HDY V-MAX COL: 2.250"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 28.1 C | 3647 | 55,100 PSI |
| BL-C(2)   | 30.0   | 3774 | 56,200 PSI |
| H335      | 26.8   | 3738 | 56,700 PSI |
| H4895     | 27.7 C | 3741 | 56,000 PSI |
| BENCHMARK | 25.7   | 3646 | 55,400 PSI |
| H322      | 25.1   | 3639 | 55,900 PSI |

**22 HORNET**  
BBL: 24"

CASE: WINCHESTER  
PR: WINCHESTER SR

35 GR. HDY V-MAX COL: 1.725"

|         |        |      |            |
|---------|--------|------|------------|
| H4198   | 11.5 C | 2420 | 26,300 CUP |
| H4227   | 11.6 C | 2896 | 42,500 CUP |
| H110    | 12.3   | 3060 | 41,400 CUP |
| LIL'GUN | 13.0   | 2842 | 24,000 CUP |

45 GR. HDY SP COL: 1.750"

|         |        |      |            |
|---------|--------|------|------------|
| H4198   | 11.5 C | 2400 | 32,000 CUP |
| H4227   | 9.8    | 2484 | 42,000 CUP |
| H110    | 10.4   | 2574 | 43,000 CUP |
| LIL'GUN | 13.0   | 2787 | 31,600 CUP |

**222 REMINGTON**  
BBL: 24"

CASE: WINCHESTER  
PR: WINCHESTER SR

40 GR. SIE SP COL: 2.125"

|           |        |      |            |
|-----------|--------|------|------------|
| H335      | 25.0   | 3371 | 44,600 CUP |
| H4895     | 24.0 C | 3133 | 34,200 CUP |
| BENCHMARK | 25.0   | 3303 | 40,700 CUP |
| H322      | 23.0   | 3313 | 44,000 CUP |
| H4198     | 21.4   | 3480 | 45,700 CUP |

BULLET POWDER GR VEL CUP

H4227 15.0 3040 45,100 CUP

50 GR. HDY SP COL: 2.130"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 25.0 C | 3114 | 40,600 CUP |
| BL-C(2)   | 25.0   | 3000 | 38,600 CUP |
| H335      | 23.6   | 3120 | 45,700 CUP |
| H4895     | 23.8 C | 3022 | 36,500 CUP |
| BENCHMARK | 24.0   | 3168 | 45,800 CUP |
| H322      | 22.2   | 3079 | 43,200 CUP |
| H4198     | 20.5   | 3160 | 44,200 CUP |
| H4227     | 13.8   | 2668 | 44,000 CUP |

**223 REMINGTON**  
BBL: 24"

CASE: WINCHESTER  
PR: WINCHESTER SR

40 GR. NOS BT COL: 2.280"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 28.0 C | 3674 | 47,200 CUP |
| BL-C(2)   | 28.5   | 3612 | 45,400 CUP |
| H335      | 28.0   | 3572 | 44,600 CUP |
| H4895     | 27.5 C | 3573 | 44,500 CUP |
| BENCHMARK | 27.3   | 3666 | 51,000 CUP |
| H322      | 25.5   | 3574 | 48,000 CUP |
| H4198     | 22.5   | 3601 | 49,600 CUP |

50 GR. SPR SP COL: 2.210"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 27.5 C | 3383 | 44,800 CUP |
| BL-C(2)   | 28.0   | 3428 | 47,100 CUP |
| H335      | 26.0   | 3393 | 51,700 CUP |
| H4895     | 27.5 C | 3468 | 51,300 CUP |
| BENCHMARK | 26.5   | 3396 | 50,400 CUP |
| H322      | 24.0   | 3301 | 49,300 CUP |
| H4198     | 21.5   | 3223 | 45,900 CUP |

55 GR. SPR SP COL: 2.200"

|           |        |      |            |
|-----------|--------|------|------------|
| VARGET    | 27.5 C | 3384 | 49,700 CUP |
| BL-C(2)   | 27.5   | 3313 | 48,500 CUP |
| H335      | 25.3   | 3203 | 49,300 CUP |
| H4895     | 26.0   | 3315 | 49,000 CUP |
| BENCHMARK | 25.6   | 3264 | 50,000 CUP |
| H322      | 23.0   | 3106 | 48,900 CUP |
| H4198     | 21.0   | 3150 | 47,600 CUP |

**22-250 REMINGTON**  
BBL: 24"

CASE: WINCHESTER  
PR: WINCHESTER LR

40 GR. NOS BT COL: 2.350"

|           |      |      |            |
|-----------|------|------|------------|
| H414      | 41.0 | 3933 | 47,100 CUP |
| H380      | 41.0 | 3855 | 39,200 CUP |
| VARGET    | 39.5 | 4135 | 51,100 CUP |
| H4895     | 37.0 | 4060 | 48,700 CUP |
| BENCHMARK | 36.5 | 4114 | 50,100 CUP |

50 GR. SIE SP COL: 2.350"

|           |      |      |            |
|-----------|------|------|------------|
| H4350     | 42.0 | 3579 | 48,900 CUP |
| H414      | 40.0 | 3765 | 48,600 CUP |
| H380      | 41.0 | 3742 | 45,300 CUP |
| VARGET    | 37.5 | 3834 | 50,400 CUP |
| BL-C(2)   | 34.5 | 3740 | 48,400 CUP |
| H335      | 34.5 | 3753 | 48,700 CUP |
| H4895     | 36.5 | 3827 | 50,200 CUP |
| BENCHMARK | 36.0 | 3903 | 51,400 CUP |
| H322      | 32.0 | 3628 | 50,300 CUP |

NEVER Exceed the Loads Listed in This Publication



# RIFLE data

| BULLET               | POWDER | GR   | VEL    | CUP                |
|----------------------|--------|------|--------|--------------------|
| <b>55 GR. SPR SP</b> |        |      |        |                    |
|                      |        |      |        | <b>COL: 2.350"</b> |
| H4350                | 39.0   | 3490 | 47,800 | CUP                |
| H414                 | 39.0   | 3582 | 46,700 | CUP                |
| H380                 | 41.0   | 3713 | 50,700 | CUP                |
| VARGET               | 36.5   | 3664 | 50,400 | CUP                |
| BL-C(2)              | 34.0   | 3606 | 49,600 | CUP                |
| H335                 | 33.0   | 3589 | 51,100 | CUP                |
| H4895                | 35.5   | 3670 | 49,300 | CUP                |
| BENCHMARK            | 33.6   | 3674 | 50,200 | CUP                |
| H322                 | 30.0   | 3480 | 49,800 | CUP                |

|                      |      |      |        | <b>CASE: WINCHESTER</b>  |
|----------------------|------|------|--------|--------------------------|
|                      |      |      |        | <b>PR: WINCHESTER LR</b> |
| <b>220 SWIFT</b>     |      |      |        |                          |
|                      |      |      |        | <b>COL: 2.680"</b>       |
| <b>40 GR. SIE HP</b> |      |      |        |                          |
| H414                 | 46.0 | 4213 | 51,600 | CUP                      |
| H380                 | 44.0 | 4124 | 50,000 | CUP                      |
| VARGET               | 40.5 | 4113 | 49,800 | CUP                      |
| H335                 | 40.0 | 4158 | 53,100 | CUP                      |
| H4895                | 40.0 | 4126 | 52,000 | CUP                      |

|                      |      |      |        | <b>COL: 2.680"</b> |
|----------------------|------|------|--------|--------------------|
| <b>50 GR. HDY SP</b> |      |      |        |                    |
| H414                 | 44.0 | 3826 | 49,600 | CUP                |
| H380                 | 43.5 | 3947 | 53,800 | CUP                |
| VARGET               | 36.0 | 3770 | 50,200 | CUP                |
| BL-C(2)              | 38.0 | 3888 | 51,000 | CUP                |
| H335                 | 38.0 | 3860 | 52,000 | CUP                |
| H4895                | 38.0 | 3840 | 51,200 | CUP                |

|                      |      |      |        | <b>COL: 2.680"</b> |
|----------------------|------|------|--------|--------------------|
| <b>55 GR. HDY SP</b> |      |      |        |                    |
| H4831                | 46.0 | 3616 | 46,600 | CUP                |
| H4350                | 42.0 | 3619 | 50,800 | CUP                |
| H414                 | 44.0 | 3833 | 53,700 | CUP                |
| H380                 | 42.5 | 3839 | 53,300 | CUP                |
| VARGET               | 36.0 | 3645 | 51,900 | CUP                |
| BL-C(2)              | 36.0 | 3682 | 49,900 | CUP                |
| H335                 | 36.0 | 3696 | 50,400 | CUP                |
| H4895                | 37.0 | 3698 | 52,000 | CUP                |

|  |  |  |  | <b>CASE: WINCHESTER</b>  |
|--|--|--|--|--------------------------|
|  |  |  |  | <b>PR: WINCHESTER LR</b> |
| <b>223 WINCHESTER SUPER SHORT MAGNUM</b> |  |  |  |                          |
|  |  |  |  | <b>COL: 2.200"</b>       |

|                      |      |      |        | <b>COL: 2.200"</b> |
|----------------------|------|------|--------|--------------------|
| <b>40 GR. NOS BT</b> |      |      |        |                    |
| H414                 | 50.5 | 4301 | 62,400 | PSI                |
| H380                 | 49.3 | 4292 | 62,300 | PSI                |
| VARGET               | 43.5 | 4278 | 63,800 | PSI                |
| BL-C(2)              | 46.2 | 4352 | 61,800 | PSI                |
| H4895                | 43.0 | 4320 | 62,900 | PSI                |

|                       |       |      |        | <b>COL: 2.100"</b> |
|-----------------------|-------|------|--------|--------------------|
| <b>50 GR. BAR XLC</b> |       |      |        |                    |
| H4350                 | 50.0C | 4023 | 61,500 | PSI                |
| H414                  | 49.0  | 3993 | 59,600 | PSI                |
| H380                  | 48.0  | 4002 | 62,000 | PSI                |
| VARGET                | 44.0  | 4015 | 61,800 | PSI                |
| BL-C(2)               | 46.0  | 4058 | 62,100 | PSI                |
| H4895                 | 42.9  | 4021 | 62,700 | PSI                |

|                         |       |      |        | <b>COL: 2.200"</b> |
|-------------------------|-------|------|--------|--------------------|
| <b>55 GR. HDY V-MAX</b> |       |      |        |                    |
| H4831                   | 49.0C | 3743 | 62,600 | PSI                |
| H4350                   | 47.5  | 3881 | 63,100 | PSI                |
| H414                    | 46.8  | 3886 | 63,000 | PSI                |
| H380                    | 44.5  | 3787 | 62,600 | PSI                |

| BULLET  | POWDER | GR   | VEL    | CUP |
|---------|--------|------|--------|-----|
| VARGET  | 40.5   | 3836 | 62,100 | PSI |
| BL-C(2) | 41.8   | 3841 | 62,800 | PSI |
| H4895   | 39.0   | 3798 | 62,100 | PSI |

|                |  |  |  | <b>CASE: SAKO (REF)</b>    |
|----------------|--|--|--|----------------------------|
|                |  |  |  | <b>PR: REMINGTON 7 1/2</b> |
| <b>6MM PPC</b> |  |  |  |                            |
|                |  |  |  | <b>COL: 2.100"</b>         |

|                      |      |      |        | <b>COL: 2.100"</b> |
|----------------------|------|------|--------|--------------------|
| <b>70 GR. NOS BT</b> |      |      |        |                    |
| VARGET               | 29.0 | 3034 | 48,000 | CUP                |
| BL-C(2)              | 31.0 | 3012 | 47,500 | CUP                |
| H335                 | 27.5 | 3033 | 48,500 | CUP                |
| H4895                | 28.0 | 3034 | 46,500 | CUP                |
| BENCHMARK            | 29.0 | 3149 | 50,500 | CUP                |
| H322                 | 26.5 | 3068 | 50,000 | CUP                |
| H4198                | 22.0 | 2839 | 50,400 | CUP                |

|                      |      |      |        | <b>COL: 2.115"</b> |
|----------------------|------|------|--------|--------------------|
| <b>75 GR. SPR HP</b> |      |      |        |                    |
| VARGET               | 28.0 | 2906 | 47,000 | CUP                |
| BL-C(2)              | 30.5 | 2974 | 47,800 | CUP                |
| H335                 | 27.0 | 2990 | 49,000 | CUP                |
| H4895                | 27.5 | 2981 | 48,500 | CUP                |
| BENCHMARK            | 28.5 | 3037 | 50,100 | CUP                |
| H322                 | 26.0 | 2974 | 49,500 | CUP                |
| H4198                | 21.0 | 2780 | 49,000 | CUP                |

|                       |  |  |  | <b>CASE: WINCHESTER</b>  |
|-----------------------|--|--|--|--------------------------|
|                       |  |  |  | <b>PR: WINCHESTER LR</b> |
| <b>243 WINCHESTER</b> |  |  |  |                          |
|                       |  |  |  | <b>COL: 2.625"</b>       |

|                      |      |      |        | <b>COL: 2.625"</b> |
|----------------------|------|------|--------|--------------------|
| <b>70 GR. SPR HP</b> |      |      |        |                    |
| H414                 | 46.0 | 3568 | 49,800 | CUP                |
| H380                 | 46.0 | 3567 | 48,900 | CUP                |
| VARGET               | 40.5 | 3574 | 50,100 | CUP                |
| BL-C(2)              | 39.0 | 3384 | 50,400 | CUP                |
| H4895                | 39.5 | 3477 | 49,200 | CUP                |
| BENCHMARK            | 39.3 | 3491 | 50,300 | CUP                |

|                        |      |      |        | <b>COL: 2.635"</b> |
|------------------------|------|------|--------|--------------------|
| <b>80 GR. SIE BTSP</b> |      |      |        |                    |
| H414                   | 45.0 | 3404 | 50,100 | CUP                |
| H380                   | 41.2 | 3223 | 50,300 | CUP                |
| VARGET                 | 38.5 | 3355 | 50,300 | CUP                |
| BL-C(2)                | 38.5 | 3242 | 50,600 | CUP                |
| H4895                  | 38.0 | 3307 | 50,100 | CUP                |

|                         |        |      |        | <b>COL: 2.650"</b> |
|-------------------------|--------|------|--------|--------------------|
| <b>100 GR. SPR BTSP</b> |        |      |        |                    |
| H1000                   | 47.0 C | 3000 | 49,800 | CUP                |
| H4831                   | 42.0   | 2924 | 50,100 | CUP                |
| H4350                   | 40.0   | 2973 | 51,000 | CUP                |
| H414                    | 40.0   | 2963 | 50,600 | CUP                |
| H380                    | 36.0   | 2770 | 50,100 | CUP                |
| VARGET                  | 33.7   | 2838 | 50,400 | CUP                |
| H4895                   | 33.0   | 2818 | 50,100 | CUP                |

|                      |  |  |  | <b>CASE: WINCHESTER</b>    |
|----------------------|--|--|--|----------------------------|
|                      |  |  |  | <b>PR: REMINGTON 9 1/2</b> |
| <b>6MM REMINGTON</b> |  |  |  |                            |
|                      |  |  |  | <b>COL: 2.810"</b>         |

|                        |      |      |        | <b>COL: 2.810"</b> |
|------------------------|------|------|--------|--------------------|
| <b>70 GR. SIE HPBT</b> |      |      |        |                    |
| H4350                  | 50.5 | 3638 | 49,500 | CUP                |
| H414                   | 48.5 | 3636 | 50,100 | CUP                |
| H380                   | 46.5 | 3533 | 50,000 | CUP                |
| VARGET                 | 42.0 | 3550 | 50,000 | CUP                |
| H4895                  | 42.0 | 3588 | 49,500 | CUP                |
| BENCHMARK              | 40.7 | 3575 | 49,700 | CUP                |

NEVER Exceed the Loads Listed in This Publication

| BULLET                | POWDER | GR   | VEL                              | CUP |
|-----------------------|--------|------|----------------------------------|-----|
| <b>80 GR. SPR SP</b>  |        |      |                                  |     |
| H4831                 | 51.0   | 3358 | <b>COL: 2.775"</b><br>49,400 CUP |     |
| H4350                 | 47.0   | 3337 | 48,700 CUP                       |     |
| H414                  | 46.5   | 3381 | 49,300 CUP                       |     |
| H380                  | 44.0   | 3247 | 49,500 CUP                       |     |
| VARGET                | 41.0   | 3379 | 50,600 CUP                       |     |
| H4895                 | 39.5   | 3307 | 49,400 CUP                       |     |
| <b>100 GR. SPR BT</b> |        |      |                                  |     |
| H1000                 | 50.0   | 3080 | <b>COL: 2.775"</b><br>50,200 CUP |     |
| H4831                 | 46.0   | 3042 | 50,700 CUP                       |     |
| H4350                 | 42.5   | 2999 | 50,100 CUP                       |     |
| H414                  | 42.0   | 2991 | 50,800 CUP                       |     |
| VARGET                | 36.0   | 2933 | 50,200 CUP                       |     |
| H4895                 | 35.0   | 2889 | 49,400 CUP                       |     |

| <b>243 WINCHESTER SUPER SHORT MAGNUM</b> |       |                                       |                                  |  |
|--|-------|---------------------------------------|----------------------------------|--|
| BBL: 24"                                 |       | CASE: WINCHESTER<br>PR: WINCHESTER LR |                                  |  |
| <b>70 GR. NOS BT</b>                     |       |                                       |                                  |  |
| H4350                                    | 48.7C | 3614                                  | <b>COL: 2.280"</b><br>58,400 PSI |  |
| H414                                     | 49.0  | 3618                                  | 58,900 PSI                       |  |
| H380                                     | 48.0  | 3602                                  | 60,200 PSI                       |  |
| VARGET                                   | 43.7  | 3655                                  | 63,400 PSI                       |  |
| BL-C(2)                                  | 46.2  | 3707                                  | 62,900 PSI                       |  |
| H4895                                    | 42.0  | 3618                                  | 62,500 PSI                       |  |
| <b>80 GR. SIE BTSP</b>                   |       |                                       |                                  |  |
| H4350                                    | 48.7C | 3545                                  | <b>COL: 2.220"</b><br>63,000 PSI |  |
| H414                                     | 48.0  | 3514                                  | 63,100 PSI                       |  |
| H380                                     | 46.7  | 3487                                  | 63,600 PSI                       |  |
| VARGET                                   | 42.0  | 3462                                  | 63,300 PSI                       |  |
| BL-C(2)                                  | 43.5  | 3493                                  | 63,600 PSI                       |  |
| H4895                                    | 41.0  | 3409                                  | 62,500 PSI                       |  |
| <b>100 GR. SPR BTSP</b>                  |       |                                       |                                  |  |
| H4831                                    | 45.0  | 3058                                  | <b>COL: 2.300"</b><br>63,000 PSI |  |
| H4350                                    | 41.7  | 3074                                  | 62,300 PSI                       |  |
| H414                                     | 41.8  | 3059                                  | 62,100 PSI                       |  |
| H380                                     | 40.0  | 2989                                  | 62,400 PSI                       |  |
| VARGET                                   | 36.6  | 2981                                  | 62,100 PSI                       |  |
| BL-C(2)                                  | 37.5  | 2980                                  | 62,500 PSI                       |  |
| H4895                                    | 35.5  | 2946                                  | 63,600 PSII                      |  |

| <b>25-20 WINCHESTER</b> |        |                                      |                                  |  |
|-------------------------|--------|--------------------------------------|----------------------------------|--|
| BBL: 24"                |        | CASE: REMINGTON<br>PR: WINCHESTER SR |                                  |  |
| <b>60 GR. HDY FP</b>    |        |                                      |                                  |  |
| H322                    | 15.0 C | 1900                                 | <b>COL: 1.600"</b><br>25,700 CUP |  |
| H4198                   | 14.2 C | 2101                                 | 25,800 CUP                       |  |
| H4227                   | 10.2   | 1962                                 | 26,700 CUP                       |  |
| H110                    | 9.3    | 1931                                 | 26,600 CUP                       |  |
| HS-7                    | 7.0    | 1724                                 | 27,100 CUP                       |  |

| <b>25-35 WINCHESTER</b> |      |                                       |                                  |  |
|-------------------------|------|---------------------------------------|----------------------------------|--|
| BBL: 20"                |      | CASE: WINCHESTER<br>PR: WINCHESTER LR |                                  |  |
| <b>75 GR. SPR JFP</b>   |      |                                       |                                  |  |
| VARGET                  | 29.0 | 2672                                  | <b>COL: 2.280"</b><br>36,300 CUP |  |
| BL-C(2)                 | 34.0 | 2815                                  | 32,600 CUP                       |  |
| H335                    | 25.5 | 2595                                  | 36,400 CUP                       |  |
| H4895                   | 27.4 | 2689                                  | 36,500 CUP                       |  |
| BENCHMARK               | 23.0 | 2502                                  | 36,400 CUP                       |  |

| BULLET                | POWDER | GR   | VEL                              | CUP |
|-----------------------|--------|------|----------------------------------|-----|
| H322                  | 23.5   | 2543 | 35,900 CUP                       |     |
| H4198                 | 20.5   | 2515 | 35,500 CUP                       |     |
| <b>117 GR. HDY RN</b> |        |      |                                  |     |
| H380                  | 30.0   | 2357 | <b>COL: 2.550"</b><br>34,900 CUP |     |
| VARGET                | 24.5   | 2244 | 36,600 CUP                       |     |
| BL-C(2)               | 27.0   | 2327 | 35,800 CUP                       |     |
| H335                  | 22.5   | 2174 | 35,900 CUP                       |     |
| H4895                 | 22.5   | 2168 | 36,000 CUP                       |     |
| BENCHMARK             | 21.0   | 2063 | 32,500 CUP                       |     |
| H322                  | 21.0   | 2127 | 36,000 CUP                       |     |
| H4198                 | 18.8   | 2065 | 36,100 CUP                       |     |

| <b>250-3000 SAVAGE</b>  |      |  |                                  |  |
|-------------------------|------|--|----------------------------------|--|
| BBL: 26"                |      | CASE: REMINGTON<br>PR: REMINGTON 9 1/2 |                                  |  |
| <b>75 GR. HDY V-MAX</b> |      |  |                                  |  |
| VARGET                  | 38.5 | 3254                                   | <b>COL: 2.475"</b><br>43,200 CUP |  |
| BL-C(2)                 | 37.5 | 3216                                   | 43,700 CUP                       |  |
| H335                    | 35.0 | 3209                                   | 43,800 CUP                       |  |
| H4895                   | 36.5 | 3256                                   | 43,500 CUP                       |  |
| BENCHMARK               | 33.0 | 3102                                   | 43,900 CUP                       |  |

| <b>87 GR. SPR SP</b>  |       |      |                                  |  |
|-----------------------|-------|------|----------------------------------|--|
| VARGET                | 37.0  | 3074 | <b>COL: 2.450"</b><br>43,200 CUP |  |
| BL-C(2)               | 36.5  | 3080 | 43,900 CUP                       |  |
| H335                  | 34.0  | 2969 | 43,100 CUP                       |  |
| H4895                 | 35.5  | 3068 | 43,700 CUP                       |  |
| BENCHMARK             | 32.5  | 2937 | 43,000 CUP                       |  |
| <b>100 GR. HDY SP</b> |       |      |                                  |  |
| H4350                 | 40.5C | 2936 | <b>COL: 2.500"</b><br>44,100 CUP |  |
| H414                  | 37.2  | 2852 | 43,900 CUP                       |  |
| H380                  | 37.0  | 2834 | 43,500 CUP                       |  |
| VARGET                | 35.2  | 2877 | 43,700 CUP                       |  |
| H4895                 | 33.5  | 2849 | 43,600 CUP                       |  |

| <b>257 ROBERTS</b>   |      |  |                                  |  |
|----------------------|------|--|----------------------------------|--|
| BBL: 26"             |      | CASE: REMINGTON<br>PR: REMINGTON 9 1/2 |                                  |  |
| <b>75 GR. HDY HP</b> |      |  |                                  |  |
| H4831                | 53.0 | 3307                                   | <b>COL: 2.795"</b><br>37,500 CUP |  |
| H4350                | 50.0 | 3422                                   | 44,000 CUP                       |  |
| H414                 | 52.0 | 3555                                   | 45,300 CUP                       |  |
| H380                 | 48.0 | 3563                                   | 45,600 CUP                       |  |
| VARGET               | 41.0 | 3453                                   | 43,700 CUP                       |  |
| BL-C(2)              | 46.0 | 3531                                   | 46,700 CUP                       |  |
| H335                 | 46.0 | 3548                                   | 45,000 CUP                       |  |
| H4895                | 44.0 | 3561                                   | 47,300 CUP                       |  |
| BENCHMARK            | 41.7 | 3434                                   | 45,000 CUP                       |  |

| <b>90 GR. SIE HPBT</b> |      |      |                                  |  |
|------------------------|------|------|----------------------------------|--|
| H4831                  | 52.0 | 3236 | <b>COL: 2.775"</b><br>39,500 CUP |  |
| H4350                  | 46.0 | 3040 | 43,700 CUP                       |  |
| H414                   | 50.0 | 3368 | 44,400 CUP                       |  |
| H380                   | 47.0 | 3364 | 45,400 CUP                       |  |
| VARGET                 | 40.0 | 3269 | 44,900 CUP                       |  |
| BL-C(2)                | 43.5 | 3231 | 45,000 CUP                       |  |
| H335                   | 43.0 | 3300 | 44,400 CUP                       |  |
| H4895                  | 42.0 | 3372 | 47,600 CUP                       |  |

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# R

data

| BULLET                  | POWDER | GR   | VEL        | CUP         |
|-------------------------|--------|------|------------|-------------|
| <b>100 GR. SPR SPBT</b> |        |      |            |             |
| H4831                   | 49.0   | 3010 | 44,100 CUP | COL: 2.770" |
| H4350                   | 45.0   | 2970 | 45,400 CUP |             |
| H414                    | 45.0   | 3098 | 44,500 CUP |             |
| H380                    | 44.0   | 3108 | 46,600 CUP |             |
| VARGET                  | 38.0   | 2981 | 44,900 CUP |             |
| BL-C(2)                 | 39.0   | 2958 | 45,400 CUP |             |
| H335                    | 39.0   | 3042 | 47,800 CUP |             |
| H4895                   | 38.0   | 2990 | 46,100 CUP |             |

**25 WINCHESTER SUPER SHORT MAGNUM** CASE: WINCHESTER  
**BBL: 24"** PR: WINCHESTER LR

|                      |      |      |            |             |
|----------------------|------|------|------------|-------------|
| <b>87 GR. SIE SP</b> |      |      |            |             |
| H414                 | 48.0 | 3342 | 58,200 PSI | COL: 2.300" |
| H380                 | 47.5 | 3363 | 62,200 PSI |             |
| VARGET               | 44.0 | 3431 | 62,600 PSI |             |
| H4895                | 43.3 | 3456 | 62,300 PSI |             |

|                       |        |      |            |             |
|-----------------------|--------|------|------------|-------------|
| <b>100 GR. SPR BT</b> |        |      |            |             |
| H4350                 | 48.5 C | 3233 | 61,300 PSI | COL: 2.300" |
| H414                  | 47.5   | 3221 | 60,800 PSI |             |
| H380                  | 46.5   | 3190 | 62,800 PSI |             |
| VARGET                | 42.8   | 3248 | 62,700 PSI |             |
| BL-C(2)               | 44.5   | 3264 | 58,900 PSI |             |
| H4895                 | 41.5   | 3243 | 61,700 PSI |             |

|                       |        |      |            |             |
|-----------------------|--------|------|------------|-------------|
| <b>120 GR. SFT SP</b> |        |      |            |             |
| H4831                 | 48.0 C | 2902 | 61,100 PSI | COL: 2.330" |
| H4350                 | 45.5 C | 2981 | 62,400 PSI |             |
| H414                  | 44.7   | 2985 | 63,100 PSI |             |
| H380                  | 43.0   | 2900 | 61,200 PSI |             |
| VARGET                | 39.0   | 2878 | 63,500 PSI |             |
| BL-C(2)               | 41.0   | 2908 | 62,200 PSI |             |
| H4895                 | 37.7   | 2840 | 61,700 PSI |             |

**25-06 REMINGTON** CASE: REMINGTON  
**BBL: 24"** PR: REMINGTON 9 1/2

|                        |        |      |            |             |
|------------------------|--------|------|------------|-------------|
| <b>90 GR. SIE HPBT</b> |        |      |            |             |
| H1000                  | 62.0 C | 3330 | 47,500 CUP | COL: 3.100" |
| H4831                  | 58.0   | 3481 | 50,400 CUP |             |
| H4350                  | 53.0   | 3370 | 50,700 CUP |             |
| H414                   | 51.0   | 3315 | 50,200 CUP |             |
| VARGET                 | 45.0   | 3312 | 50,400 CUP |             |
| H4895                  | 44.0   | 3257 | 51,000 CUP |             |

|                         |        |      |            |             |
|-------------------------|--------|------|------------|-------------|
| <b>100 GR. NOS PART</b> |        |      |            |             |
| H1000                   | 59.7 C | 3212 | 50,700 CUP | COL: 3.200" |
| H4831                   | 54.3   | 3172 | 51,400 CUP |             |
| H4350                   | 50.0   | 3155 | 51,500 CUP |             |
| H414                    | 47.0   | 3059 | 50,700 CUP |             |
| VARGET                  | 44.0   | 3125 | 51,400 CUP |             |
| H4895                   | 43.0   | 3072 | 51,000 CUP |             |

|                       |       |      |            |             |
|-----------------------|-------|------|------------|-------------|
| <b>120 GR. SFT SP</b> |       |      |            |             |
| RETUMBO               | 60.0C | 2991 | 50,300 CUP | COL: 3.150" |
| H1000                 | 55.5  | 2902 | 50,600 CUP |             |
| H4831                 | 51.5  | 2856 | 51,200 CUP |             |
| H4350                 | 47.5  | 2816 | 50,900 CUP |             |
| VARGET                | 41.0  | 2755 | 51,900 CUP |             |
| H4895                 | 40.0  | 2694 | 51,700 CUP |             |

**260 REMINGTON** CASE: REMINGTON  
**BBL: 24"** PR: REMINGTON 9 1/2

|                         |      |      |            |             |
|-------------------------|------|------|------------|-------------|
| <b>95 GR. HDY V-MAX</b> |      |      |            |             |
| H4350                   | 49.7 | 3284 | 58,100 PSI | COL: 2.780" |
| H414                    | 49.0 | 3313 | 58,600 PSI |             |
| H380                    | 47.0 | 3262 | 59,500 PSI |             |
| VARGET                  | 42.0 | 3244 | 58,500 PSI |             |
| BL-C(2)                 | 43.5 | 3236 | 58,300 PSI |             |
| H335                    | 38.3 | 3114 | 58,000 PSI |             |
| H4895                   | 40.8 | 3225 | 58,500 PSI |             |
| BENCHMARK               | 43.5 | 3391 | 59,600 PSI |             |

|                       |        |      |            |             |
|-----------------------|--------|------|------------|-------------|
| <b>120 GR. SPR SP</b> |        |      |            |             |
| H1000                 | 51.0 C | 2810 | 49,300 PSI | COL: 2.780" |
| H4831                 | 50.0 C | 2954 | 59,200 PSI |             |
| H4350                 | 46.5   | 2960 | 58,200 PSI |             |
| H414                  | 45.5   | 2968 | 58,624 PSI |             |
| H380                  | 43.0   | 2844 | 58,100 PSI |             |
| VARGET                | 39.0   | 2877 | 58,300 PSI |             |
| BL-C(2)               | 40.0   | 2840 | 58,900 PSI |             |
| H335                  | 36.7   | 2755 | 58,600 PSI |             |
| H4895                 | 38.0   | 2813 | 58,900 PSI |             |
| BENCHMARK             | 40.0   | 2935 | 59,500 PSI |             |

|                         |      |      |            |             |
|-------------------------|------|------|------------|-------------|
| <b>140 GR. NOS PART</b> |      |      |            |             |
| H1000                   | 50.5 | 2730 | 57,000 PSI | COL: 2.780" |
| H4831                   | 45.7 | 2686 | 59,000 PSI |             |
| H4350                   | 42.0 | 2677 | 58,800 PSI |             |
| H414                    | 41.0 | 2656 | 58,800 PSI |             |
| H380                    | 40.0 | 2594 | 58,900 PSI |             |
| VARGET                  | 36.0 | 2578 | 59,400 PSI |             |
| BL-C(2)                 | 36.6 | 2557 | 59,000 PSI |             |
| H4895                   | 34.3 | 2517 | 58,400 PSI |             |

**6.5 X 55MM SWEDISH MAUSER** CASE: WINCHESTER  
**BBL: 24"** PR: WINCHESTER LR

|                       |        |      |            |             |
|-----------------------|--------|------|------------|-------------|
| <b>120 GR. NOS BT</b> |        |      |            |             |
| H4831                 | 49.5 C | 2802 | 45,900 CUP | COL: 3.000" |
| H4350                 | 46.0   | 2792 | 45,800 CUP |             |
| H414                  | 44.5   | 2783 | 46,000 CUP |             |
| H380                  | 44.3   | 2784 | 46,000 CUP |             |
| VARGET                | 39.0   | 2812 | 45,300 CUP |             |
| H4895                 | 37.8   | 2715 | 46,000 CUP |             |

|                       |        |      |            |             |
|-----------------------|--------|------|------------|-------------|
| <b>140 GR. SPR SP</b> |        |      |            |             |
| H1000                 | 51.5 C | 2651 | 46,000 CUP | COL: 3.030" |
| H4831                 | 47.0   | 2586 | 45,700 CUP |             |
| H4350                 | 44.0   | 2617 | 45,700 CUP |             |
| H414                  | 41.5   | 2565 | 45,600 CUP |             |
| H380                  | 40.5   | 2520 | 45,100 CUP |             |
| VARGET                | 36.0   | 2528 | 46,000 CUP |             |
| H4895                 | 35.8   | 2493 | 45,700 CUP |             |

**264 WINCHESTER MAGNUM** CASE: WINCHESTER  
**BBL: 26"** PR: WINCHESTER LR

|                       |      |      |            |             |
|-----------------------|------|------|------------|-------------|
| <b>120 GR. SPR SP</b> |      |      |            |             |
| H1000                 | 72.0 | 3185 | 49,000 CUP | COL: 3.300" |
| H4831                 | 65.0 | 3369 | 52,100 CUP |             |
| H4350                 | 57.0 | 3190 | 52,900 CUP |             |

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| BULLET                  | POWDER | GR   | VEL                              | CUP |
|-------------------------|--------|------|----------------------------------|-----|
| <b>140 GR. NOS PART</b> |        |      |                                  |     |
| H870                    | 73.0   | 3163 | <b>COL: 3.260"</b><br>54,200 CUP |     |
| H1000                   | 68.0   | 3019 | 51,500 CUP                       |     |
| H4831                   | 61.0   | 3065 | 52,000 CUP                       |     |
| H4350                   | 53.0   | 2965 | 53,400 CUP                       |     |

**270 WINCHESTER**  
BBL: 24" CASE: WINCHESTER  
PR: WINCHESTER LR

| <b>130 GR. HDY SP</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H1000                 | 64.0 C | 3025 | <b>COL: 3.280"</b><br>48,100 CUP |  |
| H4831                 | 60.0 C | 3019 | 51,000 CUP                       |  |
| H4350                 | 54.3   | 3012 | 50,500 CUP                       |  |
| H414                  | 53.5   | 3003 | 50,800 CUP                       |  |
| H380                  | 49.8   | 2884 | 51,000 CUP                       |  |
| VARGET                | 46.0   | 2931 | 49,600 CUP                       |  |
| H4895                 | 45.0   | 2922 | 51,000 CUP                       |  |

| <b>140 GR. SFT SP</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H1000                 | 63.0 C | 2979 | <b>COL: 3.280"</b><br>50,800 CUP |  |
| H4831                 | 58.0 C | 2888 | 50,100 CUP                       |  |
| H4350                 | 52.0   | 2870 | 50,400 CUP                       |  |
| H414                  | 48.9   | 2788 | 49,800 CUP                       |  |
| VARGET                | 43.7   | 2772 | 50,500 CUP                       |  |
| H4895                 | 42.6   | 2768 | 50,600 CUP                       |  |

| <b>150 GR. HDY SP</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H1000                 | 59.0 C | 2831 | <b>COL: 3.285"</b><br>51,000 CUP |  |
| H4831                 | 55.7   | 2804 | 51,200 CUP                       |  |
| H4350                 | 49.0   | 2724 | 51,000 CUP                       |  |
| H414                  | 48.0   | 2706 | 51,200 CUP                       |  |

**270 WINCHESTER SHORT MAGNUM**  
BBL: 24" CASE: WINCHESTER  
PR: WINCHESTER LRM

| <b>130 GR. HDY SP</b> |       |      |                                  |  |
|-----------------------|-------|------|----------------------------------|--|
| H1000                 | 73.0C | 3168 | <b>COL: 2.730"</b><br>58,700 PSI |  |
| H4831                 | 67.0  | 3228 | 63,400 PSI                       |  |
| H4350                 | 60.5  | 3226 | 63,500 PSI                       |  |
| H414                  | 61.0  | 3235 | 62,700 PSI                       |  |
| H380                  | 59.5  | 3174 | 63,200 PSI                       |  |
| VARGET                | 54.0  | 3169 | 63,200 PSI                       |  |

| <b>140 GR. SFT SP</b> |       |      |                                  |  |
|-----------------------|-------|------|----------------------------------|--|
| RETUMBO               | 71.0C | 3165 | <b>COL: 2.800"</b><br>61,300 PSI |  |
| H1000                 | 70.0C | 3137 | 63,500 PSI                       |  |
| H4831                 | 62.5  | 3085 | 63,000 PSI                       |  |
| H4350                 | 58.0  | 3087 | 63,100 PSI                       |  |
| H414                  | 58.0  | 3068 | 62,600 PSI                       |  |
| H380                  | 56.5  | 3005 | 62,700 PSI                       |  |

| <b>150 GR. HDY SP</b> |       |      |                                  |  |
|-----------------------|-------|------|----------------------------------|--|
| RETUMBO               | 70.0C | 3071 | <b>COL: 2.740"</b><br>63,000 PSI |  |
| H1000                 | 67.5C | 3001 | 62,800 PSI                       |  |
| H4831                 | 60.0  | 2962 | 63,100 PSI                       |  |
| H4350                 | 56.5  | 2978 | 63,000 PSI                       |  |
| H414                  | 57.5  | 2991 | 63,200 PSI                       |  |
| H380                  | 54.5  | 2885 | 63,100 PSI                       |  |

**7MM-08 REMINGTON**  
BBL: 24" CASE: REMINGTON  
PR: REMINGTON 9 1/2

| <b>120 GR. NOS BT</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H4350                 | 50.0 C | 3039 | <b>COL: 2.800"</b><br>44,600 CUP |  |
| H414                  | 49.0   | 3023 | 47,600 CUP                       |  |
| H380                  | 48.0   | 2977 | 43,400 CUP                       |  |
| VARGET                | 45.0   | 3117 | 49,900 CUP                       |  |
| BL-C(2)               | 46.5   | 3109 | 50,100 CUP                       |  |
| H335                  | 42.0   | 2984 | 49,400 CUP                       |  |
| H4895                 | 43.7   | 3085 | 49,700 CUP                       |  |
| BENCHMARK             | 41.3   | 2968 | 49,000 CUP                       |  |

| <b>140 GR. SFT SP</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H4350                 | 48.0 C | 2868 | <b>COL: 2.750"</b><br>49,800 CUP |  |
| H414                  | 46.0   | 2791 | 49,500 CUP                       |  |
| H380                  | 45.7   | 2775 | 49,400 CUP                       |  |
| VARGET                | 42.2   | 2819 | 49,800 CUP                       |  |
| BL-C(2)               | 42.5   | 2796 | 49,700 CUP                       |  |
| H335                  | 37.5   | 2647 | 49,800 CUP                       |  |
| H4895                 | 40.5   | 2769 | 49,700 CUP                       |  |
| BENCHMARK             | 38.3   | 2688 | 49,300 CUP                       |  |

| <b>150 GR. SIE HPBT</b> |        |      |                                  |  |
|-------------------------|--------|------|----------------------------------|--|
| H4350                   | 48.5 C | 2823 | <b>COL: 2.800"</b><br>50,300 CUP |  |
| H414                    | 46.5   | 2776 | 50,000 CUP                       |  |
| H380                    | 45.5   | 2748 | 49,900 CUP                       |  |
| VARGET                  | 41.3   | 2731 | 50,000 CUP                       |  |
| BL-C(2)                 | 41.5   | 2699 | 49,600 CUP                       |  |
| H335                    | 37.5   | 2605 | 49,900 CUP                       |  |
| H4895                   | 40.5   | 2723 | 50,000 CUP                       |  |
| BENCHMARK               | 38.5   | 2667 | 50,200 CUP                       |  |

**7 X 57MM MAUSER**  
BBL: 24" CASE: WINCHESTER  
PR: WINCHESTER LR

| <b>120 GR. NOS BT</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H4831                 | 52.5 C | 2777 | <b>COL: 3.000"</b><br>40,800 CUP |  |
| H4350                 | 51.0 C | 2945 | 45,800 CUP                       |  |
| H414                  | 51.0   | 2938 | 45,600 CUP                       |  |
| H380                  | 47.5   | 2860 | 46,000 CUP                       |  |
| VARGET                | 44.0   | 2979 | 46,000 CUP                       |  |
| H4895                 | 42.0   | 2859 | 45,400 CUP                       |  |
| BENCHMARK             | 41.5   | 2863 | 46,000 CUP                       |  |

| <b>140 GR. NOS BT</b> |        |      |                                  |  |
|-----------------------|--------|------|----------------------------------|--|
| H4831                 | 49.5 C | 2719 | <b>COL: 3.000"</b><br>46,000 CUP |  |
| H4350                 | 46.5   | 2682 | 46,000 CUP                       |  |
| H414                  | 47.0   | 2715 | 46,000 CUP                       |  |
| H380                  | 44.0   | 2614 | 46,000 CUP                       |  |
| VARGET                | 37.7   | 2516 | 46,000 CUP                       |  |
| H4895                 | 37.5   | 2530 | 45,800 CUP                       |  |
| BENCHMARK             | 38.0   | 2571 | 45,700 CUP                       |  |

| <b>168 GR. SIE HPBT</b> |        |      |                                  |  |
|-------------------------|--------|------|----------------------------------|--|
| H1000                   | 52.0 C | 2485 | <b>COL: 3.000"</b><br>46,000 CUP |  |
| H4831                   | 46.0   | 2393 | 43,900 CUP                       |  |
| H4350                   | 42.5   | 2378 | 44,100 CUP                       |  |
| H414                    | 42.5   | 2378 | 45,000 CUP                       |  |
| H380                    | 39.5   | 2272 | 44,500 CUP                       |  |
| VARGET                  | 37.5   | 2404 | 45,500 CUP                       |  |

NEVER Exceed the Loads Listed in This Publication

| BULLET    | POWDER | GR   | VEL    | CUP |
|-----------|--------|------|--------|-----|
| H4895     | 34.5   | 2211 | 42,600 | CUP |
| BENCHMARK | 36.0   | 2336 | 46,000 | CUP |

**280 REMINGTON**  
BBL: 24" CASE: REMINGTON  
PR: REMINGTON 9 1/2

| 120 GR. BAR XFB |        |      |        |     |
|-----------------|--------|------|--------|-----|
| H4831           | 62.0 C | 3112 | 48,600 | CUP |
| H4350           | 56.0   | 3114 | 48,400 | CUP |
| H414            | 54.5   | 3085 | 48,100 | CUP |
| H380            | 51.0   | 2952 | 48,700 | CUP |
| VARGET          | 47.2   | 3032 | 47,600 | CUP |
| BL-C(2)         | 46.5   | 2908 | 48,000 | CUP |
| H4895           | 47.0   | 3020 | 48,300 | CUP |

| 140 GR. NOS PART |      |      |        |     |
|------------------|------|------|--------|-----|
| H4831            | 58.5 | 2927 | 48,500 | CUP |
| H4350            | 53.5 | 2918 | 48,500 | CUP |
| H414             | 51.0 | 2867 | 47,900 | CUP |
| VARGET           | 45.5 | 2838 | 48,100 | CUP |
| H4895            | 45.2 | 2830 | 48,400 | CUP |

| 160 GR. SFT SP |        |      |        |     |
|----------------|--------|------|--------|-----|
| H1000          | 61.0 C | 2714 | 47,500 | CUP |
| H4831          | 55.0   | 2660 | 49,500 | CUP |
| H4350          | 49.5   | 2610 | 48,900 | CUP |
| H414           | 47.5   | 2558 | 49,700 | CUP |
| VARGET         | 42.5   | 2555 | 49,300 | CUP |
| H4895          | 41.5   | 2535 | 49,500 | CUP |

**284 WINCHESTER**  
BBL: 24" CASE: WINCHESTER  
PR: WINCHESTER LR

| 120 GR. HDY V-MAX |       |      |        |     |
|-------------------|-------|------|--------|-----|
| H4831             | 60.0C | 3018 | 45,200 | CUP |
| H4350             | 57.0C | 3174 | 49,600 | CUP |
| H414              | 54.8  | 3191 | 52,200 | CUP |
| VARGET            | 50.5  | 3158 | 52,200 | CUP |
| H4895             | 48.0  | 3120 | 51,600 | CUP |

| 150 GR. SFT SCIR |       |      |        |     |
|------------------|-------|------|--------|-----|
| H4831            | 59.0C | 2852 | 50,100 | CUP |
| H4350            | 54.7C | 2913 | 52,300 | CUP |
| H414             | 53.5  | 2968 | 50,900 | CUP |
| VARGET           | 48.7  | 2863 | 52,800 | CUP |
| H4895            | 46.5  | 2818 | 52,300 | CUP |

| 160 GR. BAR XFB |       |      |        |     |
|-----------------|-------|------|--------|-----|
| H4831           | 55.0C | 2624 | 50,800 | CUP |
| H4350           | 51.0C | 2667 | 52,600 | CUP |
| H414            | 50.7  | 2657 | 51,900 | CUP |
| VARGET          | 45.8  | 2595 | 52,900 | CUP |
| H4895           | 43.5  | 2527 | 51,900 | CUP |

| 162 GR. HDY BTSP |       |      |        |     |
|------------------|-------|------|--------|-----|
| H4831            | 58.0C | 2816 | 50,900 | CUP |
| H4350            | 53.5C | 2847 | 53,000 | CUP |
| H414             | 52.5  | 2822 | 50,700 | CUP |
| VARGET           | 47.0  | 2764 | 52,500 | CUP |
| H4895            | 44.2  | 2703 | 51,600 | CUP |

| BULLET | POWDER | GR | VEL | CUP |
|--------|--------|----|-----|-----|
|--------|--------|----|-----|-----|

**7MM REM. S.A. ULTRA MAG.** CASE: REMINGTON  
BBL: 24" PR: REMINGTON 9 1/2 M

| 140 GR. NOS BT |        |      |        |     |
|----------------|--------|------|--------|-----|
| H4831          | 64.5 C | 3099 | 63,100 | PSI |
| H4350          | 60.0   | 3122 | 63,200 | PSI |
| H414           | 60.0   | 3153 | 62,900 | PSI |
| H380           | 57.5   | 3069 | 62,600 | PSI |
| VARGET         | 53.5   | 3068 | 62,300 | PSI |

| 160 GR. NOS PART |        |      |        |     |
|------------------|--------|------|--------|-----|
| H1000            | 67.0 C | 2931 | 63,300 | PSI |
| H4831            | 60.5   | 2900 | 62,600 | PSI |
| H4350            | 56.5   | 2914 | 63,100 | PSI |
| H414             | 56.0   | 2905 | 62,700 | PSI |
| H380             | 53.5   | 2824 | 62,700 | PSI |

| 175 GR. HDY SP |        |      |        |     |
|----------------|--------|------|--------|-----|
| RETUMBO        | 66.0 C | 2863 | 62,700 | PSI |
| H1000          | 65.5 C | 2817 | 62,800 | PSI |
| H4831          | 58.0   | 2760 | 62,900 | PSI |
| H4350          | 54.5   | 2775 | 63,100 | PSI |
| H414           | 54.5   | 2778 | 63,200 | PSI |

**7MM WINCHESTER SHORT MAG.** CASE: WINCHESTER  
BBL: 24" PR: WINCHESTER LRM

| 140 GR. NOS PART |        |      |        |     |
|------------------|--------|------|--------|-----|
| RETUMBO          | 72.0 C | 3046 | 54,300 | PSI |
| H1000            | 72.0 C | 3091 | 59,000 | PSI |
| H4831            | 66.0   | 3116 | 62,000 | PSI |
| H4350            | 61.5   | 3133 | 61,900 | PSI |
| H414             | 60.8   | 3130 | 62,600 | PSI |
| H380             | 59.0   | 3062 | 63,300 | PSI |
| VARGET           | 54.5   | 3063 | 62,600 | PSI |
| H4895            | 52.3   | 3024 | 63,000 | PSI |

| 160 GR. SFT SP |        |      |        |     |
|----------------|--------|------|--------|-----|
| RETUMBO        | 70.0 C | 2958 | 59,800 | PSI |
| H1000          | 69.5 C | 2956 | 62,800 | PSI |
| H4831          | 63.5   | 2921 | 62,600 | PSI |
| H4350          | 59.5   | 2918 | 62,200 | PSI |
| H414           | 58.7   | 2904 | 63,100 | PSI |
| H380           | 57.0   | 2832 | 61,900 | PSI |
| VARGET         | 51.3   | 2823 | 62,100 | PSI |
| H4895          | 49.0   | 2762 | 62,600 | PSI |

| 175 GR. SPR MAG TIP |        |      |        |     |
|---------------------|--------|------|--------|-----|
| RETUMBO             | 64.0 C | 2800 | 61,200 | PSI |
| H1000               | 62.0 C | 2764 | 63,100 | PSI |
| H4831               | 57.5   | 2733 | 63,900 | PSI |
| H4350               | 52.5   | 2672 | 62,200 | PSI |
| H414                | 52.0   | 2636 | 61,300 | PSI |

**7MM REM. MAGNUM** CASE: WINCHESTER  
BBL: 24" PR: WINCHESTER LR

| 140 GR. NOS PART |        |      |        |     |
|------------------|--------|------|--------|-----|
| RETUMBO          | 75.0 C | 3107 | 49,400 | CUP |
| H1000            | 70.0   | 3036 | 50,600 | CUP |
| H4831            | 64.0   | 2950 | 50,200 | CUP |
| H4350            | 59.0   | 2927 | 50,000 | CUP |
| H414             | 60.2   | 2967 | 49,300 | CUP |

NEVER Exceed the Loads Listed in This Publication

| BULLET                              | POWDER  | GR                                    | VEL        | CUP                |
|-------------------------------------|---------|---------------------------------------|------------|--------------------|
| <b>162 GR. HDY SPBT</b>             |         |                                       |            |                    |
| H870                                | 80.0    | 2883                                  | 43,300 CUP | <b>COL: 3.290"</b> |
| RETUMBO                             | 73.5 C  | 2963                                  | 50,500 CUP |                    |
| H1000                               | 70.0    | 2905                                  | 49,600 CUP |                    |
| H4831                               | 64.0    | 2871                                  | 49,800 CUP |                    |
| H4350                               | 58.0    | 2799                                  | 49,400 CUP |                    |
| <b>175 GR. NOS PART</b>             |         |                                       |            |                    |
| H870                                | 77.0    | 2782                                  | 46,300 CUP | <b>COL: 3.290"</b> |
| RETUMBO                             | 68.0 C  | 2800                                  | 51,200 CUP |                    |
| H1000                               | 64.5    | 2692                                  | 50,400 CUP |                    |
| H4831                               | 58.0    | 2660                                  | 50,200 CUP |                    |
| H4350                               | 54.0    | 2617                                  | 51,400 CUP |                    |
| <b>7MM WEATHERBY MAGNUM</b>         |         |                                       |            |                    |
| BBL: 24"                            |         | CASE: REMINGTON PR: FEDERAL 215 M     |            |                    |
| <b>140 GR. SFT SP</b>               |         |                                       |            |                    |
| H1000                               | 79.0 C  | 3273                                  | 49,900 CUP | <b>COL: 3.250"</b> |
| H4831                               | 74.0    | 3258                                  | 54,000 CUP |                    |
| H4350                               | 68.5    | 3248                                  | 54,000 CUP |                    |
| <b>160 GR. BAR XFB</b>              |         |                                       |            |                    |
| H1000                               | 75.0 C  | 2994                                  | 50,800 CUP | <b>COL: 3.250"</b> |
| H4831                               | 70.0    | 2971                                  | 53,900 CUP |                    |
| H4350                               | 65.0    | 2950                                  | 53,900 CUP |                    |
| <b>175 GR. HDY SP</b>               |         |                                       |            |                    |
| H870                                | 80.0    | 2843                                  | 44,300 CUP | <b>COL: 3.350"</b> |
| H1000                               | 74.7 C  | 3022                                  | 54,000 CUP |                    |
| H4831                               | 67.5    | 2895                                  | 53,400 CUP |                    |
| H4350                               | 63.7    | 2899                                  | 53,600 CUP |                    |
| <b>7MM SHOOTING TIMES WESTERNER</b> |         |                                       |            |                    |
| BBL: 24"                            |         | CASE: FEDERAL PR: FEDERAL 215 M       |            |                    |
| <b>145 GR. SPR SP</b>               |         |                                       |            |                    |
| RETUMBO                             | 81.5 C  | 3195                                  | 53,700 CUP | <b>COL: 3.565"</b> |
| H1000                               | 77.0    | 3120                                  | 52,100 CUP |                    |
| H4831                               | 72.0    | 3063                                  | 52,300 CUP |                    |
| <b>160 GR. SFT SP</b>               |         |                                       |            |                    |
| H50BMG                              | 90.0 C  | 2970                                  | 46,600 CUP | <b>COL: 3.565"</b> |
| H5010                               | 86.0 C  | 2877                                  | 45,700 CUP |                    |
| H870                                | 90.0    | 3097                                  | 46,100 CUP |                    |
| RETUMBO                             | 80.2 C  | 3056                                  | 53,600 CUP |                    |
| H1000                               | 80.7    | 3084                                  | 51,500 CUP |                    |
| H4831                               | 74.0    | 3037                                  | 52,300 CUP |                    |
| <b>175 GR. NOS PART</b>             |         |                                       |            |                    |
| H50BMG                              | 89.0 C  | 2973                                  | 52,300 CUP | <b>COL: 3.585"</b> |
| H5010                               | 85.0 C  | 2921                                  | 51,600 CUP |                    |
| H870                                | 89.0    | 3059                                  | 51,800 CUP |                    |
| RETUMBO                             | 77.0 C  | 2967                                  | 54,200 CUP |                    |
| H1000                               | 74.0    | 2944                                  | 51,900 CUP |                    |
| <b>7MM REM. ULTRA MAG.</b>          |         |                                       |            |                    |
| BBL: 24"                            |         | CASE: REMINGTON PR: REMINGTON 9 1/2 M |            |                    |
| <b>140 GR. BAR XBT</b>              |         |                                       |            |                    |
| H50BMG                              | 107.0 C | 3271                                  | 62,400 PSI | <b>COL: 3.560"</b> |
| H870                                | 106.0   | 3349                                  | 60,300 PSI |                    |
| RETUMBO                             | 96.5 C  | 3353                                  | 62,900 PSI |                    |

| BULLET                  | POWDER | GR                                 | VEL        | CUP                |
|-------------------------|--------|------------------------------------|------------|--------------------|
| H1000                   | 95.0   | 3277                               | 62,700 PSI |                    |
| H4831                   | 87.0   | 3279                               | 63,100 PSI |                    |
| <b>160 GR. NOS PART</b> |        |                                    |            |                    |
| H50BMG                  | 100.0  | 3144                               | 63,400 PSI | <b>COL: 3.600"</b> |
| H870                    | 100.0  | 3214                               | 63,100 PSI |                    |
| RETUMBO                 | 94.0   | 3212                               | 62,800 PSI |                    |
| H1000                   | 91.0   | 3167                               | 63,500 PSI |                    |
| <b>175 GR. SFT SP</b>   |        |                                    |            |                    |
| H50BMG                  | 96.0   | 3019                               | 63,100 PSI | <b>COL: 3.600"</b> |
| H870                    | 99.0   | 3093                               | 62,500 PSI |                    |
| RETUMBO                 | 91.5   | 3069                               | 63,400 PSI |                    |
| H1000                   | 87.0   | 3021                               | 63,500 PSI |                    |
| <b>30 CARBINE</b>       |        |                                    |            |                    |
| BBL: 20"                |        | CASE: WINCHESTER PR: CCI 400       |            |                    |
| <b>85 GR. SIE RN</b>    |        |                                    |            |                    |
| H4227                   | 15.5 C | 2181                               | 30,700 CUP | <b>COL: 1.625"</b> |
| H110                    | 17.5   | 2458                               | 34,800 CUP |                    |
| <b>100 GR. SPR SP</b>   |        |                                    |            |                    |
| LIL GUN                 | 15.0   | 2132                               | 28,300 CUP | <b>COL: 1.625"</b> |
| <b>110 GR. HDY JRN</b>  |        |                                    |            |                    |
| H4227                   | 14.5 C | 2003                               | 38,800 CUP | <b>COL: 1.680"</b> |
| H110                    | 15.0   | 2106                               | 36,500 CUP |                    |
| LIL GUN                 | 15.0   | 2064                               | 29,800 CUP |                    |
| <b>30-30 WINCHESTER</b> |        |                                    |            |                    |
| BBL: 24"                |        | CASE: WINCHESTER PR: WINCHESTER LR |            |                    |
| <b>150 GR. SIE FN</b>   |        |                                    |            |                    |
| VARGET                  | 34.5   | 2349                               | 36,200 CUP | <b>COL: 2.550"</b> |
| BL-C(2)                 | 37.0   | 2358                               | 33,900 CUP |                    |
| H335                    | 33.0   | 2308                               | 36,200 CUP |                    |
| H4895                   | 34.0   | 2390                               | 36,700 CUP |                    |
| BENCHMARK               | 29.0   | 2183                               | 37,200 CUP |                    |
| H4198                   | 24.0   | 2110                               | 36,800 CUP |                    |
| <b>170 GR. SIE FP</b>   |        |                                    |            |                    |
| VARGET                  | 33.0   | 2168                               | 36,500 CUP | <b>COL: 2.550"</b> |
| BL-C(2)                 | 36.0   | 2227                               | 34,700 CUP |                    |
| H335                    | 30.5   | 2086                               | 36,300 CUP |                    |
| H4895                   | 30.5   | 2138                               | 35,200 CUP |                    |
| BENCHMARK               | 27.0   | 2001                               | 36,100 CUP |                    |
| H4198                   | 22.5   | 1918                               | 32,600 CUP |                    |
| <b>308 WINCHESTER</b>   |        |                                    |            |                    |
| BBL: 24"                |        | CASE: WINCHESTER PR: FEDERAL 210M  |            |                    |
| <b>150 GR. NOS BT</b>   |        |                                    |            |                    |
| VARGET                  | 47.0 C | 2937                               | 50,300 CUP | <b>COL: 2.800"</b> |
| BL-C(2)                 | 48.0   | 2839                               | 50,000 CUP |                    |
| H335                    | 44.0   | 2787                               | 51,200 CUP |                    |
| H4895                   | 45.5   | 2870                               | 51,000 CUP |                    |
| BENCHMARK               | 43.0   | 2752                               | 49,000 CUP |                    |
| H322                    | 40.0   | 2702                               | 50,500 CUP |                    |
| <b>168 GR. SIE HPBT</b> |        |                                    |            |                    |
| VARGET                  | 46.0 C | 2731                               | 50,600 CUP | <b>COL: 2.800"</b> |
| BL-C(2)                 | 47.0   | 2754                               | 50,200 CUP |                    |
| H335                    | 42.0   | 2631                               | 49,300 CUP |                    |
| H4895                   | 43.5   | 2703                               | 49,500 CUP |                    |
| BENCHMARK               | 42.0   | 2630                               | 49,300 CUP |                    |

NEVER Exceed the Loads Listed in This Publication

# RIFLE data

| BULLET                  | POWDER | GR   | VEL        | CUP         |
|-------------------------|--------|------|------------|-------------|
| <b>175 GR. SIE HPBT</b> |        |      |            |             |
| H414                    | 49.0   | 2629 | 50,100 CUP | COL: 2.800" |
| VARGET                  | 45.0 C | 2690 | 48,600 CUP |             |
| BL-C(2)                 | 46.0   | 2706 | 50,300 CUP |             |
| H335                    | 41.3   | 2592 | 50,100 CUP |             |
| H4895                   | 42.7   | 2647 | 49,000 CUP |             |
| BENCHMARK               | 41.5   | 2590 | 50,800 CUP |             |

**7.62 X 54R**  
BBL: 24"

|                       |        | CASE: NORMA      |            | COL: 2.875" |
|-----------------------|--------|------------------|------------|-------------|
|                       |        | PR: FEDERAL 210M |            |             |
| <b>150 GR. NOS BT</b> |        |                  |            |             |
| VARGET                | 50.5   | 2985             | 46,400 CUP |             |
| BL-C(2)               | 55.5   | 3027             | 46,300 CUP |             |
| H335                  | 49.5   | 2918             | 45,900 CUP |             |
| H4895                 | 49.5 C | 2938             | 46,300 CUP |             |

|                         |        | CASE: WINCHESTER  |            | COL: 2.975" |
|-------------------------|--------|-------------------|------------|-------------|
|                         |        | PR: WINCHESTER LR |            |             |
| <b>180 GR. SFT SCIR</b> |        |                   |            |             |
| H4831                   | 55.0 C | 2484              | 39,200 CUP |             |
| H4350                   | 55.0 C | 2692              | 44,700 CUP |             |
| H414                    | 52.0   | 2622              | 45,600 CUP |             |
| H380                    | 50.0   | 2542              | 42,000 CUP |             |
| VARGET                  | 46.5 C | 2575              | 45,900 CUP |             |
| H4895                   | 45.4 C | 2618              | 45,800 CUP |             |

**30-06**  
BBL: 24"

|                       |        | CASE: WINCHESTER  |            | COL: 3.250" |
|-----------------------|--------|-------------------|------------|-------------|
|                       |        | PR: WINCHESTER LR |            |             |
| <b>150 GR. NOS BT</b> |        |                   |            |             |
| H4350                 | 62.0 C | 3068              | 48,400 CUP |             |
| H414                  | 60.0   | 2992              | 48,600 CUP |             |
| H380                  | 59.0   | 3005              | 45,900 CUP |             |
| VARGET                | 51.0   | 2975              | 50,100 CUP |             |
| BL-C(2)               | 54.0   | 2962              | 48,600 CUP |             |
| H335                  | 51.5   | 2982              | 49,200 CUP |             |
| H4895                 | 51.0   | 2976              | 48,500 CUP |             |
| BENCHMARK             | 49.5   | 2944              | 49,300 CUP |             |

|                         |      | CASE: WINCHESTER  |            | COL: 3.300" |
|-------------------------|------|-------------------|------------|-------------|
|                         |      | PR: WINCHESTER LR |            |             |
| <b>165 GR. SIE SPBT</b> |      |                   |            |             |
| H4350                   | 59.0 | 2938              | 49,400 CUP |             |
| H414                    | 56.5 | 2877              | 49,700 CUP |             |
| H380                    | 56.5 | 2892              | 50,000 CUP |             |
| VARGET                  | 50.5 | 2873              | 49,700 CUP |             |
| BL-C(2)                 | 51.0 | 2805              | 49,800 CUP |             |
| H335                    | 47.0 | 2749              | 49,300 CUP |             |
| H4895                   | 47.5 | 2782              | 49,000 CUP |             |
| BENCHMARK               | 47.7 | 2795              | 49,300 CUP |             |

|                         |      | CASE: WINCHESTER  |            | COL: 3.300" |
|-------------------------|------|-------------------|------------|-------------|
|                         |      | PR: WINCHESTER LR |            |             |
| <b>180 GR. SIE SPBT</b> |      |                   |            |             |
| H4831                   | 60.0 | 2710              | 44,300 CUP |             |
| H4350                   | 57.5 | 2798              | 49,300 CUP |             |
| H414                    | 55.5 | 2743              | 48,700 CUP |             |
| H380                    | 53.0 | 2682              | 48,700 CUP |             |
| VARGET                  | 47.0 | 2668              | 50,000 CUP |             |
| BL-C(2)                 | 48.5 | 2634              | 48,100 CUP |             |
| H335                    | 46.0 | 2621              | 49,200 CUP |             |
| H4895                   | 46.0 | 2638              | 48,800 CUP |             |
| BENCHMARK               | 46.0 | 2660              | 49,000 CUP |             |

**300 REM. S.A. ULTRA MAG.** CASE: REMINGTON  
BBL: 24" PR: REMINGTON 9 1/2 M

|                         |        | CASE: REMINGTON       |            | COL: 2.700" |
|-------------------------|--------|-----------------------|------------|-------------|
|                         |        | PR: REMINGTON 9 1/2 M |            |             |
| <b>150 GR. SPR GSSP</b> |        |                       |            |             |
| H4350                   | 65.5 C | 3147                  | 62,100 PSI |             |
| H414                    | 65.5   | 3201                  | 62,800 PSI |             |
| H380                    | 63.0   | 3119                  | 60,700 PSI |             |
| VARGET                  | 59.0   | 3148                  | 63,200 PSI |             |
| H4895                   | 57.0   | 3147                  | 62,800 PSI |             |

|                         |        | CASE: WINCHESTER   |            | COL: 2.825" |
|-------------------------|--------|--------------------|------------|-------------|
|                         |        | PR: WINCHESTER LRM |            |             |
| <b>180 GR. SFT SCIR</b> |        |                    |            |             |
| H4350                   | 61.6 C | 2907               | 63,500 PSI |             |
| H414                    | 60.5   | 2935               | 63,400 PSI |             |
| VARGET                  | 54.0   | 2842               | 63,600 PSI |             |
| H4895                   | 51.5   | 2823               | 64,700 PSI |             |

|                         |        | CASE: WINCHESTER   |            | COL: 2.825" |
|-------------------------|--------|--------------------|------------|-------------|
|                         |        | PR: WINCHESTER LRM |            |             |
| <b>200 GR. NOS PART</b> |        |                    |            |             |
| H4831                   | 66.0 C | 2755               | 63,300 PSI |             |
| H4350                   | 59.5 C | 2751               | 63,200 PSI |             |
| H414                    | 59.5   | 2788               | 64,100 PSI |             |

**300 WIN. SHORT MAGNUM** CASE: WINCHESTER  
BBL: 24" PR: WINCHESTER LRM

|                         |      | CASE: WINCHESTER   |            | COL: 2.780" |
|-------------------------|------|--------------------|------------|-------------|
|                         |      | PR: WINCHESTER LRM |            |             |
| <b>150 GR. SPR GSSP</b> |      |                    |            |             |
| H4350                   | 67.0 | 3187               | 63,200 PSI |             |
| H414                    | 66.0 | 3204               | 63,300 PSI |             |
| H380                    | 64.0 | 3141               | 63,600 PSI |             |
| VARGET                  | 58.5 | 3140               | 63,800 PSI |             |
| H4895                   | 54.5 | 3078               | 63,100 PSI |             |

|                         |        | CASE: WINCHESTER   |            | COL: 2.860" |
|-------------------------|--------|--------------------|------------|-------------|
|                         |        | PR: WINCHESTER LRM |            |             |
| <b>180 GR. SFT SCIR</b> |        |                    |            |             |
| H4831                   | 70.0 C | 2929               | 64,000 PSI |             |
| H4350                   | 64.0   | 2950               | 63,900 PSI |             |
| H414                    | 62.5   | 2959               | 63,000 PSI |             |
| H380                    | 61.0   | 2884               | 63,400 PSI |             |

|                       |       | CASE: WINCHESTER   |            | COL: 2.790" |
|-----------------------|-------|--------------------|------------|-------------|
|                       |       | PR: WINCHESTER LRM |            |             |
| <b>200 GR. SFT SP</b> |       |                    |            |             |
| H1000                 | 72.0C | 2737               | 57,200 PSI |             |
| H4831                 | 66.5C | 2802               | 63,700 PSI |             |
| H4350                 | 62.0  | 2792               | 63,200 PSI |             |
| H414                  | 61.0  | 2803               | 63,200 PSI |             |

**300 WINCHESTER MAGNUM** CASE: WINCHESTER  
BBL: 24" PR: WINCHESTER LR

|                       |        | CASE: WINCHESTER  |            | COL: 3.340" |
|-----------------------|--------|-------------------|------------|-------------|
|                       |        | PR: WINCHESTER LR |            |             |
| <b>150 GR. SIE SP</b> |        |                   |            |             |
| H1000                 | 85.0 C | 3255              | 52,200 CUP |             |
| H4831                 | 78.0   | 3207              | 52,700 CUP |             |
| H4350                 | 72.0   | 3205              | 52,500 CUP |             |
| H414                  | 68.0   | 3145              | 52,500 CUP |             |
| H380                  | 65.0   | 3031              | 52,200 CUP |             |
| VARGET                | 60.0   | 3108              | 51,400 CUP |             |
| H4895                 | 61.0   | 3124              | 52,500 CUP |             |

|                          |        | CASE: WINCHESTER  |            | COL: 3.285" |
|--------------------------|--------|-------------------|------------|-------------|
|                          |        | PR: WINCHESTER LR |            |             |
| <b>180 GR. SPR MT-SP</b> |        |                   |            |             |
| H870                     | 89.0 C | 2901              | 43,300 CUP |             |
| H1000                    | 81.0 C | 3042              | 52,900 CUP |             |
| H4831                    | 73.0 C | 2966              | 53,200 CUP |             |
| H4350                    | 67.0   | 2918              | 53,100 CUP |             |
| H414                     | 62.0   | 2845              | 52,300 CUP |             |

NEVER Exceed the Loads Listed in This Publication

| BULLET                  | POWDER | GR   | VEL        | CUP                |
|-------------------------|--------|------|------------|--------------------|
| <b>200 GR. NOS PART</b> |        |      |            |                    |
| H870                    | 85.0 C | 2676 | 38,900 CUP | <b>COL: 3.340"</b> |
| RETUMBO                 | 84.0 C | 2962 | 52,300 CUP |                    |
| H1000                   | 79.0 C | 2883 | 52,800 CUP |                    |
| H4831                   | 72.0 C | 2825 | 53,100 CUP |                    |
| H4350                   | 66.0   | 2753 | 51,700 CUP |                    |

**300 WEATHERBY MAGNUM**  
BBL: 24" CASE: REMINGTON  
PR: FEDERAL 215 M

| <b>150 GR. BAR XBT</b> |        |      |            |                    |
|------------------------|--------|------|------------|--------------------|
| H1000                  | 88.0 C | 3264 | 53,500 CUP | <b>COL: 3.560"</b> |
| H4831                  | 79.0   | 3168 | 53,500 CUP |                    |
| H4350                  | 72.5   | 3156 | 53,800 CUP |                    |
| H414                   | 69.0   | 3099 | 53,800 CUP |                    |
| H380                   | 67.0   | 3009 | 54,000 CUP |                    |
| VARGET                 | 63.0   | 3142 | 54,300 CUP |                    |
| H4895                  | 62.3   | 3098 | 53,400 CUP |                    |

| <b>180 GR. WIN FS</b> |        |      |            |                    |
|-----------------------|--------|------|------------|--------------------|
| H1000                 | 83.0 C | 3111 | 54,600 CUP | <b>COL: 3.560"</b> |
| H4831                 | 79.0   | 3013 | 54,600 CUP |                    |
| H4350                 | 72.0   | 2974 | 54,600 CUP |                    |

| <b>200 GR. SFT</b> |        |      |            |                    |
|--------------------|--------|------|------------|--------------------|
| RETUMBO            | 85.5 C | 2981 | 54,600 CUP | <b>COL: 3.510"</b> |
| H1000              | 85.0 C | 2963 | 53,400 CUP |                    |
| H4831              | 77.5   | 2869 | 52,900 CUP |                    |
| H4350              | 71.0   | 2866 | 54,300 CUP |                    |

**300 REM. ULTRA MAG.**  
BBL: 24" CASE: REMINGTON  
PR: REMINGTON 9 1/2M

| <b>150 GR. SIE SPBT</b> |         |      |            |                    |
|-------------------------|---------|------|------------|--------------------|
| RETUMBO                 | 106.0 C | 3531 | 60,800 PSI | <b>COL: 3.530"</b> |
| H1000                   | 102.0   | 3457 | 62,900 PSI |                    |
| H4831                   | 94.0    | 3408 | 62,900 PSI |                    |

| <b>180 GR. SPR SPBT</b> |         |      |            |                    |
|-------------------------|---------|------|------------|--------------------|
| H50BMG                  | 108.0 C | 3159 | 62,100 PSI | <b>COL: 3.530"</b> |
| H870                    | 106.0   | 3206 | 58,200 PSI |                    |
| RETUMBO                 | 100.5 C | 3300 | 62,400 PSI |                    |
| H1000                   | 96.0    | 3218 | 62,800 PSI |                    |
| H4831                   | 89.0    | 3167 | 62,500 PSI |                    |

| <b>200 GR. BAR XFB</b> |        |      |            |                    |
|------------------------|--------|------|------------|--------------------|
| H50BMG                 | 98.0 C | 2910 | 63,100 PSI | <b>COL: 3.530"</b> |
| H870                   | 104.0  | 3028 | 61,300 PSI |                    |
| RETUMBO                | 86.0   | 2988 | 62,800 PSI |                    |
| H1000                  | 83.0   | 2850 | 62,800 PSI |                    |

**30-378 WEATHERBY**  
BBL: 26" CASE: WEATHERBY  
PR: FEDERAL 215 M

| <b>180 GR. SPR SPBT</b> |         |      |            |                    |
|-------------------------|---------|------|------------|--------------------|
| H50BMG                  | 120.0 C | 3229 | 47,100 CUP | <b>COL: 3.600"</b> |
| H870                    | 118.0   | 3333 | 46,700 CUP |                    |
| RETUMBO                 | 113.0 C | 3460 | 54,700 CUP |                    |
| H1000                   | 111.0   | 3412 | 54,300 CUP |                    |
| H4831                   | 100.0   | 3301 | 54,500 CUP |                    |

| <b>200 GR. BAR XFB</b> |         |      |            |                    |
|------------------------|---------|------|------------|--------------------|
| H50BMG                 | 117.0 C | 3227 | 54,800 CUP | <b>COL: 3.645"</b> |
| H5010                  | 112.0 C | 3124 | 52,700 CUP |                    |
| H870                   | 116.0   | 3206 | 52,000 CUP |                    |

| BULLET                  | POWDER  | GR   | VEL        | CUP                |
|-------------------------|---------|------|------------|--------------------|
| <b>220 GR. NOS PART</b> |         |      |            |                    |
| H50BMG                  | 118.5 C | 3145 | 53,700 CUP | <b>COL: 3.600"</b> |
| H5010                   | 114.0 C | 3071 | 51,900 CUP |                    |
| H870                    | 116.0   | 3180 | 53,500 CUP |                    |
| RETUMBO                 | 107.5   | 3155 | 55,000 CUP |                    |
| H1000                   | 104.0   | 3084 | 53,700 CUP |                    |

**7.62 X 39MM RUSSIAN**  
BBL: 24" CASE: MIDWAY  
PR: CCI 200

| <b>125 GR. SPR SP</b> |      |      |            |                    |
|-----------------------|------|------|------------|--------------------|
| BL-C(2)               | 31.5 | 2349 | 38,800 CUP | <b>COL: 2.150"</b> |
| H335                  | 31.5 | 2408 | 40,900 CUP |                    |
| H4895                 | 29.0 | 2249 | 33,600 CUP |                    |
| H322                  | 29.0 | 2323 | 35,400 CUP |                    |
| H4198                 | 26.5 | 2378 | 40,400 CUP |                    |

| <b>150 GR. HDY SP</b> |      |      |            |                    |
|-----------------------|------|------|------------|--------------------|
| BL-C(2)               | 29.5 | 2090 | 40,400 CUP | <b>COL: 2.220"</b> |
| H335                  | 29.0 | 2132 | 42,500 CUP |                    |
| H4895                 | 28.0 | 2154 | 39,300 CUP |                    |
| H322                  | 28.5 | 2192 | 40,400 CUP |                    |
| H4198                 | 24.5 | 2122 | 39,800 CUP |                    |

**303 BRITISH**  
BBL: 24" CASE: REMINGTON  
PR: FEDERAL 210

| <b>150 GR. HDY SP</b> |      |      |            |                    |
|-----------------------|------|------|------------|--------------------|
| VARGET                | 43.0 | 2656 | 42,700 CUP | <b>COL: 2.995"</b> |
| BL-C(2)               | 48.0 | 2756 | 39,200 CUP |                    |
| H335                  | 42.0 | 2706 | 43,100 CUP |                    |
| H4895                 | 40.0 | 2627 | 43,600 CUP |                    |

| <b>180 GR. SIE SP</b> |        |      |            |                    |
|-----------------------|--------|------|------------|--------------------|
| H4350                 | 48.0 C | 2500 | 43,800 CUP | <b>COL: 3.075"</b> |
| H414                  | 46.0   | 2435 | 42,500 CUP |                    |
| VARGET                | 41.0   | 2440 | 43,400 CUP |                    |
| BL-C(2)               | 45.0   | 2563 | 43,000 CUP |                    |
| H335                  | 39.0   | 2449 | 42,700 CUP |                    |
| H4895                 | 38.0   | 2400 | 43,500 CUP |                    |

**32-40 WINCHESTER**  
BBL: 24" CASE: WINCHESTER  
PR: REMINGTON 2 1/2

| <b>196 GR. HOCH</b> |      |      |            |                    |
|---------------------|------|------|------------|--------------------|
| H4227               | 13.0 | 1367 | 18,000 CUP | <b>COL: 2.555"</b> |
| H110                | 12.0 | 1376 | 19,200 CUP |                    |
| LIL'GUN             | 9.3  | 1237 | 19,600 CUP |                    |

| <b>202 GR. POPE</b> |      |      |            |                    |
|---------------------|------|------|------------|--------------------|
| H4227               | 14.0 | 1376 | 15,900 CUP | <b>COL: 2.555"</b> |
| H110                | 13.0 | 1386 | 17,900 CUP |                    |
| LIL'GUN             | 9.5  | 1264 | 20,100 CUP |                    |

| <b>204 GR. MILLER</b> |      |      |            |                    |
|-----------------------|------|------|------------|--------------------|
| H4227                 | 13.5 | 1367 | 16,300 CUP | <b>COL: 2.555"</b> |
| H110                  | 13.0 | 1369 | 17,900 CUP |                    |
| LIL'GUN               | 10.8 | 1310 | 20,100 CUP |                    |

**8 X 57MM MAUSER**  
BBL: 24" CASE: REMINGTON  
PR: REMINGTON 9 1/2

| <b>150 GR. HDY SP</b> |        |      |            |                    |
|-----------------------|--------|------|------------|--------------------|
| VARGET                | 52.4 C | 2896 | 49,000 CUP | <b>COL: 2.950"</b> |
| BL-C(2)               | 55.0   | 2962 | 48,400 CUP |                    |

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| BULLET                | POWDER | GR   | VEL  | CUP                |
|-----------------------|--------|------|------|--------------------|
| H335                  |        | 50.8 | 2942 | 48,800 CUP         |
| H4895                 |        | 51.0 | 2987 | 49,500 CUP         |
| BENCHMARK             |        | 47.5 | 2860 | 48,800 CUP         |
| <b>170 GR. HDY RN</b> |        |      |      | <b>COL: 2.825"</b> |
| VARGET                |        | 50.5 | 2700 | 48,700 CUP         |
| BL-C(2)               |        | 53.5 | 2839 | 48,800 CUP         |
| H335                  |        | 49.2 | 2738 | 48,800 CUP         |
| H4895                 |        | 49.0 | 2769 | 48,700 CUP         |
| BENCHMARK             |        | 46.6 | 2679 | 49,100 CUP         |

| <b>8MM REMINGTON MAGNUM</b> |       |                       |  |                    |
|-----------------------------|-------|-----------------------|--|--------------------|
|                             |       | CASE: REMINGTON       |  |                    |
| BBL: 24"                    |       | PR: REMINGTON 9 1/2 M |  |                    |
| <b>180 GR. BAR XFB</b>      |       |                       |  | <b>COL: 3.600"</b> |
| H1000                       | 89.0C | 3049                  |  | 51,900 CUP         |
| H4831                       | 78.0  | 2946                  |  | 52,200 CUP         |
| H4350                       | 73.0  | 3033                  |  | 52,800 CUP         |
| <b>220 GR. HDY SP</b>       |       |                       |  | <b>COL: 3.600"</b> |
| H1000                       | 88.0C | 2817                  |  | 49,300 CUP         |
| H4831                       | 80.5  | 2816                  |  | 52,100 CUP         |
| H4350                       | 74.0  | 2824                  |  | 52,100 CUP         |

| <b>338 WINCHESTER MAGNUM</b> |        |                    |  |                    |
|------------------------------|--------|--------------------|--|--------------------|
|                              |        | CASE: WINCHESTER   |  |                    |
| BBL: 24"                     |        | PR: WINCHESTER LRM |  |                    |
| <b>185 GR. BAR XBT</b>       |        |                    |  | <b>COL: 3.280"</b> |
| H4831                        | 74.0   | 2969               |  | 52,600 CUP         |
| H4350                        | 68.5   | 2971               |  | 51,600 CUP         |
| H414                         | 67.5   | 2946               |  | 52,000 CUP         |
| H380                         | 67.0   | 2943               |  | 52,700 CUP         |
| VARGET                       | 57.0   | 2841               |  | 52,400 CUP         |
| H4895                        | 58.5   | 2886               |  | 52,000 CUP         |
| <b>210 GR. NOS PART</b>      |        |                    |  | <b>COL: 3.280"</b> |
| H4831                        | 75.5 C | 2888               |  | 52,300 CUP         |
| H4350                        | 70.0   | 2855               |  | 51,800 CUP         |
| H414                         | 67.0   | 2848               |  | 51,800 CUP         |
| H380                         | 66.0   | 2797               |  | 53,000 CUP         |
| VARGET                       | 58.5   | 2784               |  | 52,500 CUP         |
| H4895                        | 60.0   | 2788               |  | 53,000 CUP         |
| <b>250 GR. HDY SP</b>        |        |                    |  | <b>COL: 3.340"</b> |
| H1000                        | 76.0 C | 2622               |  | 46,500 CUP         |
| H4831                        | 71.5 C | 2655               |  | 52,300 CUP         |
| H4350                        | 67.5   | 2657               |  | 51,900 CUP         |
| H414                         | 65.0   | 2622               |  | 52,900 CUP         |

| <b>338 LAPUA MAGNUM</b> |         |                  |  |                    |
|-------------------------|---------|------------------|--|--------------------|
|                         |         | CASE: NORMA      |  |                    |
| BBL: 24"                |         | PR: FEDERAL 215M |  |                    |
| <b>210 GR. NOS PART</b> |         |                  |  | <b>COL: 3.525"</b> |
| RETUMBO                 | 102.0 C | 3142             |  | 52,600 CUP         |
| H1000                   | 99.5    | 3052             |  | 52,500 CUP         |
| H4831                   | 89.0    | 3006             |  | 53,000 CUP         |
| H4350                   | 82.0    | 3005             |  | 52,200 CUP         |
| <b>250 GR. HDY SP</b>   |         |                  |  | <b>COL: 3.550"</b> |
| RETUMBO                 | 98.0 C  | 2853             |  | 52,000 CUP         |
| H1000                   | 98.0 C  | 2838             |  | 52,800 CUP         |
| H4831                   | 85.0    | 2740             |  | 52,200 CUP         |
| H4350                   | 78.0    | 2742             |  | 52,300 CUP         |

| BULLET                  | POWDER | GR   | VEL | CUP                |
|-------------------------|--------|------|-----|--------------------|
| <b>300 GR. SIE HPBT</b> |        |      |     | <b>COL: 3.600"</b> |
| RETUMBO                 | 94.0 C | 2654 |     | 53,400 CUP         |
| H1000                   | 92.0 C | 2590 |     | 53,000 CUP         |
| H4831                   | 79.0   | 2511 |     | 53,100 CUP         |

| <b>338 REMINGTON ULTRA MAG</b> |         |                       |  |                    |
|--------------------------------|---------|-----------------------|--|--------------------|
|                                |         | CASE: REMINGTON       |  |                    |
| BBL: 24"                       |         | PR: REMINGTON 9 1/2 M |  |                    |
| <b>200 GR. SPR SP</b>          |         |                       |  | <b>COL: 3.590"</b> |
| H1000                          | 102.0 C | 3127                  |  | 58,600 PSI         |
| H4831                          | 96.5    | 3138                  |  | 63,000 PSI         |
| H4350                          | 89.5    | 3156                  |  | 63,000 PSI         |
| H414                           | 84.0    | 3089                  |  | 63,100 PSI         |

| <b>225 GR. NOS PART</b> |         |      |  |            |
|-------------------------|---------|------|--|------------|
| RETUMBO                 | 103.0 C | 3055 |  | 61,100 PSI |
| H1000                   | 100.0 C | 3058 |  | 63,000 PSI |
| H4831                   | 93.5    | 2977 |  | 63,000 PSI |
| H4350                   | 86.0    | 2976 |  | 62,600 PSI |

| <b>250 GR. HDY SP</b> |        |      |  |            |
|-----------------------|--------|------|--|------------|
| RETUMBO               | 101.0  | 2964 |  | 64,500 PSI |
| H1000                 | 98.0 C | 2923 |  | 62,400 PSI |
| H4831                 | 90.0   | 2858 |  | 62,500 PSI |
| H4350                 | 79.0   | 2707 |  | 53,100 PSI |

| <b>338-378 WEATHERBY</b> |         |                   |  |                    |
|--------------------------|---------|-------------------|--|--------------------|
|                          |         | CASE: WEATHERBY   |  |                    |
| BBL: 26"                 |         | PR: FEDERAL 215 M |  |                    |
| <b>210 GR. NOS PART</b>  |         |                   |  | <b>COL: 3.740"</b> |
| RETUMBO                  | 123.0 C | 3362              |  | 54,000 CUP         |
| H1000                    | 113.0   | 3192              |  | 53,500 CUP         |
| H4831                    | 103.0   | 3154              |  | 54,000 CUP         |
| H4350                    | 96.5    | 3176              |  | 54,000 CUP         |

| <b>225 GR. NOS PART</b> |         |      |  |            |
|-------------------------|---------|------|--|------------|
| RETUMBO                 | 119.0 C | 3244 |  | 54,300 CUP |
| H1000                   | 111.0   | 3112 |  | 53,800 CUP |
| H4831                   | 104.0   | 3107 |  | 54,000 CUP |
| H4350                   | 95.5    | 3100 |  | 53,900 CUP |

| <b>275 GR. SFT SP</b> |         |      |  |            |
|-----------------------|---------|------|--|------------|
| H50BMG                | 120.0 C | 2843 |  | 51,000 CUP |
| H870                  | 120.0   | 2893 |  | 47,000 CUP |
| RETUMBO               | 110.5 C | 2934 |  | 52,500 CUP |
| H1000                 | 106.0   | 2837 |  | 53,700 CUP |
| H4831                 | 98.0    | 2800 |  | 53,900 CUP |

| <b>357 MAGNUM (RIFLE)</b> |      |                    |  |                    |
|---------------------------|------|--------------------|--|--------------------|
|                           |      | CASE: WINCHESTER   |  |                    |
| BBL: 18.5"                |      | PR: WINCHESTER SPM |  |                    |
| <b>158 GR. HDY XTP</b>    |      |                    |  | <b>COL: 1.580"</b> |
| H4227                     | 16.0 | 1668               |  | 42,600 CUP         |
| H110                      | 16.7 | 1757               |  | 40,700 CUP         |
| HS-6                      | 9.5  | 1427               |  | 41,900 CUP         |
| UNIVERSAL                 | 6.3  | 1147               |  | 39,300 CUP         |
| HP-38                     | 6.9  | 1214               |  | 40,000 CUP         |
| TITEGROUP                 | 6.1  | 1184               |  | 41,900 CUP         |

| <b>180 GR. NOS PART</b> |      |      |  |            |
|-------------------------|------|------|--|------------|
| H4227                   | 13.7 | 1325 |  | 40,900 CUP |
| H110                    | 13.5 | 1381 |  | 39,100 CUP |

NEVER Exceed the Loads Listed in This Publication

| BULLET                    | POWDER | GR   | VEL        | CUP |
|---------------------------|--------|------|------------|-----|
| <b>35 REMINGTON</b>       |        |      |            |     |
| BBL: 24" CASE: REMINGTON  |        |      |            |     |
| PR: REMINGTON 9 1/2       |        |      |            |     |
| COL: 2.470"               |        |      |            |     |
| <b>180 GR. SPR FN</b>     |        |      |            |     |
| VARGET                    | 40.5   | 2196 | 32,500 CUP |     |
| BL-C(2)                   | 43.0   | 2147 | 32,300 CUP |     |
| H335                      | 37.5   | 2111 | 33,600 CUP |     |
| H4895                     | 39.0   | 2232 | 33,100 CUP |     |
| BENCHMARK                 | 35.5   | 2034 | 32,300 CUP |     |
| H322                      | 35.0   | 2104 | 33,100 CUP |     |
| H4198                     | 32.0   | 2172 | 33,000 CUP |     |
| <b>200 GR. HDY RN</b>     |        |      |            |     |
| VARGET                    | 39.5   | 2139 | 33,300 CUP |     |
| BL-C(2)                   | 41.5   | 2011 | 31,700 CUP |     |
| H335                      | 37.0   | 2048 | 33,200 CUP |     |
| H4895                     | 38.5   | 2110 | 32,300 CUP |     |
| BENCHMARK                 | 35.5   | 1984 | 32,600 CUP |     |
| H322                      | 33.8   | 1987 | 33,100 CUP |     |
| H4198                     | 30.5   | 1999 | 31,700 CUP |     |
| <b>358 WINCHESTER</b>     |        |      |            |     |
| BBL: 26" CASE: WINCHESTER |        |      |            |     |
| PR: WINCHESTER LR         |        |      |            |     |
| COL: 2.650"               |        |      |            |     |
| <b>200 GR. HDY SP</b>     |        |      |            |     |
| VARGET                    | 51.0C  | 2527 | 47,900 CUP |     |
| BL-C(2)                   | 52.0   | 2464 | 41,800 CUP |     |
| H335                      | 48.5   | 2484 | 48,400 CUP |     |
| H4895                     | 48.0C  | 2519 | 49,800 CUP |     |
| BENCHMARK                 | 46.2   | 2494 | 50,000 CUP |     |
| H322                      | 44.8   | 2491 | 49,400 CUP |     |
| <b>220 GR. SPR FN SP</b>  |        |      |            |     |
| VARGET                    | 50.0C  | 2445 | 50,300 CUP |     |
| BL-C(2)                   | 51.0   | 2355 | 43,900 CUP |     |
| H335                      | 46.0   | 2352 | 49,400 CUP |     |
| H4895                     | 47.5C  | 2421 | 50,200 CUP |     |
| BENCHMARK                 | 45.0   | 2361 | 49,500 CUP |     |
| H322                      | 44.0   | 2371 | 49,300 CUP |     |
| <b>250 GR. NOS PART</b>   |        |      |            |     |
| VARGET                    | 47.0C  | 2278 | 48,600 CUP |     |
| BL-C(2)                   | 47.0   | 2240 | 47,200 CUP |     |
| H335                      | 43.0   | 2184 | 50,500 CUP |     |
| H4895                     | 44.5C  | 2257 | 50,500 CUP |     |
| BENCHMARK                 | 42.0   | 2176 | 49,400 CUP |     |
| H322                      | 42.5   | 2260 | 49,900 CUP |     |
| <b>35 WHELEN</b>          |        |      |            |     |
| BBL: 24" CASE: REMINGTON  |        |      |            |     |
| PR: REMINGTON 9 1/2       |        |      |            |     |
| COL: 3.050"               |        |      |            |     |
| <b>200 GR. SIE RN</b>     |        |      |            |     |
| H380                      | 61.0   | 2602 | 45,000 CUP |     |
| VARGET                    | 57.0   | 2653 | 42,300 CUP |     |
| BL-C(2)                   | 63.0   | 2807 | 49,000 CUP |     |
| H335                      | 55.0   | 2684 | 50,000 CUP |     |
| H4895                     | 57.0   | 2689 | 49,000 CUP |     |
| H322                      | 56.0   | 2691 | 48,500 CUP |     |
| <b>250 GR. HDY SP</b>     |        |      |            |     |
| H380                      | 59.0   | 2416 | 44,500 CUP |     |
| VARGET                    | 55.0   | 2486 | 49,900 CUP |     |
| BL-C(2)                   | 59.0   | 2503 | 48,900 CUP |     |

| BULLET                    | POWDER  | GR   | VEL        | CUP |
|---------------------------|---------|------|------------|-----|
| H335                      | 52.0    | 2404 | 50,000 CUP |     |
| H4895                     | 53.0    | 2455 | 50,000 CUP |     |
| H322                      | 52.0    | 2398 | 48,500 CUP |     |
| <b>38-55 WINCHESTER</b>   |         |      |            |     |
| BBL: 24" CASE: WINCHESTER |         |      |            |     |
| PR: CCI 200               |         |      |            |     |
| COL: 2.620"               |         |      |            |     |
| <b>255 GR. BAR JFP</b>    |         |      |            |     |
| H322                      | 33.0    | 1830 | 28,200 CUP |     |
| H4198                     | 28.0    | 1788 | 26,700 CUP |     |
| <b>375 WINCHESTER</b>     |         |      |            |     |
| BBL: 24" CASE: WINCHESTER |         |      |            |     |
| PR: WINCHESTER LR         |         |      |            |     |
| COL: 2.500"               |         |      |            |     |
| <b>220 GR. HDY JFP</b>    |         |      |            |     |
| H322                      | 38.5 C  | 2236 | 48,900 CUP |     |
| H4198                     | 34.0    | 2233 | 49,300 CUP |     |
| <b>375 H&amp;H MAGNUM</b> |         |      |            |     |
| BBL: 24" CASE: WINCHESTER |         |      |            |     |
| PR: FEDERAL 215 M         |         |      |            |     |
| COL: 3.600"               |         |      |            |     |
| <b>235 GR. SPR SP</b>     |         |      |            |     |
| H414                      | 83.0    | 2749 | 42,600 CUP |     |
| H380                      | 81.0    | 2835 | 46,800 CUP |     |
| VARGET                    | 70.0    | 2819 | 51,200 CUP |     |
| BL-C(2)                   | 85.0    | 2964 | 47,100 CUP |     |
| H335                      | 74.0    | 2853 | 50,000 CUP |     |
| H4895                     | 74.0    | 2895 | 50,400 CUP |     |
| <b>270 GR. WIN FS</b>     |         |      |            |     |
| H4350                     | 83.0 C  | 2694 | 46,800 CUP |     |
| H414                      | 78.0    | 2576 | 45,500 CUP |     |
| H380                      | 78.0    | 2632 | 46,600 CUP |     |
| VARGET                    | 67.0    | 2620 | 51,600 CUP |     |
| H4895                     | 68.0    | 2624 | 50,500 CUP |     |
| <b>300 GR. SIE SPBT</b>   |         |      |            |     |
| H4350                     | 81.5 C  | 2645 | 49,500 CUP |     |
| H414                      | 78.0    | 2548 | 46,800 CUP |     |
| VARGET                    | 62.0    | 2454 | 49,300 CUP |     |
| H4895                     | 65.0    | 2505 | 50,400 CUP |     |
| <b>375 REM. ULTRA MAG</b> |         |      |            |     |
| BBL: 24" CASE: REMINGTON  |         |      |            |     |
| PR: REMINGTON 9 1/2M      |         |      |            |     |
| COL: 3.600"               |         |      |            |     |
| <b>250 GR. BAR XFB</b>    |         |      |            |     |
| H4831                     | 103.0   | 3090 | 62,700 PSI |     |
| H4350                     | 94.5    | 3010 | 62,700 PSI |     |
| H414                      | 93.5    | 3006 | 62,700 PSI |     |
| <b>270 GR. HDY SP</b>     |         |      |            |     |
| H4831                     | 104.0 C | 2922 | 62,900 PSI |     |
| H4350                     | 95.0    | 2932 | 62,600 PSI |     |
| H414                      | 93.0    | 2924 | 63,000 PSI |     |
| <b>300 GR. SFT SP</b>     |         |      |            |     |
| H1000                     | 105.0 C | 2678 | 57,600 PSI |     |
| H4831                     | 97.0 C  | 2719 | 62,500 PSI |     |
| H4350                     | 90.0    | 2733 | 62,700 PSI |     |

NEVER Exceed the Loads Listed in This Publication

| BULLET | POWDER | GR | VEL | CUP |
|--------|--------|----|-----|-----|
|--------|--------|----|-----|-----|

**416 REMINGTON MAGNUM** CASE: REMINGTON  
BBL: 24" PR: REMINGTON 9 1/2 M

| COL: 3.590"    |      |      |            |  |
|----------------|------|------|------------|--|
| 350 GR. SPR SP |      |      |            |  |
| VARGET         | 82.0 | 2622 | 52,400 CUP |  |
| BL-C(2)        | 87.0 | 2580 | 44,700 CUP |  |
| H335           | 82.0 | 2572 | 50,900 CUP |  |
| H4895          | 80.0 | 2601 | 52,200 CUP |  |

| COL: 3.560"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 400 GR. HDY JRN |        |      |            |  |
| H4350           | 88.0 C | 2395 | 46,400 CUP |  |
| H380            | 84.0   | 2367 | 48,500 CUP |  |
| VARGET          | 77.0   | 2407 | 53,000 CUP |  |
| BL-C(2)         | 83.0   | 2420 | 50,500 CUP |  |
| H4895           | 76.0   | 2391 | 53,300 CUP |  |

**44 MAGNUM (RIFLE)** CASE: WINCHESTER  
BBL: 20" PR: REMINGTON 2 1/2

| COL: 1.600"     |      |      |            |  |
|-----------------|------|------|------------|--|
| 240 GR. NOS JHP |      |      |            |  |
| H4227           | 24.0 | 1778 | 36,100 CUP |  |
| H110            | 24.0 | 1817 | 36,200 CUP |  |

| COL: 1.600"      |      |      |            |  |
|------------------|------|------|------------|--|
| 270 GR. SPR GDSP |      |      |            |  |
| H4227            | 22.5 | 1638 | 37,400 CUP |  |
| H110             | 21.5 | 1637 | 37,700 CUP |  |

| COL: 1.600"     |      |      |            |  |
|-----------------|------|------|------------|--|
| 300 GR. HDY XTP |      |      |            |  |
| H4227           | 20.0 | 1452 | 38,600 CUP |  |
| H110            | 19.0 | 1473 | 38,800 CUP |  |

**444 MARLIN** CASE: REMINGTON  
BBL: 24" PR: REMINGTON 9 1/2

| COL: 2.535"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 240 GR. SIE JHP |        |      |            |  |
| H335            | 56.0   | 2222 | 38,900 CUP |  |
| H4895           | 53.0 C | 2069 | 33,100 CUP |  |
| BENCHMARK       | 55.0 C | 2234 | 40,600 CUP |  |
| H322            | 52.0 C | 2185 | 35,900 CUP |  |
| H4198           | 49.2 C | 2499 | 42,100 CUP |  |

| COL: 2.550"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 265 GR. HDY JFP |        |      |            |  |
| H335            | 56.0   | 2187 | 39,700 CUP |  |
| H4895           | 53.0 C | 2080 | 34,800 CUP |  |
| BENCHMARK       | 53.0 C | 2139 | 40,700 CUP |  |
| H322            | 52.0 C | 2164 | 38,300 CUP |  |
| H4198           | 47.0   | 2273 | 41,100 CUP |  |

| COL: 2.620"    |        |      |            |  |
|----------------|--------|------|------------|--|
| 300 GR. SFT HP |        |      |            |  |
| VARGET         | 50.0 C | 1914 | 35,700 CUP |  |
| H335           | 52.0   | 2023 | 42,300 CUP |  |
| H4895          | 50.0 C | 1931 | 35,600 CUP |  |
| BENCHMARK      | 48.5   | 1993 | 41,900 CUP |  |
| H322           | 48.0   | 2038 | 42,600 CUP |  |
| H4198          | 42.5   | 2082 | 42,500 CUP |  |

**45-70 GOVERNMENT (TRAPDOOR RIFLE)** CASE: WINCHESTER  
BBL: 24" PR: CCI 200

| COL: 2.525"    |        |      |            |  |
|----------------|--------|------|------------|--|
| 300 GR. SIE HP |        |      |            |  |
| VARGET         | 63.0 C | 2020 | 23,800 CUP |  |
| H335           | 63.5   | 2143 | 27,400 CUP |  |
| H4895          | 62.0 C | 1974 | 21,000 CUP |  |

| BULLET | POWDER | GR | VEL | CUP |
|--------|--------|----|-----|-----|
|--------|--------|----|-----|-----|

|           |        |      |            |  |
|-----------|--------|------|------------|--|
| BENCHMARK | 63.5 C | 2113 | 27,400 CUP |  |
| H322      | 60.0   | 2142 | 28,000 CUP |  |
| H4198     | 55.0   | 2221 | 27,600 CUP |  |

| COL: 2.540"      |      |      |            |  |
|------------------|------|------|------------|--|
| 405 GR. CAST LFP |      |      |            |  |
| VARGET           | 50.0 | 1718 | 20,900 CUP |  |
| H4895            | 48.0 | 1645 | 18,900 CUP |  |
| BENCHMARK        | 50.0 | 1695 | 22,600 CUP |  |
| H4198            | 31.0 | 1459 | 17,100 CUP |  |

**450 MARLIN** CASE: HORNADY  
BBL: 24" PR: WINCHESTER LR

| COL: 2.530"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 350 GR. HDY JFP |        |      |            |  |
| BENCHMARK       | 59.0 C | 2129 | 38,600 PSI |  |
| H322            | 58.0 C | 2196 | 42,300 PSI |  |
| H4198           | 48.5   | 2119 | 42,200 PSI |  |

| COL: 2.520"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 400 GR. SPR JFP |        |      |            |  |
| VARGET          | 57.0 C | 1910 | 38,000 PSI |  |
| H4895           | 56.0 C | 1986 | 42,000 PSI |  |
| H335            | 55.0   | 1953 | 41,600 PSI |  |
| BENCHMARK       | 55.0 C | 2010 | 42,500 PSI |  |
| H322            | 52.5 C | 2023 | 41,900 PSI |  |
| H4198           | 45.5   | 1958 | 42,600 PSI |  |

**458 WINCHESTER MAGNUM** CASE: WINCHESTER  
BBL: 24" PR: CCI 250

| COL: 3.105"    |        |      |            |  |
|----------------|--------|------|------------|--|
| 350 GR. SPR SP |        |      |            |  |
| H4895          | 80.0 C | 2496 | 38,700 CUP |  |
| BENCHMARK      | 79.0 C | 2468 | 42,400 CUP |  |
| H322           | 80.0 C | 2589 | 49,400 CUP |  |
| H4198          | 72.0   | 2548 | 51,600 CUP |  |

| COL: 3.220"    |        |      |            |  |
|----------------|--------|------|------------|--|
| 400 GR. SFT SP |        |      |            |  |
| VARGET         | 77.0 C | 2310 | 38,800 CUP |  |
| H4895          | 77.0 C | 2349 | 42,500 CUP |  |
| BENCHMARK      | 78.0 C | 2343 | 46,600 CUP |  |
| H322           | 76.0 C | 2407 | 51,100 CUP |  |
| H4198          | 67.0   | 2323 | 51,000 CUP |  |

| COL: 3.310"     |        |      |            |  |
|-----------------|--------|------|------------|--|
| 500 GR. HDY JRN |        |      |            |  |
| VARGET          | 74.0 C | 2152 | 48,100 CUP |  |
| H335            | 75.5   | 2163 | 50,300 CUP |  |
| H4895           | 74.0 C | 2161 | 50,300 CUP |  |
| BENCHMARK       | 73.0 C | 2123 | 50,300 CUP |  |
| H322            | 69.5 C | 2109 | 52,000 CUP |  |
| H4198           | 58.5   | 1987 | 51,100 CUP |  |

**50 BROWNING MACHINE GUN** CASE: FNB  
BBL: 45" PR: CCI 35

| COL: 5.450"     |       |      |  |  |
|-----------------|-------|------|--|--|
| 655 GR. ADI FMJ |       |      |  |  |
| H50BMG          | 248.0 | 3029 |  |  |

| COL: 5.450"       |       |      |  |  |
|-------------------|-------|------|--|--|
| 750 GR. HDY A-MAX |       |      |  |  |
| H50BMG            | 233.0 | 2800 |  |  |

| COL: 5.450"       |       |      |  |  |
|-------------------|-------|------|--|--|
| 800 GR. BAR SOLID |       |      |  |  |
| H50BMG            | 225.0 | 2725 |  |  |

NEVER Exceed the Loads Listed in This Publication

# PISTOL data

10-1-02

KINGSTON F. SMITH, D.D.S.  
2907 SOUTH GEORGIA  
AMARILLO, TEXAS 79109  
806-355-7449

DEAR CHRIS

ENCLOSED IS A PICTURE OF MY DAUGHTER  
KATY SMITH, SHE IS A NEW ICORE MEMBER  
OF OUR INDOOR CLUB (PALO DURO SHOOTERS) AND  
SHE JUST SHOT A "TITEGROUP". SHE SHOOTS A  
S&W 686 IN .38 SPEC MODIFIED FOR FULL MOON  
CLIPS. THE TITEGROUP + CLIPS THAT WE LOAD  
WITH HAS REDUCED THE SMOKE CONSIDERABLY.

THANKS FOR GREAT POWDERS.

*Kingston*



# PISTOL data

The loads shown in this section should be followed just as they are printed. These loads are like recipes. The closer they are followed, the better the resultant load.

## Warnings

**NEVER Exceed the Loads Listed in This Publication**

For all brands of 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.

The loads shown here are at maximum. Reduce them by 10% and work up to the load that works best for you. **NEVER EXCEED THE LISTED LOADS.**

**H110 Loads should not be reduced more than 3%.** Reduce H110 Loads 3% and work up from there. H110 if reduced too much will cause inconsistent ignition. In some cases it will lodge a bullet in the barrel, causing a hazardous situation (Barrel Obstruction). This may cause severe personal injury or death to users or bystanders.

**DO NOT REDUCE H110 LOADS BY MORE THAN 3%.**

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

## Brands

BAR - Barnes  
 BER - Berger  
 BLX - Bull-X  
 FA - Freedom Arms  
 HDY - Hornady  
 NOS - Nosler  
 REM - Remington  
 SIE - Sierra  
 SFT - Swift  
 SPR - Speer  
 WIN - Winchester

## Primers

LP - Large Pistol  
 LPM - Large Pistol Magnum  
 SP - Small Pistol  
 SPM - Small Pistol Magnum

## Data

C - Compressed Powder Charge  
 PR - Primer  
 BBL - Barrel  
 COL - Cartridge Overall Length  
 REF - Reformed

## Bullets

A-Max - Hornady Match  
 BR - Bench Rest  
 BT - Ballistic Tip  
 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  
 GC - Gas Check  
 GDHP - Gold Dot Hollow Point  
 GDSP - Gold Dot Soft Point  
 GS - Grand Slam  
 HB - Hollow Base  
 HC - Hollow Cavity  
 HP - Hollow Point  
 HPBT - Hollow Point Boat Tail  
 HSP - Hollow Soft Point  
 JFP - Jacketed Flat Point  
 JHC - Jacketed Hollow Cavity  
 JHP - Jacketed Hollow Point  
 JRN - Jacketed Round Nose  
 JSP - Jacketed Soft Point  
 JSWC - Jacketed Semi-Wadcutter  
 LBBWC - Lead Bevel Base Wadcutter  
 LFP - Lead Flat Point  
 LHBWC - Lead Hollow Base Wadcutter  
 LRN - Lead Round Nose  
 LSWC - Lead Semi-Wadcutter  
 MK - Match King  
 MT-SP - Mag Tip Soft Point  
 PSPCL - Pointed Soft Point "Core-Lokt"  
 RN - Round Nose  
 SB - Solid Base  
 SJ - Short Jacket  
 SP - Soft Point, Spitzer, Spire Point  
 SPBT - Soft Point Boat Tail  
 ST - Silvertip  
 TMJ - Totally Metal Jacket  
 UCHP - Uni-cor Hollow Point  
 WC - Wadcutter  
 X - X Bullet  
 XFB - X Flat Base  
 XBT - X Boat Tail  
 XBTC - X Boat Tail Coated

| BULLET                  | POWDER | GR                         | VEL        | CUP |
|-------------------------|--------|----------------------------|------------|-----|
| <b>223 REMINGTON</b>    |        |                            |            |     |
| <b>BBL: 15"</b>         |        | <b>CASE: WINCHESTER</b>    |            |     |
|                         |        | <b>PR: WINCHESTER SR</b>   |            |     |
| <b>40 GR. NOS BT</b>    |        |                            |            |     |
| <b>COL: 2.280"</b>      |        |                            |            |     |
| VARGET                  | 28.0 C | 3069                       | 47,200 CUP |     |
| BL-C(2)                 | 28.5   | 2910                       | 45,400 CUP |     |
| H335                    | 28.0   | 3231                       | 44,600 CUP |     |
| H4895                   | 27.5 C | 3060                       | 44,500 CUP |     |
| BENCHMARK               | 27.3   | 3174                       | 51,000 CUP |     |
| H322                    | 25.5   | 3087                       | 48,000 CUP |     |
| H4198                   | 22.5   | 3014                       | 49,600 CUP |     |
| <b>50 GR. SPR SP</b>    |        |                            |            |     |
| <b>COL: 2.210"</b>      |        |                            |            |     |
| VARGET                  | 27.5 C | 2959                       | 44,800 CUP |     |
| BL-C(2)                 | 28.0   | 2851                       | 47,100 CUP |     |
| H335                    | 26.0   | 2834                       | 51,700 CUP |     |
| H4895                   | 27.5 C | 3024                       | 51,300 CUP |     |
| BENCHMARK               | 26.5   | 2953                       | 50,400 CUP |     |
| H322                    | 24.0   | 2740                       | 49,300 CUP |     |
| H4198                   | 21.5   | 2824                       | 45,900 CUP |     |
| <b>55 GR. SPR SP</b>    |        |                            |            |     |
| <b>COL: 2.200"</b>      |        |                            |            |     |
| VARGET                  | 27.5 C | 2972                       | 49,700 CUP |     |
| BL-C(2)                 | 27.5   | 2816                       | 48,500 CUP |     |
| H335                    | 25.3   | 2799                       | 49,300 CUP |     |
| H4895                   | 26.0   | 2880                       | 49,000 CUP |     |
| BENCHMARK               | 25.6   | 2840                       | 50,000 CUP |     |
| H322                    | 23.0   | 2638                       | 48,900 CUP |     |
| H4198                   | 21.0   | 2719                       | 47,600 CUP |     |
| <b>25 ACP</b>           |        |                            |            |     |
| <b>BBL: 2"</b>          |        | <b>CASE: WINCHESTER</b>    |            |     |
|                         |        | <b>PR: FEDERAL 100M</b>    |            |     |
| <b>50 GR. SIE FMJ</b>   |        |                            |            |     |
| <b>COL: .900"</b>       |        |                            |            |     |
| UNIVERSAL               | 1.4    | 751                        | 16,600 CUP |     |
| HP-38                   | 1.5    | 788                        | 17,900 CUP |     |
| TITEGROUP               | 1.3    | 752                        | 17,200 CUP |     |
| <b>7MM BR REMINGTON</b> |        |                            |            |     |
| <b>BBL: 14"</b>         |        | <b>CASE: REMINGTON</b>     |            |     |
|                         |        | <b>PR: WINCHESTER SR</b>   |            |     |
| <b>120 GR. SIE SP</b>   |        |                            |            |     |
| <b>COL: 2.284"</b>      |        |                            |            |     |
| BL-C(2)                 | 32.0   | 2342                       |            |     |
| H335                    | 31.0   | 2376                       |            |     |
| H4895                   | 31.0   | 2363                       |            |     |
| H322                    | 29.0   | 2323                       |            |     |
| H4198                   | 24.5   | 2250                       |            |     |
| <b>139 GR. HDY SP</b>   |        |                            |            |     |
| <b>COL: 2.330"</b>      |        |                            |            |     |
| BL-C(2)                 | 30.5   | 2142                       |            |     |
| H335                    | 29.0   | 2103                       |            |     |
| H4895                   | 28.5   | 2115                       |            |     |
| H322                    | 26.5   | 2092                       |            |     |
| H4198                   | 23.0   | 1977                       |            |     |
| <b>7MM-08 REMINGTON</b> |        |                            |            |     |
| <b>BBL: 15"</b>         |        | <b>CASE: REMINGTON</b>     |            |     |
|                         |        | <b>PR: REMINGTON 9 1/2</b> |            |     |
| <b>100 GR. BAR XFB</b>  |        |                            |            |     |
| <b>COL: 2.650"</b>      |        |                            |            |     |
| H380                    | 49.0   | 2786                       | 46,300 CUP |     |
| VARGET                  | 45.7   | 2931                       | 49,600 CUP |     |
| BL-C(2)                 | 46.5   | 2873                       | 50,000 CUP |     |
| H335                    | 41.2   | 2752                       | 49,700 CUP |     |
| H4895                   | 45.0   | 2942                       | 49,900 CUP |     |
| BENCHMARK               | 42.5   | 2827                       | 49,600 CUP |     |
| <b>139 GR. HDY SP</b>   |        |                            |            |     |
| <b>COL: 2.800"</b>      |        |                            |            |     |
| H4350                   | 50.0 C | 2581                       | 47,500 CUP |     |

| BULLET                   | POWDER | GR                       | VEL        | CUP |
|--------------------------|--------|--------------------------|------------|-----|
| H414                     | 47.0   | 2451                     | 44,100 CUP |     |
| H380                     | 47.0   | 2528                     | 46,800 CUP |     |
| VARGET                   | 43.5   | 2612                     | 50,000 CUP |     |
| BL-C(2)                  | 44.7   | 2572                     | 49,900 CUP |     |
| H335                     | 40.0   | 2425                     | 49,400 CUP |     |
| H4895                    | 42.5   | 2575                     | 50,200 CUP |     |
| BENCHMARK                | 40.5   | 2520                     | 49,600 CUP |     |
| <b>162 GR. HDY A-MAX</b> |        |                          |            |     |
| <b>COL: 2.875"</b>       |        |                          |            |     |
| H4350                    | 48.0 C | 2472                     | 49,800 CUP |     |
| H414                     | 45.0   | 2388                     | 44,500 CUP |     |
| H380                     | 44.0   | 2369                     | 45,800 CUP |     |
| VARGET                   | 41.0   | 2468                     | 49,800 CUP |     |
| H335                     | 38.2   | 2338                     | 50,100 CUP |     |
| H4895                    | 39.5   | 2429                     | 49,800 CUP |     |
| BENCHMARK                | 38.0   | 2394                     | 49,200 CUP |     |
| <b>30-30 WINCHESTER</b>  |        |                          |            |     |
| <b>BBL: 14"</b>          |        | <b>CASE: WINCHESTER</b>  |            |     |
|                          |        | <b>PR: WINCHESTER LR</b> |            |     |
| <b>130 GR. SPR FP</b>    |        |                          |            |     |
| <b>COL: 2.540"</b>       |        |                          |            |     |
| VARGET                   | 36.0 C | 2238                     | 35,700 CUP |     |
| BL-C(2)                  | 37.5   | 2101                     | 32,800 CUP |     |
| H4895                    | 35.0   | 2194                     | 35,300 CUP |     |
| BENCHMARK                | 29.7   | 2020                     | 37,100 CUP |     |
| <b>150 GR. SIE FN</b>    |        |                          |            |     |
| <b>COL: 2.550"</b>       |        |                          |            |     |
| VARGET                   | 34.5   | 2119                     | 36,200 CUP |     |
| BL-C(2)                  | 37.0   | 2060                     | 33,900 CUP |     |
| H4895                    | 34.0   | 2116                     | 36,700 CUP |     |
| BENCHMARK                | 29.0   | 1944                     | 37,200 CUP |     |
| <b>308 WINCHESTER</b>    |        |                          |            |     |
| <b>BBL: 15"</b>          |        | <b>CASE: WINCHESTER</b>  |            |     |
|                          |        | <b>PR: FEDERAL 210M</b>  |            |     |
| <b>130 GR. SPR HP</b>    |        |                          |            |     |
| <b>COL: 2.615"</b>       |        |                          |            |     |
| VARGET                   | 50.0 C | 2847                     | 50,400 CUP |     |
| BL-C(2)                  | 51.5   | 2820                     | 49,700 CUP |     |
| H335                     | 46.0   | 2755                     | 49,700 CUP |     |
| H4895                    | 49.0 C | 2831                     | 50,100 CUP |     |
| BENCHMARK                | 46.0   | 2767                     | 50,100 CUP |     |
| H322                     | 43.0   | 2664                     | 49,800 CUP |     |
| H4198                    | 37.0   | 2590                     | 49,700 CUP |     |
| <b>150 GR. NOS BT</b>    |        |                          |            |     |
| <b>COL: 2.800"</b>       |        |                          |            |     |
| VARGET                   | 47.0 C | 2675                     | 50,300 CUP |     |
| BL-C(2)                  | 48.0   | 2614                     | 50,000 CUP |     |
| H335                     | 44.0   | 2541                     | 51,200 CUP |     |
| H4895                    | 45.5   | 2649                     | 51,000 CUP |     |
| BENCHMARK                | 43.0   | 2596                     | 49,000 CUP |     |
| H322                     | 40.0   | 2471                     | 50,500 CUP |     |
| <b>168 GR. SIE HPBT</b>  |        |                          |            |     |
| <b>COL: 2.800"</b>       |        |                          |            |     |
| VARGET                   | 46.0 C | 2580                     | 50,600 CUP |     |
| BL-C(2)                  | 47.0   | 2531                     | 50,200 CUP |     |
| H335                     | 42.0   | 2406                     | 49,300 CUP |     |
| H4895                    | 43.5   | 2484                     | 49,500 CUP |     |
| BENCHMARK                | 42.0   | 2463                     | 49,300 CUP |     |
| <b>32 ACP</b>            |        |                          |            |     |
| <b>BBL: 4"</b>           |        | <b>CASE: WINCHESTER</b>  |            |     |
|                          |        | <b>PR: FEDERAL 100</b>   |            |     |
| <b>71 GR. SIE FMJ</b>    |        |                          |            |     |
| <b>COL: .978"</b>        |        |                          |            |     |
| UNIVERSAL                | 2.4    | 881                      | 14,900 CUP |     |
| HP-38                    | 2.3    | 871                      | 14,400 CUP |     |
| TITEGROUP                | 2.2    | 910                      | 14,800 CUP |     |
| CLAYS                    | 1.7    | 830                      | 15,000 CUP |     |

NEVER Exceed the Loads Listed in This Publication

# Pistol data

| BULLET                            | POWDER | GR   | VEL        | CUP |
|-----------------------------------|--------|------|------------|-----|
| <b>32 S&amp;W LONG</b>            |        |      |            |     |
| BBL: 5.32"                        |        |      |            |     |
| CASE: REMINGTON PR: CCI 500       |        |      |            |     |
| 85 GR. HDY JHP COL: 1.160"        |        |      |            |     |
| UNIVERSAL                         | 3.0    | 865  | 12,000 CUP |     |
| HP-38                             | 2.7    | 810  | 11,500 CUP |     |
| TITEGROUP                         | 2.4    | 819  | 11,300 CUP |     |
| 90 GR. HDY LSWC COL: 1.189"       |        |      |            |     |
| UNIVERSAL                         | 2.7    | 844  | 10,200 CUP |     |
| HP-38                             | 2.4    | 831  | 11,300 CUP |     |
| TITEGROUP                         | 2.1    | 818  | 10,900 CUP |     |
| <b>32 H&amp;R MAGNUM</b>          |        |      |            |     |
| BBL: 5"                           |        |      |            |     |
| CASE: FEDERAL PR: FEDERAL 100     |        |      |            |     |
| 85 GR. HDY HP COL: 1.290"         |        |      |            |     |
| H4227                             | 9.5    | 1151 | 21,000 CUP |     |
| LIL'GUN                           | 12.0   | 1263 | 16,800 CUP |     |
| LONGSHOT                          | 5.0    | 1167 | 20,200 CUP |     |
| HS-6                              | 5.6    | 1146 | 20,200 CUP |     |
| UNIVERSAL                         | 4.3    | 1123 | 19,000 CUP |     |
| HP-38                             | 3.8    | 1003 | 20,700 CUP |     |
| TITEGROUP                         | 3.7    | 1110 | 20,900 CUP |     |
| 90 GR. SIE JHP COL: 1.340"        |        |      |            |     |
| H4227                             | 10.0   | 1079 | 17,000 CUP |     |
| LIL'GUN                           | 11.5   | 1227 | 18,000 CUP |     |
| LONGSHOT                          | 5.0    | 1139 | 19,500 CUP |     |
| HS-6                              | 6.0    | 1140 | 20,200 CUP |     |
| UNIVERSAL                         | 4.0    | 1072 | 20,000 CUP |     |
| HP-38                             | 4.0    | 1033 | 20,300 CUP |     |
| TITEGROUP                         | 3.6    | 1060 | 20,600 CUP |     |
| 100 GR. SPR JHP COL: 1.345"       |        |      |            |     |
| LONGSHOT                          | 4.7    | 1056 | 19,300 CUP |     |
| <b>32-20 WINCHESTER</b>           |        |      |            |     |
| BBL: 5.5"                         |        |      |            |     |
| CASE: REMINGTON PR: WINCHESTER SP |        |      |            |     |
| 85 GR. HDY JHP COL: 1.550"        |        |      |            |     |
| LIL'GUN                           | 8.0    | 1102 | 15,700 CUP |     |
| TITEGROUP                         | 3.5    | 961  | 15,900 CUP |     |
| 100 GR. REM JFP COL: 1.580"       |        |      |            |     |
| LIL'GUN                           | 7.5    | 1018 | 15,700 CUP |     |
| TITEGROUP                         | 3.5    | 908  | 16,000 CUP |     |
| <b>380 AUTO</b>                   |        |      |            |     |
| BBL: 3.75"                        |        |      |            |     |
| CASE: REMINGTON PR: CCI 500       |        |      |            |     |
| 90 GR. HDY JHP COL: .955"         |        |      |            |     |
| UNIVERSAL                         | 3.6    | 955  | 15,700 CUP |     |
| HP-38                             | 3.5    | 957  | 15,400 CUP |     |
| TITEGROUP                         | 3.2    | 970  | 15,600 CUP |     |
| 100 GR. HDY FMJ COL: .980"        |        |      |            |     |
| UNIVERSAL                         | 3.4    | 889  | 16,100 CUP |     |
| HP-38                             | 3.1    | 843  | 15,400 CUP |     |
| TITEGROUP                         | 3.0    | 912  | 14,700 CUP |     |
| <b>9mm LUGER</b>                  |        |      |            |     |
| BBL: 4"                           |        |      |            |     |
| CASE: WINCHESTER PR: CCI 500      |        |      |            |     |
| 115 GR. SPR GDHP COL: 1.125"      |        |      |            |     |
| LONGSHOT                          | 6.0    | 1203 | 32,300 PSI |     |
| HS-6                              | 7.0    | 1234 | 29,400 CUP |     |
| UNIVERSAL                         | 5.0    | 1149 | 31,200 CUP |     |
| HP-38                             | 5.1    | 1167 | 28,100 CUP |     |

| BULLET                              | POWDER | GR   | VEL        | CUP |
|-------------------------------------|--------|------|------------|-----|
| TITEGROUP 4.8 1158 30,500 CUP       |        |      |            |     |
| CLAYS                               | 3.9    | 1095 | 32,600 CUP |     |
| 125 GR. SIE FMJ COL: 1.090"         |        |      |            |     |
| LONGSHOT                            | 5.7    | 1162 | 33,400 PSI |     |
| HS-6                                | 6.8    | 1169 | 27,100 CUP |     |
| UNIVERSAL                           | 4.9    | 1118 | 30,600 CUP |     |
| HP-38                               | 4.8    | 1088 | 28,800 CUP |     |
| TITEGROUP                           | 4.4    | 1136 | 30,600 CUP |     |
| CLAYS                               | 3.7    | 1056 | 32,500 CUP |     |
| 147 GR. HDY XTP COL: 1.100"         |        |      |            |     |
| LONGSHOT                            | 4.7    | 1004 | 33,800 PSI |     |
| HS-6                                | 5.0    | 885  | 27,900 CUP |     |
| UNIVERSAL                           | 3.3    | 869  | 31,000 CUP |     |
| TITEGROUP                           | 3.6    | 929  | 27,500 CUP |     |
| <b>38 SUPER AUTO</b>                |        |      |            |     |
| BBL: 5"                             |        |      |            |     |
| CASE: REMINGTON PR: REMINGTON 1 1/2 |        |      |            |     |
| 115 GR. HDY XTP COL: 1.245"         |        |      |            |     |
| LONGSHOT                            | 7.1    | 1301 | 31,600 CUP |     |
| HS-6                                | 8.5    | 1314 | 31,500 CUP |     |
| UNIVERSAL                           | 5.5    | 1225 | 32,300 CUP |     |
| HP-38                               | 6.1    | 1261 | 32,700 CUP |     |
| TITEGROUP                           | 5.3    | 1208 | 31,800 CUP |     |
| 125 GR. SIE FMJ COL: 1.275"         |        |      |            |     |
| LONGSHOT                            | 6.9    | 1247 | 32,600 CUP |     |
| HS-6                                | 8.3    | 1271 | 32,100 CUP |     |
| UNIVERSAL                           | 5.5    | 1179 | 32,300 CUP |     |
| HP-38                               | 5.7    | 1159 | 31,200 CUP |     |
| TITEGROUP                           | 5.0    | 1124 | 31,800 CUP |     |
| 130 GR. SIE FMJ COL: 1.275"         |        |      |            |     |
| LONGSHOT                            | 6.8    | 1215 | 32,000 CUP |     |
| HS-6                                | 8.2    | 1231 | 32,500 CUP |     |
| UNIVERSAL                           | 5.3    | 1124 | 32,200 CUP |     |
| HP-38                               | 5.5    | 1134 | 31,200 CUP |     |
| TITEGROUP                           | 4.9    | 1116 | 31,000 CUP |     |
| 135 GR. NOS IPSC COL: 1.265"        |        |      |            |     |
| LIL'GUN                             | 12.8   | 1357 | 32,400 CUP |     |
| LONGSHOT                            | 6.1    | 1105 | 32,100 CUP |     |
| <b>38 SPECIAL</b>                   |        |      |            |     |
| BBL: 7.7"                           |        |      |            |     |
| CASE: WINCHESTER PR: WINCHESTER SP  |        |      |            |     |
| 125 GR. HDY XTP COL: 1.455"         |        |      |            |     |
| HS-6                                | 7.2    | 1048 | 16,600 CUP |     |
| UNIVERSAL                           | 5.2    | 1019 | 17,000 CUP |     |
| HP-38                               | 4.9    | 934  | 16,300 CUP |     |
| TITEGROUP                           | 4.6    | 1010 | 15,600 CUP |     |
| CLAYS                               | 3.9    | 937  | 16,100 CUP |     |
| 140 GR. HDY XTP COL: 1.455"         |        |      |            |     |
| HS-6                                | 6.5    | 933  | 16,000 CUP |     |
| UNIVERSAL                           | 4.8    | 939  | 15,400 CUP |     |
| HP-38                               | 4.6    | 861  | 15,800 CUP |     |
| TITEGROUP                           | 4.2    | 919  | 15,800 CUP |     |
| CLAYS                               | 3.7    | 869  | 16,700 CUP |     |
| 148 GR. HDY LHBWC COL: 1.160"       |        |      |            |     |
| HS-6                                | 5.2    | 943  | 14,300 CUP |     |
| HP-38                               | 4.0    | 956  | 15,900 CUP |     |
| UNIVERSAL                           | 3.8    | 940  | 15,600 CUP |     |
| TITEGROUP                           | 3.3    | 908  | 11,800 CUP |     |
| CLAYS                               | 2.5    | 836  | 13,200 CUP |     |

NEVER Exceed the Loads Listed in This Publication

| BULLET   | POWDER | GR   | VEL                | CUP |
|--|--------|--|--------------------|-----|
| <b>158 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.455"</b> |     |
| H4227  | 10.0   | 864  | 15,500 CUP         |     |
| HS-6   | 6.2    | 862  | 16,300 CUP         |     |
| UNIVERSAL  | 4.4    | 778  | 16,200 CUP         |     |
| HP-38  | 4.3    | 779  | 15,900 CUP         |     |
| TITEGROUP  | 3.9    | 798  | 15,900 CUP         |     |
| CLAYS  | 3.1    | 721  | 16,600 CUP         |     |
| <b>38 SPECIAL +P</b>   |        |  |                    |     |
| <b>BBL: 7.7"</b>   |        | <b>CASE: WINCHESTER PR: WINCHESTER SP</b>  |                    |     |
| <b>NOTE:</b> Loads are for use in modern arms in good condition. These loads should not be used in small frame, or aluminum frame revolvers, nor are they intended for auto pistols. |        |  |                    |     |
| <b>125 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.455"</b> |     |
| LONGSHOT   | 7.0    | 1228                                       | 18,300 PSI         |     |
| HS-6   | 7.8    | 1138                                       | 19,500 CUP         |     |
| UNIVERSAL  | 5.4    | 1072                                       | 18,900 CUP         |     |
| HP-38  | 5.3    | 1018                                       | 19,800 CUP         |     |
| TITEGROUP  | 5.0    | 1069                                       | 18,700 CUP         |     |
| <b>140 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.455"</b> |     |
| LONGSHOT   | 6.4    | 1126                                       | 17,700 PSI         |     |
| H4227  | 12.4   | 1121                                       | 19,400 CUP         |     |
| HS-6   | 7.0    | 992  | 18,300 CUP         |     |
| UNIVERSAL  | 5.1    | 1022                                       | 19,100 CUP         |     |
| HP-38  | 4.9    | 892  | 18,600 CUP         |     |
| TITEGROUP  | 4.6    | 984  | 19,300 CUP         |     |
| <b>158 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.455"</b> |     |
| LONGSHOT   | 5.5    | 965  | 17,000 PSI         |     |
| H4227  | 11.0   | 964  | 17,600 CUP         |     |
| HS-6   | 6.6    | 926  | 18,700 CUP         |     |
| UNIVERSAL  | 4.7    | 837  | 19,200 CUP         |     |
| HP-38  | 4.6    | 807  | 18,100 CUP         |     |
| TITEGROUP  | 4.3    | 905  | 19,300 CUP         |     |
| <b>357 SIG</b>   |        |  |                    |     |
| <b>BBL: 4"</b>   |        | <b>CASE: FEDERAL PR: WINCHESTER SP</b>     |                    |     |
| <b>124 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.135"</b> |     |
| LONGSHOT   | 9.3    | 1429                                       | 37,900 PSI         |     |
| HS-6   | 9.0    | 1339                                       | 38,700 PSI         |     |
| UNIVERSAL  | 5.8    | 1235                                       | 38,500 PSI         |     |
| <b>147 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.140"</b> |     |
| LONGSHOT   | 7.5    | 1254                                       | 38,700 PSI         |     |
| HS-6   | 7.6    | 1173                                       | 36,600 PSI         |     |
| UNIVERSAL  | 4.9    | 1062                                       | 36,300 PSI         |     |
| <b>357 MAGNUM</b>  |        |  |                    |     |
| <b>BBL: 10"</b>  |        | <b>CASE: WINCHESTER PR: WINCHESTER SPM</b> |                    |     |
| <b>125 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.590"</b> |     |
| H4227  | 20.0   | 1839                                       | 42,000 CUP         |     |
| H110   | 22.0   | 1966                                       | 41,400 CUP         |     |
| LONGSHOT   | 9.7    | 1647                                       | 42,000 CUP         |     |
| HS-6   | 10.9   | 1629                                       | 42,100 CUP         |     |
| UNIVERSAL  | 7.6    | 1453                                       | 39,600 CUP         |     |
| HP-38  | 8.5    | 1514                                       | 42,700 CUP         |     |
| TITEGROUP  | 7.5    | 1497                                       | 41,200 CUP         |     |
| <b>146 GR. SPR JHP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.535"</b> |     |
| H4227  | 16.0   | 1566                                       | 42,700 CUP         |     |
| H110   | 17.2   | 1691                                       | 42,600 CUP         |     |
| LONGSHOT   | 8.6    | 1483                                       | 42,600 CUP         |     |

| BULLET   | POWDER | GR   | VEL                | CUP |
|--|--------|--|--------------------|-----|
| HS-6   | 9.5    | 1461                                       | 41,800 CUP         |     |
| UNIVERSAL  | 6.5    | 1261                                       | 39,900 CUP         |     |
| HP-38  | 7.1    | 1330                                       | 42,200 CUP         |     |
| TITEGROUP  | 6.6    | 1317                                       | 42,900 CUP         |     |
| <b>158 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.580"</b> |     |
| H4227  | 16.0   | 1520                                       | 42,600 CUP         |     |
| H110   | 16.7   | 1591                                       | 40,700 CUP         |     |
| LIL'GUN  | 18.0   | 1577                                       | 25,800 CUP         |     |
| LONGSHOT   | 8.4    | 1394                                       | 43,200 CUP         |     |
| HS-6   | 9.5    | 1375                                       | 41,900 CUP         |     |
| UNIVERSAL  | 6.3    | 1133                                       | 39,300 CUP         |     |
| HP-38  | 6.9    | 1220                                       | 40,000 CUP         |     |
| TITEGROUP  | 6.1    | 1229                                       | 41,900 CUP         |     |
| <b>180 GR. NOS PART</b>  |        |  |                    |     |
|  |        |  | <b>COL: 1.575"</b> |     |
| H4227  | 13.7   | 1308                                       | 40,900 CUP         |     |
| H110   | 13.5   | 1396                                       | 39,100 CUP         |     |
| LIL'GUN  | 15.0   | 1422                                       | 34,500 CUP         |     |
| LONGSHOT   | 7.2    | 1167                                       | 41,700 CUP         |     |
| TITEGROUP  | 5.5    | 1020                                       | 40,300 CUP         |     |
| <b>35 REMINGTON</b>  |        |  |                    |     |
| <b>BBL: 14"</b>  |        | <b>CASE: REMINGTON PR: REMINGTON 9 1/2</b> |                    |     |
| <b>180 GR. SPR FN</b>  |        |  |                    |     |
|  |        |  | <b>COL: 2.470"</b> |     |
| VARGET   | 40.5   | 1998                                       | 32,500 CUP         |     |
| BL-C(2)  | 43.0   | 1954                                       | 32,300 CUP         |     |
| H335   | 37.5   | 1921                                       | 33,600 CUP         |     |
| H4895  | 39.0   | 2031                                       | 33,100 CUP         |     |
| BENCHMARK  | 35.5   | 1932                                       | 32,300 CUP         |     |
| H322   | 35.0   | 1915                                       | 33,100 CUP         |     |
| H4198  | 32.0   | 1977                                       | 33,000 CUP         |     |
| <b>200 GR. HDY RN</b>  |        |  |                    |     |
|  |        |  | <b>COL: 2.510"</b> |     |
| VARGET   | 39.5   | 1797                                       | 33,300 CUP         |     |
| BL-C(2)  | 41.5   | 1689                                       | 31,700 CUP         |     |
| H335   | 37.0   | 1720                                       | 33,200 CUP         |     |
| H4895  | 38.5   | 1772                                       | 32,300 CUP         |     |
| BENCHMARK  | 35.5   | 1766                                       | 32,600 CUP         |     |
| H322   | 33.8   | 1670                                       | 33,100 CUP         |     |
| H4198  | 30.5   | 1680                                       | 31,700 CUP         |     |
| <b>40 S&amp;W</b>  |        |  |                    |     |
| <b>BBL: 4"</b>   |        | <b>CASE: HORNADY PR: WINCHESTER SP</b>     |                    |     |
| <b>WARNING:</b> This data is intended for use in firearms with barrels which fully support the cartridge in the chamber. Use of this data in firearms which do not fully support the cartridge may result in bulged cases, ruptured cases, case head separation, or other condition which may result in damage to the firearm and/or result in injury or death of the shooter and/or bystanders. |        |  |                    |     |
| <b>135 GR. NOS JHP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.125"</b> |     |
| LONGSHOT   | 12.0   | 1480                                       | 32,400 PSI         |     |
| HS-6   | 10.2   | 1321                                       | 33,600 PSI         |     |
| UNIVERSAL  | 7.5    | 1324                                       | 32,500 PSI         |     |
| HP-38  | 7.0    | 1244                                       | 33,100 PSI         |     |
| TITEGROUP  | 6.4    | 1251                                       | 33,200 PSI         |     |
| CLAYS  | 4.5    | 1071                                       | 32,900 PSI         |     |
| <b>180 GR. HDY XTP</b>   |        |  |                    |     |
|  |        |  | <b>COL: 1.125"</b> |     |
| LONGSHOT   | 8.0    | 1159                                       | 32,300 PSI         |     |
| HS-6   | 6.9    | 976  | 32,500 PSI         |     |
| UNIVERSAL  | 5.8    | 1046                                       | 33,400 PSI         |     |
| HP-38  | 5.0    | 947  | 32,900 PSI         |     |

NEVER Exceed the Loads Listed in This Publication



# PISTOL data

| BULLET                 | POWDER | GR  | VEL | CUP        |
|------------------------|--------|-----|-----|------------|
| TITEGROUP              |        | 4.7 | 978 | 33,300 PSI |
| CLAYS                  |        | 3.5 | 847 | 34,300 PSI |
| <b>200 GR. HDY XTP</b> |        |     |     |            |
| LONGSHOT               |        | 6.0 | 954 | 32,500 PSI |
| HS-6                   |        | 6.3 | 900 | 32,800 PSI |
| UNIVERSAL              |        | 4.7 | 903 | 33,600 PSI |
| HP-38                  |        | 4.7 | 857 | 33,400 PSI |
| TITEGROUP              |        | 3.8 | 822 | 31,700 PSI |

| <b>10MM AUTO</b>       |  | CASE: WINCHESTER  |      |            |
|------------------------|--|-------------------|------|------------|
| BBL: 5"                |  | PR: WINCHESTER LP |      |            |
| <b>180 GR. SIE JHC</b> |  |                   |      |            |
| LONGSHOT               |  | 9.5               | 1287 | 34,600 PSI |
| HS-6                   |  | 9.4               | 1127 | 35,800 PSI |
| UNIVERSAL              |  | 6.4               | 1122 | 32,200 PSI |
| HP-38                  |  | 5.8               | 1061 | 34,900 PSI |
| TITEGROUP              |  | 6.0               | 1141 | 34,300 PSI |

| <b>200 GR. HDY FMJ</b> |  | CASE: WINCHESTER  |      |            |
|------------------------|--|-------------------|------|------------|
| BBL: 5"                |  | PR: WINCHESTER LP |      |            |
| LONGSHOT               |  | 8.2               | 1172 | 35,000 PSI |
| HS-6                   |  | 8.6               | 1089 | 35,900 PSI |
| UNIVERSAL              |  | 5.9               | 1015 | 36,900 PSI |
| HP-38                  |  | 5.6               | 1011 | 35,700 PSI |
| TITEGROUP              |  | 5.3               | 1024 | 36,100 PSI |

### 41 REMINGTON MAGNUM CASE: REMINGTON BBL: 10.125" PR: WINCHESTER LP

| <b>170 GR. SIE JHC</b> |  | CASE: WINCHESTER  |      |            |
|------------------------|--|-------------------|------|------------|
| BBL: 5"                |  | PR: WINCHESTER LP |      |            |
| H4227                  |  | 24.9              | 1745 | 35,600 CUP |
| H110                   |  | 26.5              | 1887 | 37,400 CUP |
| LONGSHOT               |  | 12.5              | 1646 | 38,700 CUP |
| HS-6                   |  | 13.7              | 1597 | 37,200 CUP |
| UNIVERSAL              |  | 10.3              | 1488 | 38,700 CUP |
| HP-38                  |  | 9.8               | 1440 | 38,300 CUP |
| TITEGROUP              |  | 9.2               | 1470 | 37,700 CUP |

| <b>220 GR. SPR JSP</b> |  | CASE: WINCHESTER  |      |            |
|------------------------|--|-------------------|------|------------|
| BBL: 5"                |  | PR: WINCHESTER LP |      |            |
| H4227                  |  | 20.0              | 1433 | 37,500 CUP |
| H110                   |  | 20.0              | 1563 | 31,200 CUP |
| LIL'GUN                |  | 20.5              | 1626 | 29,900 CUP |
| LONGSHOT               |  | 10.1              | 1311 | 37,700 CUP |
| HS-6                   |  | 11.3              | 1271 | 36,700 CUP |
| UNIVERSAL              |  | 8.5               | 1178 | 38,600 CUP |
| HP-38                  |  | 8.0               | 1125 | 36,700 CUP |
| TITEGROUP              |  | 7.3               | 1127 | 33,700 CUP |

### 44 S&W SPECIAL CASE: STARLINE BBL: 8" PR: WINCHESTER LP

| <b>185 GR. CAST LRNFP</b> |  | CASE: STARLINE    |      |            |
|---------------------------|--|-------------------|------|------------|
| BBL: 8"                   |  | PR: WINCHESTER LP |      |            |
| UNIVERSAL                 |  | 6.4               | 1031 | 13,900 CUP |
| HP-38                     |  | 5.6               | 953  | 12,500 CUP |
| TITEGROUP                 |  | 5.5               | 1025 | 11,600 CUP |
| CLAYS                     |  | 4.2               | 930  | 13,200 CUP |

| <b>240 GR. CAST LSWC</b> |  | CASE: STARLINE    |     |            |
|--------------------------|--|-------------------|-----|------------|
| BBL: 8"                  |  | PR: WINCHESTER LP |     |            |
| H4227                    |  | 13.2              | 947 | 12,600 CUP |
| HS-6                     |  | 8.0               | 917 | 13,000 CUP |
| UNIVERSAL                |  | 5.6               | 873 | 13,300 CUP |
| HP-38                    |  | 5.2               | 858 | 13,200 CUP |
| TITEGROUP                |  | 4.8               | 862 | 13,100 CUP |
| CLAYS                    |  | 4.0               | 771 | 13,500 CUP |

| BULLET | POWDER | GR | VEL | CUP |
|--------|--------|----|-----|-----|
|--------|--------|----|-----|-----|

### 44 REMINGTON MAGNUM

BBL: 8.275" CASE: WINCHESTER  
PR: REMINGTON 2 1/2

| <b>200 GR. NOS JHP</b> |  | CASE: WINCHESTER    |      |            |
|------------------------|--|---------------------|------|------------|
| BBL: 8.275"            |  | PR: REMINGTON 2 1/2 |      |            |
| H4227                  |  | 27.0                | 1686 | 37,800 CUP |
| H110                   |  | 28.5                | 1806 | 37,800 CUP |
| LIL'GUN                |  | 29.5                | 1794 | 36,200 CUP |
| LONGSHOT               |  | 14.3                | 1534 | 34,600 PSI |
| HS-6                   |  | 16.7                | 1569 | 37,700 CUP |
| UNIVERSAL              |  | 11.1                | 1398 | 38,300 CUP |
| HP-38                  |  | 11.9                | 1444 | 37,400 CUP |
| TITEGROUP              |  | 10.8                | 1433 | 38,400 CUP |

| <b>240 GR. NOS JHP</b> |  | CASE: WINCHESTER    |      |            |
|------------------------|--|---------------------|------|------------|
| BBL: 8.275"            |  | PR: REMINGTON 2 1/2 |      |            |
| H4227                  |  | 24.0                | 1458 | 36,100 CUP |
| H110                   |  | 24.0                | 1522 | 36,200 CUP |
| LIL'GUN                |  | 24.5                | 1582 | 38,100 CUP |
| HS-7                   |  | 16.5                | 1394 | 38,200 CUP |
| LONGSHOT               |  | 12.1                | 1331 | 34,500 PSI |
| HS-6                   |  | 15.1                | 1417 | 38,200 CUP |
| UNIVERSAL              |  | 10.2                | 1246 | 38,200 CUP |
| HP-38                  |  | 11.0                | 1272 | 37,800 CUP |
| TITEGROUP              |  | 10.0                | 1292 | 37,700 CUP |

| <b>300 GR. HDY XTP</b> |  | CASE: WINCHESTER    |      |            |
|------------------------|--|---------------------|------|------------|
| BBL: 8.275"            |  | PR: REMINGTON 2 1/2 |      |            |
| H4227                  |  | 20.0                | 1312 | 38,600 CUP |
| H110                   |  | 19.0                | 1325 | 38,800 CUP |
| LIL'GUN                |  | 17.7                | 1280 | 37,600 CUP |
| HS-7                   |  | 14.0                | 1214 | 37,300 CUP |
| LONGSHOT               |  | 9.5                 | 1071 | 34,700 PSI |
| HS-6                   |  | 13.0                | 1214 | 37,900 CUP |
| UNIVERSAL              |  | 9.6                 | 1113 | 38,200 CUP |
| HP-38                  |  | 10.0                | 1149 | 38,100 CUP |
| TITEGROUP              |  | 9.6                 | 1186 | 38,400 CUP |

### 45 ACP CASE: WINCHESTER BBL: 5" PR: FEDERAL 150

| <b>185 GR. HDY JSWC</b> |  | CASE: WINCHESTER |      |            |
|-------------------------|--|------------------|------|------------|
| BBL: 5"                 |  | PR: FEDERAL 150  |      |            |
| LONGSHOT                |  | 8.2              | 1044 | 17,000 CUP |
| HS-6                    |  | 9.5              | 996  | 16,800 CUP |
| UNIVERSAL               |  | 7.2              | 993  | 17,000 CUP |
| HP-38                   |  | 5.9              | 906  | 15,800 CUP |
| TITEGROUP               |  | 5.5              | 956  | 17,000 CUP |
| CLAYS                   |  | 4.9              | 981  | 17,400 CUP |

| <b>200 GR. SPR JHP</b> |  | CASE: WINCHESTER |      |            |
|------------------------|--|------------------|------|------------|
| BBL: 5"                |  | PR: FEDERAL 150  |      |            |
| LONGSHOT               |  | 7.8              | 1013 | 16,900 CUP |
| HS-6                   |  | 9.0              | 948  | 16,400 CUP |
| UNIVERSAL              |  | 6.7              | 930  | 17,200 CUP |
| HP-38                  |  | 5.9              | 906  | 16,700 CUP |
| TITEGROUP              |  | 5.2              | 884  | 16,900 CUP |
| CLAYS                  |  | 4.3              | 785  | 17,700 CUP |

| <b>230 GR. HDY FMJ FP</b> |  | CASE: WINCHESTER |     |            |
|---------------------------|--|------------------|-----|------------|
| BBL: 5"                   |  | PR: FEDERAL 150  |     |            |
| LONGSHOT                  |  | 6.8              | 908 | 17,200 CUP |
| HS-6                      |  | 8.2              | 825 | 15,400 CUP |
| UNIVERSAL                 |  | 6.0              | 853 | 16,900 CUP |
| HP-38                     |  | 5.3              | 832 | 16,800 CUP |
| TITEGROUP                 |  | 4.8              | 818 | 16,700 CUP |
| CLAYS                     |  | 4.0              | 732 | 17,000 CUP |

NEVER Exceed the Loads Listed in This Publication

| BULLET                                | POWDER | GR   | VEL        | CUP |
|---------------------------------------|--------|------|------------|-----|
| <b>45 COLT</b>                        |        |      |            |     |
| BBL: 7.25"                            |        |      |            |     |
| CASE: WINCHESTER<br>PR: WINCHESTER LP |        |      |            |     |
| COL: 1.600"                           |        |      |            |     |
| <b>200 GR. CAST LRNFP</b>             |        |      |            |     |
| UNIVERSAL                             | 8.8    | 1067 | 13,600 CUP |     |
| HP-38                                 | 8.0    | 1002 | 13,800 CUP |     |
| TITEGROUP                             | 7.7    | 1050 | 12,700 CUP |     |
| CLAYS                                 | 5.9    | 931  | 13,100 CUP |     |
| <b>260 GR. SPR GDHP</b>               |        |      |            |     |
| HS-6                                  | 10.7   | 865  | 14,000 CUP |     |
| UNIVERSAL                             | 8.0    | 813  | 14,000 CUP |     |
| HP-38                                 | 7.1    | 787  | 14,000 CUP |     |
| TITEGROUP                             | 6.3    | 797  | 12,500 CUP |     |
| <b>300 GR. SIE JFP</b>                |        |      |            |     |
| HS-6                                  | 10.0   | 730  | 13,700 CUP |     |
| UNIVERSAL                             | 7.3    | 700  | 13,700 CUP |     |
| TITEGROUP                             | 5.8    | 682  | 12,900 CUP |     |

| BULLET                                  | POWDER | GR   | VEL        | CUP |
|---|--------|------|------------|-----|
| <b>454 CASULL</b>                       |        |      |            |     |
| BBL: 9.375"                             |        |      |            |     |
| CASE: FREEDOM ARMS<br>PR: WINCHESTER SR |        |      |            |     |
| COL: 1.765"                             |        |      |            |     |
| <b>260 GR. FA JFP</b>                   |        |      |            |     |
| H4227                                   | 33.0 C | 1762 | 42,100 CUP |     |
| H110                                    | 36.0   | 1954 | 51,600 CUP |     |
| LIL'GUN                                 | 35.5   | 1895 | 37,900 CUP |     |
| <b>260 GR. SPR JHP</b>                  |        |      |            |     |
| LONGSHOT                                | 15.0   | 1443 | 36,600 CUP |     |
| HS-6                                    | 16.8   | 1420 | 36,400 CUP |     |
| UNIVERSAL                               | 11.5   | 1245 | 34,900 CUP |     |
| TITEGROUP                               | 11.0   | 1270 | 35,900 CUP |     |
| <b>300 GR. FA JFP</b>                   |        |      |            |     |
| H4227                                   | 31.0 C | 1702 | 52,400 CUP |     |
| H110                                    | 30.0   | 1716 | 53,700 CUP |     |
| LIL'GUN                                 | 31.0   | 1746 | 45,900 CUP |     |

| BULLET                             | POWDER | GR   | VEL        | CUP |
|------------------------------------|--------|------|------------|-----|
| <b>480 RUGER</b>                   |        |      |            |     |
| BBL: 7 1/2"                        |        |      |            |     |
| CASE: HORNADY<br>PR: WINCHESTER LP |        |      |            |     |
| COL: 1.620"                        |        |      |            |     |
| <b>325 GR. HDY XTP</b>             |        |      |            |     |
| H4227                              | 27.2   | 1477 | 45,600 PSI |     |
| H110                               | 27.0   | 1518 | 44,900 PSI |     |
| LIL'GUN                            | 25.1   | 1525 | 45,200 PSI |     |
| LONGSHOT                           | 14.5   | 1330 | 47,100 PSI |     |
| TITEGROUP                          | 10.7   | 1158 | 46,200 PSI |     |
| <b>400 GR. HDY XTP</b>             |        |      |            |     |
| H4227                              | 21.0   | 1211 | 46,100 PSI |     |
| H110                               | 20.5   | 1258 | 46,600 PSI |     |
| LIL'GUN                            | 18.0   | 1229 | 45,600 PSI |     |
| LONGSHOT                           | 11.0   | 1082 | 46,900 PSI |     |
| TITEGROUP                          | 8.5    | 959  | 46,800 PSI |     |

| BULLET                             | POWDER | GR   | VEL        | CUP |
|------------------------------------|--------|------|------------|-----|
| <b>475 LINEBAUGH</b>               |        |      |            |     |
| BBL: 8"                            |        |      |            |     |
| CASE: HORNADY<br>PR: WINCHESTER LP |        |      |            |     |
| COL: 1.740"                        |        |      |            |     |
| <b>325 GR. HDY XTP</b>             |        |      |            |     |
| H4227                              | 31.2   | 1546 | 47,700 PSI |     |
| H110                               | 33.5   | 1626 | 47,400 PSI |     |
| LIL'GUN                            | 32.0   | 1629 | 47,900 PSI |     |
| TITEGROUP                          | 12.0   | 1188 | 48,500 PSI |     |
| <b>400 GR. HDY XTP</b>             |        |      |            |     |
| H4227                              | 25.0   | 1301 | 48,800 PSI |     |
| H110                               | 25.5   | 1330 | 43,900 PSI |     |
| LIL'GUN                            | 24.0   | 1344 | 46,500 PSI |     |
| TITEGROUP                          | 9.6    | 961  | 48,700 PSI |     |

| BULLET                     | POWDER | GR   | VEL | CUP |
|----------------------------|--------|------|-----|-----|
| <b>50 ACTION EXPRESS</b>   |        |      |     |     |
| BBL: 6"                    |        |      |     |     |
| CASE: SPEER<br>PR: CCI 350 |        |      |     |     |
| COL: 1.575"                |        |      |     |     |
| <b>325 GR. SPR AE UCHP</b> |        |      |     |     |
| H4227                      | 30.8   | 1294 |     |     |
| H110                       | 32.5   | 1431 |     |     |

| BULLET                        | POWDER | GR   | VEL        | CUP |
|-------------------------------|--------|------|------------|-----|
| <b>500 LINEBAUGH</b>          |        |      |            |     |
| BBL: 8"                       |        |      |            |     |
| CASE: STARLINE<br>PR: CCI 350 |        |      |            |     |
| COL: 1.760"                   |        |      |            |     |
| <b>410 GR. LFP</b>            |        |      |            |     |
| H4227                         | 33.7   | 1369 | 34,800 PSI |     |
| H110                          | 35.5   | 1458 | 35,500 PSI |     |
| LIL'GUN                       | 32.5   | 1436 | 35,100 PSI |     |
| TITEGROUP                     | 13.0   | 1132 | 34,600 PSI |     |
| <b>425 GR. LFP (W/GCK)</b>    |        |      |            |     |
| H4227                         | 32.0   | 1356 | 35,200 PSI |     |
| H110                          | 33.0   | 1421 | 35,200 PSI |     |
| LIL'GUN                       | 31.5   | 1428 | 34,600 PSI |     |
| TITEGROUP                     | 12.0   | 1064 | 34,900 PSI |     |

| BULLET                              | POWDER | GR   | VEL        | CUP |
|-------------------------------------|--------|------|------------|-----|
| <b>500 S&amp;W MAGNUM</b>           |        |      |            |     |
| BBL: 10"                            |        |      |            |     |
| CASE: STARLINE<br>PR: WINCHESTER LR |        |      |            |     |
| COL: 2.085"                         |        |      |            |     |
| <b>275 GR. BAR XPB</b>              |        |      |            |     |
| H4227                               | 44.0   | 2047 | 48,400 PSI |     |
| H110                                | 45.0   | 2082 | 49,300 PSI |     |
| LIL'GUN                             | 44.0   | 2137 | 50,800 PSI |     |
| LONGSHOT                            | 24.5   | 1824 | 48,900 PSI |     |
| TITEGROUP                           | 20.0   | 1707 | 50,300 PSI |     |
| <b>350 GR. HDY XTP</b>              |        |      |            |     |
| H4227                               | 42.5   | 1863 | 49,900 PSI |     |
| H110                                | 43.0   | 1877 | 50,600 PSI |     |
| LIL'GUN                             | 42.0   | 1912 | 48,100 PSI |     |
| LONGSHOT                            | 23.0   | 1602 | 50,000 PSI |     |
| TITEGROUP                           | 18.5   | 1461 | 50,000 PSI |     |
| <b>400 GR. SIE JSP</b>              |        |      |            |     |
| H4227                               | 39.5   | 1698 | 49,100 PSI |     |
| H110                                | 40.0   | 1721 | 49,700 PSI |     |
| LIL'GUN                             | 37.0   | 1725 | 49,300 PSI |     |
| LONGSHOT                            | 22.0   | 1458 | 49,000 PSI |     |
| TITEGROUP                           | 17.5   | 1335 | 49,900 PSI |     |

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## SMOKELESS PISTOL AND CARBINE

| BULLET   | STARTING LOADS |         |          |        | MAXIMUM LOADS |         |          |        |
|--|----------------|---------|----------|--------|---------------|---------|----------|--------|
|  | POWDER         | GRS.    | VEL. fps | CUP    | POWDER        | GRS.    | VEL. fps | CUP    |
| <b>25-20 WINCHESTER</b>                                    |                |         |          |        |               |         |          |        |
| <b>71 GR<br/>LEAD RNFP</b>                                 | H4227          | 6.0 gr. | 1146     | 13,700 | H-4227        | 7.0 gr. | 1346     | 18,200 |
|  | HS-7           | 4.8 gr. | 1202     | 14,900 | HS-7          | 5.8 gr. | 1465     | 22,800 |
|  | HS-6           | 4.3 gr. | 1206     | 18,700 | HS-6          | 5.3 gr. | 1428     | 21,900 |
| <b>85 GR<br/>LEAD RNFP</b>                                 | H4227          | 6.0 gr. | 1129     | 18,500 | H-4227        | 7.0 gr. | 1317     | 20,500 |
|  | HS-7           | 4.5 gr. | 1085     | 17,700 | HS-7          | 5.8 gr. | 1407     | 26,200 |
|  | HS-6           | 4.5 gr. | 1261     | 19,600 | HS-6          | 5.3 gr. | 1391     | 25,300 |
| <b>90 GR<br/>LEAD RNFP</b>                                 | HS-6           | 4.6 gr. | 845      | 10,900 | HS-6          | 5.0 gr. | 963      | 14,800 |
|  | UNIVERSAL      | 3.0 gr. | 819      | 8,400  | UNIVERSAL     | 3.2 gr. | 908      | 11,500 |
|  | HP38           | 2.8 gr. | 828      | 9,600  | HP38          | 3.2 gr. | 919      | 12,500 |
|  | TITEGROUP      | 2.4 gr. | 819      | 10,500 | TITEGROUP     | 2.8 gr. | 911      | 13,300 |
| <b>32 H &amp; R MAGNUM</b>                                 |                |         |          |        |               |         |          |        |
| <b>90 GR<br/>LEAD RNFP</b>                                 | HS-6           | 4.6 gr. | 845      | 10,900 | HS-6          | 5.0 gr. | 963      | 14,800 |
|  | UNIVERSAL      | 3.0 gr. | 819      | 8,400  | UNIVERSAL     | 3.2 gr. | 908      | 11,500 |
|  | HP38           | 2.8 gr. | 828      | 9,600  | HP38          | 3.2 gr. | 919      | 12,500 |
|  | TITEGROUP      | 2.4 gr. | 819      | 10,500 | TITEGROUP     | 2.8 gr. | 911      | 13,300 |
| <b>32-20 WINCHESTER (COLT PISTOL)</b>                      |                |         |          |        |               |         |          |        |
| <b>90 GR<br/>LEAD RNFP</b>                                 | HP38           | 3.2 gr. | 833      | 11,900 | HP38          | 3.5 gr. | 969      | 16,000 |
|  | TITEGROUP      | 3.0 gr. | 937      | 12,300 | TITEGROUP     | 3.4 gr. | 1012     | 15,800 |
| <b>115 GR<br/>LEAD RNFP</b>                                | UNIVERSAL      | 3.0 gr. | 808      | 14,200 | UNIVERSAL     | 3.2 gr. | 869      | 16,000 |
|  | HP38           | 3.2 gr. | 839      | 11,100 | HP38          | 3.5 gr. | 915      | 15,600 |
|  | TITEGROUP      | 2.7 gr. | 815      | 12,900 | TITEGROUP     | 3.0 gr. | 857      | 15,300 |
| <b>32-20 WINCHESTER (RUGER PISTOL AND RIFLE DATA ONLY)</b> |                |         |          |        |               |         |          |        |
| <b>90 GR<br/>LEAD RNFP</b>                                 | HP38           | 3.5 gr. | 969      | 16,000 | HP38          | 4.5 gr. | 1,177    | 22,800 |
| <b>115 GR<br/>LEAD RNFP</b>                                | UNIVERSAL      | 3.2 gr. | 869      | 16,000 | UNIVERSAL     | 4.0 gr. | 1,037    | 22,600 |
|  | HP38           | 3.5 gr. | 915      | 15,600 | HP38          | 4.3 gr. | 1,045    | 22,600 |
| <b>38 LONG COLT</b>  |                |         |          |        |               |         |          |        |
| <b>125 GR<br/>LEAD RN</b>                                  | UNIVERSAL      | 3.2 gr. | 626      |        | UNIVERSAL     | 3.7 gr. | 772      |        |
|  | HP38           | 2.6 gr. | 636      |        | HP38          | 3.2 gr. | 766      |        |
|  | TITEGROUP      | 2.3 gr. | 657      |        | TITEGROUP     | 2.7 gr. | 752      |        |
|  | CLAYS          | 2.0 gr. | 631      |        | CLAYS         | 2.5 gr. | 765      |        |
| <b>150 GR<br/>LEAD RN</b>                                  | UNIVERSAL      | 3.0 gr. | 631      |        | UNIVERSAL     | 3.5 gr. | 769      |        |
|  | HP38           | 2.6 gr. | 631      |        | HP38          | 3.3 gr. | 777      |        |
|  | TITEGROUP      | 2.3 gr. | 641      |        | TITEGROUP     | 2.8 gr. | 755      |        |
|  | CLAYS          | 2.0 gr. | 624      |        | CLAYS         | 2.6 gr. | 744      |        |
| <b>38 SPECIAL</b>  |                |         |          |        |               |         |          |        |
| <b>125 GR<br/>LEAD RNFP</b>                                | UNIVERSAL      | 4.3 gr. | 872      | 8,700  | UNIVERSAL     | 4.7 gr. | 1,036    | 16,800 |
|  | HP38           | 3.8 gr. | 876      | 10,300 | HP38          | 4.8 gr. | 1,071    | 16,900 |
|  | TITEGROUP      | 3.2 gr. | 856      | 8,400  | TITEGROUP     | 3.8 gr. | 985      | 12,000 |
|  | CLAYS          | 2.5 gr. | 810      | 8,400  | CLAYS         | 3.5 gr. | 978      | 16,900 |
| <b>135 GR<br/>LEAD RNFP</b>                                | UNIVERSAL      | 4.1 gr. | 924      | 13,400 | UNIVERSAL     | 4.6 gr. | 1,025    | 16,900 |
|  | HP38           | 3.7 gr. | 872      | 12,500 | HP38          | 4.7 gr. | 1,024    | 17,000 |
|  | TITEGROUP      | 3.1 gr. | 824      | 9,600  | TITEGROUP     | 3.6 gr. | 927      | 12,900 |
|  | CLAYS          | 2.6 gr. | 767      | 11,400 | CLAYS         | 3.3 gr. | 910      | 16,200 |
| <b>158 GR<br/>LEAD SWC</b>                                 | UNIVERSAL      | 3.5 gr. | 756      | 9,600  | UNIVERSAL     | 4.5 gr. | 974      | 16,700 |
|  | INTERNATIONAL  | 3.0 gr. | 798      | 12,400 | INTERNATIONAL | 3.5 gr. | 903      | 16,100 |

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**SMOKELESS PISTOL AND CARBINE**

| BULLET                          | STARTING LOADS |         |          |        | MAXIMUM LOADS |         |          |        |
|---------------------------------|----------------|---------|----------|--------|---------------|---------|----------|--------|
|                                 | POWDER         | GRS.    | VEL. fps | CUP    | POWDER        | GRS.    | VEL. fps | CUP    |
| <b>38 SPECIAL (CONTINUED)</b>   |                |         |          |        |               |         |          |        |
| <b>158 GR<br/>LEAD SWC</b>      | HP38           | 3.1 gr. | 782      | 11,900 | HP38          | 3.7 gr. | 834      | 14,600 |
|                                 | TITEGROUP      | 3.2 gr. | 815      | 11,500 | TITEGROUP     | 3.8 gr. | 920      | 15,400 |
|                                 | CLAYS          | 2.8 gr. | 812      | 12,900 | CLAYS         | 3.1 gr. | 871      | 15,100 |
| <b>357 MAGNUM</b>               |                |         |          |        |               |         |          |        |
| <b>125 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 4.8 gr. | 1046     | 11,000 | UNIVERSAL     | 6.8 gr. | 1,401    | 34,200 |
|                                 | HP38           | 4.6 gr. | 1,052    | 13,800 | HP38          | 5.5 gr. | 1,185    | 18,800 |
|                                 | TITEGROUP      | 4.0 gr. | 1,055    | 13,800 | TITEGROUP     | 5.4 gr. | 1,274    | 22,800 |
|                                 | CLAYS          | 3.5 gr. | 984      | 11,900 | CLAYS         | 5.3 gr. | 1,260    | 33,000 |
| <b>135 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 4.8 gr. | 986      | 11,700 | UNIVERSAL     | 6.5 gr. | 1,314    | 27,800 |
|                                 | HP38           | 4.1 gr. | 946      | 11,700 | HP38          | 5.3 gr. | 1,027    | 19,400 |
|                                 | TITEGROUP      | 3.5 gr. | 906      | 13,100 | TITEGROUP     | 5.2 gr. | 1,186    | 24,500 |
|                                 | CLAYS          | 3.4 gr. | 914      | 12,200 | CLAYS         | 5.1 gr. | 1,207    | 30,200 |
| <b>158 GR<br/>LEAD SWC</b>      | UNIVERSAL      | 4.0 gr. | 890      | 15,700 | UNIVERSAL     | 6.2 gr. | 1,247    | 33,400 |
|                                 | HP38           | 3.4 gr. | 796      | 12,600 | HP38          | 5.0 gr. | 1,109    | 23,900 |
|                                 | TITEGROUP      | 3.5 gr. | 893      | 16,100 | TITEGROUP     | 5.0 gr. | 1,108    | 24,900 |
|                                 | CLAYS          | 3.2 gr. | 867      | 14,400 | CLAYS         | 4.6 gr. | 1,079    | 33,600 |
| <b>38-40 WCF (IN PSI)</b>       |                |         |          |        |               |         |          |        |
| <b>180 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 6.9 gr. | 813      | 8,200  | UNIVERSAL     | 7.5 gr. | 955      | 11,900 |
|                                 | HP38           | 5.8 gr. | 747      | 9,400  | HP38          | 6.8 gr. | 934      | 13,500 |
|                                 | TITEGROUP      | 5.0 gr. | 819      | 7,000  | TITEGROUP     | 6.4 gr. | 990      | 13,300 |
|                                 | CLAYS          | 4.7 gr. | 760      | 8,700  | CLAYS         | 5.5 gr. | 889      | 13,500 |
| <b>44-40 WCF (IN PSI)</b>       |                |         |          |        |               |         |          |        |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 6.6 gr. | 722      | 10,000 | UNIVERSAL     | 7.3 gr. | 777      | 11,100 |
|                                 | HP38           | 5.5 gr. | 711      | 9,800  | HP38          | 6.5 gr. | 820      | 12,400 |
|                                 | TITEGROUP      | 5.0 gr. | 758      | 8,400  | TITEGROUP     | 6.2 gr. | 901      | 12,900 |
|                                 | CLAYS          | 4.2 gr. | 648      | 8,200  | CLAYS         | 5.0 gr. | 765      | 11,700 |
| <b>44 RUSSIAN</b>               |                |         |          |        |               |         |          |        |
| <b>160-165 GR<br/>LEAD RNFP</b> | HP38           | 4.5 gr. | 878      | 8,300  | HP38          | 5.2 gr. | 1,002    | 10,400 |
|                                 | TITEGROUP      | 4.0 gr. | 884      | 6,100  | TITEGROUP     | 5.3 gr. | 1,076    | 12,000 |
|                                 | CLAYS          | 3.0 gr. | 776      | 7,300  | CLAYS         | 4.0 gr. | 977      | 11,100 |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 4.8 gr. | 816      | 8,100  | UNIVERSAL     | 5.7 gr. | 970      | 11,500 |
|                                 | HP38           | 4.2 gr. | 763      | 7,300  | HP38          | 5.0 gr. | 900      | 11,300 |
|                                 | TITEGROUP      | 3.5 gr. | 738      | 5,100  | TITEGROUP     | 4.8 gr. | 963      | 11,400 |
|                                 | CLAYS          | 3.2 gr. | 747      | 8,000  | CLAYS         | 3.7 gr. | 837      | 11,100 |
| <b>240 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 3.8 gr. | 679      | 6,400  | UNIVERSAL     | 4.6 gr. | 841      | 11,000 |
|                                 | HP38           | 4.0 gr. | 753      | 8,900  | HP38          | 4.8 gr. | 842      | 11,000 |
|                                 | TITEGROUP      | 3.5 gr. | 732      | 7,300  | TITEGROUP     | 4.2 gr. | 837      | 11,500 |
|                                 | CLAYS          | 3.0 gr. | 711      | 9,400  | CLAYS         | 3.5 gr. | 769      | 10,700 |
| <b>44 COLT</b>                  |                |         |          |        |               |         |          |        |
| <b>165 GR<br/>LEAD RNFP</b>     | HP38           | 4.5 gr. | 826      | 6,100  | HP38          | 5.5 gr. | 983      | 9,300  |
|                                 | TITEGROUP      | 4.0 gr. | 864      | 6,300  | TITEGROUP     | 5.0 gr. | 1,020    | 9,300  |
|                                 | CLAYS          | 3.0 gr. | 705      | 6,600  | CLAYS         | 4.2 gr. | 944      | 9,000  |
| <b>185 GR<br/>LEAD RNFP</b>     | HP38           | 4.5 gr. | 807      | 6,600  | HP38          | 5.3 gr. | 928      | 9,400  |
|                                 | TITEGROUP      | 3.8 gr. | 806      | 6,200  | TITEGROUP     | 4.8 gr. | 950      | 9,500  |
|                                 | CLAYS          | 3.0 gr. | 692      | 5,800  | CLAYS         | 4.2 gr. | 893      | 9,600  |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 4.8 gr. | 762      | 6,100  | UNIVERSAL     | 5.7 gr. | 927      | 9,900  |
|                                 | HP38           | 4.5 gr. | 799      | 7,000  | HP38          | 5.3 gr. | 881      | 9,400  |

NEVER Exceed the Loads Listed in This Publication

## SMOKELESS PISTOL AND CARBINE

| BULLET                          | STARTING LOADS |         |          |        | MAXIMUM LOADS |         |          |        |
|---------------------------------|----------------|---------|----------|--------|---------------|---------|----------|--------|
|                                 | POWDER         | GRS.    | VEL. fps | CUP    | POWDER        | GRS.    | VEL. fps | CUP    |
| <b>44 COLT</b>                  |                |         |          |        |               |         |          |        |
| <b>200 GR<br/>LEAD RNFP</b>     | TITEGROUP      | 4.0 gr. | 787      | 6,300  | TITEGROUP     | 4.8 gr. | 912      | 10,000 |
|                                 | CLAYS          | 3.2 gr. | 710      | 6,100  | CLAYS         | 3.9 gr. | 831      | 10,000 |
| <b>240 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 4.5 gr. | 769      | 6,400  | UNIVERSAL     | 5.2 gr. | 870      | 10,400 |
|                                 | HP38           | 4.2 gr. | 733      | 7,200  | HP38          | 4.9 gr. | 827      | 9,900  |
|                                 | TITEGROUP      | 3.5 gr. | 717      | 6,300  | TITEGROUP     | 4.3 gr. | 826      | 10,000 |
|                                 | CLAYS          | 4.0 gr. | 706      | 6,800  | CLAYS         | 4.7 gr. | 818      | 9,500  |
| <b>44 SPECIAL</b>               |                |         |          |        |               |         |          |        |
| <b>160-165 GR<br/>LEAD RNFP</b> | UNIVERSAL      | 5.5 gr. | 851      | 5,700  | UNIVERSAL     | 6.3 gr. | 1,042    | 10,900 |
|                                 | HP38           | 4.9 gr. | 893      | 8,200  | HP38          | 6.0 gr. | 1,040    | 12,000 |
|                                 | TITEGROUP      | 4.5 gr. | 865      | 7,100  | TITEGROUP     | 5.8 gr. | 1,035    | 13,400 |
|                                 | CLAYS          | 3.6 gr. | 836      | 6,000  | CLAYS         | 4.6 gr. | 1,009    | 13,400 |
| <b>185 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 5.4 gr. | 823      | 7,700  | UNIVERSAL     | 6.4 gr. | 1,031    | 13,900 |
|                                 | HP38           | 4.4 gr. | 810      | 8,000  | HP38          | 5.6 gr. | 953      | 12,500 |
|                                 | TITEGROUP      | 4.0 gr. | 819      | 6,600  | TITEGROUP     | 5.5 gr. | 1,025    | 11,600 |
|                                 | CLAYS          | 3.5 gr. | 810      | 7,800  | CLAYS         | 4.2 gr. | 930      | 13,200 |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 5.5 gr. | 802      | 8,200  | UNIVERSAL     | 6.5 gr. | 960      | 12,900 |
|                                 | INTERNATIONAL  | 4.3 gr. | 774      | 7,300  | INTERNATIONAL | 5.2 gr. | 919      | 13,500 |
|                                 | HP38           | 4.5 gr. | 743      | 8,300  | HP38          | 5.6 gr. | 918      | 12,500 |
|                                 | TITEGROUP      | 3.8 gr. | 746      | 5,700  | TITEGROUP     | 5.4 gr. | 973      | 13,100 |
|                                 | CLAYS          | 3.5 gr. | 748      | 7,800  | CLAYS         | 4.5 gr. | 891      | 14,000 |
| <b>240 GR<br/>LEAD SWC</b>      | UNIVERSAL      | 4.9 gr. | 721      | 8,000  | UNIVERSAL     | 5.6 gr. | 873      | 13,300 |
|                                 | INTERNATIONAL  | 3.9 gr. | 723      | 8,900  | INTERNATIONAL | 4.7 gr. | 825      | 13,000 |
|                                 | HP38           | 4.2 gr. | 717      | 8,400  | HP38          | 5.2 gr. | 858      | 13,200 |
|                                 | TITEGROUP      | 4.0 gr. | 758      | 9,400  | TITEGROUP     | 4.8 gr. | 862      | 13,100 |
|                                 | CLAYS          | 3.2 gr. | 669      | 9,000  | CLAYS         | 4.0 gr. | 771      | 13,500 |
| <b>44 MAGNUM</b>                |                |         |          |        |               |         |          |        |
| <b>160-165 GR<br/>LEAD RNFP</b> | UNIVERSAL      | 6.5 gr. | 918      | 7,700  | UNIVERSAL     | 7.2 gr. | 1,059    | 11,500 |
|                                 | HP38           | 6.0 gr. | 963      | 10,100 | HP38          | 7.0 gr. | 1,088    | 13,900 |
|                                 | TITEGROUP      | 5.3 gr. | 949      | 11,800 | TITEGROUP     | 6.5 gr. | 1,083    | 16,400 |
|                                 | CLAYS          | 4.4 gr. | 910      | 8,500  | CLAYS         | 5.5 gr. | 1,064    | 15,500 |
| <b>185 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 6.4 gr. | 919      | 8,400  | UNIVERSAL     | 7.4 gr. | 1,070    | 12,600 |
|                                 | HP38           | 5.9 gr. | 906      | 9,400  | HP38          | 7.2 gr. | 1,058    | 14,700 |
|                                 | TITEGROUP      | 5.3 gr. | 902      | 9,500  | TITEGROUP     | 6.6 gr. | 1,082    | 16,500 |
|                                 | CLAYS          | 4.2 gr. | 839      | 8,900  | CLAYS         | 6.0 gr. | 1,043    | 18,400 |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 6.8 gr. | 897      | 10,500 | UNIVERSAL     | 7.8 gr. | 1,045    | 15,400 |
|                                 | INTERNATIONAL  | 5.3 gr. | 854      | 10,000 | INTERNATIONAL | 6.8 gr. | 1,044    | 18,300 |
|                                 | HP38           | 5.8 gr. | 875      | 10,800 | HP38          | 7.4 gr. | 1,039    | 16,700 |
|                                 | TITEGROUP      | 5.0 gr. | 878      | 11,000 | TITEGROUP     | 6.6 gr. | 1,061    | 17,300 |
|                                 | CLAYS          | 4.2 gr. | 785      | 8,500  | CLAYS         | 6.4 gr. | 1,028    | 20,200 |
| <b>240 GR<br/>LEAD SWC</b>      | UNIVERSAL      | 6.5 gr. | 852      | 11,700 | UNIVERSAL     | 7.6 gr. | 1,009    | 19,900 |
|                                 | INTERNATIONAL  | 4.5 gr. | 737      | 9,900  | INTERNATIONAL | 6.5 gr. | 970      | 21,700 |
|                                 | HP38           | 5.5 gr. | 800      | 12,000 | HP38          | 7.2 gr. | 961      | 18,400 |
|                                 | TITEGROUP      | 4.7 gr. | 801      | 11,100 | TITEGROUP     | 6.2 gr. | 970      | 18,400 |
|                                 | CLAYS          | 4.3 gr. | 759      | 14,000 | CLAYS         | 6.2 gr. | 940      | 21,800 |
| <b>45 S&amp;W (SCHOFIELD)</b>   |                |         |          |        |               |         |          |        |
| <b>200 GR<br/>LEAD RNFP</b>     | UNIVERSAL      | 6.0 gr. | 773      | 9,100  | UNIVERSAL     | 7.0 gr. | 938      | 13,100 |
|                                 | HP38           | 5.2 gr. | 745      | 8,800  | HP38          | 6.2 gr. | 877      | 13,000 |

NEVER Exceed the Loads Listed in This Publication

**SMOKELESS PISTOL AND CARBINE**

| BULLET                                    | STARTING LOADS |         |          |        | MAXIMUM LOADS |          |          |        |
|---|----------------|---------|----------|--------|---------------|----------|----------|--------|
|   | POWDER         | GRS.    | VEL. fps | CUP    | POWDER        | GRS.     | VEL. fps | CUP    |
| <b>45 S&amp;W (SCHOFIELD) (CONTINUED)</b> |                |         |          |        |               |          |          |        |
| <b>200 GR LEAD RNFP</b>                   | TITEGROUP      | 4.5 gr. | 715      | 6,700  | TITEGROUP     | 6.0 gr.  | 925      | 12,100 |
|   | CLAYS          | 4.0 gr. | 733      | 8,300  | CLAYS         | 5.0 gr.  | 845      | 13,100 |
| <b>225-230 GR LEAD RNFP</b>               | UNIVERSAL      | 5.5 gr. | 738      | 9,400  | UNIVERSAL     | 6.0 gr.  | 816      | 11,400 |
|   | HP38           | 5.0 gr. | 719      | 9,900  | HP38          | 5.7 gr.  | 816      | 12,700 |
|   | TITEGROUP      | 4.5 gr. | 702      | 7,800  | TITEGROUP     | 5.8 gr.  | 866      | 12,300 |
|   | CLAYS          | 4.0 gr. | 697      | 9,400  | CLAYS         | 4.7 gr.  | 783      | 13,600 |
| <b>250 GR LEAD RNFP</b>                   | UNIVERSAL      | 6.0 gr. | 724      | 9,900  | UNIVERSAL     | 6.3 gr.  | 830      | 13,800 |
|   | HP38           | 4.5 gr. | 664      | 10,100 | HP38          | 5.2 gr.  | 741      | 12,100 |
|   | TITEGROUP      | 4.5 gr. | 716      | 7,900  | TITEGROUP     | 5.3 gr.  | 811      | 11,600 |
|   | CLAYS          | 4.0 gr. | 674      | 11,000 | CLAYS         | 4.2 gr.  | 710      | 12,500 |
| <b>45 LONG COLT</b>                       |                |         |          |        |               |          |          |        |
| <b>160-165 GR LEAD RNFP</b>               | UNIVERSAL      | 6.5 gr. | 798      | 7,400  | UNIVERSAL     | 9.5 gr.  | 1,197    | 12,900 |
|   | HP38           | 6.5 gr. | 917      | 7,700  | HP38          | 9.0 gr.  | 1,177    | 13,800 |
|   | TITEGROUP      | 6.0 gr. | 932      | 6,000  | TITEGROUP     | 7.0 gr.  | 1,051    | 9,100  |
|   | CLAYS          | 5.0 gr. | 907      | 7,500  | CLAYS         | 6.4 gr.  | 1,083    | 13,500 |
| <b>180 GR LEAD RNFP</b>                   | UNIVERSAL      | 6.5 gr. | 791      | 7,100  | UNIVERSAL     | 9.2 gr.  | 1,161    | 13,900 |
|   | HP38           | 6.0 gr. | 838      | 6,500  | HP38          | 8.2 gr.  | 1,087    | 13,900 |
|   | TITEGROUP      | 5.0 gr. | 759      | 4,600  | TITEGROUP     | 6.9 gr.  | 1,020    | 10,900 |
|   | CLAYS          | 4.8 gr. | 840      | 7,900  | CLAYS         | 6.0 gr.  | 1,016    | 13,800 |
| <b>200 GR LEAD RNFP</b>                   | UNIVERSAL      | 6.4 gr. | 749      | 5,700  | UNIVERSAL     | 8.8 gr.  | 1,067    | 13,600 |
|   | HP38           | 5.9 gr. | 761      | 5,800  | HP38          | 8.0 gr.  | 1,002    | 13,800 |
|   | TITEGROUP      | 5.0 gr. | 731      | 4,700  | TITEGROUP     | 7.7 gr.  | 1,050    | 12,700 |
|   | CLAYS          | 4.6 gr. | 777      | 5,900  | CLAYS         | 5.9 gr.  | 931      | 13,100 |
| <b>215 GR LEAD RNFP</b>                   | UNIVERSAL      | 6.8 gr. | 777      | 6,300  | UNIVERSAL     | 8.6 gr.  | 1,001    | 13,800 |
|   | HP38           | 5.9 gr. | 758      | 5,900  | HP38          | 7.8 gr.  | 965      | 13,500 |
|   | TITEGROUP      | 5.0 gr. | 728      | 4,800  | TITEGROUP     | 7.2 gr.  | 983      | 12,100 |
|   | CLAYS          | 4.6 gr. | 754      | 6,400  | CLAYS         | 5.7 gr.  | 889      | 13,400 |
| <b>225-230 GR LEAD RNFP</b>               | UNIVERSAL      | 6.5 gr. | 761      | 7,600  | UNIVERSAL     | 8.1 gr.  | 975      | 13,800 |
|   | HP38           | 5.8 gr. | 738      | 7,300  | HP38          | 7.3 gr.  | 941      | 13,700 |
|   | TITEGROUP      | 5.0 gr. | 762      | 7,200  | TITEGROUP     | 6.5 gr.  | 934      | 13,000 |
|   | CLAYS          | 4.4 gr. | 734      | 7,600  | CLAYS         | 5.4 gr.  | 865      | 13,900 |
| <b>250 GR LEAD RNFP</b>                   | HS-6           | 9.0 gr. | 787      | 7,800  | HS-6          | 10.5 gr. | 946      | 13,300 |
|   | UNIVERSAL      | 6.5 gr. | 742      | 9,200  | UNIVERSAL     | 7.8 gr.  | 941      | 13,000 |
|   | INTERNATIONAL  | 5.4 gr. | 786      | 9,200  | INTERNATIONAL | 6.0 gr.  | 866      | 13,400 |
|   | HP38           | 5.8 gr. | 785      | 9,100  | HP38          | 7.1 gr.  | 916      | 13,900 |
|   | TITEGROUP      | 5.0 gr. | 716      | 7,600  | TITEGROUP     | 6.2 gr.  | 881      | 13,000 |
|   | CLAYS          | 4.2 gr. | 713      | 8,500  | CLAYS         | 5.1 gr.  | 817      | 13,400 |

**LONG RANGE RIFLE**

The loads listed below are representative of common calibers used. As there are so many cartridges which could be used, only a few are shown. DO NOT USE ANY FILLER MATERIAL WITH THESE LOADS, as fillers can alter pressure and velocities decidedly. Velocities were limited to approximately 1600 f.p.s. due to excessive leading at higher velocities. If you want to use any other cartridge, consult the 26th edition of Hodgdon's Powder Manual, or contact us for advice at 913-362-9455.

**Use flat point bullets in tubular magazines.**

\*H-110 and H-4227 loads should not be reduced more than 3% due to inconsistency of velocity at the lower pressure.

## LONG RANGE RIFLE

| BULLET                                | STARTING LOADS          |          |          |        | MAXIMUM LOADS |          |          |        |
|---------------------------------------|-------------------------|----------|----------|--------|---------------|----------|----------|--------|
|                                       | POWDER                  | GRS.     | VEL. fps | CUP    | POWDER        | GRS.     | VEL. fps | CUP    |
| <b>25-35 WINCHESTER</b>               |                         |          |          |        |               |          |          |        |
| <b>90 GR LFP W/GC</b>                 | TITEGROUP               | 5.0 gr.  | 1369     | 18,000 | TITEGROUP     | 7.0 gr.  | 1513     | 28,900 |
| <b>30-30 WINCHESTER</b>               |                         |          |          |        |               |          |          |        |
| <b>160 GR CAST</b>                    | H4895                   | 17.5 gr. | 1351     | 15,200 | H4895         | 21.0 gr. | 1562     | 23,100 |
|                                       | H4198                   | 15.0 gr. | 1420     | 15,000 | H4198         | 17.0 gr. | 1616     | 20,600 |
| <b>32-40 WINCHESTER</b>               |                         |          |          |        |               |          |          |        |
| <b>196 GR CAST</b>                    | H110*Reduce Maximum 3%  |          |          |        | H110          | 12.0 gr. | 1376     | 19,200 |
|                                       | H4227*Reduce Maximum 3% |          |          |        | H4227         | 13.0 gr. | 1267     | 18,000 |
| <b>38-55 WINCHESTER</b>               |                         |          |          |        |               |          |          |        |
| <b>250 GR CAST</b>                    | H4895                   | 21.0 gr. | 1197     | 18,200 | H4895         | 26.0 gr. | 1600     | 26,500 |
|                                       | H4198                   | 18.5 gr. | 1408     | 17,100 | H4198         | 21.0 gr. | 1608     | 23,700 |
| <b>40-65 WINCHESTER (SINGLE SHOT)</b> |                         |          |          |        |               |          |          |        |
| <b>400 GR BUFFALO ARMS LEAD RNFP</b>  | VARGET                  | 35.0 gr. | 1438     | 20,100 | VARGET        | 38.0 gr. | 1558     | 24,800 |
|                                       | H4895                   | 33.0 gr. | 1423     | 19,700 | H4895         | 36.0 gr. | 1554     | 24,200 |
|                                       | BENCHMARK               | 29.0 gr. | 1321     | 18,800 | BENCHMARK     | 32.5 gr. | 1491     | 25,000 |
|                                       | H322                    | 30.5 gr. | 1398     | 19,200 | H322          | 33.0 gr. | 1520     | 23,900 |
|                                       | H4198                   | 28.0 gr. | 1441     | 21,200 | H4198         | 31.0 gr. | 1572     | 24,700 |
|                                       | H4227                   | 20.0 gr. | 1277     | 18,900 | H4227         | 23.0 gr. | 1410     | 24,900 |
| <b>45-70 GOVERNMENT</b>               |                         |          |          |        |               |          |          |        |
| <b>300 GR CAST</b>                    | VARGET                  | 45.0 gr. | 1599     | 17,800 | VARGET        | 55.0 gr. | 1880     | 20,600 |
|                                       | H4895                   | 45.0 gr. | 1572     | 14,400 | H4895         | 51.0 gr. | 1703     | 15,500 |
|                                       | H4198                   | 30.0 gr. | 1390     | 14,400 | H4198         | 35.5 gr. | 1641     | 16,100 |
| <b>385 GR CAST</b>                    | VARGET                  | 42.5 gr. | 1537     | 15,400 | VARGET        | 52.5 gr. | 1805     | 21,800 |
|                                       | H4895                   | 35.0 gr. | 1280     | 11,900 | H4895         | 42.0 gr. | 1526     | 23,100 |
|                                       | H4198                   | 28.0 gr. | 1302     | 13,300 | H4198         | 32.0 gr. | 1483     | 14,700 |
| <b>405 GR CAST</b>                    | VARGET                  | 40.0 gr. | 1392     | 15,600 | VARGET        | 50.0 gr. | 1718     | 20,900 |
|                                       | H4895                   | 40.0 gr. | 1424     | 14,900 | H4895         | 48.0 gr. | 1645     | 18,900 |
|                                       | H4198                   | 27.0 gr. | 1251     | 14,200 | H4198         | 31.0 gr. | 1459     | 17,100 |
| <b>485 GR CAST</b>                    | H4895                   | 32.0 gr. | 1155     | 15,600 | H4895         | 39.0 gr. | 1403     | 22,700 |
|                                       | H4198                   | 28.0 gr. | 1279     | 16,400 | H4198         | 32.0 gr. | 1434     | 20,400 |
| <b>45-120 SHARPS</b>                  |                         |          |          |        |               |          |          |        |
| <b>350 GR LYMAN #457122</b>           | H4895                   | 59.0 gr. | 1875     | 24,800 | H4895         | 64.0 gr. | 2031     | 26,900 |
|                                       | BENCHMARK               | 53.0 gr. | 1809     | 24,700 | BENCHMARK     | 57.0 gr. | 1922     | 26,800 |
|                                       | H322                    | 50.0 gr. | 1717     | 21,000 | H322          | 53.0 gr. | 1874     | 27,700 |
|                                       | H4198                   | 46.0 gr. | 1783     | 22,500 | H4198         | 49.0 gr. | 1903     | 27,500 |
| <b>405 GR LYMAN #457193</b>           | VARGET                  | 59.0 gr. | 1763     | 24,200 | VARGET        | 63.0 gr. | 1858     | 28,200 |
|                                       | H4895                   | 58.0 gr. | 1849     | 26,000 | H4895         | 64.0 gr. | 2012     | 28,300 |
|                                       | BENCHMARK               | 53.0 gr. | 1805     | 26,500 | BENCHMARK     | 58.0 gr. | 1917     | 27,200 |
|                                       | H322                    | 49.0 gr. | 1665     | 23,200 | H322          | 52.5 gr. | 1793     | 27,900 |
|                                       | H4198                   | 45.0 gr. | 1708     | 24,700 | H4198         | 48.0 gr. | 1818     | 27,200 |
| <b>500 GR LYMAN #457125</b>           | VARGET                  | 56.0 gr. | 1618     | 24,200 | VARGET        | 61.0 gr. | 1737     | 27,900 |
|                                       | H4895                   | 54.0 gr. | 1641     | 24,400 | H4895         | 60.0 gr. | 1809     | 28,500 |
|                                       | BENCHMARK               | 50.0 gr. | 1607     | 26,600 | BENCHMARK     | 54.5 gr. | 1747     | 28,200 |
|                                       | H322                    | 48.0 gr. | 1568     | 25,400 | H322          | 52.0 gr. | 1695     | 28,300 |
|                                       | H4198                   | 42.0 gr. | 1523     | 25,200 | H4198         | 46.5 gr. | 1650     | 28,300 |

## LONG RANGE RIFLE

| BULLET               | STARTING LOADS |           |          |        | MAXIMUM LOADS |           |          |        |
|----------------------|----------------|-----------|----------|--------|---------------|-----------|----------|--------|
|                      | POWDER         | GRS.      | VEL. fps | CUP    | POWDER        | GRS.      | VEL. fps | CUP    |
| <b>50-140 SHARPS</b> |                |           |          |        |               |           |          |        |
| <b>425 GR</b>        | H4831          | 118.0 gr. | 2079     | 22,800 | H4831         | 125.0 gr. | 2209     | 26,300 |
| <b>LYMAN</b>         | H4350          | 105.0 gr. | 2033     | 21,600 | H4350         | 114.0 gr. | 2242     | 26,700 |
| <b>#515141</b>       | VARGET         | 95.0 gr.  | 2127     | 23,600 | VARGET        | 102.5 gr. | 2294     | 28,100 |
| <b>515 GR</b>        | H4831          | 112.0 gr. | 1956     | 23,200 | H4831         | 118.0 gr. | 2085     | 27,500 |
| <b>LYMAN</b>         | H4350          | 101.0 gr. | 1916     | 22,000 | H4350         | 108.0 gr. | 2091     | 27,200 |
| <b>#515142</b>       | VARGET         | 87.0 gr.  | 1958     | 24,000 | VARGET        | 95.0 gr.  | 2088     | 27,900 |

## POCKET PISTOL

| BULLET                 | STARTING LOADS |         |          | MAXIMUM LOADS |         |          |
|------------------------|----------------|---------|----------|---------------|---------|----------|
|                        | POWDER         | GRS.    | VEL. fps | POWDER        | GRS.    | VEL. fps |
| <b>32 S&amp;W</b>      |                |         |          |               |         |          |
| <b>85 GR CAST</b>      | HP38           | 1.1 gr. | 610      | HP38          | 1.4 gr. | 680      |
| <b>32 S&amp;W LONG</b> |                |         |          |               |         |          |
| <b>90 GR CAST</b>      | HP38           | 1.6 gr. | 600      | HP38          | 1.9 gr. | 700      |
| <b>38 S&amp;W</b>      |                |         |          |               |         |          |
| <b>145 GR CAST</b>     | HP38           | 2.2 gr. | 595      | HP38          | 2.5 gr. | 630      |
| <b>38 SHORT COLT</b>   |                |         |          |               |         |          |
| <b>90 GR</b>           | UNIVERSAL      | 2.9 gr. | 634      | UNIVERSAL     | 3.4 gr. | 775      |
| <b>AA 206 LRN</b>      | HP38           | 2.4 gr. | 609      | HP38          | 2.8 gr. | 749      |
|                        | TITEGROUP      | 2.3 gr. | 639      | TITEGROUP     | 2.7 gr. | 791      |
|                        | CLAYS          | 1.8 gr. | 634      | CLAYS         | 2.1 gr. | 778      |
| <b>135 GR</b>          | UNIVERSAL      | 2.4 gr. | 624      | UNIVERSAL     | 2.8 gr. | 771      |
| <b>AA 202 LFP</b>      | HP38           | 2.4 gr. | 657      | HP38          | 2.8 gr. | 777      |
|                        | TITEGROUP      | 2.3 gr. | 646      | TITEGROUP     | 2.7 gr. | 760      |
|                        | CLAYS          | 1.8 gr. | 648      | CLAYS         | 2.1 gr. | 731      |

## PYRODEX PELLETS IN METALLIC CARTRIDGES

| CARTRIDGE  | BULLET   | PELLETS USED       | VELOCITY | PRESSURE   |
|------------|----------|--------------------|----------|------------|
| 44 REM MAG | 240 SWC  | 1 - PYRODEX PISTOL | 1053 FPS | 17,100 CUP |
| 44/40 WCF  | 200 RNFP | 1 - PYRODEX PISTOL | 943 FPS  | 12,700 CUP |
| 45 COLT    | 230 RNFP | 1 - PYRODEX PISTOL | 870 FPS  | 9,600 CUP  |
| 45 COLT    | 250 RNFP | 1 - PYRODEX PISTOL | 818 FPS  | 10,000 CUP |
| 45-70 GOV. | 405 RNFP | 1 - 50/50          | 1015 FPS | 14,200 CUP |
| 45-70 GOV. | 405 RNFP | 2 - 50/30          | 1270 FPS | 27,200 CUP |
| 45-70 GOV. | 405 RNFP | 2 - PYRODEX PISTOL | 1231 FPS | 21,900 CUP |

Please contact Hodgdon Powder Company for a FREE copy of our Pyrodex Manual or information on our NEW Triple Seven muzzleloading propellant.

\*H-110 and H-4227 loads should not be reduced more than 3% due to inconsistency of velocity at the lower pressure.

NEVER Exceed the Loads Listed in This Publication



## TRIPLE SEVEN PISTOL & LONG RANGE RIFLE LOADS

All loads with Triple Seven were developed by filling the case to a point that would allow the base of the bullet to come into contact with the powder charge. **WARNING: NO COMPRESSION SHOULD BE USED WITH Triple Seven.** High pressure may result by compressing this powder. Damage to your firearm may occur with heavy compression that could cause injury to the shooter. A single card wad of approximately .030 may be used between the base of the bullet and the powder charge. No other wads or fillers should be used in Triple Seven loads. All powder charges are measured by VOLUME with an adjustable black powder measure, not weighed. Do not use a powder measure designed for smokeless powder. (read warning section)

| TRIPLE SEVEN PISTOL |   |        |               |          |             |
|---------------------|---|--------|---------------|----------|-------------|
| CALIBER             | TRIPLE SEVEN<br>(Set Your Powder Measure @) |        | BULLET        | VELOCITY | PRESSURE    |
| 32-20 Win.          | FFg   | 18 gr. | 90 gr. RNFP   | 968 fps  | 11,000 CUP  |
| 32-20 Win.          | FFg   | 18 gr. | 115 gr. LFP   | 864 fps  | 12,100 CUP  |
| 38 Long Colt        | FFg   | 15 gr. | 125 gr. LRN   | 808 fps  | 5,500 CUP   |
| 38 Long Colt        | FFg   | 12 gr. | 150 gr. LRN   | 740 fps  | 6,000 CUP   |
| 38 Special          | FFg   | 20 gr. | 125 gr. RNFP  | 931 fps  | 8,800 CUP   |
| 38 Special          | FFg   | 15 gr. | 158 gr. RNFP  | 785 fps  | 7,600 CUP   |
| 357 Magnum          | FFg   | 20 gr. | 135 gr. LRN   | 948 fps  | <12,000 CUP |
| 357 Magnum          | FFg   | 18 gr. | 158 gr. LSWC  | 796 fps  | <12,000 CUP |
| 38-40               | FFg   | 30 gr. | 180 gr. RNFP  | 887 fps  | 7,700 CUP   |
| 44 Special          | FFg   | 25 gr. | 160 gr. LRNFP | 957 fps  | 7,000 CUP   |
| 44 Special          | FFg   | 25 gr. | 185 gr. LRNFP | 924 fps  | 8,100 CUP   |
| 44 Special          | FFg   | 25 gr. | 200 gr. LRNFP | 905 fps  | 8,300 CUP   |
| 44 Special          | FFg   | 20 gr. | 240 gr. LRNFP | 777 fps  | 7,800 CUP   |
| 44-40               | FFg   | 30 gr. | 200 gr. RNFP  | 830 fps  | 6,500 CUP   |
| 44 Magnum           | FFg   | 30 gr. | 200 gr. LSWC  | 984 fps  | 8,800 CUP   |
| 44 Magnum           | FFg   | 25 gr. | 240 gr. LSWC  | 868 fps  | 9,100 CUP   |
| 45 S&W              | FFg   | 25 gr. | 200 gr. LSWC  | 869 fps  | 6,600 CUP   |
| 45 S&W              | FFg   | 25 gr. | 230 gr. LRN   | 800 fps  | 6,500 CUP   |
| 45 S&W              | FFg   | 25 gr. | 250 gr. LRNFP | 813 fps  | 7,500 CUP   |
| 45 Colt             | FFg   | 35 gr. | 200 gr. LSWC  | 959 fps  | 8,500 CUP   |
| 45 Colt             | FFg   | 30 gr. | 250 gr. RNFP  | 838 fps  | 9,500 CUP   |

NOTE: All powder charges are measured by volume, not weight

| TRIPLE SEVEN RIFLE |   |     |                                   |          |  |
|--------------------|---|-----|-----------------------------------|----------|--|
| CALIBER            | TRIPLE SEVEN<br>(Set Your Powder Measure @) |     | BULLET                            | VELOCITY |  |
| 25-35 Win.         | 35 gr.                                      | FFg | 90 gr. LFP W/GC                   | 1718 fps |  |
| 30-30 Win.         | 40 gr.                                      | FFg | 160 gr. LRN                       | 1547 fps |  |
| 38-55              | 35 gr.                                      | FFg | 250 gr. RNFP                      | 1261 fps |  |
| 40-65 Single Shot  | 50 gr.                                      | FFg | 400 gr. Lead                      | 1152 fps |  |
| 45-70              | 65 gr.                                      | FFg | 300 gr. LRNFP                     | 1512 fps |  |
| 45-70              | 65 gr.                                      | FFg | 350 gr. LRNFP                     | 1380 fps |  |
| 45-70              | 60 gr.                                      | FFg | 485 gr. LFP                       | 1161 fps |  |
| 45-70              | 55 gr.                                      | FFg | 500 gr. #457125                   | 1148 fps |  |
| 45-120             | 90 gr.                                      | FFg | 350 gr. LRNFP +2 Wonder wads      | 1607 fps |  |
| 45-120             | 95 gr.                                      | FFg | 405 gr. RNFP                      | 1511 fps |  |
| 45-120             | 95 gr.                                      | FFg | 500 gr. LFP                       | 1375 fps |  |
| 50-140             | 95 gr.                                      | FFg | 425 gr. LRNFP +3 - 1/4" Fiberwads | 1452 fps |  |
| 50-140             | 85 gr.                                      | FFg | 515 gr. LRNFP +7 Wonder wads      | 1245 fps |  |

NEVER Exceed the Loads Listed in This Publication

# PYRODEX PISTOL & LONG RANGE RIFLE LOADS

All pistol loads shown were developed by filling the case to a point which allowed the powder to be compressed 1/16" to 1/8" when the bullet was seated. All rifle loads used a card wad of approximately .030" between the base of the bullet and the powder. The powder charges listed in the data are by volume, not weight. Use an adjustable powder measure designed for blackpowder to measure the proper charge.

The shooter may have to use a long drop tube to assist in filling the case. To reduce loads in straight sided cases simply insert card or polyethylene wads between the base of the bullet and the powder. DO NOT USE ANY OTHER FILLER. LOADS FOR THE 38-40 AND THE 44-40 SHOULD NOT BE REDUCED. NEVER ALLOW AN AIR SPACE BETWEEN THE BULLET AND THE POWDER. **DO NOT USE A POWDER MEASURE DESIGNED FOR SMOKELESS POWDER! (READ WARNINGS SECTION.)**

| PYRODEX PISTOL |   |        |              |          |            |
|----------------|---|--------|--------------|----------|------------|
| CALIBER        | GRADE OF PYRODEX<br>(Set Your Powder Measure @) |        | BULLET       | VELOCITY | PRESSURE   |
| 38-40 WCF      | P   | 30 gr. | 180 gr. RNFP | 920 fps  | 8,200 CUP  |
| 38-40 WCF      | RS  | 30 gr. | 180 gr. RNFP | 903 fps  | 7,900 CUP  |
| 38-40 WCF      | Select  | 30 gr. | 180 gr. RNFP | 821 fps  | 8,400 CUP  |
| 44 Special     | P   | 30 gr. | 200 gr. RNFP | 990 fps  | 12,100 CUP |
| 44 Special     | RS  | 30 gr. | 200 gr. RNFP | 962 fps  | 12,300 CUP |
| 44 Special     | Select  | 30 gr. | 200 gr. RNFP | 901 fps  | 10,000 CUP |
| 44 Special     | P   | 25 gr. | 240 gr. SWC  | 891 fps  | 12,800 CUP |
| 44 Special     | RS  | 25 gr. | 240 gr. SWC  | 831 fps  | 10,000 CUP |
| 44 Special     | Select  | 25 gr. | 240 gr. SWC  | 816 fps  | 9,700 CUP  |
| 44 Magnum      | P   | 32 gr. | 200 gr. RNFP | 1022 fps | 11,800 CUP |
| 44 Magnum      | RS  | 32 gr. | 200 gr. RNFP | 957 fps  | 10,300 CUP |
| 44 Magnum      | Select  | 32 gr. | 200 gr. RNFP | 864 fps  | 6,900 CUP  |
| 44 Magnum      | P   | 30 gr. | 240 gr. SWC  | 1000 fps | 10,900 CUP |
| 44 Magnum      | RS  | 30 gr. | 240 gr. SWC  | 908 fps  | 10,600 CUP |
| 44 Magnum      | Select  | 30 gr. | 240 gr. SWC  | 809 fps  | 9,800 CUP  |
| 44-40 WCF      | P   | 35 gr. | 200 gr. RNFP | 802 fps  | 9,900 CUP  |
| 44-40 WCF      | RS  | 35 gr. | 200 gr. RNFP | 800 fps  | 9,200 CUP  |
| 44-40 WCF      | Select  | 35 gr. | 200 gr. RNFP | 704 fps  | 8,900 CUP  |
| 45 Long Colt   | P   | 37 gr. | 250 gr. RNFP | 955 fps  | 13,500 CUP |
| 45 Long Colt   | RS  | 37 gr. | 250 gr. RNFP | 918 fps  | 11,900 CUP |
| 45 Long Colt   | Select  | 37 gr. | 250 gr. RNFP | 848 fps  | 9,800 CUP  |

NOTE: All powder charges are measured by volume, not weight

| PYRODEX RIFLE |   |           |         |                     |          |
|---------------|---|-----------|---------|---------------------|----------|
| CALIBER       | GRADE OF PYRODEX<br>(Set Your Powder Measure @) |           | BULLET  | WAD                 | VELOCITY |
| 38-55         | 55 gr.  | RS/Select | 250 gr. | Card .030"          | 1320 fps |
| 40/65 Win.    | 60 gr.  | RS/Select | 400 gr. | *1/16" Polyethylene | 1214 fps |
| 40/70 SBN     | 60 gr.  | P         | 400 gr. | Card .030"          | 1272 fps |
| 40/70 SBN     | 70 gr.  | RS/Select | 400 gr. | * Card .030"        | 1292 fps |
| 45/70         | 60 gr.  | RS/Select | 420 gr. | * Ox-Yoke           | 1248 fps |
| 45/70         | 65 gr.  | RS/Select | 465 gr. | Card .030"          | 1355 fps |
| 45/70         | 65 gr.  | RS/Select | 540 gr. | 1/16" Polyethylene  | 1107 fps |
| 45/90         | 70 gr.  | RS/Select | 508 gr. | Card .030"          | 1207 fps |
| 45/90         | 85 gr.  | RS/Select | 508 gr. | Card .030"          | 1311 fps |

Polyethylene wads are cut from plastic milk cartons. .030 card wads are cut from tablet back or bullet boxes. Ox-Yoke prelubricated felt wads are from Ox-Yoke manufacturing.

# TRIPLE SEVEN & PYRODEX SHOTSHELL

Any brand of shot shell may be used to create these loads. Simply put the correct charge of Pyrodex or Triple Seven (by volume) into the case and adjust the wad column height for a good crimp.

Powder charges are measured in an adjustable powder measure designed for blackpowder. **Do Not Use a Powder Measure designed for Smokeless Powders.**

(READ WARNINGS SECTION.)

Generally, one .200 nitro wad over the powder and a 1/2" felt cushion wad will give a column height close to the correct length. The addition of .050 nitro wads to the column will allow for height adjustments for different hulls. A shot collar or shot cup may be used to contain the shot charge with no adjustment to powder charge.

**CAUTION:** Damascus barrels should be considered unsafe with **ANY POWDER!**

(READ WARNINGS SECTION.)

## TRIPLE SEVEN & PYRODEX DATA FOR BREECH LOADING SHOTGUNS

| Gauge    | Shot Wt. Oz. | Wad Column    | Set Your Measure @ | Velocity | L.U.P. |
|----------|--------------|---------------|--------------------|----------|--------|
| 10-3 1/2 | 2            | Card + Filler | 140 Pyrodex        | 1154     | 6900   |
| 10-2 7/8 | 1 5/8        | Card + Filler | 105 Pyrodex        | 1115     | 4900   |
| 12-2 3/4 | 1 1/8        | Card + Filler | 100 Pyrodex        | 1043     | 5700   |
| 12-2 3/4 | 1 1/8        | WAA12R        | 70 Pyrodex         | 1100     | 6500   |
| 12-2 3/4 | 1 1/8        | WAA12R        | 70 Triple Seven    | 1187     | 7700   |
| 12-2 3/4 | 1 1/4        | Card + Filler | 90 Pyrodex         | 1039     | 5800   |
| 12-2 3/4 | 1 1/2        | Card + Filler | 90 Pyrodex         | 1012     | 5900   |
| 16-2 3/4 | 1            | Card + Filler | 90 Pyrodex         | 1128     | 5600   |
| 16-2 3/4 | 1 1/8        | Card + Filler | 80 Pyrodex         | 1095     | 5800   |
| 16-2 3/4 | 1 1/4        | Card + Filler | 80 Pyrodex         | 1040     | 6000   |
| 20-2 3/4 | 7/8          | Card + Filler | 80 Pyrodex         | 1134     | 5800   |
| 20-2 3/4 | 1            | Card + Filler | 70 Pyrodex         | 1090     | 5900   |
| 20-2 3/4 | 1 1/8        | Card + Filler | 65 Pyrodex         | 1052     | 5900   |

## CAP AND BALL REVOLVERS

Set your blackpowder measure at the volume settings shown

### CAP BALL REVOLVERS

All loads shown are maximum.

| CALIBER  | BALL DIAMETER         | POWDER                | POWDER MEASURE SETTING | VELOCITY FPS |
|----------|-----------------------|-----------------------|------------------------|--------------|
| 31       | .320 or 0 Buckshot    | Pyrodex P             | 12 Gr.                 | 580          |
| 36       | .375 or 0000 Buckshot | Pyrodex P             | 28 Gr.                 | 935          |
| 36       | .375 or 0000 Buckshot | Triple Seven          | 15 Gr.                 | 662          |
| 36       | .375 or 0000 Buckshot | Triple Seven          | 20 Gr.                 | 832          |
| 44       | .451 or .454          | Pyrodex P             | 37 Gr.                 | 910          |
| 44       | .451 or .454          | Pyrodex Pistol Pellet |                        | 800          |
| 44       | .451 or .454          | Triple Seven          | 20 Gr.                 | 536          |
| 44       | .451 or .454          | Triple Seven          | 25 Gr.                 | 763          |
| 44       | .451 or .454          | Pyrodex P             | 43 Gr.                 | 986          |
| 45 Ruger | .457 Round ball       | Triple Seven          | 30 Gr.                 | 845          |
| 45 Ruger | .457 Round ball       | Triple Seven          | 35 Gr.                 | 987          |



P.O. Box 2932 • Shawnee Mission, KS 66201  
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 Internet Address: <http://www.hodgdon.com>  
 E-Mail: [help@hodgdon.com](mailto:help@hodgdon.com)

Rev. 1/03

# SHOTSHELL data

Dear Chris: This is a success story in the making. Enclosed you will find a picture of the Middlesex Conservation Club "Youth Trap League" participants and leaders. The Club is located outside the rural community of Middlesex, in upstate New York. We sponsor this league for any youth of legal age to possess a firearm, by letting them shoot, at no cost for the birds for an eight week period during the summer months. Each youth shoots two rounds of trap at each shoot and at the end of the season, their scores are averaged and trophies are awarded to every one of them for their accomplishments. Most of these youths are first time shooters and bring discount store shells with them and at the end of the day, they had sore arms and bruised cheeks. I decided to dig into my bucket of reloads and let the kids with 12 ga. guns see what a competition shell should feel like for recoil and they were astonished. After using those shoulder busters they brought with them, they couldn't believe that a 12 ga. shell could be so nice to shoot. I load 16.9 grains of Hodgdon's "Clays" with 1 oz. of 8 1/2 magnum shot in a Remington STS hull. I have to say that they really enjoy shooting my "soft recoil" trap shells and now that's all they talk about and ask for. Space doesn't permit all the fine remarks I receive about this load and I tell them it's not me, only the "Clays" powder I use, that makes shooting a 12 ga. so much more enjoyable to shoot. Many parents have either bought or are in the process of buying reloaders and have asked me for my "recipe", and of course, Hodgdon's "Clays" powder is on the top of the list. These fine kids are our sport's future, and by giving them a load like this, that doesn't kick their shoulders into raw meat by the end of the day, will keep them coming back year after year. I personally can't thank the Hodgdon Company enough for producing a clean burning, low recoiling powder, such as the "Clays". I truly enjoy it, my wife loves it, and the kids marvel over it. You truly have made the sport much more enjoyable for all of us shooters. Cheers to you and keep up the good work.

Sincerely, Dave Monahan ...Canandaigua, New York

*D.S. This is ONE OF THE NICEST Things for  
SHOOTERS ON THE INTERNET Chris !!!*

*Thanks  
Dave Monahan  
4326 Middle Cheshire Rd.  
Canandaigua, N.Y.  
14424-8370*



# SHOTSHELL data

## Forward

There are many good handbooks available giving the basics of reloading and the beginner should study one or more of them before embarking upon his new hobby. We are assuming that the user of our data manual knows the mechanics of re-loading and simply needs a supplement to help him find a good load using the components available to him.

By revising our shotshell data often, we hope to keep fairly well up-to-date with the rapidly changing array of components offered by today's consumer-oriented manufacturers.

## Warnings

### *NEVER Exceed the Loads Listed in This Publication*

The data in this manual was developed in the Hodgdon Laboratory under controlled conditions. No data shown in the ensuing lead data section should be used with steel or Bismuth shot. NEVER substitute components when loading shotshells using this data. Substitution of different components could cause excessive or dangerous pressures, which could damage or destroy your firearm or cause serious personal injury or even death to the user and/or bystanders.

The format provides a convenient presentation of all components used for a given set of data. Loads are listed alphabetically by case type and then alphabetically by primer type with each set of data. In addition, each set of components is shown in even velocity increments corresponding to the old Dram equivalent velocities. This allows the shooter to choose loads similar to factory loadings.

After choosing an appropriate load, be sure to weigh actual charges thrown by the bushing or charge bar. No bushing or charge bar throws the exact charge as listed in the tables. Such changes occur because of small tolerances in bushing sizes, tolerances in bulk density of powder, and the way each loader is mounted and operated. It is important to verify these weights for safety and to insure getting the type load you want.

Since Hodgdon Powder Company has no control over variations in components, reloading tools or reloader's procedures, the individual is solely responsible for any changes in ballistics that may occur using this data.

**Damascus barreled shotguns should *NOT* be used with any powder due to their weak construction. Barrel rupture may result in injury or death to the shooter and/or bystanders.**

Lee

| BUSHING # | CLAYS | INTER | UNIV | HS6  | HS7  | H110° | TITWAD | TITEGROUP | LONGSHOT | LIL'GUN |
|-----------|-------|-------|------|------|------|-------|--------|-----------|----------|---------|
| .095      | 10.7  | 12.3  | 15.2 | 21.9 | 22.9 | 22.5  | 12.4   | 15.6      | 19.1     | 23.5    |
| .100      | 11.3  | 13.0  | 16.0 | 23.0 | 24.1 | 23.7  | 13.0   | 17.2      | 20.1     | 24.7    |
| .105      | 11.8  | 13.7  | 16.8 | 24.2 | 25.3 | 24.9  | 13.7   | 18.7      | 21.1     | 26.0    |
| .110      | 12.4  | 14.3  | 17.6 | 25.3 | 26.5 | 26.1  | 14.3   | 19.3      | 22.1     | 27.2    |
| .116      | 13.0  | 15.1  | 18.5 | 26.7 | 28.0 | 27.5  | 15.1   | 20.1      | 23.3     | 28.7    |
| .122      | 13.7  | 15.9  | 19.5 | 28.1 | 29.4 | 28.9  | 15.9   | 21.4      | 24.5     | 30.2    |
| .128      | 14.4  | 16.6  | 20.4 | 29.4 | 30.8 | 30.3  | 16.7   | 22.7      | 25.7     | 31.7    |
| .134      | 15.0  | 17.5  | 21.4 | 30.8 | 32.3 | 31.8  | 17.5   | 24.0      | 26.9     | 33.1    |
| .141      | 15.8  | 18.4  | 22.5 | 32.4 | 34.0 | 33.4  | 18.4   | 25.6      | 28.3     | 34.9    |
| .148      | 16.6  | 19.3  | 23.6 | 34.0 | 35.7 | 35.1  | 19.3   |           | 29.8     | 36.5    |
| .151      | 16.7  | 19.6  | 24.0 |      |      |       | 19.7   |           | 30.4     | 37.2    |
| .155      | 17.3  | 20.1  | 24.7 | 35.7 | 37.4 | 36.7  | 20.4   |           | 31.1     | 38.2    |
| .163      | 18.2  | 21.1  | 25.9 | 37.5 | 39.3 | 38.6  | 21.4   |           | 32.7     | 40.2    |
| .171      | 19.1  | 22.0  | 27.1 | 39.3 | 41.2 | 40.5  | 22.5   |           | 34.3     | 42.1    |
| .180      | 20.1  | 23.1  | 28.5 | 41.4 | 43.4 | 42.7  | 23.6   |           | 36.1     | 44.4    |
| .189      | 21.2  | 24.1  | 29.9 | 43.5 | 45.6 | 44.8  |        |           | 37.9     | 46.6    |
| .198      | 22.1  | 25.2  | 31.3 | 45.5 | 47.7 | 46.9  | 26.0   |           | 39.7     | 48.8    |

Mec

| BUSHING # | CLAYS | INTER | UNIV | HS6  | HS7  | H110° | TITWAD | LIL'GUN | LGSH | TITEGROUP |
|-----------|-------|-------|------|------|------|-------|--------|---------|------|-----------|
| 7         |       |       |      |      |      |       |        | 11.9    |      |           |
| 8         |       |       |      |      |      |       |        | 12.5    |      |           |
| 9         |       |       |      |      |      |       |        | 12.9    |      |           |
| 10        |       |       |      |      |      | 13.5  |        | 13.4    | 11.0 |           |
| 11        |       |       |      |      |      | 14.4  |        |         | 11.7 |           |
| 12        |       |       |      |      |      | 15.4  |        |         | 12.4 |           |
| A12       |       |       |      | 15.5 |      | 16.4  |        |         | 13.2 |           |
| 13        |       |       |      | 16.1 | 16.6 | 17.0  |        |         | 13.9 |           |
| 14        |       |       |      | 17.9 | 18.4 |       |        |         | 15.4 | 13.8      |
| 15        |       |       | 12.0 | 18.8 | 19.3 |       |        |         | 16.1 | 14.5      |
| 16        |       | 10.8  | 12.9 | 19.8 | 20.4 |       |        |         | 17.0 | 15.4      |
| 17        |       | 11.4  | 13.5 | 20.7 | 21.3 |       |        |         | 17.8 | 16.2      |
| 18        |       | 11.8  | 14.0 | 21.6 | 22.3 |       |        |         | 18.7 | 17.1      |
| 19        |       | 12.3  | 14.6 | 22.6 | 23.2 |       |        |         | 19.5 | 18.1      |
| 20        |       | 12.9  | 15.5 | 23.7 | 24.4 |       | 13.3   |         | 20.3 | 19.0      |
| 21        |       | 13.3  | 16.0 | 24.7 | 25.4 |       | 13.9   |         | 21.2 | 19.7      |
| 22        |       | 14.3  | 16.8 | 25.8 | 26.6 |       | 14.5   |         | 22.1 | 20.2      |
| 23        |       | 14.6  | 17.4 | 26.8 | 27.7 |       | 15.2   |         | 23.1 | 21.1      |
| 24        |       | 15.5  | 18.3 | 27.9 | 28.9 |       | 15.8   |         | 24.0 | 21.9      |
| 25        |       | 16.0  | 18.9 | 28.9 | 29.9 |       | 16.2   |         | 24.8 | 22.7      |
| 26        |       | 16.6  | 19.1 | 30.3 | 31.2 |       | 16.9   |         | 25.9 | 23.7      |
| 27        | 14.6  | 17.1  | 20.2 | 31.2 | 32.3 |       | 17.6   |         | 26.9 | 24.7      |
| 28        | 15.2  | 17.7  | 21.1 | 32.6 | 33.6 |       | 18.3   |         | 28.0 | 25.8      |
| 29        | 15.9  | 18.3  | 21.7 | 33.6 | 34.7 |       | 19.0   |         | 29.0 |           |
| 30        | 16.3  | 19.1  | 22.7 | 35.0 | 36.2 |       | 19.7   |         | 30.1 |           |
| 31        | 16.9  | 19.9  | 23.4 | 36.2 | 37.4 |       | 20.4   |         | 31.1 |           |
| 32        | 17.5  | 20.6  | 24.4 | 37.8 | 38.9 |       | 21.4   |         | 32.2 |           |
| 33        | 18.2  | 21.2  | 25.2 | 39.0 | 40.1 |       | 22.2   |         | 33.3 |           |
| 34        | 18.9  | 21.9  | 26.0 | 40.4 | 41.5 |       | 23.0   |         | 34.5 |           |
| 35        | 19.4  | 22.6  | 26.7 | 41.1 | 42.4 |       | 23.4   |         | 35.6 |           |
| 36        | 20.1  | 23.4  | 27.6 | 43.0 | 44.4 |       | 24.0   |         | 36.7 |           |
| 37        | 20.7  | 24.2  | 28.7 | 44.4 | 45.7 |       | 25.3   |         | 38.0 |           |
| 38        | 21.4  | 25.1  | 29.7 | 46.2 | 47.4 |       |        |         | 39.3 |           |
| 38A       | 22.2  | 26.0  |      |      |      |       |        |         | 40.6 |           |
| 39        | 22.8  | 26.9  |      | 47.6 | 50.3 |       |        |         | 42.0 |           |
| 39A       |       |       |      |      |      |       |        |         | 43.1 |           |
| 40        |       |       |      |      |      |       |        |         | 44.4 |           |
| 41        |       |       |      |      |      |       |        |         | 47.3 |           |
| 41A       |       |       |      |      |      |       |        |         | 48.8 |           |
| 42        |       |       |      |      |      |       |        |         | 50.2 |           |
| 42A       |       |       |      |      |      |       |        |         | 51.5 |           |
| 43        |       |       |      |      |      |       |        |         | 53.0 |           |

INTERNATIONAL - INTER  
 UNIVERSAL - UNIV  
 LONGSHOT - LGSH

# Hornady/ Spolar

| GRS  | CLAYS | INTER | UNIV | BUSHING NUMBERS |     |       |        | LIL'GUN | LGSH | TITEGROUP |
|------|-------|-------|------|-----------------|-----|-------|--------|---------|------|-----------|
|      |       |       |      | HS6             | HS7 | H110° | TITWAD |         |      |           |
| 11.0 |       |       | 333  |                 |     |       |        | 250     |      |           |
| 12.0 |       |       | 348  |                 |     |       |        | 259     |      |           |
| 13.0 |       |       | 363  | 330             |     | 256   |        | 266     |      |           |
| 13.5 |       |       |      |                 |     |       |        |         | 300  |           |
| 14.0 |       | 375   | 342  |                 |     | 266   |        |         |      | 318       |
| 14.7 |       |       |      |                 |     |       |        |         |      | 324       |
| 15.0 |       | 390   | 354  |                 |     |       | 384    | 309     |      |           |
| 16.0 | 429   | 402   | 366  |                 |     |       | 396    | 318     | 330  |           |
| 16.5 | 435   | 408   | 372  |                 |     |       | 402    | 327     | 336  |           |
| 17.0 | 441   | 414   | 378  | 300             |     |       | 408    | 330     | 342  |           |
| 17.4 | 447   | 417   | 384  |                 |     |       | 414    | 336     | 345  |           |
| 18.0 | 456   | 423   | 390  | 309             |     |       | 420    | 339     | 351  |           |
| 18.5 | 462   | 429   | 393  |                 |     |       | 426    | 345     | 357  |           |
| 19.0 | 468   | 435   | 402  | 318             | 318 |       | 432    | 348     | 360  |           |
| 19.4 | 474   | 438   | 405  |                 |     |       | 435    | 354     | 363  |           |
| 20.0 | 483   | 447   | 411  | 327             | 330 |       | 441    | 357     | 369  |           |
| 20.6 | 489   | 453   | 417  |                 |     |       | 450    | 363     | 375  |           |
| 21.0 | 495   | 459   | 420  | 336             | 339 |       | 453    | 366     | 378  |           |
| 21.5 | 501   | 465   | 423  |                 |     |       | 459    | 369     | 381  |           |
| 22.0 | 507   | 471   | 429  | 345             | 348 |       | 462    | 372     | 387  |           |
| 22.5 |       | 477   | 432  |                 |     |       | 468    | 378     | 390  |           |
| 23.0 |       | 483   | 438  | 351             | 357 |       | 474    | 381     | 396  |           |
| 23.5 |       | 489   | 441  |                 |     |       |        | 384     | 399  |           |
| 24.0 |       | 495   | 447  | 360             | 363 |       | 486    | 390     | 405  |           |
| 24.5 |       | 501   | 450  |                 |     |       | 489    | 393     |      |           |
| 25.0 |       | 507   | 456  | 366             | 369 |       | 492    | 396     |      |           |
| 26.0 |       |       | 468  | 375             | 378 |       |        |         | 405  |           |
| 27.0 |       |       | 480  | 381             | 384 |       |        |         | 414  |           |
| 28.0 |       |       | 489  | 387             | 390 |       |        |         | 423  |           |
| 29.0 |       |       | 501  | 393             | 396 |       |        |         | 429  |           |
| 30.0 |       |       |      | 402             | 405 |       |        |         | 435  |           |
| 31.0 |       |       |      | 408             | 411 |       |        |         | 444  |           |
| 32.0 |       |       |      | 414             | 417 |       |        |         | 450  |           |
| 33.0 |       |       |      | 423             | 423 |       |        |         | 459  |           |
| 34.0 |       |       |      | 429             | 429 |       |        |         | 465  |           |
| 35.0 |       |       |      | 435             | 438 |       | 471    |         | 471  |           |
| 36.0 |       |       |      | 441             | 444 |       |        |         | 480  |           |
| 37.0 |       |       |      | 444             | 450 |       |        |         | 486  |           |
| 38.0 |       |       |      | 450             |     |       |        |         | 492  |           |
| 39.0 |       |       |      |                 |     |       |        |         | 498  |           |

# Ponsness Warren

| BUSHING # | CLAYS | INTER | UNIV | HS6  | HS7  | H110° | TITWAD | LIL'GUN | LGSH | TITEGROUP |
|-----------|-------|-------|------|------|------|-------|--------|---------|------|-----------|
|           |       |       |      |      |      |       |        |         |      |           |
| 2AX       |       |       |      |      |      |       |        | 12.7    |      |           |
| 3AX       |       |       |      |      |      |       |        | 13.1    |      |           |
| 1A        |       |       |      |      |      | 13.7  |        |         |      |           |
| 2A        |       |       |      |      |      | 14.8  |        |         |      |           |
| 3A        |       |       |      | 15.3 |      | 15.6  |        |         | 13.0 |           |
| A         |       |       |      | 16.8 | 17.1 | 17.5  |        |         | 15.0 |           |
| B         |       |       |      | 17.6 | 18.2 |       |        |         | 15.5 | 14.5      |
| C         |       |       |      | 18.5 | 18.8 |       |        |         | 16.5 | 15.0      |
| C1        |       |       | 12.5 | 18.5 | 18.8 |       |        |         | 17.0 | 16.0      |
| D         |       |       | 13.0 | 19.6 | 20.1 |       |        |         | 17.3 | 16.3      |
| D1        |       |       | 13.2 | 20.4 | 21.0 |       |        |         | 18.2 | 17.0      |
| E         |       |       | 11.7 | 21.3 | 22.4 |       |        |         | 20.7 | 19.4      |
| E1        |       | 11.7  | 14.0 | 21.3 | 22.4 |       |        |         | 21.6 | 20.0      |
| E2        |       | 13.1  | 15.7 | 23.5 | 24.2 |       |        |         | 22.8 | 21.3      |
| F         |       | 13.7  | 16.2 | 24.0 | 24.7 |       |        |         | 24.2 | 22.7      |
| F1        |       | 14.4  | 17.2 | 26.1 | 26.5 |       | 14.7   |         | 25.3 | 23.5      |
| F2        |       | 15.2  | 18.1 | 27.5 | 28.5 |       | 15.6   |         | 26.8 | 24.7      |
| F6        |       | 15.8  | 18.3 | 28.3 | 29.3 |       | 15.8   |         | 27.7 | 25.1      |
| G         |       |       |      |      |      |       | 16.4   |         | 28.8 | 26.8      |
| G1        |       |       |      |      |      |       |        |         | 29.9 | 27.1      |
| H         |       |       |      |      |      |       |        |         | 30.0 | 29.0      |
| I         |       |       |      |      |      |       |        |         | 31.2 | 30.0      |
| J         |       |       |      |      |      |       |        |         | 32.0 | 31.2      |
| J1        |       |       |      |      |      |       |        |         | 32.5 | 32.0      |
| K         |       |       |      |      |      |       |        |         | 33.4 | 32.5      |
| L         |       |       |      |      |      |       |        |         | 34.8 | 33.4      |
| M         |       |       |      |      |      |       |        |         | 35.5 | 34.8      |
| N         |       |       |      |      |      |       |        |         | 37.1 | 35.5      |
| O         |       |       |      |      |      |       |        |         | 38.8 | 37.1      |
| P         |       |       |      |      |      |       |        |         | 39.0 | 38.8      |
| Q         |       |       |      |      |      |       |        |         | 41.1 | 39.0      |
| R         |       |       |      |      |      |       |        |         | 42.8 | 41.1      |
| S         |       |       |      |      |      |       |        |         | 44.1 | 42.8      |
| T         |       |       |      |      |      |       |        |         | 45.4 | 44.1      |

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LONGSHOT - LGSH

The following chart shows wads that may be substituted for current popular models as listed in the ensuing data.

**WAA12:** WT12 Winchester, CB01118,  
CB1118-12, Black Magic, Blue Duster  
**WAA12SL:** CB1100-12, Green Duster,  
WAA12L: (in 7/8 oz. loads only)CB0178-12  
**Federal 12SO:** CB2100-12  
**Federal 12S3:** CB2118-0-12  
**Remington Fig. 8:** CB3118-12A

**Windjammer:** CB4118-12  
**WAA20:** CB1078-20, Duster 20  
**WAA28:** CB1034-28, Duster 28  
**WAA41:** CB1050-41, Duster 410  
**Federal 410SC:** CB1050-41  
**Remington SP410:** CB1050-41  
**WAA12R:** CB1138-12  
**WAA12F114:** CB1114-12

**Primer Substitution:** The Nobel Sport 209 primer may be safely substituted wherever the Winchester 209 primer is shown.

## Notes on Recoil

In physics we learned that for every force there is an equal and opposite force. In a firearm, the gases generated by burning powder push the ejecta (shot and wad) down the barrel and in turn push the shotgun in the opposite direction creating what we call recoil. According to physics, the momentum of a free recoiling firearm is equal and opposite in direction to the momentum of the ejecta and powder charge. The formula for free recoil of a firearm is:

$$\text{Recoil Energy in ft. lbs.} = \frac{(Bw Mv + 4700 Pw)^2}{64.348 Gw}$$

Where Gw = the weight of the gun in pounds  
Bw = weight of the ejecta (shot and wad) in pounds  
Pw = powder weight in pounds  
Mv = muzzle velocity in feet per second

Example: Our shooter has an 8 lb. target gun with a load using 18.0 grs. of Clays, a wad weighing 33.0 gr., shot charge of 1 1/8 oz. and giving 1200 f/s muzzle velocity. First, we must convert the ejecta weight to lbs. (1 1/8 oz. = 492.0 gr.) Dividing grains by 7000 converts to pounds.

$$Gw = 8 \text{ lb.}$$

$$Bw = \frac{492.0 + 33.0}{7000} = \frac{525}{7000} = .075 \text{ lb.}$$

$$Pw = \frac{18}{7000} = .003 \text{ lb.}$$

$$Mv = 1200 \text{ ft/sec}$$

Substituting the numbers in the formula we find the

$$\text{Recoil energy of the shooters load} = \frac{[(.075 \times 1200) + (4700 \times .003)]^2}{64.348 \times 8} = 21.05 \text{ ft/lbs}$$

Unfortunately, too many shooters think that pressure has an effect on recoil. In truth, it doesn't. It is not included in the formula for calculating recoil as noted in our example. However, there are factors that effect our perception of recoil. A major factor is muzzle blast. Clean burning powders help limit muzzle blast, are quieter, and therefore seem lower in recoil.

Some people think slow burning powders produce less recoil. What they are perceiving is the longer time it takes the powder to reach peak pressure, which gives the same recoil as a faster burning powder, just over a longer period of time. Others like the faster burning powders which peak quicker, although still the same recoil, just a shorter period of recoil. Perception can be everything to a shooter, so he should shoot what he "feels" is the most comfortable. That is why Hodgdon has a complete range of powders to cover all perceptions and needs.

The only real way to lessen recoil is to lower velocities, or lessen shot charge, or both.

## Shooters!



Guarantee the future of shooting by educating tomorrow's handloaders. Hodgdon Powder supports the NRA Foundation's Handloading Education Endowment Fund—you can too!  
Contact: Executive Director, The NRA Foundation, 11250 Waples Mill Road, Fairfax, VA 22030



# SHOT SHELL data

| SHOT  | POWDER   | PRIMER    | WAD                                   | CHARGE/PRESSURE*     |                      |
|---|----------|-----------|---------------------------------------|----------------------|----------------------|
| Velocity is measured in feet per second (fps). Pressure is measured in Lead Units of Pressure (LUP) or in Pounds per Square Inch (PSI). |          |           |                                       |                      |                      |
| <b>10 GA., 3 1/2", FEDERAL PLASTIC SHELL WITH PAPER BASEWAD</b>   |          |           |                                       |                      |                      |
| <b>1165 fps</b>   |          |           |                                       |                      |                      |
| 2 oz  | HS-6     | CCI 209M  | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 40.0 gr / 9,900 PSI  |                      |
| 2 oz  | HS-7     | CCI 209M  | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 43.0 gr / 10,200 PSI |                      |
| <b>1250 fps</b> <b>1300 fps</b>   |          |           |                                       |                      |                      |
| 2 oz  | Longshot | CCI209M   | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 39.4 gr / 9,600 PSI  | —                    |
| 2 oz  | Longshot | Fed. 209A | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 40.5 gr / 9,900 PSI  | 41.2 gr / 11,000 PSI |
| <b>1165 fps</b>   |          |           |                                       |                      |                      |
| 2 1/4 oz  | HS-7     | Win. 209  | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 40.0 gr / 10,300 PSI |                      |
| <b>1250 fps</b>   |          |           |                                       |                      |                      |
| 2 1/4 oz  | Longshot | CCI209M   | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 33.0 gr / 10,800 PSI |                      |
| 2 1/4 oz  | Longshot | Fed. 209A | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 33.0 gr / 10,500 PSI |                      |
| 2 1/4 oz  | Longshot | Rem. 209P | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 34.0 gr / 10,300 PSI |                      |
| <b>10 GA., 3 1/2", REMINGTON PLASTIC SHELL WITH YELLOW PLASTIC BASEWAD</b>  |          |           |                                       |                      |                      |
| <b>1165 fps</b>   |          |           |                                       |                      |                      |
| 2 oz  | HS-6     | CCI 209M  | Rem. SP10 +<br>3-20 ga.<br>.135" Card | 40.0 gr / 11,000 PSI |                      |
| 2 oz  | HS-7     | CCI 209M  | Rem. SP10 +<br>3-20 ga.<br>.135" Card | 43.0 gr / 11,000 PSI |                      |
| <b>1200 fps</b>   |          |           |                                       |                      |                      |
| 2 oz  | Longshot | Fed. 209A | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 36.5 gr / 11,000 PSI |                      |
| 2 oz  | Longshot | Rem. 209P | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 37.5 gr / 11,000 PSI |                      |
| 2 oz  | Longshot | Win. 209  | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 38.0 gr / 10,700 PSI |                      |
| <b>1165 fps</b>   |          |           |                                       |                      |                      |
| 2 1/4 oz  | HS-7     | Win. 209  | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 40.0 gr / 10,800 PSI |                      |
| <b>1250 fps</b>   |          |           |                                       |                      |                      |
| 2 1/4 oz  | Longshot | CCI209M   | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 33.0 gr / 11,000 PSI |                      |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |
|------|--------|--------|-----|-----------------|
|------|--------|--------|-----|-----------------|

## 10 GA., 3 1/2", REMINGTON PLASTIC SHELL WITH YELLOW PLASTIC BASEWAD CONT.

| 1250 fps |          |           |                                       |                      |
|----------|----------|-----------|---------------------------------------|----------------------|
| 2 1/4 oz | Longshot | Fed. 209A | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 32.0 gr / 11,000 PSI |
| 2 1/4 oz | Longshot | Rem. 209P | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 33.5 gr / 10,800 PSI |

## 10 GA., 3 1/2", WINCHESTER POLYFORMED PLASTIC SHELL W/ PLASTIC BASEWAD

| 1165 fps |      |          |                                       |                      |
|----------|------|----------|---------------------------------------|----------------------|
| 2 oz     | HS-6 | CCI 209M | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 40.0 gr / 10,700 PSI |
| 2 oz     | HS-7 | CCI 209M | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 42.5 gr / 10,600 PSI |

| 1250 fps |          |           |                                       |                      |
|----------|----------|-----------|---------------------------------------|----------------------|
| 2 oz     | Longshot | CCI209M   | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 37.0 gr / 10,900 PSI |
| 2 oz     | Longshot | Fed. 209A | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 37.0 gr / 11,000 PSI |
| 2 oz     | Longshot | Win. 209  | Rem. SP10 +<br>2-20 ga.<br>.135" Card | 38.6 gr / 10,200 PSI |

| 1165 fps |      |          |                                       |                      |
|----------|------|----------|---------------------------------------|----------------------|
| 2 1/4 oz | HS-7 | CCI 209M | Rem. SP10 +<br>1-20 ga.<br>.135" Card | 40.0 gr / 11,000 PSI |

| 1200 fps |          |           |           |                      |
|----------|----------|-----------|-----------|----------------------|
| 2 1/4 oz | Longshot | CCI209M   | Rem. SP10 | 33.5 gr / 11,000 PSI |
| 2 1/4 oz | Longshot | Fed. 209A | Rem. SP10 | 31.5 gr / 10,800 PSI |
| 2 1/4 oz | Longshot | Win. 209  | Rem. SP10 | 37.5 gr / 10,900 PSI |

## 12 GA., 2 3/4", CHEDDITE PLASTIC SHELLS

|          |            |           |             | 1090 fps            | 1145 fps             | 1200 fps             | 1235 fps             |
|----------|------------|-----------|-------------|---------------------|----------------------|----------------------|----------------------|
| 1 1/8 oz | Titewad    | Ched. 209 | Fed. 12S3   | 16.5 gr / 7,400 PSI | 17.0 gr / 9,000 PSI  | 18.0 gr / 10,100 PSI | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | Fio. TL1    | 16.0 gr / 9,100 PSI | 17.0 gr / 10,400 PSI | 18.0 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | Rem. Fig. 8 | —                   | 16.5 gr / 8,800 PSI  | 18.0 gr / 10,400 PSI | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | WAA12SL     | 16.5 gr / 7,300 PSI | 17.0 gr / 8,500 PSI  | 18.0 gr / 9,800 PSI  | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | Fed. 12S3   | 16.3 gr / 7,700 PSI | 17.5 gr / 8,500 PSI  | 18.7 gr / 9,700 PSI  | 20.5 gr / 11,400 PSI |
| 1 1/8 oz | Clays      | Ched. 209 | WAA12       | 16.3 gr / 7,700 PSI | 17.3 gr / 8,500 PSI  | 18.5 gr / 10,000 PSI | 20.5 gr / 11,500 PSI |
| 1 1/8 oz | Clays      | Fio 616   | Fio. TL1    | 16.0 gr / 7,500 PSI | 17.0 gr / 8,000 PSI  | 19.0 gr / 11,300 PSI | —                    |
| 1 1/8 oz | Internat'l | Ched. 209 | Fed. 12S3   | 19.5 gr / 7,200 PSI | 20.0 gr / 8,400 PSI  | 21.0 gr / 8,500 PSI  | —                    |
| 1 1/8 oz | Internat'l | Ched. 209 | WAA12       | 19.0 gr / 7,300 PSI | 19.5 gr / 7,800 PSI  | 20.5 gr / 8,400 PSI  | 21.5 gr / 9,900 PSI  |
| 1 1/8 oz | Internat'l | Fio 616   | Fio. TL1    | —                   | 19.0 gr / 7,200 PSI  | 20.5 gr / 8,800 PSI  | 22.0 gr / 10,000 PSI |
|          |            |           |             | 1420 fps            | 1475 fps             | 1530 fps             | 1585 fps             |
| 1 1/8 oz | Longshot   | Ched. 209 | Fed. 12S3   | 33.6 gr / 7,100 PSI | 35.2 gr / 8,200 PSI  | 36.8 gr / 9,200 PSI  | 38.4 gr / 10,300 PSI |
| 1 1/8 oz | Longshot   | Ched. 209 | Fio. TL1    | 33.7 gr / 7,900 PSI | 35.2 gr / 9,300 PSI  | 36.6 gr / 9,800 PSI  | 38.0 gr / 10,700 PSI |
| 1 1/8 oz | Longshot   | Ched. 209 | Rem. R12L   | 32.9 gr / 7,600 PSI | 34.6 gr / 8,400 PSI  | 36.4 gr / 9,300 PSI  | 38.1 gr / 10,100 PSI |
| 1 1/8 oz | Longshot   | Ched. 209 | Windjammer  | 34.7 gr / 7,400 PSI | 36.1 gr / 8,000 PSI  | 37.5 gr / 8,700 PSI  | 38.9 gr / 9,400 PSI  |

# SHOT SHELL data

| SHOT   | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE     |                      |                      |                      |
|--|------------|-----------|-------------|---------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", CHEDDITE PLASTIC SHELLS CONT.</b>     |            |           |             |                     |                      |                      |                      |
|  |            |           |             | 1330 fps            | 1385 fps             | 1440 fps             | 1495 fps             |
| 1 1/4 oz   | Longshot   | Ched. 209 | Rem. R12L   | 30.3 gr / 7,700 PSI | 32.2 gr / 8,600 PSI  | 34.0 gr / 9,500 PSI  | —                    |
| 1 1/4 oz   | Longshot   | Ched. 209 | WAA12F114   | 29.8 gr / 8,000 PSI | 31.7 gr / 8,800 PSI  | 33.6 gr / 9,700 PSI  | —                    |
|  |            |           |             | 1185 fps            | 1240 fps             | 1295 fps             | 1350 fps             |
| 1 3/8 oz   | Longshot   | Ched. 209 | Fed. 12S4   | 25.6 gr / 7,800 PSI | 27.2 gr / 9,200 PSI  | 28.7 gr / 10,400 PSI | 30.5 gr / 11,500 PSI |
| 1 3/8 oz   | Longshot   | Ched. 209 | Rem. R12L   | —                   | 28.1 gr / 8,400 PSI  | 29.5 gr / 9,500 PSI  | 30.9 gr / 10,500 PSI |
| 1 3/8 oz   | Longshot   | Ched. 209 | WAA12F114   | 25.5 gr / 7,700 PSI | 27.2 gr / 8,900 PSI  | 28.8 gr / 10,100 PSI | 30.4 gr / 11,300 PSI |
|  |            |           |             | 1205 fps            | 1260 fps             | 1315 fps             |                      |
| 1 1/2 oz   | Longshot   | Ched. 209 | Fed. 12S4   | 27.0 gr / 9,800 PSI | —                    | —                    | —                    |
| 1 1/2 oz   | Longshot   | Ched. 209 | WAA12R      | 26.6 gr / 9,100 PSI | 28.6 gr / 10,100 PSI | 30.6 gr / 11,100 PSI | —                    |
| <b>12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS</b> |            |           |             |                     |                      |                      |                      |
|  |            |           |             | 1250 fps            | 1300 fps             | 1350 fps             | 1400 fps             |
| 7/8 oz   | Titewad    | CCI 209SC | WAA12L      | 18.1 gr / 7,100 PSI | 19.0 gr / 8,100 PSI  | 20.3 gr / 8,700 PSI  | 21.4 gr / 9,900 PSI  |
| 7/8 oz   | Titewad    | Fed. 209A | Fed. 12S0   | 19.5 gr / 6,400 PSI | 20.5 gr / 7,500 PSI  | 21.6 gr / 8,800 PSI  | 22.7 gr / 9,800 PSI  |
| 7/8 oz   | Titewad    | Win. 209  | WAA12L      | 18.4 gr / 6,800 PSI | 19.3 gr / 7,400 PSI  | 20.6 gr / 8,700 PSI  | 21.9 gr / 9,300 PSI  |
| 7/8 oz   | Clays      | CCI 209SC | WAA12L      | 19.0 gr / 6,700 PSI | 20.5 gr / 8,000 PSI  | 21.7 gr / 9,400 PSI  | 22.5 gr / 11,300 PSI |
| 7/8 oz   | Clays      | Fed. 209A | WAA12L      | 19.2 gr / 7,400 PSI | 20.0 gr / 8,000 PSI  | 21.5 gr / 9,700 PSI  | 22.5 gr / 11,500 PSI |
| 7/8 oz   | Clays      | Win. 209  | WAA12L      | 19.0 gr / 7,000 PSI | 20.3 gr / 8,000 PSI  | 22.0 gr / 8,800 PSI  | 23.0 gr / 10,500 PSI |
|  |            |           |             | 1300 fps            | 1350 fps             | 1400 fps             | 1450 fps             |
| 7/8 oz   | Internat'l | CCI 209SC | WAA12L      | 22.7 gr / 7,300 PSI | 24.0 gr / 8,200 PSI  | 25.0 gr / 9,400 PSI  | 25.5 gr / 10,200 PSI |
| 7/8 oz   | Internat'l | Fed. 209A | WAA12L      | 22.3 gr / 7,500 PSI | 23.2 gr / 8,300 PSI  | 24.5 gr / 9,300 PSI  | 25.7 gr / 10,000 PSI |
| 7/8 oz   | Internat'l | Win. 209  | WAA12L      | 23.5 gr / 7,500 PSI | 24.3 gr / 7,900 PSI  | 25.5 gr / 9,100 PSI  | 27.0 gr / 10,600 PSI |
|  |            |           |             | 1180 fps            | 1235 fps             | 1290 fps             | 1345 fps             |
| 1 oz   | Titewad    | CCI 209   | WAA12L      | 17.2 gr / 7,900 PSI | 18.5 gr / 9,200 PSI  | 19.8 gr / 10,400 PSI | 21.1 gr / 11,300 PSI |
| 1 oz   | Titewad    | CCI 209SC | Purple PC   | —                   | 18.7 gr / 8,100 PSI  | 20.2 gr / 9,200 PSI  | 21.7 gr / 10,500 PSI |
| 1 oz   | Titewad    | Fed. 209A | Fed. 12S0   | 17.8 gr / 7,100 PSI | 19.3 gr / 8,500 PSI  | 20.8 gr / 9,600 PSI  | 21.7 gr / 11,300 PSI |
| 1 oz   | Titewad    | Fed. 209A | Rem. TGT 12 | 17.0 gr / 7,500 PSI | 18.4 gr / 8,700 PSI  | 19.7 gr / 9,800 PSI  | 21.0 gr / 11,000 PSI |
| 1 oz   | Titewad    | Win. 209  | Fed. 12S0   | 18.0 gr / 7,100 PSI | 19.1 gr / 8,600 PSI  | 20.3 gr / 10,300 PSI | 22.0 gr / 11,300 PSI |
| 1 oz   | Titewad    | Win. 209  | WAA12L      | 17.4 gr / 7,500 PSI | 18.7 gr / 8,400 PSI  | 20.2 gr / 9,700 PSI  | 21.7 gr / 11,300 PSI |
|  |            |           |             | 1125 fps            | 1180 fps             | 1235 fps             | 1290 fps             |
| 1 oz   | Clays      | CCI 209SC | Purple PC   | —                   | 18.0 gr / 6,600 PSI  | 19.0 gr / 8,000 PSI  | 20.0 gr / 9,300 PSI  |
| 1 oz   | Clays      | Fed. 209A | Fed. 12S0   | 16.8 gr / 6,700 PSI | 17.9 gr / 7,700 PSI  | 19.3 gr / 9,200 PSI  | 20.3 gr / 10,800 PSI |
| 1 oz   | Clays      | Rem. 209P | Rem. TGT 12 | 18.2 gr / 5,900 LUP | 19.2 gr / 6,300 LUP  | 20.2 gr / 6,800 LUP  | 21.2 gr / 7,300 LUP  |
| 1 oz   | Clays      | Win. 209  | WAA12SL     | 17.2 gr / 6,200 LUP | 18.2 gr / 7,000 LUP  | 19.1 gr / 7,600 LUP  | 20.0 gr / 8,300 LUP  |
|  |            |           |             | 1235 fps            | 1290 fps             | 1345 fps             | 1400 fps             |
| 1 oz   | Internat'l | CCI 209   | WAA12SL     | 21.5 gr / 7,300 PSI | 22.3 gr / 8,000 PSI  | 23.5 gr / 9,100 PSI  | 24.7 gr / 10,200 PSI |
| 1 oz   | Internat'l | Fed. 209A | Fed. 12S0   | 19.9 gr / 8,300 PSI | 21.3 gr / 9,900 PSI  | 22.5 gr / 11,200 PSI | —                    |
| 1 oz   | Internat'l | Fed. 209A | Purple PC   | 20.0 gr / 7,400 PSI | 21.4 gr / 8,600 PSI  | 22.7 gr / 9,700 PSI  | 24.1 gr / 10,300 PSI |
| 1 oz   | Internat'l | Fed. 209A | WAA12SL     | 19.7 gr / 7,700 PSI | 21.0 gr / 9,100 PSI  | 22.3 gr / 10,500 PSI | —                    |
| 1 oz   | Internat'l | Rem. 209P | Rem. TGT 12 | 20.8 gr / 7,200 PSI | 21.2 gr / 7,500 PSI  | 23.3 gr / 9,400 PSI  | 24.5 gr / 10,400 PSI |
| 1 oz   | Internat'l | Win. 209P | WAA12SL     | 20.5 gr / 7,200 PSI | 22.0 gr / 8,400 PSI  | 23.4 gr / 9,400 PSI  | 24.7 gr / 10,400 PSI |
|  |            |           |             | 1090 fps            | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz   | Titewad    | Ched. 209 | Fed. 12S3   | 15.4 gr / 9,100 PSI | 16.7 gr / 10,300 PSI | —                    | —                    |
| 1 1/8 oz   | Titewad    | Ched. 209 | Rem. Fig. 8 | 15.4 gr / 8,800 PSI | 16.7 gr / 9,900 PSI  | 18.1 gr / 11,100 PSI | —                    |
| 1 1/8 oz   | Titewad    | Ched. 209 | Windjammer  | 16.0 gr / 8,100 PSI | 17.2 gr / 9,400 PSI  | 18.5 gr / 10,900 PSI | —                    |

| SHOT   | POWDER     | PRIMER    | WAD            | CHARGE/PRESSURE     |                      |                      |                      |
|--|------------|-----------|----------------|---------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS CONT.</b> |            |           |                |                     |                      |                      |                      |
|  |            |           |                | <b>1090 fps</b>     | <b>1145 fps</b>      | <b>1200 fps</b>      | <b>1255 fps</b>      |
| 1 1/8 oz   | Titewad    | CCI 209M  | G/BP CS12      | 14.9 gr / 9,800 PSI | 15.9 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz   | Titewad    | Fed. 209A | Fed. 12S3      | 16.3 gr / 8,300 PSI | 17.3 gr / 8,900 PSI  | 18.8 gr / 10,300 PSI | —                    |
| 1 1/8 oz   | Titewad    | Fed. 209A | Rem. Fig. 8    | 15.8 gr / 8,000 PSI | 16.9 gr / 9,600 PSI  | 18.1 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Titewad    | Fed. 209A | WAA12          | 15.4 gr / 8,200 PSI | 16.8 gr / 9,800 PSI  | 18.0 gr / 11,100 PSI | —                    |
| 1 1/8 oz   | Titewad    | Fio. 616  | Fio. TL 1      | 15.7 gr / 8,900 PSI | 16.7 gr / 9,800 PSI  | 18.0 gr / 11,000 PSI | —                    |
|  |            |           |                | <b>1090 fps</b>     | <b>1145 fps</b>      | <b>1200 fps</b>      | <b>1255 fps</b>      |
| 1 1/8 oz   | Titewad    | Rem. 209P | Rem. Fig. 8    | 16.0 gr / 7,500 PSI | 17.0 gr / 8,600 PSI  | 18.0 gr / 9,500 PSI  | —                    |
| 1 1/8 oz   | Titewad    | Win. 209  | WAA12SL        | 16.5 gr / 7,900 PSI | 17.5 gr / 9,100 PSI  | 18.2 gr / 9,800 PSI  | —                    |
| 1 1/8 oz   | Clays      | Ched. 209 | Fed. 12S3      | 16.8 gr / 8,000 PSI | 18.0 gr / 9,500 PSI  | 19.2 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Clays      | Ched. 209 | Rem. Fig. 8    | 16.5 gr / 7,600 PSI | 17.9 gr / 9,000 PSI  | 19.3 gr / 10,500 PSI | —                    |
| 1 1/8 oz   | Clays      | Ched. 209 | Windjammer     | 16.9 gr / 7,000 PSI | 18.2 gr / 8,400 PSI  | 19.5 gr / 9,900 PSI  | 20.9 gr / 11,400 PSI |
| 1 1/8 oz   | Clays      | Fed. 209A | Fed. 12S3      | 16.8 gr / 7,900 PSI | 17.1 gr / 8,600 PSI  | 19.0 gr / 10,400 PSI | —                    |
| 1 1/8 oz   | Clays      | Fed. 209A | Rem. Fig. 8    | 17.0 gr / 7,400 PSI | 17.5 gr / 7,900 PSI  | 19.0 gr / 9,600 PSI  | —                    |
| 1 1/8 oz   | Clays      | Fed. 209A | WAA12          | 16.5 gr / 7,700 PSI | 17.0 gr / 8,100 PSI  | 18.5 gr / 10,300 PSI | —                    |
| 1 1/8 oz   | Clays      | Fed. 209A | Windjammer     | 16.5 gr / 7,400 PSI | 17.6 gr / 8,700 PSI  | 18.8 gr / 10,100 PSI | —                    |
| 1 1/8 oz   | Clays      | Rem. 209P | Red PC         | 17.5 gr / 6,500 LUP | 18.5 gr / 7,400 LUP  | 19.4 gr / 8,300 LUP  | —                    |
| 1 1/8 oz   | Clays      | Rem. 209P | Rem. Fig. 8    | 16.6 gr / 7,200 PSI | 17.8 gr / 8,600 PSI  | 18.9 gr / 9,900 PSI  | 20.1 gr / 11,300 PSI |
| 1 1/8 oz   | Clays      | Win. 209  | G/BP PISK      | 16.6 gr / 8,800 PSI | 17.7 gr / 10,100 PSI | 18.8 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Clays      | Win. 209  | Windjammer     | 17.3 gr / 6,300 LUP | 18.3 gr / 7,200 LUP  | 19.4 gr / 8,100 LUP  | —                    |
| 1 1/8 oz   | Internat'l | Ched. 209 | Fed. 12S3      | 18.2 gr / 7,300 PSI | 19.4 gr / 8,300 PSI  | 20.6 gr / 9,400 PSI  | 21.8 gr / 10,500 PSI |
| 1 1/8 oz   | Internat'l | Ched. 209 | Rem. Fig. 8    | 17.9 gr / 6,800 PSI | 19.3 gr / 7,900 PSI  | 21.0 gr / 9,300 PSI  | 22.0 gr / 10,100 PSI |
| 1 1/8 oz   | Internat'l | Ched. 209 | Windjammer     | 18.3 gr / 6,700 PSI | 19.5 gr / 7,800 PSI  | 20.8 gr / 9,000 PSI  | 22.0 gr / 10,000 PSI |
| 1 1/8 oz   | Internat'l | CCI 209M  | Rem. TGT 12    | 19.5 gr / 6,800 LUP | 20.0 gr / 7,000 LUP  | 20.6 gr / 7,800 LUP  | 22.5 gr / 8,600 LUP  |
| 1 1/8 oz   | Internat'l | CCI 209SC | Rem. TGT 12    | 19.0 gr / 6,200 PSI | 19.2 gr / 6,900 PSI  | 20.0 gr / 7,900 PSI  | 21.5 gr / 9,500 PSI  |
| 1 1/8 oz   | Internat'l | Fed. 209A | Fed. 12S3      | 18.5 gr / 7,000 PSI | 19.0 gr / 7,200 PSI  | 20.5 gr / 8,800 PSI  | 22.2 gr / 10,600 PSI |
| 1 1/8 oz   | Internat'l | Fed. 209A | WAA12          | —                   | 18.4 gr / 8,200 PSI  | 19.6 gr / 9,500 PSI  | 20.7 gr / 10,700 PSI |
| 1 1/8 oz   | Internat'l | Fed. 209A | Windjammer     | 19.0 gr / 6,200 PSI | 19.5 gr / 6,500 PSI  | 20.8 gr / 8,000 PSI  | 22.5 gr / 9,200 PSI  |
| 1 1/8 oz   | Internat'l | Fio. 616  | Fio. TL 1      | 19.2 gr / 6,800 LUP | 19.7 gr / 7,300 LUP  | 21.1 gr / 8,100 LUP  | 22.5 gr / 9,200 LUP  |
| 1 1/8 oz   | Internat'l | Rem. 209P | G/BP CS12      | —                   | 18.8 gr / 8,100 PSI  | 20.0 gr / 9,100 PSI  | 21.2 gr / 10,500 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | WAA12SL        | 19.1 gr / 6,600 LUP | 20.1 gr / 7,100 LUP  | 21.0 gr / 7,500 LUP  | 22.4 gr / 8,900 LUP  |
| 1 1/8 oz   | Internat'l | Win. 209  | Windjammer     | —                   | 19.5 gr / 7,000 PSI  | 20.8 gr / 8,000 PSI  | 22.2 gr / 9,000 PSI  |
|  |            |           |                | <b>1200 fps</b>     | <b>1255 fps</b>      | <b>1310 fps</b>      |                      |
| 1 1/8 oz   | Universal  | CCI 209   | Windjammer     | 25.2 gr / 7,300 PSI | 26.5 gr / 8,200 PSI  | 28.0 gr / 8,800 PSI  |                      |
| 1 1/8 oz   | Universal  | CCI 209SC | Hor. Versalife | 23.2 gr / 7,700 PSI | 24.5 gr / 8,600 PSI  | 25.5 gr / 9,600 PSI  |                      |
| 1 1/8 oz   | Universal  | CCI 209SC | Windjammer     | 24.5 gr / 7,300 LUP | 26.0 gr / 8,100 PSI  | 26.7 gr / 8,900 PSI  |                      |
| 1 1/8 oz   | Universal  | Fed. 209A | Fed. 12S3      | 23.0 gr / 8,700 PSI | 24.4 gr / 9,600 PSI  | 25.7 gr / 10,500 PSI |                      |
| 1 1/8 oz   | Universal  | Fio. 616  | Fio. TL 1      | 23.3 gr / 8,700 PSI | 24.2 gr / 9,500 PSI  | 26.0 gr / 10,100 PSI |                      |
| 1 1/8 oz   | Universal  | Win. 209  | Rem. Fig. 8    | 24.0 gr / 8,000 PSI | 25.0 gr / 8,700 PSI  | 26.8 gr / 9,500 PSI  |                      |
| 1 1/8 oz   | Universal  | Win. 209  | WAA12          | 23.2 gr / 8,800 PSI | 24.5 gr / 9,700 PSI  | 25.0 gr / 10,400 PSI |                      |
|  |            |           |                | <b>1420 fps</b>     | <b>1475 fps</b>      | <b>1530 fps</b>      | <b>1585 fps</b>      |
| 1 1/8 oz   | Longshot   | CCI 209M  | Fed. 12S3      | 32.2 gr / 8,400 PSI | 33.6 gr / 9,500 PSI  | 34.9 gr / 10,600 PSI | —                    |
| 1 1/8 oz   | Longshot   | CCI 209M  | Rem. Fig. 8    | 32.2 gr / 8,500 PSI | 33.8 gr / 9,400 PSI  | 35.5 gr / 10,400 PSI | 37.1 gr / 11,400 PSI |
| 1 1/8 oz   | Longshot   | CCI 209M  | WAA12          | 31.4 gr / 8,800 PSI | 33.2 gr / 9,500 PSI  | 35.0 gr / 10,300 PSI | 36.8 gr / 11,000 PSI |
| 1 1/8 oz   | Longshot   | Fed. 209A | Fed. 12S3      | 32.0 gr / 9,000 PSI | 33.3 gr / 10,000 PSI | 34.6 gr / 11,500 PSI | —                    |
| 1 1/8 oz   | Longshot   | Fed. 209A | Rem. Fig. 8    | 32.2 gr / 8,600 PSI | 33.6 gr / 9,500 PSI  | 35.0 gr / 10,500 PSI | 36.4 gr / 11,400 PSI |

| SHOT   | POWDER    | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|--|-----------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS CONT.</b> |           |           |             |                      |                      |                      |                      |
|  |           |           |             | <b>1420 fps</b>      | <b>1475 fps</b>      | <b>1530 fps</b>      | <b>1585 fps</b>      |
| 1 1/8 oz.  | Longshot  | Fed. 209A | WAA12       | 31.7 gr / 8,900 PSI  | 33.1 gr / 9,700 PSI  | 34.6 gr / 10,700 PSI | 36.0 gr / 11,500 PSI |
| 1 1/8 oz.  | Longshot  | Fed. 209A | Windjammer  | 32.3 gr / 8,200 PSI  | 33.9 gr / 9,200 PSI  | 35.5 gr / 10,200 PSI | 37.1 gr / 11,200 PSI |
| 1 1/8 oz.  | Longshot  | Rem. 209P | Fed. 12S3   | 32.9 gr / 8,400 PSI  | 34.1 gr / 9,300 PSI  | 35.3 gr / 10,200 PSI | —                    |
| 1 1/8 oz.  | Longshot  | Rem. 209P | Rem. Fig. 8 | 32.1 gr / 8,200 PSI  | 33.9 gr / 9,100 PSI  | 35.6 gr / 10,000 PSI | 37.4 gr / 10,900 PSI |
| 1 1/8 oz.  | Longshot  | Rem. 209P | WAA12       | 32.4 gr / 8,200 PSI  | 33.9 gr / 9,100 PSI  | 35.4 gr / 10,000 PSI | 36.9 gr / 10,900 PSI |
| 1 1/8 oz.  | Longshot  | Rem. 209P | Windjammer  | 32.9 gr / 7,900 PSI  | 34.4 gr / 8,800 PSI  | 35.9 gr / 9,600 PSI  | 37.5 gr / 10,500 PSI |
| 1 1/8 oz.  | Longshot  | Win. 209  | Fed. 12S3   | 34.2 gr / 7,100 PSI  | 35.5 gr / 8,200 PSI  | 36.8 gr / 9,400 PSI  | 38.1 gr / 10,600 PSI |
|  |           |           |             | <b>1420 fps</b>      | <b>1475 fps</b>      | <b>1530 fps</b>      | <b>1585</b>          |
| 1 1/8 oz.  | Longshot  | Win. 209  | Rem. Fig. 8 | 34.9 gr / 7,100 PSI  | 36.0 gr / 8,100 PSI  | 37.1 gr / 9,100 PSI  | 38.2 gr / 10,000 PSI |
| 1 1/8 oz.  | Longshot  | Win. 209  | WAA12       | 34.0 gr / 7,600 PSI  | 35.2 gr / 8,500 PSI  | 36.4 gr / 9,400 PSI  | 37.8 gr / 10,400 PSI |
| 1 1/8 oz.  | Longshot  | Win. 209  | Windjammer  | 35.0 gr / 7,100 PSI  | 36.2 gr / 8,000 PSI  | 37.4 gr / 8,900 PSI  | 38.5 gr / 10,100 PSI |
|  |           |           |             | <b>1220 fps</b>      | <b>1330 fps</b>      |                      |                      |
| 1 1/4 oz.  | Universal | CCI 209SC | Fed. 12S4   | 24.0 gr / 9,500 PSI  | —                    |                      |                      |
| 1 1/4 oz.  | Universal | CCI 209   | Fed. 12S4   | 25.0 gr / 10,100 PSI | —                    |                      |                      |
| 1 1/4 oz.  | Universal | Fed. 209A | Fed. 12S4   | 23.3 gr / 10,400 PSI | —                    |                      |                      |
| 1 1/4 oz.  | Universal | Fio. 616  | Rem. SP12   | 24.7 gr / 9,200 PSI  | —                    |                      |                      |
| 1 1/4 oz.  | Universal | Win. 209  | WAA12 F114  | 24.5 gr / 10,300 PSI | —                    |                      |                      |
| 1 1/4 oz.  | HS-6      | Win. 209  | WAA12F114   | 32.0 gr / 9,600 LUP  | 34.5 gr / 10,100 LUP |                      |                      |
|  |           |           |             | <b>1330 fps</b>      | <b>1385 fps</b>      | <b>1440 fps</b>      | <b>1495 fps</b>      |
| 1 1/4 oz.  | Longshot  | CCI 209 M | Fed. 12S3   | 29.5 gr / 10,200 PSI | 30.6 gr / 10,900 PSI | —                    | —                    |
| 1 1/4 oz.  | Longshot  | CCI 209M  | Rem. R12L   | 29.8 gr / 8,700 PSI  | 31.5 gr / 9,500 PSI  | 33.2 gr / 10,400 PSI | —                    |
| 1 1/4 oz.  | Longshot  | CCI 209M  | WAA12F114   | 29.2 gr / 9,000 PSI  | 30.6 gr / 9,900 PSI  | 32.0 gr / 10,900 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Fed. 209A | Fed. 12S4   | 28.4 gr / 9,800 PSI  | 30.2 gr / 10,800 PSI | —                    | —                    |
| 1 1/4 oz.  | Longshot  | Fed. 209A | Rem. R12L   | 29.2 gr / 9,400 PSI  | 30.7 gr / 10,400 PSI | 32.1 gr / 11,400 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Fed. 209A | WAA12F114   | 28.2 gr / 9,900 PSI  | 29.9 gr / 10,900 PSI | —                    | —                    |
| 1 1/4 oz.  | Longshot  | Rem. 209P | Fed. 12S4   | 28.4 gr / 9,400 PSI  | 30.1 gr / 10,300 PSI | 31.8 gr / 11,300 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Rem. 209P | Rem. R12L   | 29.1 gr / 8,800 PSI  | 31.1 gr / 9,700 PSI  | 33.0 gr / 10,500 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Rem. 209P | WAA12F114   | 28.3 gr / 9,200 PSI  | 30.3 gr / 10,100 PSI | 32.4 gr / 11,000 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Win. 209  | Fed. 12S4   | 29.7 gr / 8,000 PSI  | 31.3 gr / 9,300 PSI  | 32.9 gr / 10,600 PSI | —                    |
| 1 1/4 oz.  | Longshot  | Win. 209  | Rem. R12L   | 30.7 gr / 7,700 PSI  | 32.2 gr / 8,700 PSI  | 33.6 gr / 9,700 PSI  | 35.0 gr / 10,800 PSI |
| 1 1/4 oz.  | Longshot  | Win. 209  | WAA12F114   | —                    | 33.4 gr / 7,200 PSI  | 34.4 gr / 9,200 PSI  | 35.4 gr / 11,300 PSI |
|  |           |           |             | <b>1185 fps</b>      | <b>1240 fps</b>      | <b>1295 fps</b>      | <b>1350 fps</b>      |
| 1 3/8 oz.  | Longshot  | CCI 209 M | Fed. 12S4   | 23.8 gr / 9,500 PSI  | 25.4 gr / 10,100 PSI | 27.1 gr / 10,900 PSI | —                    |
| 1 3/8 oz.  | Longshot  | CCI 209 M | Rem. R12H   | 25.0 gr / 8,500 PSI  | 26.6 gr / 9,500 PSI  | 28.2 gr / 10,500 PSI | 29.8 gr / 11,500 PSI |
| 1 3/8 oz.  | Longshot  | CCI 209 M | WAA12F114   | 24. gr / 9,100 PSI   | 25.5 gr / 10,300 PSI | 27. gr / 11,400 PSI  | —                    |
| 1 3/8 oz.  | Longshot  | FED. 209A | Fed. 12S4   | 24.6 gr / 9,500 PSI  | 26.2 gr / 10,700 PSI | —                    | —                    |
| 1 3/8 oz.  | Longshot  | FED. 209A | Rem. R12H   | 25.7 gr / 8,600 PSI  | 27.3 gr / 9,500 PSI  | 29.0 gr / 10,400 PSI | —                    |
| 1 3/8 oz.  | Longshot  | FED. 209A | WAA12F114   | 24.6 gr / 9,300 PSI  | 26.3 gr / 10,300 PSI | 28.0 gr / 11,500 PSI | —                    |
| 1 3/8 oz.  | Longshot  | REM. 209P | Fed. 12S4   | 24.8 gr / 8,900 PSI  | 26.4 gr / 10,300 PSI | 27.9 gr / 11,500 PSI | —                    |
| 1 3/8 oz.  | Longshot  | REM. 209P | Rem. R12H   | 27.3 gr / 7,700 PSI  | 28.4 gr / 8,600 PSI  | 29.5 gr / 9,600 PSI  | 30.6 gr / 10,500 PSI |
| 1 3/8 oz.  | Longshot  | REM. 209P | WAA12F114   | 25.2 gr / 8,700 PSI  | 26.8 gr / 9,700 PSI  | 28.3 gr / 10,700 PSI | —                    |
| 1 3/8 oz.  | Longshot  | WIN. 209  | Rem. R12H   | 28.7 gr / 6,900 PSI  | 29.6 gr / 8,000 PSI  | 30.6 gr / 9,200 PSI  | 31.6 gr / 10,400 PSI |
| 1 3/8 oz.  | Longshot  | WIN. 209  | WAA12F114   | 26.5 gr / 8,400 PSI  | 28.1 gr / 9,100 PSI  | 29.8 gr / 9,900 PSI  | —                    |
|  |           |           |             | <b>1260 fps</b>      |                      |                      |                      |
| 1 1/2 oz.  | HS-7      | Win. 209  | WAA12R      | 37.0 gr / 10,900 LUP |                      |                      |                      |

| SHOT  | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|---|------------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS CONT.</b>            |            |           |             |                      |                      |                      |                      |
|   |            |           |             | 1205 fps             | 1260 fps             | 1315 fps             |                      |
| 1 1/2 oz  | Longshot   | Fed. 209A | Fed. 12S4   | 25.5 gr / 11,400 PSI | —                    | —                    |                      |
| 1 1/2 oz  | Longshot   | Fed. 209A | WAA12R      | 25.6 gr / 10,200 PSI | 27.2 gr / 11,500 PSI | —                    |                      |
| 1 1/2 oz  | Longshot   | Win. 209  | Fed. 12S4   | 26.8 gr / 10,200 PSI | 28.0 gr / 11,400 PSI | —                    |                      |
| 1 1/2 oz  | Longshot   | Win. 209  | WAA12R      | 27.2 gr / 9,000 PSI  | 29.1 gr / 10,200 PSI | 31.0 gr / 11,500 PSI |                      |
| <b>12 GA., 2 3/4", FEDERAL HI-POWER PLASTIC SHELLS W/ FIBER BASE WADS</b> |            |           |             |                      |                      |                      |                      |
|   |            |           |             | 1200 fps             | 1255 fps             | 1310 fps             |                      |
| 1 1/8 oz  | Universal  | Fed. 209A | Fed. 12S3   | 24.0 gr / 8,200 PSI  | 25.0 gr / 9,000 PSI  | 26.5 gr / 9,400 PSI  |                      |
| 1 1/8 oz  | Universal  | Win. 209  | WAA12       | 24.0 gr / 8,300 PSI  | 25.0 gr / 8,700 PSI  | 26.5 gr / 9,700 PSI  |                      |
| 1 1/4 oz  | Universal  | CCI 209M  | Rem. SP12   | 25.5 gr / 7,900 PSI  | —                    | —                    |                      |
| 1 1/4 oz  | Universal  | Fed. 209A | Fed. 12S4   | 24.0 gr / 10,300 PSI | —                    | —                    |                      |
| 1 1/4 oz  | Universal  | Win. 209  | WAA12 F114  | 25.5 gr / 9,400 PSI  | —                    | —                    |                      |
| 1 1/4 oz  | Universal  | Win. 209  | Fed. 12S4   | 25.2 gr / 8,800 PSI  | —                    | —                    |                      |
| <b>12 GA., 2 3/4", FEDERAL PAPER SHELLS</b>                               |            |           |             |                      |                      |                      |                      |
|   |            |           |             | 1250 fps             | 1325 fps             | 1400 fps             | 1475 fps             |
| 7/8 oz  | Titewad    | Fed. 209A | WAA12SL     | 19.1 gr / 6,900 PSI  | 20.9 gr / 8,100 PSI  | 22.7 gr / 9,400 PSI  | 24.6 gr / 10,600 PSI |
| 7/8 oz  | Titewad    | Rem. 209P | G/BP SF12   | 18.4 gr / 8,000 PSI  | 20.0 gr / 9,400 PSI  | 21.5 gr / 11,100 PSI | —                    |
| 7/8 oz  | Titewad    | Win. 209  | WAA12SL     | —                    | 21.0 gr / 7,600 PSI  | 22.9 gr / 8,900 PSI  | 24.8 gr / 10,200 PSI |
| 7/8 oz  | Clays      | Fed. 209A | WAA12SL     | 18.4 gr / 7,200 PSI  | 20.2 gr / 8,800 PSI  | 21.9 gr / 10,300 PSI | —                    |
|   |            |           |             | 1250 fps             | 1325 fps             | 1400 fps             | 1475 fps             |
| 7/8 oz  | Clays      | Rem. 209P | Rem. Fig. 8 | —                    | 20.9 gr / 8,100 PSI  | 22.5 gr / 9,300 PSI  | —                    |
| 7/8 oz  | Clays      | Win. 209  | WAA12       | —                    | 21.2 gr / 7,600 PSI  | 22.6 gr / 9,300 PSI  | 24.0 gr / 11,100 PSI |
| 7/8 oz  | Internat'l | CCI 209M  | Fed. 12S3   | —                    | 22.4 gr / 8,000 PSI  | 24.0 gr / 9,300 PSI  | 25.7 gr / 10,600 PSI |
| 7/8 oz  | Internat'l | Fed. 209A | Fed. 12S3   | —                    | 22.0 gr / 8,100 PSI  | 23.5 gr / 9,500 PSI  | 25.0 gr / 11,300 PSI |
| 7/8 oz  | Internat'l | Win. 209  | WAA12       | —                    | 23.1 gr / 7,400 PSI  | 24.6 gr / 8,100 PSI  | —                    |
|   |            |           |             | 1180 fps             | 1235 fps             | 1290 fps             | 1345 fps             |
| 1 oz  | Titewad    | CCI 209SC | Windjammer  | 17.2 gr / 6,900 PSI  | 19.1 gr / 8,300 PSI  | 20.1 gr / 8,900 PSI  | 21.5 gr / 10,200 PSI |
| 1 oz  | Titewad    | Fed. 209A | Fed. 12S3   | 18.1 gr / 7,500 PSI  | 19.5 gr / 8,400 PSI  | 20.6 gr / 9,700 PSI  | 22.0 gr / 11,100 PSI |
| 1 oz  | Titewad    | Rem. 209P | Rem. Fig. 8 | 17.9 gr / 7,000 PSI  | 19.2 gr / 8,000 PSI  | 20.5 gr / 9,000 PSI  | 21.9 gr / 10,300 PSI |
| 1 oz  | Titewad    | Win. 209  | WAA12       | 17.4 gr / 7,200 PSI  | 18.7 gr / 8,900 PSI  | 20.0 gr / 9,800 PSI  | 21.3 gr / 10,900 PSI |
| 1 oz  | Clays      | Fed. 209A | Fed. 12S0   | 18.0 gr / 7,100 PSI  | 19.5 gr / 8,700 PSI  | 21.0 gr / 10,900 PSI | —                    |
| 1 oz  | Clays      | Rem. 209P | Rem. TGT 12 | 18.5 gr / 6,000 PSI  | 20.0 gr / 6,400 PSI  | 22.0 gr / 7,700 PSI  | —                    |
| 1 oz  | Clays      | Win. 209  | Windjammer  | 18.0 gr / 5,800 PSI  | 19.5 gr / 7,300 PSI  | 20.5 gr / 8,800 PSI  | —                    |
| 1 oz  | Clays      | Win. 209  | WAA12SL     | 17.5 gr / 6,400 PSI  | 19.0 gr / 8,300 PSI  | 21.0 gr / 10,800 PSI | —                    |
|   |            |           |             | 1180 fps             | 1235 fps             | 1290 fps             | 1345 fps             |
| 1 oz  | Internat'l | CCI 209M  | Fed. 12C1   | —                    | 21.6 gr / 7,200 PSI  | 22.8 gr / 8,500 PSI  | 24.0 gr / 9,700 PSI  |
| 1 oz  | Internat'l | Fed. 209A | Fed. 12C1   | —                    | 20.7 gr / 8,100 PSI  | 22.0 gr / 9,400 PSI  | 23.2 gr / 10,600 PSI |
| 1 oz  | Internat'l | Rem. 209P | Fed. 12C1   | —                    | —                    | 23.2 gr / 7,900 PSI  | 24.2 gr / 9,300 PSI  |
| 1 oz  | Internat'l | Win. 209  | Fed. 12C1   | —                    | —                    | 23.2 gr / 7,700 PSI  | 24.4 gr / 9,100 PSI  |
|   |            |           |             | 1090 fps             | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz  | Titewad    | Ched. 209 | Fed. 12S3   | 15.9 gr / 8,300 PSI  | 17.2 gr / 9,700 PSI  | 18.6 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Titewad    | Ched. 209 | Rem. Fig. 8 | 16.2 gr / 8,300 PSI  | 17.5 gr / 9,600 PSI  | 18.8 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Titewad    | Ched. 209 | Windjammer  | 15.9 gr / 8,000 PSI  | 17.4 gr / 9,400 PSI  | 18.9 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Titewad    | CCI 209SC | WAA12F114   | 15.3 gr / 9,600 PSI  | 16.6 gr / 10,500 PSI | 17.5 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Titewad    | CCI 209M  | Fed. 12C1   | 16.3 gr / 8,600 PSI  | 17.5 gr / 9,800 PSI  | 18.6 gr / 10,900 PSI | —                    |

| SHOT  | POWDER     | PRIMER    | WAD            | CHARGE/PRESSURE     |                      |                      |                      |
|---|------------|-----------|----------------|---------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", FEDERAL PAPER SHELLS CONT.</b>   |            |           |                |                     |                      |                      |                      |
|   |            |           |                | 1090 fps            | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz  | Titewad    | Fed. 209A | Fed. 12C1      | 16.6 gr / 7,700 PSI | 17.9 gr / 8,800 PSI  | 19.3 gr / 10,100 PSI | —                    |
| 1 1/8 oz  | Titewad    | Fed. 209A | Fed. 12S4      | 16.2 gr / 9,000 PSI | 17.2 gr / 9,600 PSI  | 18.4 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Titewad    | Fio. 616  | Hor. Versalite | 16.0 gr / 8,000 PSI | 17.0 gr / 9,100 PSI  | 18.4 gr / 10,500 PSI | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | WAA12          | 16.4 gr / 7,500 PSI | 17.4 gr / 8,400 PSI  | 18.8 gr / 10,000 PSI | —                    |
| 1 1/8 oz  | Clays      | Ched. 209 | Rem. Fig. 8    | 16.8 gr / 5,800 PSI | 18.4 gr / 8,100 PSI  | 19.8 gr / 10,300 PSI | —                    |
| 1 1/8 oz  | Clays      | Ched. 209 | Windjammer     | 17.5 gr / 6,000 PSI | 18.7 gr / 7,800 PSI  | 20.0 gr / 9,800 PSI  | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | Fed. 12C1      | 17.3 gr / 7,500 PSI | 18.3 gr / 8,600 PSI  | 19.3 gr / 9,700 PSI  | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | Fed. 12S3      | 17.0 gr / 7,400 PSI | 18.0 gr / 8,700 PSI  | 19.5 gr / 10,500 PSI | —                    |
| 1 1/8 oz  | Clays      | Fio. 616  | Hor. Versalite | 16.8 gr / 7,500 PSI | 17.5 gr / 8,600 PSI  | 19.0 gr / 10,300 PSI | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Rem. Fig. 8    | 18.0 gr / 5,900 PSI | 18.5 gr / 7,000 PSI  | 19.5 gr / 9,200 PSI  | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Fed. 12C1      | —                   | 19.3 gr / 7,600 PSI  | 20.0 gr / 8,300 PSI  | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | WAA12          | 17.0 gr / 7,600 PSI | 18.0 gr / 8,800 PSI  | 19.0 gr / 10,900 PSI | —                    |
| 1 1/8 oz  | Internat'l | Ched. 209 | Fed. 12C1      | 18.1 gr / 6,900 PSI | 19.3 gr / 8,200 PSI  | 20.5 gr / 9,500 PSI  | 21.6 gr / 10,700 PSI |
| 1 1/8 oz  | Internat'l | Ched. 209 | Rem. Fig. 8    | 17.9 gr / 6,900 PSI | 19.1 gr / 8,000 PSI  | 20.4 gr / 9,200 PSI  | 21.7 gr / 10,400 PSI |
| 1 1/8 oz  | Internat'l | Ched. 209 | Windjammer     | 18.5 gr / 6,700 PSI | 19.7 gr / 7,800 PSI  | 20.9 gr / 8,800 PSI  | 22.1 gr / 9,900 PSI  |
| 1 1/8 oz  | Internat'l | CCI 209M  | Red PC         | —                   | 21.2 gr / 7,000 LUP  | 21.9 gr / 7,500 LUP  | 22.8 gr / 8,800 LUP  |
| 1 1/8 oz  | Internat'l | Fed. 209A | Fed. 12C1      | 19.6 gr / 7,800 PSI | 20.9 gr / 9,000 PSI  | 22.1 gr / 10,200 PSI | —                    |
| 1 1/8 oz  | Internat'l | Fed. 209A | Fed. 12S4      | 18.8 gr / 7,000 PSI | 19.5 gr / 7,500 PSI  | 21.0 gr / 10,000 PSI | 22.0 gr / 11,200 PSI |
| 1 1/8 oz  | Internat'l | Win. 209  | WAA12          | 20.0 gr / 6,400 LUP | 20.6 gr / 7,000 LUP  | 21.6 gr / 7,500 LUP  | 23.2 gr / 8,600 LUP  |
| 1 1/8 oz  | Internat'l | Rem. 209P | Fed. 12C1      | —                   | 21.8 gr / 7,800 PSI  | 22.9 gr / 9,000 PSI  | —                    |
|   |            |           |                | 1365 fps            | 1420 fps             | 1475 fps             | 1530 fps             |
| 1 1/8 oz  | Longshot   | Fed. 209A | Fed. 12C1      | —                   | 33.1 gr / 8,500 PSI  | 34.0 gr / 9,800 PSI  | 34.9 gr / 11,200 PSI |
| 1 1/8 oz  | Longshot   | Fed. 209A | G/BP Z21       | 30.6 gr / 8,100 PSI | 31.4 gr / 9,400 PSI  | 32.2 gr / 10,600 PSI | —                    |
| 1 1/8 oz  | Longshot   | Rem. 209P | Fed. 12C1      | —                   | 33.6 gr / 8,500 PSI  | 34.6 gr / 9,500 PSI  | 35.5 gr / 10,300 PSI |
| 1 1/8 oz  | Longshot   | Win. 209  | WAA12 F114     | —                   | —                    | 35.7 gr / 8,700 PSI  | 36.5 gr / 10,100 PSI |
| <b>12 GA., 2 3/4", FIOCCHI, VICTORY, PMC AND NOBEL SPORT PLASTIC SHELLS (LOW BASEWAD)</b> |            |           |                |                     |                      |                      |                      |
|   |            |           |                | 1250 fps            | 1300 fps             | 1350 fps             | 1400 fps             |
| 7/8 oz  | Titewad    | Fed. 209A | Fed. 12S0      | 18.7 gr / 7,400 PSI | 19.7 gr / 8,600 PSI  | 20.7 gr / 9,700 PSI  | 22.0 gr / 10,500 PSI |
| 7/8 oz  | Titewad    | Fio. 616  | Fed. 12S0      | 18.2 gr / 7,800 PSI | 19.5 gr / 8,900 PSI  | 20.5 gr / 10,000 PSI | 21.5 gr / 11,200 PSI |
| 7/8 oz  | Titewad    | Win. 209  | WAA12SL        | 18.4 gr / 7,500 PSI | 19.5 gr / 8,400 PSI  | 20.6 gr / 9,300 PSI  | 21.5 gr / 10,000 PSI |
|   |            |           |                | 1200 fps            | 1250 fps             | 1300 fps             | 1350 fps             |
| 7/8 oz  | Clays      | CCI 209M  | Purple PC      | 17.3 gr / 5,700 PSI | 18.1 gr / 6,300 PSI  | 19.2 gr / 7,700 PSI  | —                    |
| 7/8 oz  | Clays      | Fed. 209A | Rem. TGT 12    | 16.5 gr / 6,400 PSI | 17.7 gr / 7,300 PSI  | 18.7 gr / 7,400 PSI  | —                    |
| 7/8 oz  | Clays      | Fio. 616  | Fed. 12S0      | 16.6 gr / 6,800 PSI | 17.8 gr / 7,500 PSI  | 19.2 gr / 8,500 PSI  | —                    |
| 7/8 oz  | Clays      | Win. 209  | WAA12SL        | 16.8 gr / 6,200 PSI | 18.0 gr / 7,200 PSI  | 19.0 gr / 8,000 PSI  | —                    |
| 7/8 oz  | Internat'l | CCI 209SC | WAA12SL        | —                   | 21.0 gr / 7,300 PSI  | 22.0 gr / 8,100 PSI  | 22.5 gr / 8,500 PSI  |
|   |            |           |                | 1180 fps            | 1235 fps             | 1290 fps             | 1345 fps             |
| 1 oz  | Titewad    | Fed. 209A | Fed. 12S0      | 17.0 gr / 8,400 PSI | 19.0 gr / 10,200 PSI | 20.0 gr / 11,100 PSI | —                    |
| 1 oz  | Titewad    | Fio. 616  | Rem. Fig. 8    | 17.0 gr / 8,200 PSI | 18.0 gr / 9,200 PSI  | 19.5 gr / 10,300 PSI | —                    |
| 1 oz  | Titewad    | Win. 209  | WAA12SL        | 17.2 gr / 7,400 PSI | 18.5 gr / 8,900 PSI  | 19.8 gr / 9,800 PSI  | —                    |
| 1 oz  | Clays      | CCI 209M  | Purple PC      | 18.0 gr / 7,300 PSI | 19.1 gr / 8,600 PSI  | 19.9 gr / 9,400 PSI  | —                    |
| 1 oz  | Clays      | CCI 209SC | WAA12SL        | 18.0 gr / 8,400 PSI | 18.5 gr / 9,500 PSI  | —                    | —                    |
| 1 oz  | Clays      | Win. 209  | WAA12SL        | 17.1 gr / 7,800 PSI | 18.5 gr / 9,200 PSI  | 19.3 gr / 10,600 PSI | —                    |
| 1 oz  | Internat'l | CCI 209M  | Purple PC      | 19.6 gr / 6,400 PSI | 20.5 gr / 7,000 PSI  | 21.6 gr / 8,200 PSI  | —                    |
| 1 oz  | Internat'l | Win. 209  | WAA12SL        | 19.0 gr / 7,100 PSI | 20.0 gr / 8,600 PSI  | 21.1 gr / 9,600 PSI  | —                    |

**SHOT POWDER PRIMER WAD CHARGE/PRESSURE**

**12 GA., 2 3/4", FIOCCHI, VICTORY,PMC AND NOBEL SPORT PLASTIC SHELLS (LOW BASEWAD) CONT.**

|          |            |           |                | 1090 fps             | 1145 fps             | 1200 fps             | 1255 fps             |
|----------|------------|-----------|----------------|----------------------|----------------------|----------------------|----------------------|
| 1 1/8 oz | Titewad    | Ched. 209 | Fio. TL1       | 15.6 gr / 8,800 PSI  | 17.0 gr / 10,400 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | Rem. Fig. 8    | 15.5 gr / 8,500 PSI  | 17.0 gr / 9,600 PSI  | 18.5 gr / 10,800 PSI | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | WAA12          | 15.5 gr / 8,600 PSI  | 16.8 gr / 9,800 PSI  | 18.1 gr / 11,000 PSI | —                    |
| 1 1/8 oz | Titewad    | Fio. 616  | Fio. TL1       | 15.3 gr / 9,300 PSI  | 16.4 gr / 10,500 PSI | 17.7 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | WAA12          | 16.2 gr / 7,900 PSI  | 16.9 gr / 8,500 PSI  | 18.5 gr / 10,000 PSI | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | Fio. TL1       | 16.8 gr / 8,300 PSI  | 18.1 gr / 9,500 PSI  | 19.5 gr / 10,800 PSI | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | Rem. Fig. 8    | 16.9 gr / 7,100 PSI  | 18.3 gr / 8,700 PSI  | 19.7 gr / 10,300 PSI | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | WAA12          | 16.7 gr / 7,700 PSI  | 17.9 gr / 9,100 PSI  | 19.2 gr / 10,500 PSI | —                    |
| 1 1/8 oz | Clays      | CCI 209   | Hor. Versalite | 17.9 gr / 6,300 LUP  | 18.9 gr / 7,000 LUP  | 20.0 gr / 7,700 LUP  | —                    |
| 1 1/8 oz | Clays      | CCI 209SC | Fio. TL1       | 16.8 gr / 8,300 PSI  | 18.0 gr / 8,900 PSI  | —                    | —                    |
| 1 1/8 oz | Clays      | Fed. 209A | Fed. 12S3      | 16.5 gr / 9,100 PSI  | 17.0 gr / 10,000 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Fio. 616  | Fio. TL1       | 16.5 gr / 7,000 LUP  | 17.9 gr / 8,000 LUP  | 19.4 gr / 9,100 LUP  | —                    |
| 1 1/8 oz | Clays      | Rem. 209P | Rem. Fig. 8    | 17.6 gr / 6,200 LUP  | 18.8 gr / 6,800 LUP  | 19.9 gr / 7,500 LUP  | —                    |
| 1 1/8 oz | Clays      | Win. 209  | WAA12          | 16.3 gr / 6,800 LUP  | 17.6 gr / 8,000 LUP  | 18.9 gr / 9,200 LUP  | —                    |
| 1 1/8 oz | Internat'l | Ched. 209 | Fio. TL1       | 17.9 gr / 7,000 PSI  | 19.3 gr / 8,200 PSI  | 20.7 gr / 9,400 PSI  | 22.0 gr / 10,400 PSI |
| 1 1/8 oz | Internat'l | Ched. 209 | Rem. Fig. 8    | 18.2 gr / 6,600 PSI  | 19.5 gr / 7,700 PSI  | 20.8 gr / 8,700 PSI  | 22.1 gr / 9,700 PSI  |
| 1 1/8 oz | Internat'l | Ched. 209 | WAA12          | 17.9 gr / 7,000 PSI  | 19.1 gr / 7,900 PSI  | 20.1 gr / 8,700 PSI  | 21.7 gr / 10,000 PSI |
| 1 1/8 oz | Internat'l | CCI 209SC | Fio. TL1       | 19.0 gr / 7,400 PSI  | 20.0 gr / 8,500 PSI  | 21.0 gr / 9,400 PSI  | —                    |
| 1 1/8 oz | Internat'l | Fed. 209A | Fio. TL1       | 18.0 gr / 7,800 PSI  | 18.5 gr / 8,300 PSI  | 20.0 gr / 10,400 PSI | —                    |
| 1 1/8 oz | Internat'l | Fio. 616  | Fio. TL1       | 19.3 gr / 7,400 LUP  | 20.3 gr / 7,700 LUP  | 21.0 gr / 8,300 LUP  | 22.6 gr / 9,900 LUP  |
|          |            |           |                | <b>1090 fps</b>      | <b>1145 fps</b>      | <b>1200 fps</b>      | <b>1255 fps</b>      |
| 1 1/8 oz | Internat'l | Win. 209  | WAA12          | 19.2 gr / 7,000 LUP  | 19.7 gr / 7,400 LUP  | 21.0 gr / 8,500 LUP  | 22.0 gr / 9,800 LUP  |
|          |            |           |                | <b>1200 fps</b>      | <b>1255 fps</b>      | <b>1310 fps</b>      |                      |
| 1 1/8 oz | Universal  | Fio. 616  | Fio. TL1       | 23.4 gr / 8,600 PSI  | 25.0 gr / 9,800 PSI  | 26.5 gr / 10,600 PSI | —                    |
| 1 1/8 oz | Universal  | Win. 209  | WAA12          | 23.3 gr / 9,100 PSI  | 24.0 gr / 9,600 PSI  | 25.0 gr / 10,800 PSI | —                    |
|          |            |           |                | <b>1420 fps</b>      | <b>1475 fps</b>      | <b>1530 fps</b>      | <b>1585 fps</b>      |
| 1 1/8 oz | Longshot   | Fio. 616  | Fed. 12S3      | 33.2 gr / 8,000 PSI  | 34.7 gr / 8,900 PSI  | 36.2 gr / 9,800 PSI  | 37.8 gr / 10,700 PSI |
| 1 1/8 oz | Longshot   | Fio. 616  | Fio. TL1       | 33.4 gr / 8,300 PSI  | 34.8 gr / 9,300 PSI  | 36.2 gr / 10,300 PSI | 37.6 gr / 11,200 PSI |
| 1 1/8 oz | Longshot   | Fio. 616  | Rem. Fig. 8    | 33.4 gr / 7,500 PSI  | 34.9 gr / 8,500 PSI  | 36.4 gr / 9,400 PSI  | 37.9 gr / 10,300 PSI |
| 1 1/8 oz | Longshot   | Fio. 616  | WAA12          | 32.7 gr / 8,400 PSI  | 34.0 gr / 9,300 PSI  | 35.3 gr / 10,100 PSI | 36.6 gr / 11,000 PSI |
| 1 1/8 oz | Longshot   | Fio. 616  | Windjammer     | 33.7 gr / 7,600 PSI  | 35.3 gr / 8,400 PSI  | 36.8 gr / 9,200 PSI  | 38.3 gr / 10,000 PSI |
|          |            |           |                | <b>1220 fps</b>      | <b>1330 fps</b>      |                      |                      |
| 1 1/4 oz | Universal  | Fio. 616  | WAA12F114      | 24.0 gr / 10,900 PSI | —                    | —                    | —                    |
| 1 1/4 oz | Universal  | Win. 209  | Rem. SP12      | 24.0 gr / 10,900 PSI | —                    | —                    | —                    |
| 1 1/4 oz | HS-6       | Win. 209  | Rem. R12H      | —                    | 35.0 gr / 9,200 LUP  | —                    | —                    |
|          |            |           |                | <b>1185 fps</b>      | <b>1240 fps</b>      | <b>1295 fps</b>      | <b>1350 fps</b>      |
| 1 3/8 oz | Longshot   | Fio. 616  | G/BP Sport     | 25.6 gr / 8,000 PSI  | 27.3 gr / 9,200 PSI  | 28.9 gr / 10,400 PSI | 30.8 gr / 11,500 PSI |
| 1 3/8 oz | Longshot   | Fio. 616  | Rem. SP12      | —                    | 27.4 gr / 8,700 PSI  | 28.9 gr / 9,700 PSI  | 30.5 gr / 10,700 PSI |
| 1 3/8 oz | Longshot   | Win. 209  | Fed. 12S4      | 26.0 gr / 8,300 PSI  | 27.5 gr / 9,300 PSI  | 29.0 gr / 10,400 PSI | —                    |
|          |            |           |                | <b>1260 fps</b>      |                      |                      |                      |
| 1 1/2 oz | HS-7       | Fio. 616  | WAA12R         | 39.0 gr / 10,800 LUP | —                    | —                    | —                    |

**12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS**

|        |         |         |             | 1250 fps            | 1300 fps             | 1350 fps             | 1400 fps |
|--------|---------|---------|-------------|---------------------|----------------------|----------------------|----------|
| 7/8 oz | Titewad | CCI 209 | Rem. TGT 12 | 16.9 gr / 9,400 PSI | 17.8 gr / 10,800 PSI | 19.0 gr / 11,400 PSI | —        |



| SHOT  | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|---|------------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT.</b> |            |           |             |                      |                      |                      |                      |
|   |            |           |             | <b>1250 fps</b>      | <b>1300 fps</b>      | <b>1350 fps</b>      | <b>1400 fps</b>      |
| 7/8 oz  | Titewad    | CCI 209   | WAA12L      | 16.8 gr / 10,100 PSI | 18.0 gr / 10,700 PSI | 19.0 gr / 11,500 PSI | —                    |
| 7/8 oz  | Titewad    | CCI 209SC | Rem. TGT 12 | 16.6 gr / 9,600 PSI  | 17.7 gr / 10,800 PSI | 18.8 gr / 11,500 PSI | —                    |
| 7/8 oz  | Titewad    | CCI 209SC | WAA12SL     | 17.0 gr / 10,600 PSI | 17.3 gr / 10,900 PSI | —                    | —                    |
| 7/8 oz  | Titewad    | Fed. 209A | Rem. TGT 12 | 16.8 gr / 9,100 PSI  | 18.0 gr / 10,100 PSI | 19.1 gr / 11,000 PSI | 20.2 gr / 11,500 PSI |
| 7/8 oz  | Titewad    | Fed. 209A | WAA12L      | 17.0 gr / 9,600 PSI  | 18.0 gr / 10,700 PSI | 19.0 gr / 11,500 PSI | —                    |
| 7/8 oz  | Titewad    | Rem. 209P | CB-4100-12  | 17.8 gr / 7,000 PSI  | 19.0 gr / 8,000 PSI  | 20.1 gr / 8,800 PSI  | 21.3 gr / 9,700 PSI  |
| 7/8 oz  | Titewad    | Rem. 209P | Rem. TGT 12 | 17.4 gr / 8,200 PSI  | 18.7 gr / 9,100 PSI  | 19.8 gr / 9,500 PSI  | 21.0 gr / 10,500 PSI |
| 7/8 oz  | Titewad    | Rem. 209P | WAA12L      | 16.9 gr / 8,200 PSI  | 18.4 gr / 9,400 PSI  | 19.7 gr / 10,100 PSI | 20.9 gr / 11,300 PSI |
| 7/8 oz  | Titewad    | Win. 209  | CB-4100-12  | 18.7 gr / 7,000 PSI  | 19.8 gr / 7,800 PSI  | 20.9 gr / 8,500 PSI  | 22.1 gr / 9,400 PSI  |
| 7/8 oz  | Titewad    | Win. 209  | Rem. TGT 12 | 17.0 gr / 8,500 PSI  | 18.0 gr / 9,900 PSI  | 19.2 gr / 10,900 PSI | —                    |
| 7/8 oz  | Titewad    | Win. 209  | WAA12L      | 17.3 gr / 8,300 PSI  | 18.6 gr / 9,200 PSI  | 19.8 gr / 10,600 PSI | 21.1 gr / 11,300 PSI |
|   |            |           |             | <b>1200 fps</b>      | <b>1250 fps</b>      | <b>1300 fps</b>      | <b>1350 fps</b>      |
| 7/8 oz  | Clays      | CCI 209   | Rem. TGT 12 | 16.1 gr / 7,900 PSI  | 17.3 gr / 9,400 PSI  | 18.3 gr / 10,100 PSI | 19.6 gr / 11,200 PSI |
| 7/8 oz  | Clays      | CCI 209   | WAA12L      | 16.3 gr / 8,800 PSI  | 17.3 gr / 9,900 PSI  | 18.7 gr / 11,200 PSI | —                    |
| 7/8 oz  | Clays      | CCI 209SC | Rem. TGT 12 | 18.0 gr / 7,000 PSI  | 18.8 gr / 7,900 PSI  | 19.5 gr / 8,900 PSI  | 20.5 gr / 9,900 PSI  |
| 7/8 oz  | Clays      | CCI 209SC | WAA12L      | 16.8 gr / 7,000 PSI  | 17.8 gr / 7,800 PSI  | 18.6 gr / 10,000 PSI | 19.6 gr / 11,000 PSI |
| 7/8 oz  | Clays      | Fed. 209A | Activ TG-30 | 16.2 gr / 7,700 PSI  | 17.5 gr / 9,200 PSI  | 18.5 gr / 10,300 PSI | —                    |
| 7/8 oz  | Clays      | Fed. 209A | Fed. 12S0   | 16.3 gr / 8,900 PSI  | 17.3 gr / 9,600 PSI  | 18.5 gr / 11,500 PSI | —                    |
| 7/8 oz  | Clays      | Fed. 209A | Rem. TGT 12 | 16.1 gr / 8,700 PSI  | 17.3 gr / 9,800 PSI  | 18.3 gr / 11,100 PSI | —                    |
| 7/8 oz  | Clays      | Fed. 209A | WAA12L      | 16.0 gr / 8,100 PSI  | 17.0 gr / 10,200 PSI | 18.2 gr / 10,800 PSI | —                    |
| 7/8 oz  | Clays      | Rem. 209P | CB-4100-12  | 16.9 gr / 5,800 PSI  | 18.2 gr / 6,700 PSI  | 19.6 gr / 7,600 PSI  | 20.9 gr / 8,400 PSI  |
| 7/8 oz  | Clays      | Rem. 209P | Rem. TGT 12 | 16.4 gr / 6,300 PSI  | 17.5 gr / 7,100 PSI  | 18.9 gr / 7,400 PSI  | —                    |
| 7/8 oz  | Clays      | Rem. 209P | Fed. 12S0   | 16.0 gr / 7,500 PSI  | 17.2 gr / 8,200 PSI  | 18.8 gr / 9,100 PSI  | —                    |
| 7/8 oz  | Clays      | Rem. 209P | WAA12SL     | —                    | 18.0 gr / 8,400 PSI  | 19.5 gr / 10,200 PSI | —                    |
| 7/8 oz  | Clays      | Rem. 209P | WAA12L      | 16.8 gr / 6,700 PSI  | 18.0 gr / 7,300 PSI  | 19.3 gr / 9,000 PSI  | 20.3 gr / 9,700 PSI  |
| 7/8 oz  | Clays      | Win. 209  | CB-4100-12  | 18.8 gr / 5,200 PSI  | 19.8 gr / 6,100 PSI  | 20.8 gr / 7,000 PSI  | 21.8 gr / 7,900 PSI  |
|   |            |           |             | <b>1200 fps</b>      | <b>1250 fps</b>      | <b>1300 fps</b>      | <b>1350 fps</b>      |
| 7/8 oz  | Clays      | Win. 209  | Rem. TGT 12 | 16.8 gr / 7,500 PSI  | 18.0 gr / 8,400 PSI  | 19.0 gr / 9,100 PSI  | 20.0 gr / 10,100 PSI |
| 7/8 oz  | Clays      | Win. 209  | WAA12SL     | 15.9 gr / 7,100 PSI  | 17.1 gr / 8,900 PSI  | 18.2 gr / 10,000 PSI | —                    |
| 7/8 oz  | Clays      | Win. 209  | WAA12L      | 17.1 gr / 8,100 PSI  | 18.0 gr / 8,900 PSI  | 19.3 gr / 10,100 PSI | 20.1 gr / 11,400 PSI |
|   |            |           |             | <b>1250 fps</b>      | <b>1300 fps</b>      | <b>1350 fps</b>      | <b>1400 fps</b>      |
| 7/8 oz  | Internat'l | CCI 209   | Rem. TGT 12 | 19.8 gr / 6,900 PSI  | 20.8 gr / 7,800 PSI  | 21.9 gr / 8,700 PSI  | 22.9 gr / 9,600 PSI  |
| 7/8 oz  | Internat'l | CCI 209   | WAA12L      | 20.0 gr / 7,100 PSI  | 20.9 gr / 7,900 PSI  | 21.9 gr / 8,700 PSI  | 22.8 gr / 9,500 PSI  |
| 7/8 oz  | Internat'l | CCI 209SC | Rem. TGT 12 | 20.7 gr / 7,100 PSI  | 21.0 gr / 7,700 PSI  | 22.2 gr / 8,400 PSI  | 23.2 gr / 9,200 PSI  |
| 7/8 oz  | Internat'l | CCI 209SC | WAA12L      | 20.0 gr / 7,100 PSI  | 21.0 gr / 8,000 PSI  | 22.0 gr / 9,000 PSI  | 22.9 gr / 9,900 PSI  |
| 7/8 oz  | Internat'l | Fed. 209A | Fed. 12S0   | 19.3 gr / 7,700 PSI  | 20.4 gr / 8,700 PSI  | 21.4 gr / 9,600 PSI  | 22.5 gr / 10,600 PSI |
| 7/8 oz  | Internat'l | Fed. 209A | Rem. TGT 12 | 19.1 gr / 7,300 PSI  | 20.2 gr / 8,200 PSI  | 21.3 gr / 9,000 PSI  | 22.4 gr / 9,900 PSI  |
| 7/8 oz  | Internat'l | Fed. 209A | WAA12L      | 19.4 gr / 7,200 PSI  | 20.4 gr / 8,000 PSI  | 21.5 gr / 9,000 PSI  | 22.6 gr / 10,000 PSI |
| 7/8 oz  | Internat'l | Rem. 209P | Rem. TGT 12 | 20.0 gr / 6,600 PSI  | 21.0 gr / 7,500 PSI  | 21.9 gr / 8,300 PSI  | 22.9 gr / 9,200 PSI  |
| 7/8 oz  | Internat'l | Rem. 209P | WAA12L      | 20.5 gr / 6,900 PSI  | 21.3 gr / 7,600 PSI  | 22.2 gr / 8,400 PSI  | 23.1 gr / 9,300 PSI  |
| 7/8 oz  | Internat'l | Win. 209  | Fed. 12S0   | 20.2 gr / 6,900 PSI  | 21.2 gr / 7,800 PSI  | 22.2 gr / 8,700 PSI  | 23.2 gr / 9,500 PSI  |
| 7/8 oz  | Internat'l | Win. 209  | Rem. TGT 12 | 20.2 gr / 6,500 PSI  | 21.3 gr / 7,300 PSI  | 22.3 gr / 8,100 PSI  | 23.4 gr / 8,900 PSI  |
| 7/8 oz  | Internat'l | Win. 209  | WAA12L      | 20.7 gr / 6,500 PSI  | 21.5 gr / 7,400 PSI  | 22.3 gr / 8,200 PSI  | 23.1 gr / 9,100 PSI  |
|   |            |           |             | <b>1125 fps</b>      | <b>1180 fps</b>      | <b>1235 fps</b>      | <b>1290 fps</b>      |
| 1 oz  | Titewad    | CCI 209   | Purple PC   | —                    | 17.0 gr / 8,200 PSI  | 18.0 gr / 10,100 PSI | 19.0 gr / 10,500 PSI |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |
|------|--------|--------|-----|-----------------|
|------|--------|--------|-----|-----------------|

**12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT.**

|      |            |           |             | 1125 fps            | 1180 fps             | 1235 fps             | 1290 fps             |
|------|------------|-----------|-------------|---------------------|----------------------|----------------------|----------------------|
| 1 oz | Titewad    | CCI 209   | Rem. TGT 12 | 15.2 gr / 8,200 PSI | 16.4 gr / 9,100 PSI  | 17.7 gr / 10,500 PSI | 19.0 gr / 11,400 PSI |
| 1 oz | Titewad    | CCI 209   | WAA12L      | 15.8 gr / 8,200 PSI | 16.8 gr / 9,000 PSI  | 17.8 gr / 10,500 PSI | —                    |
| 1 oz | Titewad    | CCI 209SC | WAA12SL     | 15.2 gr / 8,200 PSI | 16.2 gr / 9,700 PSI  | 17.5 gr / 10,800 PSI | 18.5 gr / 11,400 PSI |
| 1 oz | Titewad    | Fed. 209A | Purple PC   | 16.2 gr / 6,500 PSI | 17.2 gr / 7,200 PSI  | 18.4 gr / 8,000 PSI  | 20.0 gr / 9,800 PSI  |
| 1 oz | Titewad    | Fed. 209A | Rem. TGT 12 | 15.5 gr / 7,500 PSI | 16.5 gr / 8,800 PSI  | 17.8 gr / 10,000 PSI | —                    |
| 1 oz | Titewad    | Fed. 209A | WAA12SL     | 15.8 gr / 8,000 PSI | 17.0 gr / 8,600 PSI  | 18.2 gr / 10,100 PSI | 19.4 gr / 11,000 PSI |
| 1 oz | Titewad    | Flo. 616  | Windjammer  | —                   | —                    | 18.0 gr / 9,600 PSI  | 19.2 gr / 10,800 PSI |
| 1 oz | Titewad    | Rem. 209P | CB-4100-12  | 15.7 gr / 6,800 PSI | 17.0 gr / 8,100 PSI  | 18.2 gr / 9,300 PSI  | 19.5 gr / 10,600 PSI |
| 1 oz | Titewad    | Rem. 209P | WAA12SL     | 15.5 gr / 7,900 PSI | 16.7 gr / 9,200 PSI  | 18.0 gr / 10,000 PSI | 19.0 gr / 11,300 PSI |
| 1 oz | Titewad    | Rem. 209P | Rem. TGT 12 | —                   | 16.7 gr / 7,800 PSI  | 18.2 gr / 9,600 PSI  | 19.4 gr / 11,300 PSI |
| 1 oz | Titewad    | Win. 209  | CB-4100-12  | 15.8 gr / 6,800 PSI | 17.1 gr / 7,900 PSI  | 18.4 gr / 9,200 PSI  | 19.6 gr / 10,200 PSI |
| 1 oz | Titewad    | Win. 209  | Purple PC   | 16.6 gr / 5,600 PSI | 17.7 gr / 6,900 PSI  | 19.0 gr / 8,400 PSI  | 20.2 gr / 9,800 PSI  |
| 1 oz | Titewad    | Win. 209  | Rem. TGT 12 | 15.3 gr / 7,400 PSI | 16.6 gr / 8,600 PSI  | 17.9 gr / 9,800 PSI  | 19.2 gr / 11,000 PSI |
| 1 oz | Titewad    | Win. 209  | WAA12SL     | 15.5 gr / 7,900 PSI | 16.5 gr / 8,900 PSI  | 18.0 gr / 11,000 PSI | —                    |
| 1 oz | Clays      | CCI 209   | Purple PC   | 17.1 gr / 6,400 LUP | 18.3 gr / 7,100 LUP  | 19.5 gr / 7,700 LUP  | 20.7 gr / 8,400 LUP  |
| 1 oz | Clays      | CCI 209   | Rem. TGT 12 | 15.4 gr / 8,700 PSI | 16.6 gr / 9,600 PSI  | 18.2 gr / 11,400 PSI | —                    |
| 1 oz | Clays      | CCI 209   | WAA12SL     | 15.1 gr / 8,500 PSI | 16.3 gr / 10,100 PSI | 17.5 gr / 11,200 PSI | —                    |
| 1 oz | Clays      | CCI 209SC | Rem. TGT 12 | 15.7 gr / 6,900 LUP | 17.8 gr / 8,100 LUP  | 18.8 gr / 9,900 LUP  | 20.5 gr / 11,100 LUP |
| 1 oz | Clays      | CCI 209SC | WAA12SL     | 15.8 gr / 8,300 PSI | 16.6 gr / 10,000 PSI | 17.4 gr / 11,300 PSI | —                    |
| 1 oz | Clays      | Fed. 209A | Purple PC   | 16.0 gr / 7,900 PSI | 17.0 gr / 9,100 PSI  | 18.5 gr / 10,300 PSI | —                    |
| 1 oz | Clays      | Fed. 209A | WAA12SL     | 15.6 gr / 9,200 PSI | 16.5 gr / 10,800 PSI | 17.7 gr / 11,300 PSI | —                    |
| 1 oz | Clays      | Rem. 209P | CB-4100-12  | 16.7 gr / 5,800 PSI | 18.0 gr / 7,200 PSI  | 19.2 gr / 8,500 PSI  | 20.4 gr / 9,800 PSI  |
| 1 oz | Clays      | Rem. 209P | Purple PC   | 16.6 gr / 6,100 PSI | 17.8 gr / 7,400 PSI  | 19.1 gr / 8,800 PSI  | 20.3 gr / 10,100 PSI |
| 1 oz | Clays      | Rem. 209P | Rem. TGT 12 | 16.8 gr / 6,600 LUP | 17.9 gr / 7,400 LUP  | 18.9 gr / 8,100 LUP  | 19.9 gr / 8,800 LUP  |
| 1 oz | Clays      | Rem. 209P | WAA12SL     | 16.4 gr / 6,700 PSI | 17.6 gr / 8,100 PSI  | 18.7 gr / 9,400 PSI  | 19.9 gr / 10,900 PSI |
| 1 oz | Clays      | Win. 209  | Purple PC   | 16.8 gr / 5,700 PSI | 18.1 gr / 7,000 PSI  | 19.4 gr / 8,300 PSI  | 20.6 gr / 9,500 PSI  |
| 1 oz | Clays      | Win. 209  | Rem. TGT 12 | 16.3 gr / 6,500 PSI | 17.6 gr / 7,900 PSI  | 18.8 gr / 9,200 PSI  | 20.1 gr / 10,500 PSI |
| 1 oz | Clays      | Win. 209  | WAA12SL     | 15.7 gr / 7,100 LUP | 17.0 gr / 8,200 LUP  | 18.4 gr / 9,500 LUP  | 19.8 gr / 10,700 LUP |
|      |            |           |             | 1180 fps            | 1235 fps             | 1290fps              | 1345 fps             |
| 1 oz | Clays      | Win. 209  | Windjammer  | 17.3 gr / 5,500 PSI | 18.4 gr / 7,100 PSI  | 19.5 gr / 8,600 PSI  | 20.6 gr / 10,200 PSI |
| 1 oz | Internat'l | CCI 209   | Rem. TGT 12 | 19.0 gr / 6,800 PSI | 20.0 gr / 7,900 PSI  | 21.0 gr / 9,000 PSI  | 22.0 gr / 10,100 PSI |
| 1 oz | Internat'l | CCI 209   | WAA12SL     | 18.6 gr / 7,400 PSI | 19.8 gr / 8,500 PSI  | 21.0 gr / 9,500 PSI  | 22.3 gr / 10,600 PSI |
| 1 oz | Internat'l | CCI 209SC | Purple PC   | 18.7 gr / 7,200 PSI | 20.0 gr / 8,100 PSI  | 21.2 gr / 9,000 PSI  | 22.5 gr / 10,000 PSI |
| 1 oz | Internat'l | CCI 209SC | Rem. TGT 12 | 19.5 gr / 6,800 PSI | 20.8 gr / 7,800 PSI  | 22.2 gr / 9,300 PSI  | 22.8 gr / 10,300 PSI |
| 1 oz | Internat'l | CCI 209SC | WAA12SL     | 18.7 gr / 7,200 PSI | 19.8 gr / 8,300 PSI  | 21.0 gr / 9,400 PSI  | 22.2 gr / 10,600 PSI |
| 1 oz | Internat'l | Fed. 209A | Purple PC   | 18.4 gr / 7,100 PSI | 19.6 gr / 8,200 PSI  | 20.9 gr / 9,400 PSI  | 22.2 gr / 10,600 PSI |
| 1 oz | Internat'l | Fed. 209A | Rem. TGT 12 | 18.2 gr / 7,900 PSI | 19.2 gr / 9,000 PSI  | 20.2 gr / 10,000 PSI | 21.3 gr / 11,100 PSI |
| 1 oz | Internat'l | Fed. 209A | WAA12SL     | 17.8 gr / 7,500 PSI | 19.0 gr / 8,800 PSI  | 20.3 gr / 10,200 PSI | 21.5 gr / 11,500 PSI |
| 1 oz | Internat'l | Rem. 209P | Purple PC   | 19.2 gr / 6,800 PSI | 20.5 gr / 7,900 PSI  | 21.7 gr / 8,900 PSI  | 23.0 gr / 9,900 PSI  |
| 1 oz | Internat'l | Rem. 209P | Rem. TGT 12 | 20.2 gr / 6,800 LUP | 20.9 gr / 7,700 LUP  | 21.4 gr / 8,900 LUP  | —                    |
| 1 oz | Internat'l | Rem. 209P | WAA12SL     | 19.0 gr / 6,800 PSI | 20.2 gr / 8,100 PSI  | 21.3 gr / 9,300 PSI  | 22.4 gr / 10,500 PSI |
| 1 oz | Internat'l | Win. 209  | Purple PC   | 20.2 gr / 6,500 PSI | 21.3 gr / 7,500 PSI  | 22.4 gr / 8,500 PSI  | 23.5 gr / 9,600 PSI  |
| 1 oz | Internat'l | Win. 209  | Rem. TGT 12 | 18.9 gr / 7,100 PSI | 20.2 gr / 8,200 PSI  | 21.5 gr / 9,300 PSI  | 22.8 gr / 10,300 PSI |
| 1 oz | Internat'l | Win. 209  | WAA12SL     | 18.4 gr / 7,100 LUP | 20.1 gr / 8,600 LUP  | 21.0 gr / 10,000 LUP | —                    |
| 1 oz | Titigroup  | Rem. 209P | Rem. TGT 12 | 16.1 gr / 7,900 PSI | 17.3 gr / 8,900 PSI  | 18.6 gr / 10,100 PSI | 19.9 gr / 11,200 PSI |

| SHOT  | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|---|------------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT.</b> |            |           |             |                      |                      |                      |                      |
|   |            |           |             | <b>1180 fps</b>      | <b>1235 fps</b>      | <b>1290 fps</b>      | <b>1345 fps</b>      |
| 1 oz  | Titelgroup | Rem. 209P | WAA12SL     | 16.4 gr / 7,700 PSI  | 17.6 gr / 9,100 PSI  | 18.8 gr / 10,400 PSI | —                    |
| 1 oz  | Titelgroup | Win. 209  | Rem. TGT 12 | 16.0 gr / 7,700 PSI  | 17.5 gr / 8,900 PSI  | 18.9 gr / 10,000 PSI | 20.3 gr / 11,000 PSI |
| 1 oz  | Titelgroup | Win. 209  | WAA12SL     | 16.3 gr / 8,100 PSI  | 17.6 gr / 9,100 PSI  | 18.9 gr / 10,200 PSI | 20.5 gr / 11,300 PSI |
|   |            |           |             | <b>1090 fps</b>      | <b>1145 fps</b>      | <b>1200 fps</b>      | <b>1255 fps</b>      |
| 1 1/8 oz  | Titewad    | Ched. 209 | Rem. Fig. 8 | 15.3 gr / 10,400 PSI | 16.2 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Ched. 209 | WAA12       | 15.0 gr / 10,400 PSI | 15.8 gr / 11,400 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Ched. 209 | Windjammer  | 15.5 gr / 9,400 PSI  | 16.5 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | CCI 209   | Red PC      | 15.5 gr / 10,200 PSI | 16.0 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | CCI 209   | Rem. Fig. 8 | 15.0 gr / 10,600 PSI | 15.8 gr / 11,300 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | CCI 209SC | WAA12       | 15.0 gr / 10,100 PSI | 15.8 gr / 11,100 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | CCI 209SC | Windjammer  | 15.0 gr / 10,000 PSI | 16.0 gr / 11,100 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Fed. 209A | Red PC      | 15.5 gr / 9,200 PSI  | 16.5 gr / 9,700 PSI  | 18.0 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Titewad    | Fed. 209A | Rem. Fig. 8 | 15.2 gr / 9,600 PSI  | 16.3 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Fed. 209A | WAA12       | 15.2 gr / 9,800 PSI  | 16.0 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Fed. 209A | Windjammer  | 15.3 gr / 9,000 PSI  | 16.3 gr / 9,500 PSI  | 17.8 gr / 11,100 PSI | —                    |
| 1 1/8 oz  | Titewad    | Fio. 616  | Fio. TL1    | 15.0 gr / 10,700 PSI | 16.0 gr / 11,500 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Fio. 616  | Rem. Fig. 8 | 15.0 gr / 10,000 PSI | 16.0 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Fio. 616  | WAA12       | 15.0 gr / 9,400 PSI  | 16.0 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Rem. 209P | Red PC      | 15.5 gr / 8,600 PSI  | 16.7 gr / 10,200 PSI | 18.0 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Titewad    | Rem. 209P | Rem. Fig. 8 | 15.2 gr / 9,100 PSI  | 16.5 gr / 10,100 PSI | 17.9 gr / 10,900 PSI | —                    |
| 1 1/8 oz  | Titewad    | Rem. 209P | Trapper     | 15.0 gr / 10,200 PSI | 16.0 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Rem. 209P | WAA12       | 15.1 gr / 9,700 PSI  | 16.1 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Rem. 209P | Windjammer  | 15.3 gr / 9,000 PSI  | 16.5 gr / 10,200 PSI | 17.6 gr / 11,400 PSI | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Fed. 12S3   | 16.0 gr / 9,600 PSI  | 17.0 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Hawk        | 15.2 gr / 9,500 PSI  | 16.3 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Red PC      | 15.8 gr / 8,000 PSI  | 17.1 gr / 9,500 PSI  | 18.3 gr / 10,900 PSI | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Rem. Fig. 8 | 15.8 gr / 9,200 PSI  | 16.8 gr / 10,400 PSI | 17.8 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Trapper     | 15.1 gr / 9,900 PSI  | 16.3 gr / 11,200 PSI | —                    | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | WAA12       | 15.4 gr / 8,700 PSI  | 16.7 gr / 10,000 PSI | 17.9 gr / 11,400 PSI | —                    |
| 1 1/8 oz  | Titewad    | Win. 209  | Windjammer  | 16.1 gr / 9,100 PSI  | 17.2 gr / 10,400 PSI | 18.5 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | Ched. 209 | Rem. Fig. 8 | 16.0 gr / 9,100 PSI  | 17.2 gr / 10,400 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Ched. 209 | WAA12       | 15.5 gr / 9,500 PSI  | 16.4 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Ched. 209 | Windjammer  | 15.7 gr / 8,100 PSI  | 17.0 gr / 9,500 PSI  | 18.3 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Clays      | CCI 209   | Red PC      | 16.0 gr / 8,400 PSI  | 17.4 gr / 9,800 PSI  | 18.8 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Clays      | CCI 209   | Rem. Fig. 8 | 16.8 gr / 7,400 PSI  | 18.0 gr / 9,300 PSI  | 19.3 gr / 11,400 PSI | —                    |
| 1 1/8 oz  | Clays      | CCI 209   | WAA12       | 15.9 gr / 8,500 PSI  | 17.2 gr / 10,300 PSI | 18.2 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | CCI 209   | Windjammer  | 16.6 gr / 6,400 LUP  | 18.0 gr / 7,500 LUP  | 19.4 gr / 8,600 LUP  | —                    |
| 1 1/8 oz  | Clays      | CCI 209SC | Red PC      | 15.7 gr / 8,700 PSI  | 17.0 gr / 10,100 PSI | 18.4 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | CCI 209SC | Rem. Fig. 8 | 16.0 gr / 6,600 PSI  | 17.0 gr / 8,100 PSI  | 18.0 gr / 8,800 PSI  | —                    |
| 1 1/8 oz  | Clays      | CCI 209SC | WAA12       | 16.0 gr / 9,300 PSI  | 17.0 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | CCI 209SC | Windjammer  | —                    | 17.6 gr / 9,900 PSI  | 18.5 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | Red PC      | 15.8 gr / 8,900 PSI  | 16.6 gr / 10,200 PSI | 18.0 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | Rem. Fig. 8 | 15.8 gr / 9,500 PSI  | 16.9 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | WAA12       | 15.5 gr / 9,900 PSI  | 16.6 gr / 11,200 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Fed. 209A | Windjammer  | 16.2 gr / 8,500 PSI  | 17.3 gr / 10,000 PSI | 18.4 gr / 11,400 PSI | —                    |
| 1 1/8 oz  | Clays      | Fio. 616  | Rem. Fig. 8 | 15.8 gr / 8,600 PSI  | 17.0 gr / 10,500 PSI | —                    | —                    |

| SHOT  | POWDER     | PRIMER    | WAD            | CHARGE/PRESSURE     |                      |                      |                      |
|---|------------|-----------|----------------|---------------------|----------------------|----------------------|----------------------|
|   |            |           |                | 1090 fps            | 1145 fps             | 1200 fps             | 1255 fps             |
| <b>12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT.</b> |            |           |                |                     |                      |                      |                      |
| 1 1/8 oz  | Clays      | Fio. 616  | WAA12          | 15.8 gr / 9,100 PSI | 16.8 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Fio. 616  | Windjammer     | 15.9 gr / 8,100 PSI | 17.2 gr / 9,500 PSI  | 18.4 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Hawk           | 15.5 gr / 9,000 PSI | 16.5 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Red PC         | 16.5 gr / 8,200 PSI | 17.7 gr / 9,900 PSI  | 18.8 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Rem. Fig 8     | 16.9 gr / 6,900 LUP | 18.0 gr / 7,900 LUP  | 19.2 gr / 9,000 LUP  | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Trapper        | 15.9 gr / 9,400 PSI | 17.0 gr / 11,200 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | WAA12          | 16.6 gr / 7,700 LUP | 17.7 gr / 9,000 LUP  | 18.8 gr / 10,300 LUP | —                    |
| 1 1/8 oz  | Clays      | Rem. 209P | Windjammer     | 16.3 gr / 8,100 PSI | 17.5 gr / 9,500 PSI  | 18.8 gr / 11,100 PSI | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Hawk           | 15.8 gr / 8,600 PSI | 17.2 gr / 10,000 PSI | 18.6 gr / 11,500 PSI | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Hor Versalite  | 15.8 gr / 7,600 LUP | 17.2 gr / 9,100 LUP  | 18.6 gr / 10,500 LUP | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Lage Uniwad    | 16.6 gr / 8,800 PSI | 17.7 gr / 10,300 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Red PC         | 16.5 gr / 7,800 PSI | 17.7 gr / 9,400 PSI  | 19.0 gr / 11,100 PSI | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Rem. Fig. 8    | 16.4 gr / 8,400 PSI | 17.5 gr / 9,700 PSI  | 18.6 gr / 11,000 PSI | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Trapper        | 16.2 gr / 9,200 PSI | 17.3 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | WAA12          | 16.2 gr / 8,100 PSI | 17.3 gr / 9,700 PSI  | 18.4 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Clays      | Win. 209  | Windjammer     | 16.8 gr / 7,700 PSI | 18.1 gr / 9,100 PSI  | 19.4 gr / 10,500 PSI | —                    |
| 1 1/8 oz  | Internat'l | Ched. 209 | Rem. Fig. 8    | 17.6 gr / 7,800 PSI | 18.7 gr / 8,900 PSI  | 19.8 gr / 10,100 PSI | 21.0 gr / 11,300 PSI |
| 1 1/8 oz  | Internat'l | Ched. 209 | WAA12          | 17.1 gr / 8,000 PSI | 18.3 gr / 9,200 PSI  | 19.5 gr / 10,400 PSI | —                    |
| 1 1/8 oz  | Internat'l | Ched. 209 | Windjammer     | 17.7 gr / 7,500 PSI | 18.8 gr / 8,600 PSI  | 19.9 gr / 9,600 PSI  | 21.1 gr / 10,800 PSI |
| 1 1/8 oz  | Internat'l | CCI 209   | Red PC         | 17.9 gr / 6,800 PSI | 19.0 gr / 8,200 PSI  | 20.1 gr / 9,600 PSI  | 21.2 gr / 11,100 PSI |
| 1 1/8 oz  | Internat'l | CCI 209   | Rem. Fig. 8    | 17.8 gr / 7,400 PSI | 19.0 gr / 8,800 PSI  | 20.2 gr / 10,200 PSI | 21.3 gr / 11,400 PSI |
| 1 1/8 oz  | Internat'l | CCI 209   | WAA12          | 17.1 gr / 7,800 PSI | 18.3 gr / 8,900 PSI  | 19.6 gr / 10,200 PSI | 20.9 gr / 11,400 PSI |
| 1 1/8 oz  | Internat'l | CCI 209   | Windjammer     | 19.2 gr / 6,100 LUP | 19.8 gr / 6,500 LUP  | 21.2 gr / 7,500 LUP  | 22.3 gr / 8,300 LUP  |
| 1 1/8 oz  | Internat'l | CCI 209SC | Red PC         | 17.6 gr / 7,800 PSI | 18.9 gr / 9,100 PSI  | 19.8 gr / 10,000 PSI | 20.8 gr / 11,000 PSI |
| 1 1/8 oz  | Internat'l | CCI 209SC | Rem. Fig. 8    | 18.0 gr / 7,200 PSI | 19.0 gr / 7,900 PSI  | 20.3 gr / 9,300 PSI  | 22.0 gr / 10,300 PSI |
| 1 1/8 oz  | Internat'l | CCI 209SC | WAA12          | 17.1 gr / 7,900 PSI | 18.3 gr / 9,200 PSI  | 19.5 gr / 10,400 PSI | 20.8 gr / 11,500 PSI |
| 1 1/8 oz  | Internat'l | CCI 209SC | Windjammer     | 17.6 gr / 7,500 PSI | 18.8 gr / 8,600 PSI  | 20.0 gr / 9,700 PSI  | 21.2 gr / 10,700 PSI |
| 1 1/8 oz  | Internat'l | Fed. 209A | Red PC         | 17.1 gr / 8,100 PSI | 18.3 gr / 9,200 PSI  | 19.5 gr / 10,300 PSI | 20.6 gr / 11,300 PSI |
| 1 1/8 oz  | Internat'l | Fed. 209A | Rem. Fig. 8    | 16.9 gr / 8,200 PSI | 18.0 gr / 9,300 PSI  | 19.3 gr / 10,700 PSI | —                    |
| 1 1/8 oz  | Internat'l | Fed. 209A | WAA12          | 16.7 gr / 8,300 PSI | 17.9 gr / 9,600 PSI  | 19.1 gr / 10,800 PSI | —                    |
| 1 1/8 oz  | Internat'l | Fed. 209A | Windjammer     | 16.9 gr / 7,600 PSI | 18.2 gr / 8,900 PSI  | 19.6 gr / 10,200 PSI | 20.9 gr / 11,400 PSI |
| 1 1/8 oz  | Internat'l | Fio. 616  | Rem. Fig. 8    | 17.3 gr / 7,900 PSI | 18.5 gr / 9,000 PSI  | 19.7 gr / 10,100 PSI | 20.9 gr / 11,300 PSI |
| 1 1/8 oz  | Internat'l | Fio. 616  | WAA12          | 17.2 gr / 8,300 PSI | 18.3 gr / 9,500 PSI  | 19.4 gr / 10,700 PSI | —                    |
| 1 1/8 oz  | Internat'l | Fio. 616  | Windjammer     | 17.3 gr / 6,900 PSI | 18.7 gr / 8,400 PSI  | 20.0 gr / 9,800 PSI  | 21.4 gr / 11,200 PSI |
| 1 1/8 oz  | Internat'l | Rem. 209P | Fed. 12S3      | 17.6 gr / 6,900 LUP | 18.3 gr / 7,800 LUP  | 19.4 gr / 9,000 LUP  | 20.6 gr / 10,200 LUP |
| 1 1/8 oz  | Internat'l | Rem. 209P | Hawk           | 17.5 gr / 7,700 PSI | 18.7 gr / 8,900 PSI  | 19.9 gr / 10,200 PSI | 21.0 gr / 11,300 PSI |
| 1 1/8 oz  | Internat'l | Rem. 209P | Hor. Vers.     | 17.2 gr / 7,700 PSI | 18.4 gr / 8,900 PSI  | 19.6 gr / 10,100 PSI | 20.8 gr / 11,300 PSI |
| 1 1/8 oz  | Internat'l | Rem. 209P | Red PC         | 17.6 gr / 7,300 PSI | 18.9 gr / 8,600 PSI  | 20.2 gr / 9,900 PSI  | 21.4 gr / 11,100 PSI |
| 1 1/8 oz  | Internat'l | Rem. 209P | Rem. Fig. 8    | 18.6 gr / 6,400 LUP | 19.6 gr / 7,000 LUP  | 20.9 gr / 7,500 LUP  | 21.7 gr / 9,100 LUP  |
| 1 1/8 oz  | Internat'l | Rem. 209P | Trapper        | 17.3 gr / 8,400 PSI | 18.4 gr / 9,200 PSI  | 19.8 gr / 10,300 PSI | 21.2 gr / 11,400 PSI |
| 1 1/8 oz  | Internat'l | Rem. 209P | WAA12          | 18.3 gr / 7,000 LUP | 18.8 gr / 7,600 LUP  | 19.7 gr / 8,700 LUP  | 20.9 gr / 10,400 LUP |
| 1 1/8 oz  | Internat'l | Rem. 209P | Windjammer     | —                   | 19.2 gr / 8,400 PSI  | 20.3 gr / 9,400 PSI  | 21.5 gr / 10,500 PSI |
| 1 1/8 oz  | Internat'l | Win. 209  | Hawk           | 17.7 gr / 7,700 PSI | 18.9 gr / 9,000 PSI  | 20.0 gr / 10,200 PSI | 21.5 gr / 11,500 PSI |
| 1 1/8 oz  | Internat'l | Win. 209  | Hor. Versalite | 17.8 gr / 6,900 LUP | 18.4 gr / 7,800 LUP  | 19.5 gr / 9,100 LUP  | 20.6 gr / 10,400 LUP |
| 1 1/8 oz  | Internat'l | Win. 209  | Lage Uniwad    | 17.7 gr / 7,400 PSI | 19.0 gr / 8,600 PSI  | 20.3 gr / 9,900 PSI  | 21.6 gr / 11,100 PSI |
| 1 1/8 oz  | Internat'l | Win. 209  | Red PC         | 17.7 gr / 7,600 PSI | 19.0 gr / 8,600 PSI  | 20.3 gr / 9,600 PSI  | 21.5 gr / 10,500 PSI |

| SHOT   | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|--|------------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| 12 GA., 2 3/4", REMINGTON STS. OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT. |            |           |             |                      |                      |                      |                      |
|  |            |           |             | 1090 fps             | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz   | Internat'l | Win. 209  | Rem. Fig. 8 | 17.5 gr / 7,900 PSI  | 18.6 gr / 9,000 PSI  | 19.7 gr / 10,200 PSI | 20.8 gr / 11,300 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | Trapper     | 17.0 gr / 7,900 PSI  | 18.5 gr / 9,100 PSI  | 19.9 gr / 10,100 PSI | 21.3 gr / 11,500 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | WAA12       | 17.0 gr / 7,100 PSI  | 18.4 gr / 8,600 PSI  | 19.8 gr / 10,100 PSI | 21.1 gr / 11,500 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | Windjammer  | 19.4 gr / 8,200 PSI  | 20.1 gr / 8,900 PSI  | 22.1 gr / 10,300 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Rem. 209P | Rem. Fig. 8 | 14.9 gr / 8,200 PSI  | 16.0 gr / 9,100 PSI  | 16.7 gr / 10,300 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Rem. 209P | WAA12       | 14.9 gr / 8,000 PSI  | 15.8 gr / 9,200 PSI  | 16.7 gr / 10,300 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Win. 209  | Rem. Fig. 8 | 15.1 gr / 8,000 PSI  | 16.1 gr / 8,900 PSI  | 17.1 gr / 9,900 PSI  | —                    |
| 1 1/8 oz   | Titegroup  | Win. 209  | WAA12       | 14.7 gr / 8,300 PSI  | 15.8 gr / 9,400 PSI  | 16.8 gr / 10,500 PSI | —                    |
|  |            |           |             | 1200 fps             | 1255 fps             | 1310 fps             |                      |
| 1 1/8 oz   | Universal  | CCI 209   | Windjammer  | 23.2 gr / 8,400 PSI  | 24.4 gr / 9,100 PSI  | 25.7 gr / 10,200 PSI | —                    |
| 1 1/8 oz   | Universal  | Fed. 209A | Fed. 12S3   | 21.7 gr / 10,200 PSI | 22.7 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz   | Universal  | Win. 209  | Rem. Fig. 8 | 22.5 gr / 8,900 PSI  | 23.7 gr / 9,900 PSI  | 25.0 gr / 10,800 PSI | —                    |
| 1 1/8 oz   | Universal  | Win. 209  | WAA12       | 21.5 gr / 9,800 PSI  | 23.0 gr / 10,700 PSI | —                    | —                    |
|  |            |           |             | 1420 fps             | 1475 fps             | 1530 fps             | 1585 fps             |
| 1 1/8 oz   | Longshot   | CCI 209M  | Fed. 12S3   | 30.6 gr / 10,000 PSI | 31.9 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz   | Longshot   | CCI 209M  | Hor. Vers.  | 31.7 gr / 9,000 PSI  | 32.9 gr / 9,900 PSI  | 34.1 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Longshot   | CCI 209M  | Rem. R12L   | 31.0 gr / 9,600 PSI  | 32.7 gr / 10,400 PSI | 34.5 gr / 11,400 PSI | —                    |
| 1 1/8 oz   | Longshot   | CCI 209M  | WAA12       | 30.9 gr / 9,800 PSI  | 32.3 gr / 10,600 PSI | 33.6 gr / 11,400 PSI | —                    |
| 1 1/8 oz   | Longshot   | CCI 209M  | Windjammer  | 31.7 gr / 9,000 PSI  | 33.3 gr / 9,800 PSI  | 34.8 gr / 10,600 PSI | 36.4 gr / 11,500 PSI |
| 1 1/8 oz   | Longshot   | Fed. 209A | Fed. 12S3   | 29.4 gr / 10,700 PSI | 31.1 gr / 11,600 PSI | —                    | —                    |
| 1 1/8 oz   | Longshot   | Fed. 209A | Rem. R12L   | 29.8 gr / 10,200 PSI | 31.2 gr / 11,100 PSI | —                    | —                    |
| 1 1/8 oz   | Longshot   | Fed. 209A | WAA12       | 29.4 gr / 10,900 PSI | —                    | —                    | —                    |
| 1 1/8 oz   | Longshot   | Fed. 209A | Windjammer  | 30.6 gr / 9,300 PSI  | 32.1 gr / 10,300 PSI | 33.6 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Longshot   | Rem. 209P | Hor. Vers.  | 31.0 gr / 9,100 PSI  | 32.4 gr / 10,000 PSI | 33.7 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Longshot   | Rem. 209P | Rem. R12L   | 31.1 gr / 9,400 PSI  | 32.5 gr / 10,400 PSI | 33.9 gr / 11,400 PSI | —                    |
| 1 1/8 oz   | Longshot   | Rem. 209P | WAA12       | 30.6 gr / 9,300 PSI  | 31.7 gr / 10,400 PSI | 32.7 gr / 11,500 PSI | —                    |
| 1 1/8 oz   | Longshot   | Rem. 209P | Windjammer  | 32.0 gr / 8,600 PSI  | 33.5 gr / 9,700 PSI  | 35.0 gr / 10,900 PSI | —                    |
|  |            |           |             | 1420 fps             | 1475 fps             | 1530 fps             | 1585 fps             |
| 1 1/8 oz   | Longshot   | Win. 209  | Fed. 12S3   | 31.9 gr / 8,500 PSI  | 33.0 gr / 9,800 PSI  | 34.2 gr / 11,100 PSI | —                    |
| 1 1/8 oz   | Longshot   | Win. 209  | Rem. R12L   | 31.5 gr / 8,800 PSI  | 32.0 gr / 10,100 PSI | 34.5 gr / 11,400 PSI | —                    |
| 1 1/8 oz   | Longshot   | Win. 209  | WAA12       | 31.7 gr / 9,100 PSI  | 32.8 gr / 10,100 PSI | 33.5 gr / 11,200 PSI | —                    |
| 1 1/8 oz   | Longshot   | Win. 209  | Windjammer  | 33.4 gr / 7,700 PSI  | 34.3 gr / 8,800 PSI  | 35.3 gr / 10,000 PSI | 36.3 gr / 11,100 PSI |
|  |            |           |             | 1220 fps             | 1330 fps             |                      |                      |
| 1 1/4 oz   | Universal  | CCI 209   | Rem. SP12   | 23.7 gr / 9,200 PSI  | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | CCI 209   | WAA12F114   | 23.1 gr / 10,800 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | CCI 209M  | Rem. SP12   | 23.5 gr / 10,800 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | CCI 209M  | WAA12F114   | 23.0 gr / 11,300 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | Fed. 209A | Rem. SP12   | 22.5 gr / 11,300 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | Rem. 209P | Rem. SP12   | 24.0 gr / 9,600 PSI  | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | Rem. 209P | WAA12F114   | 23.7 gr / 10,600 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | Win. 209  | Rem. SP12   | 24.0 gr / 10,000 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | Universal  | Win. 209  | WAA12F114   | 23.5 gr / 10,900 PSI | —                    | —                    | —                    |
| 1 1/4 oz   | HS-6       | Win. 209  | WAA12F114   | 32.0 gr / 9,200 LUP  | 34.0 gr / 10,400 LUP | —                    | —                    |
| 1 1/4 oz   | HS-6       | Win. 209  | Rem. R12H   | 32.0 gr / 9,100 LUP  | 34.0 gr / 10,200 LUP | —                    | —                    |

| SHOT  | POWDER   | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |                      |
|---|----------|-----------|-------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", REMINGTON STS. OR NITRO 27, OR GUN CLUB PLASTIC SHELLS CONT.</b> |          |           |             |                      |                      |                      |                      |
|   |          |           |             | <b>1330 fps</b>      | <b>1385 fps</b>      | <b>1440 fps</b>      | <b>1495 fps</b>      |
| 1 1/4 oz  | Longshot | CCI 209M  | Fed. 12S4   | 27.0 gr / 11,400 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | CCI 209M  | Rem. R12L   | 27.7 gr / 10,600 PSI | 28.7 gr / 11,500 PSI | —                    | —                    |
| 1 1/4 oz  | Longshot | CCI 209M  | WAA12F114   | 26.4 gr / 11,500 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | Fed. 209A | Fed. 12S4   | 27.0 gr / 11,500 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | Fed. 209A | Rem. R12L   | 27.5 gr / 10,600 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | Fed. 209A | WAA12F114   | 27.3 gr / 11,400 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | Rem. 209P | Fed. 12S4   | 27.4 gr / 10,900 PSI | —                    | —                    | —                    |
| 1 1/4 oz  | Longshot | Rem. 209P | Rem. R12L   | 28.5 gr / 9,900 PSI  | 29.9 gr / 10,700 PSI | —                    | —                    |
| 1 1/4 oz  | Longshot | Rem. 209P | WAA12F114   | 27.1 gr / 10,600 PSI | 28.2 gr / 11,500 PSI | —                    | —                    |
| 1 1/4 oz  | Longshot | Win. 209  | Fed. 12S4   | 28.3 gr / 9,900 PSI  | 29.6 gr / 11,100 PSI | —                    | —                    |
| 1 1/4 oz  | Longshot | Win. 209  | Rem. R12L   | 28.5 gr / 9,300 PSI  | 30.2 gr / 10,300 PSI | 31.8 gr / 11,200 PSI | —                    |
| 1 1/4 oz  | Longshot | Win. 209  | WAA12F114   | 28.2 gr / 9,100 PSI  | 30.1 gr / 10,400 PSI | —                    | —                    |
|   |          |           |             | <b>1285 fps</b>      |                      |                      |                      |
| 1 3/8 oz  | HS-7     | Win. 209  | Rem. R12H   | 38.0 gr / 10,100 LUP |                      |                      |                      |
| 1 3/8 oz  | HS-7     | Win. 209  | WAA12R      | 38.5 gr / 9,900 LUP  |                      |                      |                      |
| 1 3/8 oz  | HS-7     | Win. 209  | Rem. R12H   | 38.0 gr / 10,100 LUP |                      |                      |                      |
|   |          |           |             | <b>1185 fps</b>      | <b>1240 fps</b>      | <b>1295 fps</b>      |                      |
| 1 3/8 oz  | Longshot | CCI 209M  | Fed. 12S4   | 23.1 gr / 11,200 PSI | —                    | —                    | —                    |
| 1 3/8 oz  | Longshot | CCI 209M  | G/BP Sport  | 23.1 gr / 10,000 PSI | 24.9 gr / 11,500 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | CCI 209M  | Rem. SP12   | 24.1 gr / 10,300 PSI | 25.3 gr / 11,300 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | FED. 209A | FED. 12S4   | 22.5 gr / 10,800 PSI | —                    | —                    | —                    |
| 1 3/8 oz  | Longshot | FED. 209A | G/BP Sport  | 23.1 gr / 10,100 PSI | 24.7 gr / 11,500 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | FED. 209A | Rem. SP12   | 22.9 gr / 9,700 PSI  | 25.0 gr / 11,000 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | REM. 209P | Fed. 12S4   | 23.0 gr / 10,600 PSI | —                    | —                    | —                    |
| 1 3/8 oz  | Longshot | REM. 209P | G/BP Sport  | 23.4 gr / 9,300 PSI  | 25.2 gr / 10,800 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | REM. 209P | Rem. SP12   | 23.4 gr / 9,300 PSI  | 26.1 gr / 10,200 PSI | 27.7 gr / 11,500 PSI | —                    |
| 1 3/8 oz  | Longshot | WIN. 209  | FED. 12S4   | 23.5 gr / 9,900 PSI  | —                    | —                    | —                    |
| 1 3/8 oz  | Longshot | WIN. 209  | G/BP Sport  | 23.5 gr / 9,400 PSI  | 25.3 gr / 10,500 PSI | —                    | —                    |
| 1 3/8 oz  | Longshot | WIN. 209  | Rem. SP12   | 24.9 gr / 8,800 PSI  | 26.1 gr / 10,400 PSI | —                    | —                    |
|   |          |           |             | <b>1260 fps</b>      |                      |                      |                      |
| 1 1/2 oz  | HS-7     | Fed. 209  | Rem. R12H   | 36.0 gr / 10,600 LUP |                      |                      |                      |
| 1 1/2 oz  | HS-7     | Win. 209  | WAA12R      | 35.5 gr / 10,300 LUP |                      |                      |                      |
|   |          |           |             | <b>1205 fps</b>      | <b>1260 fps</b>      |                      |                      |
| 1 1/2 oz  | Longshot | Rem. 209P | Rem. RP12   | 25.0 gr / 11,500 PSI | —                    | —                    | —                    |
| 1 1/2 oz  | Longshot | Rem. 209P | WAA12R      | 24.8 gr / 11,000 PSI | —                    | —                    | —                    |
| 1 1/2 oz  | Longshot | Win. 209  | Rem. RP12   | 25.6 gr / 10,400 PSI | —                    | —                    | —                    |
| 1 1/2 oz  | Longshot | Win. 209  | WAA12R      | 26.1 gr / 10,500 PSI | 27.0 gr / 11,300 PSI | —                    | —                    |
| <b>12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS</b>         |          |           |             |                      |                      |                      |                      |
|   |          |           |             | <b>1250 fps</b>      | <b>1300 fps</b>      | <b>1350 fps</b>      | <b>1400 fps</b>      |
| 7/8 oz  | Titewad  | CCI 209SC | Rem. TGT 12 | 17.7 gr / 7,800 PSI  | 18.8 gr / 8,900 PSI  | 19.8 gr / 9,600 PSI  | 21.0 gr / 10,200 PSI |
| 7/8 oz  | Titewad  | CCI 209SC | WAA12L      | 17.3 gr / 8,800 PSI  | 18.2 gr / 10,100 PSI | 19.8 gr / 11,300 PSI | —                    |
| 7/8 oz  | Titewad  | Fed. 209A | WAA12L      | 17.8 gr / 8,600 PSI  | 18.8 gr / 9,100 PSI  | 19.8 gr / 10,700 PSI | —                    |
| 7/8 oz  | Titewad  | Rem. 209P | Fed. 12S0   | 17.4 gr / 9,200 PSI  | 18.6 gr / 10,100 PSI | 19.4 gr / 11,300 PSI | —                    |
| 7/8 oz  | Titewad  | Fio. 616  | Rem. TGT 12 | 17.5 gr / 8,100 PSI  | 19.2 gr / 8,900 PSI  | 20.1 gr / 9,800 PSI  | 21.3 gr / 10,500 PSI |

SHOT POWDER PRIMER WAD

CHARGE/PRESSURE

## 12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT.

|        |            |           |             | 1250 fps            | 1300 fps             | 1350 fps             | 1400 fps             |
|--------|------------|-----------|-------------|---------------------|----------------------|----------------------|----------------------|
| 7/8 oz | Titewad    | Rem. 209P | Rem.TGT12   | 17.2 gr / 8,300 PSI | 18.2 gr / 9,400 PSI  | 19.5 gr / 10,300 PSI | —                    |
| 7/8 oz | Titewad    | Rem. 209P | WAA12L      | 18.0 gr / 8,500 PSI | 19.0 gr / 9,100 PSI  | 19.9 gr / 10,000 PSI | —                    |
| 7/8 oz | Titewad    | Win. 209  | Fed. 12S0   | 17.3 gr / 9,300 PSI | 18.5 gr / 10,400 PSI | 19.5 gr / 11,300 PSI | —                    |
| 7/8 oz | Titewad    | Win. 209  | Rem.TGT12   | 17.1 gr / 9,300 PSI | 18.1 gr / 9,900 PSI  | 19.5 gr / 10,800 PSI | —                    |
| 7/8 oz | Titewad    | Win. 209  | WAA12L      | 17.8 gr / 8,600 PSI | 19.1 gr / 9,500 PSI  | 20.2 gr / 10,300 PSI | 21.4 gr / 10,800 PSI |
|        |            |           |             | 1200 fps            | 1250 fps             | 1300 fps             | 1350 fps             |
| 7/8 oz | Clays      | CCI 209M  | Rem. TGT 12 | 16.5 gr / 7,100 PSI | 17.5 gr / 7,800 PSI  | 18.5 gr / 8,900 PSI  | —                    |
| 7/8 oz | Clays      | CCI 209M  | WAA12L      | 15.8 gr / 7,500 PSI | 17.1 gr / 9,200 PSI  | 18.0 gr / 10,600 PSI | —                    |
| 7/8 oz | Clays      | CCI 209SC | Rem. TGT 12 | 16.3 gr / 6,500 PSI | 17.6 gr / 7,100 PSI  | 18.7 gr / 7,800 PSI  | —                    |
| 7/8 oz | Clays      | CCI 209SC | WAA12L      | 16.0 gr / 7,600 PSI | 17.4 gr / 9,500 PSI  | 18.3 gr / 10,500 PSI | —                    |
| 7/8 oz | Clays      | Fed. 209A | Fed. 12S0   | 16.0 gr / 8,800 PSI | 17.4 gr / 9,400 PSI  | 18.5 gr / 9,900 PSI  | 19.5 gr / 11,400 PSI |
| 7/8 oz | Clays      | Fed. 209A | Rem.TGT12   | 16.0 gr / 6,900 PSI | 17.2 gr / 9,300 PSI  | 18.5 gr / 9,900 PSI  | 19.5 gr / 11,400 PSI |
| 7/8 oz | Clays      | Fed. 209A | WAA12L      | —                   | 18.0 gr / 8,400 PSI  | 19.1 gr / 9,300 PSI  | 20.5 gr / 10,800 PSI |
| 7/8 oz | Clays      | Fed. 209A | WAA12SL     | —                   | 18.0 gr / 8,500 PSI  | 19.0 gr / 9,700 PSI  | —                    |
| 7/8 oz | Clays      | Rem. 209P | Fed. 12S0   | 16.8 gr / 7,100 PSI | 18.0 gr / 8,600 PSI  | 19.0 gr / 9,200 PSI  | —                    |
| 7/8 oz | Clays      | Rem. 209P | Rem. TGT 12 | 18.2 gr / 6,000 LUP | 18.9 gr / 6,800 LUP  | —                    | —                    |
| 7/8 oz | Clays      | Rem. 209P | WAA12L      | 16.8 gr / 6,800 PSI | 18.1 gr / 7,500 PSI  | 19.1 gr / 8,600 PSI  | 20.5 gr / 10,700 PSI |
| 7/8 oz | Clays      | Win. 209  | Fed. 12S0   | 17.1 gr / 7,400 PSI | 18.0 gr / 8,000 PSI  | 20.0 gr / 10,700 PSI | —                    |
| 7/8 oz | Clays      | Win. 209  | Rem.TGT12   | 15.8 gr / 7,100 PSI | 17.4 gr / 8,000 PSI  | 18.4 gr / 9,000 PSI  | 19.4 gr / 11,300 PSI |
| 7/8 oz | Clays      | Win. 209  | WAA12SL     | 16.9 gr / 7,100 LUP | 18.1 gr / 7,400 LUP  | 19.7 gr / 8,400 LUP  | —                    |
| 7/8 oz | Clays      | Win. 209  | WAA12L      | —                   | 18.3 gr / 8,300 PSI  | 19.2 gr / 9,400 PSI  | 20.5 gr / 10,000 PSI |
|        |            |           |             | 1250 fps            | 1300 fps             | 1350 fps             | 1400 fps             |
| 7/8 oz | Internat'l | CCI 209M  | Rem.TGT12   | 19.0 gr / 7,400 PSI | 20.0 gr / 8,900 PSI  | 20.8 gr / 8,900 PSI  | 22.0 gr / 10,400 PSI |
| 7/8 oz | Internat'l | CCI 209M  | WAA12L      | 18.8 gr / 7,600 PSI | 20.0 gr / 8,000 PSI  | 21.0 gr / 9,500 PSI  | 22.4 gr / 10,500 PSI |
| 7/8 oz | Internat'l | CCI 209M  | Fed. 12S0   | 19.0 gr / 8,200 PSI | 20.0 gr / 9,100 PSI  | 21.0 gr / 10,200 PSI | 22.0 gr / 11,000 PSI |
| 7/8 oz | Internat'l | CCI 209SC | Rem.TGT12   | 19.0 gr / 7,800 PSI | 19.8 gr / 8,200 PSI  | 20.8 gr / 9,400 PSI  | 21.5 gr / 10,300 PSI |
| 7/8 oz | Internat'l | CCI 209SC | WAA12L      | 19.2 gr / 8,100 PSI | 20.2 gr / 8,700 PSI  | 21.2 gr / 9,500 PSI  | 22.2 gr / 10,800 PSI |
| 7/8 oz | Internat'l | Ched. 209 | WAA12L      | 20.0 gr / 7,000 PSI | 21.2 gr / 7,500 PSI  | 22.0 gr / 8,400 PSI  | 22.8 gr / 9,300 PSI  |
| 7/8 oz | Internat'l | Fed. 209A | Rem.TGT12   | 18.6 gr / 8,300 PSI | 19.7 gr / 9,000 PSI  | 20.6 gr / 10,000 PSI | 22.0 gr / 10,800 PSI |
| 7/8 oz | Internat'l | Fed. 209A | WAA12SL     | 20.0 gr / 7,800 PSI | 21.0 gr / 8,600 PSI  | 22.0 gr / 9,500 PSI  | —                    |
| 7/8 oz | Internat'l | Rem. 209P | Rem.TGT12   | 20.5 gr / 6,800 PSI | 21.5 gr / 7,300 PSI  | 22.5 gr / 8,300 PSI  | 23.0 gr / 9,300 PSI  |
| 7/8 oz | Internat'l | Rem. 209P | WAA12L      | 20.0 gr / 7,500 PSI | 20.8 gr / 8,300 PSI  | 22.2 gr / 8,900 PSI  | 22.7 gr / 10,200 PSI |
| 7/8 oz | Internat'l | Win. 209  | Fed. 12S0   | 19.5 gr / 8,100 PSI | 20.9 gr / 8,500 PSI  | 21.9 gr / 9,500 PSI  | —                    |
| 7/8 oz | Internat'l | Win. 209  | Rem.TGT12   | 19.2 gr / 7,100 PSI | 20.2 gr / 7,800 PSI  | 21.2 gr / 8,700 PSI  | 22.5 gr / 9,300 PSI  |
| 7/8 oz | Internat'l | Win. 209  | WAA12SL     | 20.5 gr / 7,900 PSI | 21.0 gr / 8,600 PSI  | 21.5 gr / 9,100 PSI  | 22.5 gr / 10,200 PSI |
|        |            |           |             | 1125 fps            | 1180 fps             | 1235 fps             | 1290 fps             |
| 1 oz   | Titewad    | CCI 209SC | Purple PC   | 15.5 gr / 7,400 PSI | 17.0 gr / 7,700 PSI  | 18.5 gr / 9,100 PSI  | 20.0 gr / 10,200 PSI |
| 1 oz   | Titewad    | CCI 209SC | Rem.TGT12   | 15.3 gr / 8,700 PSI | 16.5 gr / 9,200 PSI  | 17.6 gr / 10,900 PSI | —                    |
| 1 oz   | Titewad    | CCI 209SC | WAA12SL     | 15.7 gr / 8,000 PSI | 16.7 gr / 8,200 PSI  | 17.7 gr / 10,400 PSI | —                    |
| 1 oz   | Titewad    | Fed. 209A | Rem.TGT12   | 15.7 gr / 7,600 PSI | 17.3 gr / 8,800 PSI  | 18.1 gr / 10,000 PSI | 19.4 gr / 11,200 PSI |
| 1 oz   | Titewad    | Fed. 209A | WAA12SL     | 16.4 gr / 7,300 PSI | 17.4 gr / 7,700 PSI  | 18.4 gr / 9,600 PSI  | 20.1 gr / 10,600 PSI |
| 1 oz   | Titewad    | Fio. 616  | Windjammer  | —                   | 16.6 gr / 8,300 PSI  | 18.2 gr / 9,600 PSI  | 19.5 gr / 10,700 PSI |
| 1 oz   | Titewad    | Rem. 209P | Fed. 12S0   | 15.7 gr / 8,700 PSI | 16.5 gr / 10,000 PSI | 18.0 gr / 11,200 PSI | —                    |
| 1 oz   | Titewad    | Rem. 209P | Purple PC   | 15.9 gr / 6,500 PSI | 17.3 gr / 7,300 PSI  | 18.8 gr / 9,200 PSI  | 20.3 gr / 10,400 PSI |

**SHOT POWDER PRIMER WAD CHARGE/PRESSURE**

**12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT.**

|      |            |           |             | 1125 fps            | 1180 fps             | 1235 fps             | 1290 fps             |
|------|------------|-----------|-------------|---------------------|----------------------|----------------------|----------------------|
| 1 oz | Titewad    | Rem. 209P | Rem. TGT 12 | 15.9 gr / 6,900 PSI | 16.8 gr / 7,800 PSI  | 18.4 gr / 8,900 PSI  | 20.2 gr / 10,600 PSI |
| 1 oz | Titewad    | Rem. 209P | WAA12SL     | 15.5 gr / 7,300 PSI | 17.1 gr / 8,000 PSI  | 18.5 gr / 9,600 PSI  | 19.5 gr / 11,200 PSI |
| 1 oz | Titewad    | Rem. 209P | Windjammer  | —                   | 17.3 gr / 7,900 PSI  | 18.3 gr / 9,400 PSI  | 19.5 gr / 9,900 PSI  |
| 1 oz | Titewad    | Win. 209  | Fed. 12S0   | 15.6 gr / 9,000 PSI | 16.8 gr / 10,300 PSI | —                    | —                    |
| 1 oz | Titewad    | Win. 209  | Purple PC   | 15.9 gr / 6,900 PSI | 17.1 gr / 7,400 PSI  | 18.5 gr / 9,000 PSI  | 19.5 gr / 10,400 PSI |
| 1 oz | Titewad    | Win. 209  | Rem.TGT12   | 15.2 gr / 8,200 PSI | 16.4 gr / 9,200 PSI  | 17.7 gr / 10,200 PSI | 19.0 gr / 11,300 PSI |
| 1 oz | Clays      | CCI 209   | WAA12SL     | 15.6 gr / 8,300 PSI | 16.5 gr / 9,800 PSI  | 18.1 gr / 10,700 PSI | —                    |
| 1 oz | Clays      | CCI 209   | Fed. 12S0   | 15.8 gr / 9,000 PSI | 17.0 gr / 10,500 PSI | —                    | —                    |
| 1 oz | Clays      | CCI 209   | Purple PC   | 16.0 gr / 7,400 PSI | 17.2 gr / 8,200 PSI  | 18.5 gr / 9,900 PSI  | 20.0 gr / 10,800 PSI |
| 1 oz | Clays      | CCI 209   | Rem. TGT 12 | 16.6 gr / 6,700 LUP | 17.7 gr / 7,700 LUP  | 18.7 gr / 8,500 LUP  | 19.8 gr / 9,500 LUP  |
| 1 oz | Clays      | CCI 209   | WAA12SL     | 15.7 gr / 7,900 PSI | 17.0 gr / 8,700 PSI  | 18.4 gr / 10,900 PSI | —                    |
| 1 oz | Clays      | CCI 209   | Windjammer  | 16.3 gr / 6,500 PSI | 17.5 gr / 7,600 PSI  | 18.8 gr / 9,000 PSI  | 20.3 gr / 10,700 PSI |
| 1 oz | Clays      | CCI 209SC | Purple PC   | 16.6 gr / 6,000 PSI | 18.0 gr / 7,100 PSI  | 19.3 gr / 8,400 PSI  | 20.8 gr / 10,700 PSI |
| 1 oz | Clays      | CCI 209SC | Rem. TGT 12 | 15.2 gr / 6,400 PSI | 16.6 gr / 7,500 PSI  | 17.5 gr / 9,700 PSI  | 19.2 gr / 11,000 PSI |
| 1 oz | Clays      | CCI 209SC | WAA12SL     | 15.8 gr / 7,500 PSI | 17.0 gr / 8,300 PSI  | 18.5 gr / 9,800 PSI  | —                    |
| 1 oz | Clays      | CCI 209SC | Windjammer  | 15.7 gr / 6,800 PSI | 16.7 gr / 7,400 PSI  | 18.0 gr / 9,200 PSI  | 19.5 gr / 11,200 PSI |
| 1 oz | Clays      | Fed. 209A | Purple PC   | 15.5 gr / 7,400 PSI | 17.3 gr / 9,200 PSI  | 18.5 gr / 10,400 PSI | 19.8 gr / 11,100 PSI |
| 1 oz | Clays      | Fed. 209A | Rem.TGT12   | 15.2 gr / 7,800 PSI | 16.7 gr / 9,500 PSI  | 18.2 gr / 11,000 PSI | —                    |
| 1 oz | Clays      | Fed. 209A | WAA12SL     | 15.4 gr / 8,500 PSI | 16.9 gr / 9,000 PSI  | 18.4 gr / 10,900 PSI | —                    |
| 1 oz | Clays      | Fed. 209A | Windjammer  | 15.1 gr / 7,900 PSI | 16.8 gr / 9,200 PSI  | 18.2 gr / 11,200 PSI | —                    |
| 1 oz | Clays      | Rem. 209P | Fed. 12S0   | 16.0 gr / 8,200 PSI | 17.4 gr / 9,400 PSI  | 18.7 gr / 11,400 PSI | —                    |
| 1 oz | Clays      | Rem. 209P | Rem.TGT12   | 16.1 gr / 7,500 PSI | 17.3 gr / 8,400 PSI  | 18.5 gr / 9,900 PSI  | —                    |
| 1 oz | Clays      | Rem. 209P | WAA12SL     | 16.2 gr / 6,500 PSI | 17.4 gr / 8,000 PSI  | 18.6 gr / 9,200 PSI  | 20.4 gr / 10,600 PSI |
| 1 oz | Clays      | Win. 209  | Purple PC   | 15.7 gr / 7,000 PSI | 17.2 gr / 8,500 PSI  | 18.5 gr / 9,900 PSI  | 20.0 gr / 10,400 PSI |
| 1 oz | Clays      | Win. 209  | Rem.TGT12   | 15.8 gr / 7,700 PSI | 16.8 gr / 8,500 PSI  | 18.2 gr / 10,300 PSI | —                    |
| 1 oz | Clays      | Win. 209  | WAA12SL     | 16.0 gr / 7,400 LUP | 17.2 gr / 8,300 LUP  | 18.5 gr / 9,200 LUP  | 19.8 gr / 10,200 LUP |
| 1 oz | Internat'l | CCI 209   | Purple PC   | 18.8 gr / 7,300 PSI | 20.0 gr / 8,500 PSI  | 21.0 gr / 9,100 PSI  | 22.0 gr / 10,900 PSI |
| 1 oz | Internat'l | CCI 209   | Rem.TGT12   | 18.0 gr / 7,400 PSI | 19.2 gr / 8,700 PSI  | 20.2 gr / 10,000 PSI | —                    |
| 1 oz | Internat'l | CCI 209   | WAA12SL     | 19.2 gr / 6,700 LUP | 20.6 gr / 7,500 LUP  | 22.3 gr / 8,800 LUP  | —                    |
| 1 oz | Internat'l | CCI 209SC | Purple PC   | 18.5 gr / 8,200 PSI | 19.8 gr / 9,100 PSI  | 21.0 gr / 10,100 PSI | 22.0 gr / 11,200 PSI |
| 1 oz | Internat'l | CCI 209SC | Rem.TGT12   | 17.8 gr / 8,700 PSI | 19.3 gr / 9,700 PSI  | 20.3 gr / 10,400 PSI | 21.3 gr / 11,300 PSI |
| 1 oz | Internat'l | CCI 209SC | WAA12SL     | 19.0 gr / 7,400 PSI | 20.0 gr / 8,600 PSI  | 21.0 gr / 10,000 PSI | —                    |
| 1 oz | Internat'l | Fed. 209A | Purple PC   | 19.2 gr / 7,000 PSI | 20.6 gr / 7,900 PSI  | 21.7 gr / 9,600 PSI  | —                    |
| 1 oz | Internat'l | Fed. 209A | Rem.TGT12   | 17.8 gr / 9,000 PSI | 18.8 gr / 9,700 PSI  | 20.0 gr / 10,500 PSI | —                    |
| 1 oz | Internat'l | Fed. 209A | WAA12SL     | 18.0 gr / 8,700 PSI | 19.0 gr / 10,400 PSI | 20.0 gr / 11,300 PSI | —                    |
| 1 oz | Internat'l | Rem. 209P | Fed. 12S0   | 18.8 gr / 9,100 PSI | 20.0 gr / 9,900 PSI  | —                    | —                    |
| 1 oz | Internat'l | Rem. 209P | Purple PC   | 19.8 gr / 7,700 PSI | 20.7 gr / 8,900 PSI  | 21.6 gr / 9,400 PSI  | 22.8 gr / 10,100 PSI |
| 1 oz | Internat'l | Rem. 209P | Rem. TGT 12 | 20.8 gr / 5,900 LUP | 21.5 gr / 7,100 LUP  | 22.3 gr / 7,800 LUP  | —                    |
| 1 oz | Internat'l | Rem. 209P | WAA12SL     | 19.0 gr / 7,700 PSI | 20.0 gr / 9,200 PSI  | 21.2 gr / 9,700 PSI  | 22.5 gr / 11,100 PSI |
| 1 oz | Internat'l | Win. 209  | Fed. 12S0   | 18.4 gr / 8,700 PSI | 19.6 gr / 10,500 PSI | 20.7 gr / 11,100 PSI | —                    |
| 1 oz | Internat'l | Win. 209  | Purple PC   | 18.6 gr / 7,700 PSI | 20.0 gr / 8,100 PSI  | 21.2 gr / 9,300 PSI  | 22.7 gr / 10,800 PSI |
| 1 oz | Internat'l | Win. 209  | Rem.TGT12   | 18.4 gr / 7,700 PSI | 19.6 gr / 8,600 PSI  | 20.7 gr / 9,600 PSI  | 22.2 gr / 11,000 PSI |
| 1 oz | Internat'l | Win. 209  | WAA12SL     | 18.9 gr / 6,900 LUP | 20.4 gr / 8,300 LUP  | 21.3 gr / 8,900 LUP  | —                    |
| 1 oz | Titigroup  | Rem. 209P | Rem. TGT 12 | 16.0 gr / 7,700 PSI | 17.3 gr / 9,000 PSI  | 18.6 gr / 10,200 PSI | 20.0 gr / 11,200 PSI |
| 1 oz | Titigroup  | Rem. 209P | WAA12SL     | 16.2 gr / 7,800 PSI | 17.4 gr / 9,100 PSI  | 18.6 gr / 10,400 PSI | 20.0 gr / 11,500 PSI |



SHOT POWDER PRIMER WAD CHARGE/PRESSURE

## 12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT.

|          |            |           |                | 1180 fps             | 1235 fps             | 1290 fps             | 1345 fps             |
|----------|------------|-----------|----------------|----------------------|----------------------|----------------------|----------------------|
| 1 oz     | Titelgroup | Win. 209  | Rem. TGT 12    | 15.7 gr / 7,900 PSI  | 17.1 gr / 9,100 PSI  | 18.5 gr / 10,200 PSI | 19.9 gr / 11,400 PSI |
| 1 oz     | Titelgroup | Win. 209  | WAA12SL        | 16.5 gr / 7,500 PSI  | 17.7 gr / 8,800 PSI  | 18.9 gr / 10,100 PSI | 20.1 gr / 11,400 PSI |
|          |            |           |                | 1090 fps             | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz | Titewad    | Ched. 209 | Rem. Fig. 8    | 15.7 gr / 9,500 PSI  | 16.6 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | WAA12          | 15.3 gr / 9,900 PSI  | 16.4 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Ched. 209 | Windjammer     | 15.9 gr / 8,700 PSI  | 16.8 gr / 10,100 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | CCI 209   | Rem. Fig. 8    | 15.3 gr / 10,300 PSI | 16.5 gr / 11,200 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | CCI 209   | WAA12          | 15.3 gr / 10,300 PSI | 16.0 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | CCI 209   | Windjammer     | 15.3 gr / 8,600 PSI  | 16.6 gr / 9,400 PSI  | 17.8 gr / 10,900 PSI | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | Fed. 12S3      | 15.5 gr / 9,900 PSI  | 16.8 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | Hor. Vers.     | 15.3 gr / 10,600 PSI | 16.3 gr / 11,400 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | Red PC         | 15.6 gr / 9,600 PSI  | 16.6 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | Rem. Fig. 8    | 15.6 gr / 10,000 PSI | 16.6 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | WAA12          | 15.4 gr / 9,700 PSI  | 16.4 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Fed. 209A | Windjammer     | 15.4 gr / 9,400 PSI  | 16.0 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Rem. 209P | Rem. Fig. 8    | 15.7 gr / 8,500 PSI  | 16.8 gr / 9,300 PSI  | 18.3 gr / 10,400 PSI | —                    |
| 1 1/8 oz | Titewad    | Rem. 209P | WAA12          | 15.5 gr / 10,100 PSI | 16.4 gr / 11,200 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Rem. 209P | Windjammer     | 15.5 gr / 9,100 PSI  | 16.2 gr / 10,000 PSI | 17.0 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | CB3118-12-AR   | 15.2 gr / 9,300 PSI  | 16.3 gr / 10,700 PSI | 17.7 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | Hawk           | 14.8 gr / 10,000 PSI | 15.5 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | Red PC         | 15.1 gr / 8,900 PSI  | 15.9 gr / 9,700 PSI  | —                    | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | Rem. Fig. 8    | 15.2 gr / 9,000 PSI  | 16.2 gr / 9,700 PSI  | 17.5 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | WAA12          | 15.2 gr / 9,500 PSI  | 16.5 gr / 10,400 PSI | 17.8 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Titewad    | Win. 209  | Windjammer     | 15.3 gr / 8,300 PSI  | 16.3 gr / 9,600 PSI  | 17.8 gr / 10,500 PSI | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | Rem. Fig. 8    | 16.4 gr / 8,800 PSI  | 17.5 gr / 10,200 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | WAA12          | 15.8 gr / 9,400 PSI  | 17.2 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Ched. 209 | Windjammer     | 15.7 gr / 7,900 PSI  | 17.4 gr / 9,500 PSI  | 19.0 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Clays      | CCI 209   | Red PC         | 16.5 gr / 8,400 PSI  | 17.0 gr / 10,000 PSI | 18.3 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Clays      | CCI 209   | Rem. Fig. 8    | 16.0 gr / 8,700 PSI  | 16.8 gr / 9,600 PSI  | —                    | —                    |
| 1 1/8 oz | Clays      | CCI 209   | WAA12          | 16.0 gr / 8,900 PSI  | 17.0 gr / 9,800 PSI  | 18.1 gr / 11,300 PSI | —                    |
| 1 1/8 oz | Clays      | CCI 209   | Windjammer     | 16.0 gr / 8,200 PSI  | 16.8 gr / 8,600 PSI  | 18.5 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Clays      | CCI 209SC | Rem. Fig. 8    | 15.7 gr / 8,800 PSI  | 16.5 gr / 10,400 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | CCI 209SC | Trapper        | 15.5 gr / 10,300 PSI | 16.0 gr / 11,400 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | CCI 209SC | WAA12          | 15.5 gr / 9,300 PSI  | 16.0 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | CCI 209SC | Windjammer     | 16.1 gr / 8,600 PSI  | 16.7 gr / 9,100 PSI  | 17.8 gr / 11,500 PSI | —                    |
| 1 1/8 oz | Clays      | Fed. 209A | Rem. Fig. 8    | 15.8 gr / 10,700 PSI | 16.6 gr / 11,100 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Fed. 209A | Windjammer     | 16.0 gr / 9,100 PSI  | 16.7 gr / 10,300 PSI | 18.0 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Clays      | Fed. 209A | WAA12          | 15.0 gr / 9,700 PSI  | 16.0 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Fed. 209A | WAA12          | 15.5 gr / 9,400 PSI  | 16.0 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Rem. 209P | Red PC         | 17.1 gr / 7,200 LUP  | 18.4 gr / 7,800 LUP  | 19.6 gr / 8,400 LUP  | —                    |
| 1 1/8 oz | Clays      | Rem. 209P | Rem. Fig. 8    | 16.3 gr / 9,000 PSI  | 17.3 gr / 10,100 PSI | 18.5 gr / 11,500 PSI | —                    |
| 1 1/8 oz | Clays      | Rem. 209P | WAA12          | 15.9 gr / 8,900 PSI  | 17.0 gr / 9,400 PSI  | —                    | —                    |
| 1 1/8 oz | Clays      | Rem. 209P | Windjammer     | 16.5 gr / 8,100 PSI  | 17.5 gr / 9,400 PSI  | 18.5 gr / 10,400 PSI | —                    |
| 1 1/8 oz | Clays      | Win. 209  | Hor. Versalite | 16.4 gr / 8,300 LUP  | 17.6 gr / 9,400 LUP  | 18.8 gr / 10,600 LUP | —                    |
| 1 1/8 oz | Clays      | Win. 209  | Lage Uniwad    | 16.0 gr / 9,700 PSI  | 16.9 gr / 10,600 PSI | —                    | —                    |
| 1 1/8 oz | Clays      | Win. 209  | Red PC         | 16.3 gr / 7,900 PSI  | 17.0 gr / 9,100 PSI  | 18.3 gr / 10,900 PSI | —                    |

| SHOT   | POWDER     | PRIMER    | WAD            | CHARGE/PRESSURE      |                      |                      |                      |
|--|------------|-----------|----------------|----------------------|----------------------|----------------------|----------------------|
| 12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT. |            |           |                |                      |                      |                      |                      |
|  |            |           |                | 1090 fps             | 1145 fps             | 1200 fps             | 1255 fps             |
| 1 1/8 oz   | Clays      | Win. 209  | Rem. Fig. 8    | 16.0 gr / 7,700 LUP  | 17.0 gr / 8,500 LUP  | 18.1 gr / 9,400 LUP  | —                    |
| 1 1/8 oz   | Clays      | Win. 209  | WAA12          | 16.1 gr / 7,700 LUP  | 17.3 gr / 8,800 LUP  | 18.2 gr / 9,800 LUP  | —                    |
| 1 1/8 oz   | Internat'l | Ched. 209 | Rem. Fig. 8    | 17.4 gr / 7,900 PSI  | 18.5 gr / 9,200 PSI  | 19.7 gr / 10,500 PSI | —                    |
| 1 1/8 oz   | Internat'l | Ched. 209 | WAA12          | 16.9 gr / 8,100 PSI  | 18.1 gr / 9,600 PSI  | 19.3 gr / 11,100 PSI | —                    |
| 1 1/8 oz   | Internat'l | Ched. 209 | Windjammer     | 17.9 gr / 8,000 PSI  | 18.9 gr / 9,200 PSI  | 19.8 gr / 10,300 PSI | 20.8 gr / 11,500 PSI |
| 1 1/8 oz   | Internat'l | CCI 209   | Fed. 12S3      | —                    | 19.2 gr / 7,900 LUP  | 20.0 gr / 8,300 LUP  | 21.6 gr / 10,200 LUP |
| 1 1/8 oz   | Internat'l | CCI 209   | Hor. Vers.     | 16.7 gr / 8,600 PSI  | 17.2 gr / 9,600 PSI  | 18.2 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Internat'l | CCI 209   | Red PC         | 17.3 gr / 8,900 PSI  | 17.7 gr / 9,400 PSI  | 19.0 gr / 10,700 PSI | 20.5 gr / 11,300 PSI |
| 1 1/8 oz   | Internat'l | CCI 209   | Rem. Fig. 8    | 17.0 gr / 9,300 PSI  | 17.8 gr / 10,100 PSI | 18.5 gr / 11,200 PSI | —                    |
| 1 1/8 oz   | Internat'l | CCI 209   | WAA12          | 17.0 gr / 9,700 PSI  | 17.4 gr / 10,500 PSI | 18.2 gr / 11,400 PSI | —                    |
| 1 1/8 oz   | Internat'l | CCI 209   | Windjammer     | 17.0 gr / 8,300 PSI  | 17.7 gr / 8,800 PSI  | 19.5 gr / 9,800 PSI  | 20.5 gr / 11,500 PSI |
| 1 1/8 oz   | Internat'l | CCI 209SC | Red PC         | 16.7 gr / 8,900 PSI  | 17.8 gr / 9,800 PSI  | 18.5 gr / 10,300 PSI | 20.5 gr / 11,500 PSI |
| 1 1/8 oz   | Internat'l | CCI 209SC | Rem. Fig. 8    | 16.7 gr / 8,600 PSI  | 17.5 gr / 9,800 PSI  | 18.5 gr / 10,500 PSI | —                    |
| 1 1/8 oz   | Internat'l | CCI 209SC | Trapper        | 16.5 gr / 9,400 PSI  | 17.5 gr / 9,900 PSI  | —                    | —                    |
| 1 1/8 oz   | Internat'l | CCI 209SC | WAA12          | 16.2 gr / 9,100 PSI  | 17.2 gr / 9,800 PSI  | 18.5 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Internat'l | CCI 209SC | Windjammer     | 16.7 gr / 8,500 PSI  | 17.7 gr / 8,900 PSI  | 19.0 gr / 10,600 PSI | 20.7 gr / 11,200 PSI |
| 1 1/8 oz   | Internat'l | Fed. 209A | Red PC         | 16.0 gr / 9,200 PSI  | 17.2 gr / 10,400 PSI | 18.5 gr / 11,500 PSI | —                    |
| 1 1/8 oz   | Internat'l | Fed. 209A | Rem. Fig. 8    | 16.5 gr / 9,700 PSI  | 17.0 gr / 10,100 PSI | 18.0 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Internat'l | Fed. 209A | WAA12          | 16.0 gr / 9,500 PSI  | 16.8 gr / 10,300 PSI | 17.5 gr / 10,900 PSI | —                    |
| 1 1/8 oz   | Internat'l | Fed. 209A | Windjammer     | 17.4 gr / 6,900 PSI  | 18.0 gr / 7,700 PSI  | 19.5 gr / 9,500 PSI  | 21.3 gr / 11,200 PSI |
| 1 1/8 oz   | Internat'l | Fio. 616  | Rem. Fig. 8    | 16.3 gr / 8,600 PSI  | 17.6 gr / 9,500 PSI  | 18.3 gr / 10,200 PSI | —                    |
| 1 1/8 oz   | Internat'l | Fio. 616  | WAA12          | 16.3 gr / 9,600 PSI  | 17.0 gr / 11,000 PSI | —                    | —                    |
| 1 1/8 oz   | Internat'l | Rem. 209P | Hawk           | 16.8 gr / 8,800 PSI  | 18.0 gr / 9,800 PSI  | 19.0 gr / 10,800 PSI | —                    |
| 1 1/8 oz   | Internat'l | Rem. 209P | Hor. Vers.     | 16.8 gr / 9,000 PSI  | 17.8 gr / 10,000 PSI | 19.0 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Internat'l | Rem. 209P | Rem. Fig. 8    | —                    | 20.1 gr / 6,300 LUP  | 21.1 gr / 7,700 LUP  | 22.1 gr / 8,000 LUP  |
| 1 1/8 oz   | Internat'l | Rem. 209P | WAA12          | 16.5 gr / 8,900 PSI  | 17.8 gr / 9,500 PSI  | 18.7 gr / 11,100 PSI | —                    |
| 1 1/8 oz   | Internat'l | Rem. 209P | Windjammer     | 17.2 gr / 8,100 PSI  | 18.3 gr / 8,300 PSI  | 19.2 gr / 9,000 PSI  | 20.8 gr / 10,800 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | Hawk           | 17.0 gr / 9,000 PSI  | 18.0 gr / 9,900 PSI  | 19.0 gr / 10,200 PSI | 20.0 gr / 11,400 PSI |
| 1 1/8 oz   | Internat'l | Win. 209  | Hor. Versalite | 17.4 gr / 7,900 LUP  | 18.1 gr / 8,600 LUP  | 19.2 gr / 9,800 LUP  | —                    |
| 1 1/8 oz   | Internat'l | Win. 209  | Red PC         | 18.3 gr / 6,800 LUP  | 18.9 gr / 7,200 LUP  | 20.2 gr / 8,300 LUP  | 21.3 gr / 9,700 LUP  |
| 1 1/8 oz   | Internat'l | Win. 209  | Rem. Fig. 8    | 17.3 gr / 8,100 PSI  | 18.3 gr / 9,500 PSI  | —                    | —                    |
| 1 1/8 oz   | Internat'l | Win. 209  | Trapper        | 17.0 gr / 8,100 PSI  | 18.0 gr / 9,300 PSI  | 19.0 gr / 10,400 PSI | —                    |
| 1 1/8 oz   | Internat'l | Win. 209  | WAA12          | 17.6 gr / 7,400 LUP  | 18.1 gr / 8,300 LUP  | 19.2 gr / 9,600 LUP  | 21.3 gr / 10,800 LUP |
| 1 1/8 oz   | Internat'l | Win. 209  | Windjammer     | 17.3 gr / 7,900 PSI  | 18.0 gr / 8,600 PSI  | 19.5 gr / 9,800 PSI  | 20.8 gr / 10,300 PSI |
| 1 1/8 oz   | Titegroup  | Rem. 209P | Rem. Fig. 8    | 14.7 gr / 8,500 PSI  | 15.9 gr / 9,700 PSI  | 17.0 gr / 10,700 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Rem. 209P | WAA12          | 14.6 gr / 8,400 PSI  | 15.6 gr / 9,600 PSI  | 16.5 gr / 10,600 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Win. 209  | Rem. Fig. 8    | 14.9 gr / 8,200 PSI  | 15.9 gr / 9,200 PSI  | 16.9 gr / 10,200 PSI | —                    |
| 1 1/8 oz   | Titegroup  | Win. 209  | WAA12          | 14.9 gr / 7,900 PSI  | 15.9 gr / 9,000 PSI  | 17.4 gr / 10,400 PSI | 18.4 gr / 11,400 PSI |
|  |            |           |                | 1200 fps             | 1255 fps             | 1310 fps             |                      |
| 1 1/8 oz   | Universal  | CCI 209   | Windjammer     | 23.3 gr / 8,000 PSI  | 24.3 gr / 9,300 PSI  | —                    | —                    |
| 1 1/8 oz   | Universal  | CCI 209M  | Hor. Versalite | 22.0 gr / 9,900 PSI  | 23.0 gr / 10,700 PSI | —                    | —                    |
| 1 1/8 oz   | Universal  | CCI 209SC | Windjammer     | 22.4 gr / 8,200 PSI  | 24.0 gr / 9,000 PSI  | 24.4 gr / 9,800 PSI  | —                    |
| 1 1/8 oz   | Universal  | Fed. 209A | WAA12          | 21.5 gr / 9,600 PSI  | 22.8 gr / 10,700 PSI | 23.6 gr / 11,300 PSI | —                    |
| 1 1/8 oz   | Universal  | Win. 209  | Rem. Fig. 8    | 22.5 gr / 9,000 PSI  | 23.5 gr / 10,000 PSI | 24.5 gr / 10,700 PSI | —                    |
| 1 1/8 oz   | Universal  | Win. 209  | WAA12          | 22.0 gr / 10,000 PSI | 22.7 gr / 10,600 PSI | —                    | —                    |

| SHOT  | POWDER    | PRIMER    | WAD        | CHARGE/PRESSURE      |                      |                      |                      |
|---|-----------|-----------|------------|----------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT.</b> |           |           |            |                      |                      |                      |                      |
|   |           |           |            | 1420 fps             | 1475 fps             | 1530 fps             | 1585 fps             |
| 1 1/8 oz  | Longshot  | CCI 209M  | Fed. 12S3  | 30.9 gr / 10,200 PSI | 32.4 gr / 11,300 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | CCI 209M  | Rem. R12H  | 31.5 gr / 9,200 PSI  | 32.9 gr / 10,200 PSI | 34.2 gr / 11,200 PSI | —                    |
| 1 1/8 oz  | Longshot  | CCI 209M  | WAA12      | 30.9 gr / 10,000 PSI | 32.5 gr / 10,900 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | CCI 209M  | Windjammer | 32.2 gr / 8,700 PSI  | 33.7 gr / 9,600 PSI  | 35.1 gr / 10,500 PSI | —                    |
| 1 1/8 oz  | Longshot  | Fed. 209A | Fed. 12S3  | 31.1 gr / 10,300 PSI | 32.2 gr / 11,300 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | Fed. 209A | Rem. R12H  | 31.0 gr / 9,800 PSI  | 32.6 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | Fed. 209A | WAA12      | 31.0 gr / 9,800 PSI  | 32.3 gr / 10,800 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | Rem. 209P | Fed. 12S3  | 30.3 gr / 10,500 PSI | 31.7 gr / 11,400 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | Rem. 209P | Rem. R12H  | 31.3 gr / 9,200 PSI  | 32.5 gr / 10,200 PSI | 33.7 gr / 11,300 PSI | —                    |
| 1 1/8 oz  | Longshot  | Rem. 209P | WAA12      | 30.8 gr / 9,500 PSI  | 32.1 gr / 10,500 PSI | —                    | —                    |
| 1 1/8 oz  | Longshot  | Rem. 209P | Windjammer | 31.9 gr / 8,800 PSI  | 33.7 gr / 9,600 PSI  | 35.4 gr / 10,200 PSI | —                    |
| 1 1/8 oz  | Longshot  | Win. 209  | Fed. 12S3  | 32.6 gr / 8,800 PSI  | 34.1 gr / 9,500 PSI  | 35.7 gr / 10,300 PSI | —                    |
| 1 1/8 oz  | Longshot  | Win. 209  | Hor. Vers. | 32.2 gr / 8,600 PSI  | 33.6 gr / 9,500 PSI  | 34.9 gr / 10,300 PSI | —                    |
| 1 1/8 oz  | Longshot  | Win. 209  | Rem. R12L  | 33.4 gr / 8,100 PSI  | 34.6 gr / 9,100 PSI  | 35.9 gr / 10,200 PSI | 37.1 gr / 11,100 PSI |
| 1 1/8 oz  | Longshot  | Win. 209  | WAA12      | 32.1 gr / 9,200 PSI  | 33.2 gr / 10,100 PSI | 34.4 gr / 11,100 PSI | —                    |
|   |           |           |            | 1220 fps             | 1250 fps             |                      |                      |
| 1 1/4 oz  | Universal | CCI 209   | Rem. SP12  | 22.5 gr / 10,700 PSI | 23.9 gr / 11,100 PSI |                      |                      |
| 1 1/4 oz  | Universal | CCI 209   | WAA12 F114 | 23.5 gr / 10,000 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | CCI 209M  | Rem. SP12  | 23.3 gr / 11,100 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | CCI 209M  | WAA12F114  | 22.5 gr / 11,400 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | Fed. 209A | Rem. SP12  | 22.4 gr / 11,500 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | Fed. 209A | WAA12F114  | 22.6 gr / 11,500 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | Rem. 209P | Rem. SP12  | 23.3 gr / 10,600 PSI | 24.2 gr / 11,200 PSI |                      |                      |
| 1 1/4 oz  | Universal | Rem. 209P | WAA12F114  | 23.0 gr / 11,500 PSI | —                    |                      |                      |
| 1 1/4 oz  | Universal | Win. 209  | Rem. SP12  | 22.8 gr / 10,700 PSI | 23.3 gr / 11,400 PSI |                      |                      |
| 1 1/4 oz  | Universal | Win. 209  | WAA12 F114 | 23.0 gr / 10,900 PSI | —                    |                      |                      |
|   |           |           |            | 1220 fps             | 1330 fps             |                      |                      |
| 1 1/4 oz  | HS-6      | Win. 209  | WAA12F114  | 30.0 gr / 8,800 LUP  | 33.0 gr / 10,500 LUP |                      |                      |
| 1 1/4 oz  | HS-6      | Win. 209  | Rem. R12H  | 31.5 gr / 9,000 LUP  | 35.0 gr / 10,600 LUP |                      |                      |
| 1 1/4 oz  | HS-6      | Win. 209  | Fed. 12C1  | 32.0 gr / 8,700 LUP  | 35.0 gr / 10,400 LUP |                      |                      |
|   |           |           |            | 1330 fps             | 1385 fps             | 1440 fps             |                      |
| 1 1/4 oz  | Longshot  | CCI 209M  | Rem. SP12  | 29.3 gr / 8,900 PSI  | 30.7 gr / 9,900 PSI  | 32.1 gr / 10,800 PSI |                      |
| 1 1/4 oz  | Longshot  | CCI 209M  | WAA12F114  | 29.3 gr / 10,200 PSI | 30.1 gr / 11,300 PSI | —                    |                      |
| 1 1/4 oz  | Longshot  | CCI 209M  | Fed. 12S4  | 28.5 gr / 10,900 PSI | —                    | —                    |                      |
| 1 1/4 oz  | Longshot  | Fed. 209A | Rem. SP12  | 28.6 gr / 9,400 PSI  | 30.0 gr / 10,600 PSI | —                    |                      |
| 1 1/4 oz  | Longshot  | Fed. 209A | WAA12F114  | 27.7 gr / 10,800 PSI | —                    | —                    |                      |
| 1 1/4 oz  | Longshot  | Rem. 209P | Fed. 12S4  | 28.5 gr / 11,000 PSI | —                    | —                    |                      |
| 1 1/4 oz  | Longshot  | Rem. 209P | Rem. SP12  | 29.1 gr / 9,400 PSI  | 30.9 gr / 9,800 PSI  | 32.2 gr / 11,200 PSI |                      |
| 1 1/4 oz  | Longshot  | Rem. 209P | WAA12F114  | 27.9 gr / 10,500 PSI | 29.5 gr / 11,300 PSI | —                    |                      |
| 1 1/4 oz  | Longshot  | Win. 209  | Fed. 12S4  | 29.8 gr / 9,400 PSI  | 31.1 gr / 10,500 PSI | —                    |                      |
| 1 1/4 oz  | Longshot  | Win. 209  | Rem. SP12  | 30.0 gr / 8,300 PSI  | 31.5 gr / 9,300 PSI  | 33.0 gr / 10,400 PSI |                      |
| 1 1/4 oz  | Longshot  | Win. 209  | WAA12F114  | 28.7 gr / 9,800 PSI  | 30.4 gr / 10,800 PSI | —                    |                      |
|   |           |           |            | 1285 fps             |                      |                      |                      |
| 1 3/8 oz  | HS-7      | Win. 209  | WAA12R     | 35.5 gr / 10,300 LUP |                      |                      |                      |

| SHOT   | POWDER    | PRIMER    | WAD                      | CHARGE/PRESSURE      |                      |                      |
|--|-----------|-----------|--------------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE PLASTIC SHELLS CONT.</b>  |           |           |                          |                      |                      |                      |
|  |           |           |                          | <b>1185 fps</b>      | <b>1240 fps</b>      | <b>1295 fps</b>      |
| 1 3/8 oz   | Longshot  | CCI 209M  | BP Ultra Short Euro      | 23.7 gr / 9,300 PSI  | 25.1 gr / 10,600 PSI | —                    |
| 1 3/8 oz   | Longshot  | CCI 209M  | Rem. RP12                | 23.1 gr / 10,200 PSI | 24.8 gr / 10,900 PSI | —                    |
| 1 3/8 oz   | Longshot  | CCI 209M  | WAA12R                   | 23.5 gr / 9,700 PSI  | 25.2 gr / 11,000 PSI | —                    |
| 1 3/8 oz   | Longshot  | FED. 209A | BP Ultra Short Euro      | 24.0 gr / 9,500 PSI  | 25.4 gr / 10,600 PSI | —                    |
| 1 3/8 oz   | Longshot  | FED. 209A | Rem. RP12                | 23.6 gr / 9,500 PSI  | 25.3 gr / 10,700 PSI | —                    |
| 1 3/8 oz   | Longshot  | FED. 209A | WAA12R                   | 23.5 gr / 10,100 PSI | 25.2 gr / 10,900 PSI | —                    |
| 1 3/8 oz   | Longshot  | REM. 209P | BP Ultra Short Euro      | 23.9 gr / 8,900 PSI  | 25.6 gr / 10,300 PSI | —                    |
| 1 3/8 oz   | Longshot  | REM. 209P | Rem. RP12                | 23.5 gr / 9,500 PSI  | 25.6 gr / 10,200 PSI | 27.5 gr / 11,100 PSI |
| 1 3/8 oz   | Longshot  | REM. 209P | WAA12R                   | 24.3 gr / 8,800 PSI  | 25.7 gr / 10,200 PSI | 27.0 gr / 11,500 PSI |
| 1 3/8 oz   | Longshot  | WIN. 209  | BP Ultra Short Euro      | 24.4 gr / 9,000 PSI  | 26.1 gr / 10,300 PSI | 27.8 gr / 11,500 PSI |
| 1 3/8 oz   | Longshot  | WIN. 209  | Rem. RP12                | 24.5 gr / 8,500 PSI  | 26.4 gr / 9,600 PSI  | 28.3 gr / 10,800 PSI |
| 1 3/8 oz   | Longshot  | WIN. 209  | WAA12R                   | 24.6 gr / 8,700 PSI  | 26.4 gr / 9,800 PSI  | 28.1 gr / 10,900 PSI |
| <b>1260 fps</b>  |           |           |                          |                      |                      |                      |
| 1 1/2 oz   | HS-7      | Win. 209  | WAA12R                   | 36.5 gr / 10,400 LUP |                      |                      |
| 1 1/2 oz   | HS-7      | Win. 209  | Rem. RP12                | 36.5 gr / 9,900 LUP  |                      |                      |
|  |           |           |                          | <b>1205 fps</b>      | <b>1260 fps</b>      |                      |
| 1 1/2 oz   | Longshot  | CCI 209M  | Rem. SP12                | 25.9 gr / 11,400 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | CCI 209M  | WAA12R                   | 25.0 gr / 11,300 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | Fed. 209A | Rem. RP12                | 25.5 gr / 11,100 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | Fed. 209A | WAA12R                   | 25.0 gr / 11,000 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | Rem. 209P | Rem. RP12                | 25.5 gr / 11,100 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | Rem. 209P | WAA12R                   | 26.0 gr / 10,800 PSI | —                    |                      |
| 1 1/2 oz   | Longshot  | Win. 209  | Rem. RP12                | 27.0 gr / 9,900 PSI  | 28.0 gr / 11,400 PSI |                      |
| 1 1/2 oz   | Longshot  | Win. 209  | WAA12R                   | 26.4 gr / 10,100 PSI | 28.0 gr / 11,500 PSI |                      |
| <b>12 GA., 2 3/4", WINCHESTER POLYFORMED PLASTIC GAME SHELLS (PLASTIC BASEWAD)</b> |           |           |                          |                      |                      |                      |
|  |           |           |                          | <b>1200 fps</b>      | <b>1255 fps</b>      | <b>1310 fps</b>      |
| 1 1/8 oz   | Universal | CCI 209M  | Windjammer               | 24.5 gr / 8,000 PSI  | 25.8 gr / 8,600 PSI  | 26.2 gr / 9,600 PSI  |
| 1 1/8 oz   | Universal | CCI 209SC | Windjammer               | 25.0 gr / 6,800 PSI  | 26.5 gr / 7,200 PSI  | 27.5 gr / 7,900 PSI  |
| 1 1/8 oz   | Universal | Fed. 209A | Rem. Fig. 8              | 24.0 gr / 8,000 PSI  | 24.8 gr / 8,900 PSI  | 26.0 gr / 9,400 PSI  |
| 1 1/8 oz   | Universal | Win. 209  | WAA12                    | 24.0 gr / 7,900 PSI  | 25.3 gr / 9,000 PSI  | 26.0 gr / 10,100 PSI |
| <b>12 GA., 3", FEDERAL PLASTIC SHELL, 7/16" BASE WAD</b>                           |           |           |                          |                      |                      |                      |
|  |           |           |                          | <b>1225 fps</b>      | <b>1280 fps</b>      | <b>1335 fps</b>      |
| 1 5/8 oz   | Longshot  | CCI209M   | Fed. 12S4                | 28.3 gr / 10,600 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot  | CCI209M   | WAA12                    | 28.8 gr / 10,200 PSI | 30.8 gr / 11,200 PSI | —                    |
| 1 5/8 oz   | Longshot  | Fed. 209A | Fed. 12S4                | 28.3 gr / 10,800 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot  | Fed. 209A | WAA12                    | 29.1 gr / 10,000 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot  | Win. 209  | Fed. 12S4                | 30.0 gr / 10,300 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot  | Win. 209  | WAA12                    | 30.9 gr / 9,500 PSI  | 32.0 gr / 10,600 PSI | —                    |
|  |           |           |                          | <b>1155 fps</b>      | <b>1210 fps</b>      |                      |
| 1 7/8 oz   | Longshot  | CCI209M   | Rem. SP12                | 27.7 gr / 10,600 PSI | —                    |                      |
| 1 7/8 oz   | Longshot  | Fed. 209A | Rem. SP12                | 27.1 gr / 11,200 PSI | —                    |                      |
| 1 7/8 oz   | Longshot  | Win. 209  | Rem. SP12                | 27.9 gr / 9,900 PSI  | 29.5 gr / 11,400 PSI |                      |
| 1 7/8 oz   | Longshot  | Win. 209  | Win. WAA12R + .070" card | 28.0 gr / 10,500 PSI | —                    |                      |

| SHOT   | POWDER   | PRIMER    | WAD                 | CHARGE/PRESSURE      |                      |                      |
|--|----------|-----------|---------------------|----------------------|----------------------|----------------------|
| <b>12 GA., 3", FIOCCHI PLASTIC SHELL</b>                                       |          |           |                     |                      |                      |                      |
| 1155 fps   |          |           |                     |                      |                      |                      |
| 1 7/8 oz   | Longshot | Ched. 209 | Rem. SP12           | 27.2 gr / 10,800 PSI |                      |                      |
| 1 7/8 oz   | Longshot | Ched. 209 | WAA12R              | 27.0 gr / 10,800 PSI |                      |                      |
| 1 7/8 oz   | Longshot | Fio. 616  | Rem. SP12           | 27.5 gr / 10,800 PSI |                      |                      |
| 1 7/8 oz   | Longshot | Fio. 616  | WAA12R              | 26.9 gr / 10,900 PSI |                      |                      |
| <b>12 GA., 3", REMINGTON-PETERS PLASTIC GAME SHELLS</b>                        |          |           |                     |                      |                      |                      |
| 1225 fps      1280 fps      1335 fps   |          |           |                     |                      |                      |                      |
| 1 5/8 oz   | Longshot | CCI209M   | Rem. SP12           | 28.9 gr / 9,700 PSI  | 31.0 gr / 10,600 PSI | —                    |
| 1 5/8 oz   | Longshot | CCI209M   | WAA12F114           | 28.0 gr / 10,400 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot | Rem. 209P | Rem. SP12           | 29.7 gr / 9,000 PSI  | 31.3 gr / 10,200 PSI | —                    |
| 1 5/8 oz   | Longshot | Rem. 209P | WAA12F114           | 29.0 gr / 10,300 PSI | —                    | —                    |
| 1 5/8 oz   | Longshot | Win. 209  | Rem. SP12           | 29.9 gr / 9,300 PSI  | 32.2 gr / 10,300 PSI | 34.4 gr / 11,200 PSI |
| 1 5/8 oz   | Longshot | Win. 209  | WAA12F114           | 29.8 gr / 9,600 PSI  | 31.2 gr / 11,300 PSI | —                    |
| 1155 fps      1210 fps   |          |           |                     |                      |                      |                      |
| 1 7/8 oz   | Longshot | CCI209M   | Rem. SP12           | 27.6 gr / 10,900 PSI | —                    | —                    |
| 1 7/8 oz   | Longshot | Rem. 209P | Rem. SP12           | 28.4 gr / 11,000 PSI | —                    | —                    |
| 1 7/8 oz   | Longshot | Win. 209  | Rem. SP12           | 29.1 gr / 8,600 PSI  | 30.8 gr / 11,000 PSI | —                    |
| 1140 fps   |          |           |                     |                      |                      |                      |
| 1 7/8 oz   | HS-7     | Rem. 209P | WAA12R              | 36.0 gr / 10,800 LUP |                      |                      |
| 1 7/8 oz   | HS-7     | Rem. 209P | Rem. RP12           | 36.0 gr / 10,700 LUP |                      |                      |
| <b>12 GA., 3", WINCHESTER POLYFORMED PLASTIC GAME SHELLS (PLASTIC BASEWAD)</b> |          |           |                     |                      |                      |                      |
| 1225 fps      1280 fps      1335 fps   |          |           |                     |                      |                      |                      |
| 1 5/8 oz   | Longshot | CCI209M   | Rem. R12L           | 31.6 gr / 9,800 PSI  | 32.9 gr / 10,200 PSI | 34.5 gr / 11,400 PSI |
| 1 5/8 oz   | Longshot | CCI209M   | WAA12F114           | —                    | 31.6 gr / 10,700 PSI | —                    |
| 1 5/8 oz   | Longshot | Rem. 209P | Rem. R12L           | 32.2 gr / 8,500 PSI  | 33.9 gr / 9,200 PSI  | 35.7 gr / 10,000 PSI |
| 1 5/8 oz   | Longshot | Rem. 209P | WAA12F114           | —                    | 31.4 gr / 10,400 PSI | —                    |
| 1 5/8 oz   | Longshot | Win. 209  | Rem. R12L           | 33.6 gr / 7,200 PSI  | 34.8 gr / 8,700 PSI  | 36.1 gr / 10,300 PSI |
| 1 5/8 oz   | Longshot | Win. 209  | WAA12F114           | —                    | 32.7 gr / 10,400 PSI | 34.0 gr / 11,500 PSI |
| 1155 fps      1210 fps   |          |           |                     |                      |                      |                      |
| 1 7/8 oz   | Longshot | CCI209M   | Rem. SP12           | 28.5 gr / 9,900 PSI  | 31.0 gr / 11,500 PSI | —                    |
| 1 7/8 oz   | Longshot | CCI209M   | WAA12R + .070" card | 28.5 gr / 10,400 PSI | —                    | —                    |
| 1 7/8 oz   | Longshot | Rem. 209P | Rem. SP12           | 29.9 gr / 8,300 PSI  | 31.0 gr / 11,100 PSI | —                    |
| 1 7/8 oz   | Longshot | Rem. 209P | WAA12R + .070" card | 29.3 gr / 9,500 PSI  | 30.9 gr / 11,500 PSI | —                    |
| 1 7/8 oz   | Longshot | Win. 209  | Rem. SP12           | 30.2 gr / 9,500 PSI  | 32.0 gr / 10,700 PSI | —                    |
| 1 7/8 oz   | Longshot | Win. 209  | WAA12R + .070" card | 29.5 gr / 8,800 PSI  | 31.3 gr / 11,000 PSI | —                    |
| <b>12 GA., 3", WINCHESTER COMPRESSION-FORMED SUPER-X TYPE SHELLS</b>           |          |           |                     |                      |                      |                      |
| 1295 fps   |          |           |                     |                      |                      |                      |
| 1 3/8 oz   | HS-6     | Win. 209  | WAA12               | 35.5 gr / 9,400 LUP  |                      |                      |
| 1205 fps   |          |           |                     |                      |                      |                      |
| 1 5/8 oz   | HS-7     | Win. 209  | WAA12               | 36.0 gr / 10,400 LUP |                      |                      |
| 1 5/8 oz   | HS-7     | Win. 209  | Rem. R12H           | 36.0 gr / 10,200 LUP |                      |                      |
| 1100 fps   |          |           |                     |                      |                      |                      |
| 1 7/8 oz   | HS-7     | Win. 209  | WAA12R              | 33.5 gr / 10,600 LUP |                      |                      |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |
|------|--------|--------|-----|-----------------|--|
|------|--------|--------|-----|-----------------|--|

## 12 GA., 3 1/2", FEDERAL STEEL SHOTSHELLS (LEAD SHOT LOADS)

|          |          |           |                                 | 1250 fps           | 1300 fps           |
|----------|----------|-----------|---------------------------------|--------------------|--------------------|
| 1 7/8 oz | Longshot | Fed. 209A | Fed. 12S0 + 1-20 ga. .135" Card | 36.3 gr/12,200 PSI | —                  |
| 1 7/8 oz | Longshot | Fed. 209A | WAA12L + 1-20 ga. .135" Card    | 37.0 gr/12,300 PSI | —                  |
| 1 7/8 oz | Longshot | Fed. 209A | WAA12SL + 1-20 ga. .135" Card   | 37.0 gr/12,500 PSI | —                  |
|          |          |           |                                 | 1250 fps           | 1300 fps           |
| 1 7/8 oz | Longshot | Rem. 209P | Fed. 12S0 + 1-20 ga. .135" Card | 37.8 gr/11,400 PSI | 39.4 gr/13,300 PSI |
| 1 7/8 oz | Longshot | Rem. 209P | WAA12L + 1-20 ga. .135" Card    | 37.3 gr/12,100 PSI | 39.2 gr/13,400 PSI |
| 1 7/8 oz | Longshot | Rem. 209P | WAA12SL + 1-20 ga. .135" Card   | 36.8 gr/12,400 PSI | 39.0 gr/13,000 PSI |
|          |          |           |                                 | 1200 fps           |                    |
| 2 oz     | Longshot | Fed. 209A | Fed. 12S3 + 1-20 ga. .135" Card | 35.0 gr/12,900 PSI |                    |
| 2 oz     | Longshot | Fed. 209A | WAA12SL                         | 34.8 gr/13,300 PSI |                    |
| 2 oz     | Longshot | Rem. 209P | Fed. 12S3 + 1-20 ga. .135" Card | 35.5 gr/12,400 PSI |                    |
| 2 oz     | Longshot | Rem. 209P | WAA12SL                         | 35.3 gr/12,300 PSI |                    |
|          |          |           |                                 | 1150 fps           |                    |
| 2 1/4 oz | Longshot | Fed. 209A | Fed. 12S3                       | 32.0 gr/13,700 PSI |                    |
| 2 1/4 oz | Longshot | Fed. 209A | Rem. RXP                        | 31.0 gr/13,200 PSI |                    |
| 2 1/4 oz | Longshot | Fed. 209A | WAA12                           | 31.0 gr/13,700 PSI |                    |
| 2 1/4 oz | Longshot | Rem. 209P | Fed. 12S3                       | 33.0 gr/12,900 PSI |                    |
| 2 1/4 oz | Longshot | Rem. 209P | Rem. RXP                        | 33.0 gr/12,600 PSI |                    |
| 2 1/4 oz | Longshot | Rem. 209P | WAA12                           | 33.0 gr/13,400 PSI |                    |

## 12 GA., 3 1/2", REMINGTON STEEL SHOTSHELLS (LEAD SHOT LOADS)

|          |          |           |                                  | 1250 fps             |  |
|----------|----------|-----------|----------------------------------|----------------------|--|
| 1 7/8 oz | Longshot | Fed. 209A | Fed. 12S0 + 1-20 ga. .135" Card  | 36.0 gr / 13,600 PSI |  |
| 1 7/8 oz | Longshot | Fed. 209A | Rem. TGT12 + 1-20 ga. .135" Card | 36.0 gr / 13,200 PSI |  |
| 1 7/8 oz | Longshot | Fed. 209A | WAA12SL + 1-20 ga. .135" Card    | 36.1 gr / 13,000 PSI |  |
| 1 7/8 oz | Longshot | Rem. 209P | Fed. 12S0 + 1-20 ga. .135" Card  | 36.4 gr / 13,000 PSI |  |
| 1 7/8 oz | Longshot | Rem. 209P | Rem. TGT12 + 1-20 ga. .135" Card | 36.0 gr / 13,100 PSI |  |
| 1 7/8 oz | Longshot | Rem. 209P | WAA12SL + 1-20 ga. .135" Card    | 36.5 gr / 13,200 PSI |  |

SHOT POWDER PRIMER WAD CHARGE/PRESSURE

## 12 GA., 3 1/2", REMINGTON STEEL SHOTSHELLS (LEAD SHOT LOADS) CONT.

| 1200 fps |          |           |                                       |                      |                      |
|----------|----------|-----------|---------------------------------------|----------------------|----------------------|
| 2 oz     | Longshot | Fed. 209A | Rem. TGT12                            | 33.8 gr / 13,000 PSI |                      |
| 2 oz     | Longshot | Rem. 209P | Fed. 12S3 +<br>1-20 ga.<br>.135" Card | 34.0 gr / 13,300 PSI |                      |
| 2 oz     | Longshot | Rem. 209P | Rem. TGT12                            | 34.0 gr / 13,300 PSI |                      |
|          |          |           | 1150 fps                              | 1175 fps             |                      |
| 2 1/4 oz | Longshot | Fed. 209A | Fed. 12S3                             | 29.4 gr / 13,100 PSI | 29.9 gr / 13,600 PSI |
| 2 1/4 oz | Longshot | Fed. 209A | Rem. RXP                              | 29.3 gr / 13,300 PSI | 30.0 gr / 13,900 PSI |
| 2 1/4 oz | Longshot | Fed. 209A | WAA12                                 | 29.5 gr / 13,600 PSI | ---                  |
| 2 1/4 oz | Longshot | Rem. 209P | Rem. RXP                              | 31.0 gr / 13,700 PSI | ---                  |
| 2 1/4 oz | Longshot | Rem. 209P | WAA12                                 | 30.0 gr / 13,000 PSI | 30.9 gr / 13,500 PSI |

## 12 GA., 3 1/2", WINCHESTER STEEL SHOTSHELLS (LEAD SHOT LOADS)

| 1250 fps |          |           |                                       |                      | 1300 fps             |
|----------|----------|-----------|---------------------------------------|----------------------|----------------------|
| 1 7/8 oz | Longshot | Fed. 209A | Fed. 12S3 +<br>1-20 ga.<br>.135" Card | 35.5 gr / 13,400 PSI | ---                  |
| 1 7/8 oz | Longshot | Fed. 209A | WAA12 +<br>1-20 ga.<br>.135" Card     | 35.9 gr / 13,000 PSI | ---                  |
| 1 7/8 oz | Longshot | Fed. 209A | WAA12SL +<br>1-20 ga.<br>.135" Card   | 37.0 gr / 12,800 PSI | ---                  |
| 1 7/8 oz | Longshot | Win. 209  | Fed. 12S3 +<br>1-20 ga.<br>.135" Card | 37.9 gr / 11,200 PSI | 39.5 gr / 12,400 PSI |
| 1 7/8 oz | Longshot | Win. 209  | WAA12 +<br>1-20 ga.<br>.135" Card     | 37.2 gr / 11,900 PSI | 39.8 gr / 13,100 PSI |
| 1 7/8 oz | Longshot | Win. 209  | WAA12SL +<br>1-20 ga.<br>.135" Card   | 38.6 gr / 11,100 PSI | ---                  |
| 1200 fps |          |           |                                       |                      |                      |
| 2 oz     | Longshot | Fed. 209A | Fed. 12S3 +<br>1-20 ga.<br>.135" Card | 34.2 gr / 13,400 PSI |                      |
| 2 oz     | Longshot | Fed. 209A | WAA12 +<br>1-20 ga.<br>.135" Card     | 35.0 gr / 13,200 PSI |                      |
| 2 oz     | Longshot | Win. 209  | Fed. 12S3 +<br>1-20 ga.<br>.135" Card | 38.0 gr / 11,300 PSI |                      |
| 2 oz     | Longshot | Win. 209  | WAA12 +<br>1-20 ga.<br>.135" Card     | 36.0 gr / 12,800 PSI |                      |
| 1150 fps |          |           |                                       |                      |                      |
| 2 1/4 oz | Longshot | Rem. 209P | Fed. 12S4 +<br>1-20 ga.<br>.135" Card | 31.0 gr / 13,500 PSI |                      |
| 2 1/4 oz | Longshot | Rem. 209P | Rem. R12H +<br>1-20 ga.<br>.135" Card | 31.5 gr / 12,400 PSI |                      |
| 2 1/4 oz | Longshot | Rem. 209P | WAA12F114 +<br>1-20 ga.<br>.135" Card | 32.0 gr / 14,000 PSI |                      |
| 2 1/4 oz | Longshot | Win. 209  | Fed. 12S4                             | 31.5 gr / 13,300 PSI |                      |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |
|------|--------|--------|-----|-----------------|
|------|--------|--------|-----|-----------------|

## 12 GA., 3 1/2", WINCHESTER STEEL SHOTSHELLS (LEAD SHOT LOADS) CONT.

| 1150 fps |          |          |                                       |                      |
|----------|----------|----------|---------------------------------------|----------------------|
| 2 1/4 oz | Longshot | Win. 209 | Rem. R12H +<br>1-20 ga.<br>.135" Card | 32.0 gr / 13,200 PSI |
| 2 1/4 oz | Longshot | Win. 209 | WAA12F114 +<br>1-20 ga.<br>.135" Card | 32.0 gr / 12,600 PSI |

## 16 GA., 2 3/4", FEDERAL HI POWER PLASTIC PAPER BASE WAD SHELLS

| 1165 fps |           |           |            |                     | 1220 fps            |                     | 1275 fps |  |
|----------|-----------|-----------|------------|---------------------|---------------------|---------------------|----------|--|
| 1 oz     | Universal | CCI 209M  | Activ G-28 | 21.5 gr / 7,500 PSI | 22.5 gr / 8,200 PSI | 24.2 gr / 9,000 PSI |          |  |
| 1 oz     | Universal | Fed. 209A | BPG/BP     | 21.0 gr / 7,400 PSI | 22.0 gr / 8,200 PSI | 23.5 gr / 9,200 PSI |          |  |
| 1 oz     | Universal | Win. 209  | WAA16      | 20.7 gr / 7,600 PSI | 22.3 gr / 8,200 PSI | 23.5 gr / 8,900 PSI |          |  |

## 16 GA., 2 3/4", REMINGTON SP PLASTIC SHELLS

| 1165 fps |           |          |           |                     | 1220 fps            |                      | 1275 fps |  |
|----------|-----------|----------|-----------|---------------------|---------------------|----------------------|----------|--|
| 1 oz     | Universal | CCI 209M | BPG/BP    | 19.5 gr / 8,400 PSI | 20.5 gr / 9,600 PSI | 21.5 gr / 10,300 PSI |          |  |
| 1 oz     | Universal | Win. 209 | REM. SP16 | 18.5 gr / 8,800 PSI | 19.8 gr / 9,900 PSI | 20.5 gr / 10,400 PSI |          |  |
| 1 oz     | Universal | Win. 209 | WAA16     | 18.5 gr / 9,000 PSI | 19.5 gr / 9,900 PSI | 20.5 gr / 10,400 PSI |          |  |

## 16 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED SHELLS

| 1165 fps |           |          |        |                     | 1220 fps             |                      | 1275 fps |  |
|----------|-----------|----------|--------|---------------------|----------------------|----------------------|----------|--|
| 1 oz     | Universal | Win. 209 | BPG/BP | 19.5 gr / 9,100 PSI | 20.0 gr / 10,000 PSI | 21.0 gr / 10,700 PSI |          |  |
| 1 oz     | Universal | Win. 209 | WAA16  | 19.0 gr / 9,200 PSI | 20.0 gr / 10,300 PSI | 20.7 gr / 11,000 PSI |          |  |
| 1 oz     | HS-6      | CCI 209  | WAA16  | 23.5 gr / 8,200 LUP | 24.5 gr / 8,800 LUP  | —                    |          |  |
| 1 oz     | HS-6      | Win. 209 | WAA16  | 23.0 gr / 8,500 LUP | 24.0 gr / 9,300 LUP  | —                    |          |  |
| 1 oz     | HS-7      | Win. 209 | WAA16  | 25.0 gr / 8,400 LUP | 26.5 gr / 9,100 LUP  | —                    |          |  |

| 1185 fps |      |          |           |                      | 1240 fps             |  |  |  |
|----------|------|----------|-----------|----------------------|----------------------|--|--|--|
| 1 1/8 oz | HS-6 | Win. 209 | WAA16     | 24.5 gr / 10,600 LUP | —                    |  |  |  |
| 1 1/8 oz | HS-6 | Win. 209 | Rem. SP16 | 26.5 gr / 8,600 LUP  | 27.5 gr / 9,400 LUP  |  |  |  |
| 1 1/8 oz | HS-7 | Win. 209 | WAA16     | 26.0 gr / 10,100 LUP | 27.0 gr / 10,700 LUP |  |  |  |

## 20 GA., 2 3/4", CHEDDITE PLASTIC SHELLS

| 1200 fps |           |          |           |                     | 1225 fps            |                      | 1250 fps |  |
|----------|-----------|----------|-----------|---------------------|---------------------|----------------------|----------|--|
| 7/8 oz   | Universal | Ched.209 | Fed. 20S1 | 17.0 gr / 8,900 PSI | 17.5 gr / 9,600 PSI | 18.1 gr / 10,000 PSI |          |  |
| 7/8 oz   | Universal | Ched.209 | G/BP20    | 18.0 gr / 9,100 PSI | 18.3 gr / 9,700 PSI | 18.6 gr / 9,900 PSI  |          |  |
| 7/8 oz   | Universal | Fio. 616 | Fed. 20S1 | 16.7 gr / 9,200 PSI | 17.1 gr / 9,700 PSI | 17.5 gr / 10,300 PSI |          |  |
| 7/8 oz   | Universal | Fio. 616 | G/BP20    | 17.0 gr / 9,500 PSI | 17.5 gr / 9,700 PSI | 18.0 gr / 10,200 PSI |          |  |

| 1300 fps |          |          |            |                     | 1350 fps            |                      | 1400 fps             |  | 1450 fps |  |
|----------|----------|----------|------------|---------------------|---------------------|----------------------|----------------------|--|----------|--|
| 7/8 oz   | Longshot | Ched.209 | Fed. 20S1  | 21.4 gr / 9,000 PSI | 22.6 gr / 9,800 PSI | 23.7 gr / 10,600 PSI | 24.9 gr / 11,500 PSI |  |          |  |
| 7/8 oz   | Longshot | Ched.209 | Rem. RXP20 | 21.3 gr / 7,800 PSI | 22.5 gr / 8,700 PSI | 23.6 gr / 9,400 PSI  | 24.8 gr / 10,300 PSI |  |          |  |
| 7/8 oz   | Longshot | Fio. 616 | Fed. 20S1  | 20.7 gr / 8,700 PSI | 21.7 gr / 9,400 PSI | 22.8 gr / 10,200 PSI | 23.8 gr / 10,900 PSI |  |          |  |
| 7/8 oz   | Longshot | Fio. 616 | Rem. RXP20 | 21.1 gr / 9,100 PSI | 22.3 gr / 9,900 PSI | 23.4 gr / 10,700 PSI | 24.6 gr / 11,500 PSI |  |          |  |

| 1165 fps |          |          |           |                     | 1220 fps             |                      | 1275 fps |  |
|----------|----------|----------|-----------|---------------------|----------------------|----------------------|----------|--|
| 1 oz     | Longshot | Ched.209 | Fed. 20S1 | 17.8 gr / 9,200 PSI | 19.0 gr / 10,000 PSI | 20.2 gr / 10,900 PSI |          |  |
| 1 oz     | Longshot | Ched.209 | WAA20     | 17.5 gr / 8,300 PSI | 19.0 gr / 9,600 PSI  | 20.5 gr / 10,900 PSI |          |  |

## 20 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS

| 1200 fps |            |           |           |                      | 1225 fps             |   | 1250 fps |  |
|----------|------------|-----------|-----------|----------------------|----------------------|---|----------|--|
| 7/8 oz   | Internat'l | CCI 209SC | Fed. 20S1 | 15.0 gr / 11,100 PSI | 15.6 gr / 11,800 PSI | — |          |  |



| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |  |
|------|--------|--------|-----|-----------------|--|--|
|------|--------|--------|-----|-----------------|--|--|

| 20 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS CONT. |            |           |            |                      |                      |                      |                      |
|---|------------|-----------|------------|----------------------|----------------------|----------------------|----------------------|
|   |            |           |            | 1200 fps             | 1225 fps             | 1250 fps             |                      |
| 7/8 oz  | Internat'l | CCI 209SC | PC20       | 14.7 gr / 10,400 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | CCI 209SC | Rem. RXP20 | 14.5 gr / 10,000 PSI | 15.5 gr / 10,700 PSI | —                    |                      |
| 7/8 oz  | Internat'l | CCI 209SC | WAA20F1    | 14.7 gr / 10,300 PSI | 15.3 gr / 11,600 PSI | —                    |                      |
| 7/8 oz  | Internat'l | CCI 209SC | Windjammer | 15.0 gr / 10,700 PSI | 15.5 gr / 11,800 PSI | —                    |                      |
| 7/8 oz  | Internat'l | Fed. 209A | Fed. 20S1  | 14.5 gr / 11,500 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Fed. 209A | Rem. RXP20 | 14.7 gr / 11,100 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Fed. 209A | WAA20F1    | 14.5 gr / 11,500 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Fed. 209A | Windjammer | 14.5 gr / 11,300 PSI | 14.9 gr / 12,000 PSI | —                    |                      |
| 7/8 oz  | Internat'l | Rem. 209P | Fed. 20S1  | 15.3 gr / 10,700 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Rem. 209P | WAA20F1    | 15.0 gr / 10,200 PSI | 15.5 gr / 11,300 PSI | 16.0 gr / 11,500 PSI |                      |
| 7/8 oz  | Internat'l | Rem. 209P | Windjammer | 15.3 gr / 10,700 PSI | 16.0 gr / 11,400 PSI | —                    |                      |
| 7/8 oz  | Internat'l | Win. 209  | Fed. 20S1  | 14.6 gr / 11,400 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Win. 209  | PC20       | 15.0 gr / 11,200 PSI | —                    | —                    |                      |
| 7/8 oz  | Internat'l | Win. 209  | Rem. RXP20 | 14.7 gr / 10,200 PSI | 15.3 gr / 11,300 PSI | —                    |                      |
| 7/8 oz  | Internat'l | Win. 209  | WAA20F1    | 14.5 gr / 10,500 PSI | 15.1 gr / 11,500 PSI | —                    |                      |
| 7/8 oz  | Internat'l | Win. 209  | Windjammer | 14.5 gr / 10,800 PSI | —                    | —                    |                      |
| 7/8 oz  | Universal  | CCI 209SC | Fed. 20S1  | 17.0 gr / 9,500 PSI  | 17.6 gr / 10,100 PSI | —                    |                      |
| 7/8 oz  | Universal  | CCI 209SC | PC20       | 17.5 gr / 9,500 PSI  | —                    | —                    |                      |
| 7/8 oz  | Universal  | CCI 209SC | Rem. RXP20 | 17.5 gr / 9,000 PSI  | 18.0 gr / 9,800 PSI  | 18.5 gr / 10,000 PSI |                      |
| 7/8 oz  | Universal  | CCI 209SC | WAA20F1    | 17.2 gr / 9,200 PSI  | 17.7 gr / 9,500 PSI  | 18.0 gr / 10,000 PSI |                      |
| 7/8 oz  | Universal  | CCI 209SC | Windjammer | 17.0 gr / 9,500 PSI  | 17.6 gr / 9,800 PSI  | 18.2 gr / 10,300 PSI |                      |
| 7/8 oz  | Universal  | Fed. 209A | Fed. 20S1  | 16.7 gr / 10,000 PSI | 17.0 gr / 10,700 PSI | —                    |                      |
| 7/8 oz  | Universal  | Fed. 209A | PC20       | 17.0 gr / 10,000 PSI | —                    | —                    |                      |
| 7/8 oz  | Universal  | Fed. 209A | Rem. RXP20 | 17.0 gr / 9,800 PSI  | 17.7 gr / 10,200 PSI | 18.0 gr / 10,400 PSI |                      |
| 7/8 oz  | Universal  | Fed. 209A | WAA20F1    | 17.0 gr / 10,100 PSI | 17.5 gr / 10,500 PSI | 17.8 gr / 10,800 PSI |                      |
| 7/8 oz  | Universal  | Fed. 209A | Windjammer | 17.0 gr / 9,600 PSI  | 17.5 gr / 10,300 PSI | 18.0 gr / 10,800 PSI |                      |
| 7/8 oz  | Universal  | Rem. 209P | Fed. 20S1  | 18.0 gr / 9,300 PSI  | —                    | —                    |                      |
| 7/8 oz  | Universal  | Rem. 209P | Rem. RXP20 | 18.5 gr / 8,400 PSI  | 19.0 gr / 9,100 PSI  | —                    |                      |
| 7/8 oz  | Universal  | Rem. 209P | WAA20F1    | 17.8 gr / 8,700 PSI  | 18.3 gr / 9,500 PSI  | —                    |                      |
| 7/8 oz  | Universal  | Rem. 209P | Windjammer | 18.0 gr / 8,900 PSI  | 18.5 gr / 9,400 PSI  | —                    |                      |
| 7/8 oz  | Universal  | Win. 209  | Fed. 20S1  | 17.4 gr / 9,600 PSI  | 18.0 gr / 10,300 PSI | —                    |                      |
| 7/8 oz  | Universal  | Win. 209  | PC20       | 17.5 gr / 9,400 PSI  | —                    | —                    |                      |
| 7/8 oz  | Universal  | Win. 209  | Rem. RXP20 | 17.5 gr / 9,300 PSI  | 18.2 gr / 9,800 PSI  | —                    |                      |
| 7/8 oz  | Universal  | Win. 209  | WAA20      | 17.0 gr / 9,300 PSI  | 17.5 gr / 9,900 PSI  | 18.0 gr / 10,200 PSI |                      |
| 7/8 oz  | Universal  | Win. 209  | WAA20F1    | 17.0 gr / 10,000 PSI | 17.4 gr / 10,200 PSI | 17.9 gr / 10,400 PSI |                      |
| 7/8 oz  | Universal  | Win. 209  | Windjammer | 17.5 gr / 9,200 PSI  | 18.2 gr / 9,900 PSI  | 18.5 gr / 10,400 PSI |                      |
|   |            |           |            | 1300 fps             | 1350 fps             | 1400 fps             | 1450 fps             |
| 7/8 oz  | Longshot   | CCI209M   | Fed. 20S1  | 20.5 gr / 8,900 PSI  | 21.5 gr / 9,800 PSI  | 22.6 gr / 10,900 PSI | —                    |
| 7/8 oz  | Longshot   | CCI209M   | Rem. RXP20 | 21.1 gr / 8,500 PSI  | 22.1 gr / 9,200 PSI  | 23.2 gr / 9,900 PSI  | 24.2 gr / 10,700 PSI |
| 7/8 oz  | Longshot   | CCI209M   | WAA20      | 21.0 gr / 8,700 PSI  | 21.7 gr / 9,700 PSI  | 22.3 gr / 10,600 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | Fed. 20S1  | 20.3 gr / 9,300 PSI  | 21.3 gr / 10,200 PSI | 22.3 gr / 11,100 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | Rem. RXP20 | 20.5 gr / 8,800 PSI  | 21.6 gr / 9,800 PSI  | 22.7 gr / 10,700 PSI | 23.8 gr / 11,800 PSI |
| 7/8 oz  | Longshot   | Fed. 209A | WAA20      | 20.6 gr / 8,900 PSI  | 21.7 gr / 9,800 PSI  | 22.8 gr / 10,600 PSI | 23.9 gr / 11,400 PSI |
| 7/8 oz  | Longshot   | Rem. 209P | Fed. 20S1  | 20.6 gr / 8,800 PSI  | 21.7 gr / 9,700 PSI  | 22.8 gr / 10,500 PSI | 24.0 gr / 11,900 PSI |
| 7/8 oz  | Longshot   | Rem. 209P | Rem. RXP20 | 22.5 gr / 8,200 PSI  | 23.2 gr / 9,000 PSI  | 23.9 gr / 9,700 PSI  | 24.5 gr / 10,400 PSI |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |  |  |
|------|--------|--------|-----|-----------------|--|--|--|
|------|--------|--------|-----|-----------------|--|--|--|

## 20 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS CONT.

|        |          |           |            | 1300 fps            | 1350 fps            | 1400 fps             | 1450 fps             |
|--------|----------|-----------|------------|---------------------|---------------------|----------------------|----------------------|
| 7/8 oz | Longshot | Rem. 209P | WAA20      | 20.8 gr / 8,600 PSI | 21.9 gr / 9,400 PSI | 22.9 gr / 10,200 PSI | 24.0 gr / 11,000 PSI |
| 7/8 oz | Longshot | Win. 209  | Fed. 20S1  | 21.5 gr / 8,100 PSI | 22.6 gr / 8,900 PSI | 23.7 gr / 9,700 PSI  | 25.0 gr / 11,000 PSI |
| 7/8 oz | Longshot | Win. 209  | Rem. RXP20 | —                   | 24.1 gr / 7,700 PSI | 24.9 gr / 8,700 PSI  | 25.7 gr / 9,600 PSI  |
| 7/8 oz | Longshot | Win. 209  | WAA20      | 22.3 gr / 7,500 PSI | 23.3 gr / 8,300 PSI | 24.3 gr / 9,200 PSI  | 25.0 gr / 10,800 PSI |

|      |      |           |          | 1165 fps             | 1220 fps             | 1250 fps             |
|------|------|-----------|----------|----------------------|----------------------|----------------------|
| 1 oz | HS-6 | CCI 209M  | WAA20F1  | 21.5 gr / 9,800 PSI  | 23.0 gr / 11,200 PSI | —                    |
| 1 oz | HS-6 | CCI 209M  | REM SP20 | 21.3 gr / 10,000 PSI | 22.5 gr / 10,800 PSI | —                    |
| 1 oz | HS-6 | Fed. 209A | REM SP20 | 21.0 gr / 10,100 PSI | 22.5 gr / 11,300 PSI | —                    |
| 1 oz | HS-6 | Fed. 209A | WAA20F1  | 21.0 gr / 9,700 PSI  | 22.5 gr / 11,200 PSI | —                    |
| 1 oz | HS-6 | Win. 209  | REM SP20 | 21.5 gr / 9,900 PSI  | 23.0 gr / 10,900 PSI | 24.0 gr / 11,700 PSI |
| 1 oz | HS-6 | Win. 209  | WAA20F1  | 21.5 gr / 10,100 PSI | 23.0 gr / 11,700 PSI | —                    |

|      |          |           |            | 1165 fps            | 1220 fps             | 1275 fps             |
|------|----------|-----------|------------|---------------------|----------------------|----------------------|
| 1 oz | Longshot | CCI 209M  | Fed. 20S1  | 17.7 gr / 9,200 PSI | 19.1 gr / 10,500 PSI | 20.5 gr / 11,800 PSI |
| 1 oz | Longshot | CCI 209M  | Rem. SP20  | —                   | 19.5 gr / 10,400 PSI | 20.6 gr / 11,800 PSI |
| 1 oz | Longshot | CCI 209M  | WAA20F1    | —                   | 18.9 gr / 10,400 PSI | 20.5 gr / 11,800 PSI |
| 1 oz | Longshot | Fed. 209A | Fed. 20S1  | 16.8 gr / 9,400 PSI | 18.5 gr / 10,600 PSI | 20.3 gr / 11,800 PSI |
| 1 oz | Longshot | Fed. 209A | Rem. SP20  | 17.4 gr / 9,400 PSI | 18.9 gr / 10,500 PSI | 20.4 gr / 11,700 PSI |
| 1 oz | Longshot | Fed. 209A | WAA20F1    | 17.7 gr / 9,100 PSI | 18.9 gr / 10,100 PSI | 20.2 gr / 11,200 PSI |
| 1 oz | Longshot | Rem. 209P | Fed. 20S1  | 17.7 gr / 8,700 PSI | 19.0 gr / 10,100 PSI | 20.2 gr / 11,400 PSI |
| 1 oz | Longshot | Rem. 209P | Rem. RXP20 | 19.0 gr / 8,700 PSI | 19.8 gr / 9,600 PSI  | 20.7 gr / 10,600 PSI |
| 1 oz | Longshot | Rem. 209P | WAA20F1    | 17.1 gr / 9,100 PSI | 18.8 gr / 10,000 PSI | 20.6 gr / 10,900 PSI |
| 1 oz | Longshot | Win. 209  | Fed. 20S1  | 18.6 gr / 9,000 PSI | 19.7 gr / 9,900 PSI  | 20.9 gr / 10,800 PSI |
| 1 oz | Longshot | Win. 209  | Rem. RXP20 | 19.8 gr / 8,100 PSI | 20.7 gr / 8,900 PSI  | 21.5 gr / 9,700 PSI  |
| 1 oz | Longshot | Win. 209  | WAA20F1    | 17.8 gr / 8,400 PSI | 19.5 gr / 9,400 PSI  | 21.0 gr / 10,300 PSI |

## 20 GA., 2 3/4", FIOCCHI AND PMC PLASTIC TARGET SHELLS (LOW BASE WAD)

|        |            |           |             | 1200 fps             | 1225 fps             | 1250 fps             |
|--------|------------|-----------|-------------|----------------------|----------------------|----------------------|
| 7/8 oz | Internat'l | Fio. 616  | Fed. 20S1   | 14.6 gr / 11,800 PSI | —                    | —                    |
| 7/8 oz | Internat'l | Fio. 616  | PC20        | 14.8 gr / 11,000 PSI | —                    | —                    |
| 7/8 oz | Internat'l | Fio. 616  | Rem. RXP 20 | 15.0 gr / 10,700 PSI | —                    | —                    |
| 7/8 oz | Internat'l | Fio. 616  | WAA20       | 14.8 gr / 11,700 PSI | —                    | —                    |
| 7/8 oz | Internat'l | Fio. 616  | Windjammer  | 15.0 gr / 12,000 PSI | —                    | —                    |
| 7/8 oz | Universal  | Fio. 616  | Fed. 20S1   | 16.6 gr / 9,800 PSI  | 17.0 gr / 10,600 PSI | —                    |
| 7/8 oz | Universal  | Fio. 616  | PC20        | 17.0 gr / 9,800 PSI  | —                    | —                    |
| 7/8 oz | Universal  | Fio. 616  | Rem. RXP 20 | 17.3 gr / 9,100 PSI  | 18.0 gr / 9,800 PSI  | —                    |
| 7/8 oz | Universal  | Fio. 616  | WAA20       | 17.0 gr / 9,300 PSI  | 17.6 gr / 9,800 PSI  | 18.0 gr / 10,000 PSI |
| 7/8 oz | Universal  | Fio. 616  | Windjammer  | 17.5 gr / 9,400 PSI  | 17.8 gr / 9,900 PSI  | 18.0 gr / 10,200 PSI |
| 7/8 oz | Universal  | Ched. 209 | Fed. 20S1   | 17.5 gr / 9,400 PSI  | 18.0 gr / 9,300 PSI  | —                    |
| 7/8 oz | Universal  | Ched. 209 | Rem. RXP 20 | 18.5 gr / 8,700 PSI  | —                    | —                    |
| 7/8 oz | Universal  | Ched. 209 | WAA20       | 18.0 gr / 9,000 PSI  | —                    | —                    |

|        |          |          |            | 1300 fps            | 1350 fps             | 1400 fps             | 1450 fps             |
|--------|----------|----------|------------|---------------------|----------------------|----------------------|----------------------|
| 7/8 oz | Longshot | Ched.209 | Fed. 20S1  | 20.7 gr / 9,300 PSI | 21.8 gr / 9,300 PSI  | 23.0 gr / 10,200 PSI | 24.1 gr / 11,000 PSI |
| 7/8 oz | Longshot | Ched.209 | Rem. RXP20 | —                   | 22.0 gr / 9,200 PSI  | 23.5 gr / 10,500 PSI | 24.8 gr / 11,600 PSI |
| 7/8 oz | Longshot | Fio. 616 | Fed. 20S1  | 21.2 gr / 9,100 PSI | 22.2 gr / 10,400 PSI | 23.2 gr / 11,600 PSI | —                    |
| 7/8 oz | Longshot | Fio. 616 | Rem. RXP20 | —                   | 22.0 gr / 9,100 PSI  | 23.2 gr / 10,000 PSI | 24.3 gr / 10,800 PSI |

| SHOT  | POWDER     | PRIMER    | WAD         | CHARGE/PRESSURE      |                      |                      |
|---|------------|-----------|-------------|----------------------|----------------------|----------------------|
| <b>20 GA., 2 3/4", FIOCCHI AND PMC PLASTIC TARGET SHELLS (LOW BASE WAD) CONT.</b> |            |           |             |                      |                      |                      |
|   |            |           |             | 1165 fps             | 1220 fps             | 1275 fps             |
| 1 oz  | Longshot   | Fio. 616  | Fed. 20S1   | 18.0 gr / 8,900 PSI  | 19.2 gr / 10,000 PSI | 20.4 gr / 11,200 PSI |
| 1 oz  | Longshot   | Fio. 616  | WAA20       | 18.3 gr / 9,000 PSI  | 19.4 gr / 9,900 PSI  | 20.5 gr / 10,800 PSI |
| <b>20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS</b>              |            |           |             |                      |                      |                      |
|   |            |           |             | 1150 fps             | 1200 fps             | 1250 fps             |
| 3/4 oz  | Internat'l | CCI 209M  | PC20        | 12.2 gr / 9,400 PSI  | 13.0 gr / 10,800 PSI | —                    |
| 3/4 oz  | Internat'l | CCI 209M  | WAA20       | 12.0 gr / 9,200 PSI  | 13.1 gr / 10,700 PSI | —                    |
| 3/4 oz  | Internat'l | Rem. 209P | PC20        | 12.5 gr / 8,400 PSI  | 13.7 gr / 9,500 PSI  | —                    |
| 3/4 oz  | Internat'l | Rem. 209P | WAA20       | 12.5 gr / 8,600 PSI  | 13.6 gr / 10,600 PSI | —                    |
| 3/4 oz  | Internat'l | Win. 209  | PC20        | 12.5 gr / 9,000 PSI  | 13.2 gr / 10,200 PSI | 14.2 gr / 11,800 PSI |
| 3/4 oz  | Internat'l | Win. 209  | WAA20       | 12.0 gr / 9,000 PSI  | 13.2 gr / 10,400 PSI | —                    |
|   |            |           |             | 1200 fps             | 1225fps              | 1250 fps             |
| 7/8 oz  | Internat'l | Rem. 209P | RXP20       | 14.0 gr / 10,700 PSI | —                    | —                    |
| 7/8 oz  | Internat'l | Win. 209  | PC20        | 14.0 gr / 11,000 PSI | —                    | —                    |
| 7/8 oz  | Internat'l | Win. 209  | WAA20       | 14.0 gr / 11,900 PSI | —                    | —                    |
| 7/8 oz  | Universal  | CCI 209SC | Fed. 20S1   | 15.2 gr / 10,700 PSI | 15.6 gr / 11,500 PSI | —                    |
| 7/8 oz  | Universal  | CCI 209SC | Rem. RXP 20 | 15.5 gr / 10,400 PSI | 16.0 gr / 11,000 PSI | 16.4 gr / 11,300 PSI |
| 7/8 oz  | Universal  | CCI 209SC | WAA20F1     | 15.4 gr / 10,700 PSI | 15.9 gr / 10,900 PSI | 16.2 gr / 11,900 PSI |
| 7/8 oz  | Universal  | CCI 209SC | Windjammer  | 15.4 gr / 10,700 PSI | 15.8 gr / 11,400 PSI | —                    |
| 7/8 oz  | Universal  | Fed. 209A | Fed. 20S1   | 15.0 gr / 11,900 PSI | —                    | —                    |
| 7/8 oz  | Universal  | Fed. 209A | Rem. RXP 20 | 15.4 gr / 10,700 PSI | 15.9 gr / 11,300 PSI | —                    |
| 7/8 oz  | Universal  | Fed. 209A | WAA20F1     | 15.0 gr / 11,200 PSI | 15.5 gr / 12,000 PSI | —                    |
| 7/8 oz  | Universal  | Rem. 209P | Fed. 20S1   | 16.0 gr / 10,700 PSI | 16.2 gr / 11,100 PSI | 16.5 gr / 11,400 PSI |
| 7/8 oz  | Universal  | Rem. 209P | Rem. RXP 20 | 15.8 gr / 9,900 PSI  | 16.7 gr / 10,700 PSI | —                    |
| 7/8 oz  | Universal  | Rem. 209P | WAA20F1     | 15.6 gr / 10,500 PSI | 16.0 gr / 11,000 PSI | 16.5 gr / 11,200 PSI |
| 7/8 oz  | Universal  | Rem. 209P | Windjammer  | 16.0 gr / 10,600 PSI | 16.5 gr / 11,200 PSI | —                    |
| 7/8 oz  | Universal  | Win. 209  | Fed. 20S1   | 15.5 gr / 10,800 PSI | 16.0 gr / 11,500 PSI | —                    |
| 7/8 oz  | Universal  | Win. 209  | Rem. RXP 20 | 16.0 gr / 10,400 PSI | 16.7 gr / 11,400 PSI | —                    |
| 7/8 oz  | Universal  | Win. 209  | Windjammer  | 16.0 gr / 10,800 PSI | 16.5 gr / 11,500 PSI | —                    |
|   |            |           |             | 1250 fps             | 1300 fps             | 1350 fps             |
| 7/8 oz  | Longshot   | CCI209M   | Fed. 20S1   | 16.9 gr / 10,400 PSI | 18.0 gr / 11,600 PSI | —                    |
| 7/8 oz  | Longshot   | CCI209M   | PC20        | 17.7 gr / 9,500 PSI  | 18.4 gr / 10,600 PSI | 19.6 gr / 12,000 PSI |
| 7/8 oz  | Longshot   | CCI209M   | Rem. RXP20  | 17.7 gr / 9,500 PSI  | 18.7 gr / 10,800 PSI | 19.6 gr / 12,000 PSI |
| 7/8 oz  | Longshot   | CCI209M   | WAA20       | 17.0 gr / 10,700 PSI | 18.1 gr / 11,700 PSI | —                    |
| 7/8 oz  | Longshot   | CCI209M   | Windjammer  | 17.3 gr / 10,000 PSI | 18.1 gr / 11,300 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | Fed. 20S1   | 17.5 gr / 10,800 PSI | 18.3 gr / 12,000 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | PC20        | 17.6 gr / 10,200 PSI | 18.6 gr / 11,200 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | Rem. RXP20  | 17.6 gr / 10,100 PSI | 18.6 gr / 11,200 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | WAA20       | 17.1 gr / 10,600 PSI | 18.3 gr / 11,700 PSI | —                    |
| 7/8 oz  | Longshot   | Fed. 209A | Windjammer  | 17.2 gr / 10,400 PSI | 18.5 gr / 11,900 PSI | —                    |
| 7/8 oz  | Longshot   | Rem. 209P | Fed. 20S1   | 17.5 gr / 10,200 PSI | 18.4 gr / 11,600 PSI | —                    |
| 7/8 oz  | Longshot   | Rem. 209P | PC20        | 17.7 gr / 9,500 PSI  | 18.8 gr / 10,700 PSI | 19.9 gr / 11,900 PSI |
| 7/8 oz  | Longshot   | Rem. 209P | Rem. RXP20  | 17.6 gr / 9,600 PSI  | 18.9 gr / 11,200 PSI | —                    |
| 7/8 oz  | Longshot   | Rem. 209P | WAA20       | 17.3 gr / 10,300 PSI | 18.5 gr / 11,800 PSI | —                    |
| 7/8 oz  | Longshot   | Rem. 209P | Windjammer  | 17.8 gr / 10,100 PSI | 18.9 gr / 11,200 PSI | —                    |
| 7/8 oz  | Longshot   | Win. 209  | PC20        | 18.8 gr / 8,700 PSI  | 19.8 gr / 10,100 PSI | 20.7 gr / 11,300 PSI |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |  |
|------|--------|--------|-----|-----------------|--|--|
|------|--------|--------|-----|-----------------|--|--|

## 20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS CONT.

|        |          |           |            | 1250 fps             | 1300 fps             | 1350 fps             |
|--------|----------|-----------|------------|----------------------|----------------------|----------------------|
| 7/8 oz | Longshot | Win. 209  | Rem. RXP20 | 18.2 gr / 9,100 PSI  | 19.4 gr / 10,300 PSI | 20.6 gr / 11,500 PSI |
| 7/8 oz | Longshot | Win. 209  | WAA20      | 17.9 gr / 9,900 PSI  | 19.0 gr / 11,200 PSI | —                    |
| 7/8 oz | Longshot | Win. 209  | Windjammer | 18.4 gr / 9,000 PSI  | 19.4 gr / 10,500 PSI | 20.3 gr / 12,000 PSI |
| 7/8 oz | Longshot | Win. 209  | Fed. 20S1  | 18.1 gr / 10,000 PSI | 19.1 gr / 11,100 PSI | 20.1 gr / 12,000 PSI |
|        |          |           |            | 1165 fps             | 1220 fps             |                      |
| 1 oz   | HS-6     | CCI 209   | Rem. SP 20 | 20.5 gr / 11,500 PSI | —                    |                      |
| 1 oz   | HS-6     | CCI 209   | WAA20F1    | 20.5 gr / 11,900 PSI | —                    |                      |
| 1 oz   | HS-6     | CCI 209   | Windjammer | 19.6 gr / 11,200 PSI | —                    |                      |
| 1 oz   | HS-6     | CCI 209M  | Fed. 20S1  | 19.5 gr / 11,600 PSI | —                    |                      |
| 1 oz   | HS-6     | CCI 209M  | WAA20F1    | 19.7 gr / 11,300 PSI | —                    |                      |
| 1 oz   | HS-6     | Fed. 209A | Rem. SP 20 | 19.5 gr / 11,400 PSI | —                    |                      |
| 1 oz   | HS-6     | Fed. 209A | WAA20F1    | 19.5 gr / 11,100 PSI | —                    |                      |
| 1 oz   | HS-6     | Rem. 209P | Fed. 20S1  | 20.0 gr / 10,900 PSI | —                    |                      |
| 1 oz   | HS-6     | Rem. 209P | WAA20F1    | 20.4 gr / 10,900 PSI | 21.6 gr / 11,700 PS  |                      |
| 1 oz   | HS-6     | Rem. 209P | Windjammer | 20.8 gr / 10,900 PSI | —                    |                      |
| 1 oz   | HS-6     | Win. 209  | Fed. 20S1  | 19.7 gr / 11,500 PSI | —                    |                      |
| 1 oz   | HS-6     | Win. 209  | Rem. SP 20 | 20.0 gr / 11,200 PSI | —                    |                      |
| 1 oz   | HS-6     | Win. 209  | WAA20F1    | 20.3 gr / 11,200 PSI | —                    |                      |
| 1 oz   | HS-6     | Win. 209  | Windjammer | 20.0 gr / 11,200 PSI | —                    |                      |
| 1 oz   | Longshot | CCI 209M  | Rem. SP20  | 16.5 gr / 11,700 PSI | —                    |                      |
| 1 oz   | Longshot | CCI 209M  | WAA20F1    | 16.5 gr / 11,000 PSI | —                    |                      |
| 1 oz   | Longshot | Fed. 209A | WAA20F1    | 15.9 gr / 11,200 PSI | 16.5 gr / 12,000 PSI |                      |
| 1 oz   | Longshot | Rem. 209P | Rem. SP20  | 16.0 gr / 11,100 PSI | —                    |                      |
| 1 oz   | Longshot | Rem. 209P | WAA20F1    | 15.9 gr / 10,900 PSI | 17.3 gr / 12,000 PSI |                      |
| 1 oz   | Longshot | Win. 209  | Rem. SP20  | 16.0 gr / 10,400 PSI | 17.8 gr / 12,000 PSI |                      |
| 1 oz   | Longshot | Win. 209  | WAA20F1    | 16.3 gr / 9,900 PSI  | 18.0 gr / 12,000 PSI |                      |

## 20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS

|        |            |           |            | 1150 fps             | 1200 fps             | 1250 fps             |
|--------|------------|-----------|------------|----------------------|----------------------|----------------------|
| 3/4 oz | Internat'l | CCI 209M  | Fio. 20    | 12.2 gr / 9,700 PSI  | 13.0 gr / 10,800 PSI | —                    |
| 3/4oz  | Internat'l | CCI 209M  | PC20       | 12.3 gr / 10,200 PSI | 13.1 gr / 11,900 PSI | —                    |
| 3/4oz  | Internat'l | CCI 209M  | WAA20      | 12.1 gr / 10,100 PSI | 12.7 gr / 11,500 PSI | —                    |
| 3/4oz  | Internat'l | Rem. 209P | Fio. 20    | 12.8 gr / 8,100 PSI  | 13.8 gr / 10,200 PSI | 14.5 gr / 10,900 PSI |
| 3/4oz  | Internat'l | Rem. 209P | PC20       | 12.5 gr / 9,000 PSI  | 14.0 gr / 10,900 PSI | —                    |
| 3/4oz  | Internat'l | Rem. 209P | WAA20      | 12.1 gr / 9,000 PSI  | 13.2 gr / 10,500 PSI | —                    |
| 3/4oz  | Internat'l | Win. 209  | Fio. 20    | 12.3 gr / 9,000 PSI  | 12.9 gr / 10,500 PSI | 14.0 gr / 11,800 PSI |
| 3/4oz  | Internat'l | Win. 209  | PC20       | 12.2 gr / 10,400 PSI | 13.0 gr / 11,300 PSI | —                    |
| 3/4oz  | Internat'l | Win. 209  | WAA20      | 12.0 gr / 10,100 PSI | 13.0 gr / 11,700 PSI | —                    |
|        |            |           |            | 1200 fps             |                      |                      |
| 7/8 oz | Internat'l | Rem. 209P | Rem. RXP20 | 14.0 gr / 10,800 PSI |                      |                      |
| 7/8 oz | Internat'l | Win. 209  | PC20       | 14.0 gr / 11,200 PSI |                      |                      |
| 7/8 oz | Internat'l | Win. 209  | WAA20      | 14.0 gr / 11,800 PSI |                      |                      |
| 7/8 oz | Universal  | CCI 209SC | Fed. 20S1  | 14.6 gr / 11,800 PSI |                      |                      |
| 7/8 oz | Universal  | CCI 209SC | PC20       | 15.5 gr / 11,600 PSI |                      |                      |
| 7/8 oz | Universal  | CCI 209SC | Rem. RXP20 | 15.3 gr / 11,100 PSI |                      |                      |
| 7/8 oz | Universal  | CCI 209SC | WAA20F1    | 15.1 gr / 11,600 PSI |                      |                      |

| SHOT  | POWDER    | PRIMER    | WAD        | CHARGE/PRESSURE      |                      |                      |
|---|-----------|-----------|------------|----------------------|----------------------|----------------------|
| <b>20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS CONT.</b> |           |           |            |                      |                      |                      |
| <b>1200 fps</b>   |           |           |            |                      |                      |                      |
| 7/8 oz  | Universal | CCI 209SC | Windjammer | 15.5 gr / 11,900 PSI |                      |                      |
| 7/8 oz  | Universal | Fed. 209A | Fed. 20S1  | 14.3 gr / 12,000 PSI |                      |                      |
| 7/8 oz  | Universal | Fed. 209A | PC20       | 14.7 gr / 11,900 PSI |                      |                      |
| 7/8 oz  | Universal | Fed. 209A | Rem. RXP20 | 14.8 gr / 11,400 PSI |                      |                      |
| 7/8 oz  | Universal | Fed. 209A | WAA20F1    | 14.6 gr / 12,000 PSI |                      |                      |
| 7/8 oz  | Universal | Fed. 209A | Windjammer | 15.8 gr / 11,700 PSI |                      |                      |
| 7/8 oz  | Universal | Rem. 209P | Fed. 20S1  | 15.3 gr / 11,500 PSI |                      |                      |
| 7/8 oz  | Universal | Rem. 209P | PC20       | 15.5 gr / 11,100 PSI |                      |                      |
| 7/8 oz  | Universal | Rem. 209P | Rem. RXP20 | 15.8 gr / 9,800 PSI  |                      |                      |
| 7/8 oz  | Universal | Rem. 209P | WAA20F1    | 15.3 gr / 11,600 PSI |                      |                      |
| 7/8 oz  | Universal | Rem. 209P | Windjammer | 16.0 gr / 11,700 PSI |                      |                      |
| 7/8 oz  | Universal | Win. 209  | Fed. 20S1  | 14.7 gr / 12,000 PSI |                      |                      |
| 7/8 oz  | Universal | Win. 209  | Rem. RXP20 | 15.0 gr / 11,000 PSI |                      |                      |
| 7/8 oz  | Universal | Win. 209  | Windjammer | 15.0 gr / 11,800 PSI |                      |                      |
| 7/8 oz  | Universal | Win. 209  | WAA20      | 15.5 gr / 10,200 PSI |                      |                      |
| <b>1250 fps      1300 fps      1350 fps</b>                               |           |           |            |                      |                      |                      |
| 7/8 oz  | Longshot  | CCI209M   | Fed. 20S1  | 17.3 gr / 11,000 PSI | —                    | —                    |
| 7/8 oz  | Longshot  | CCI209M   | PC20       | 17.4 gr / 11,000 PSI | 18.5 gr / 11,800 PSI | —                    |
| 7/8 oz  | Longshot  | CCI209M   | Rem.RXP20  | 17.7 gr / 9,800 PSI  | 18.5 gr / 11,200 PSI | —                    |
| 7/8 oz  | Longshot  | CCI209M   | WAA20      | 17.2 gr / 10,900 PSI | 18.0 gr / 11,900 PSI | —                    |
| 7/8 oz  | Longshot  | CCI209M   | Windjammer | 17.6 gr / 10,700 PSI | 18.4 gr / 12,000 PSI | —                    |
| 7/8 oz  | Longshot  | Fed. 209A | Fed. 20S1  | 17.5 gr / 11,800 PSI | —                    | —                    |
| 7/8 oz  | Longshot  | Fed. 209A | PC20       | 17.8 gr / 11,000 PSI | 18.4 gr / 11,900 PSI | —                    |
| 7/8 oz  | Longshot  | Fed. 209A | Rem.RXP20  | 17.8 gr / 11,400 PSI | 18.9 gr / 12,000 PSI | —                    |
| 7/8 oz  | Longshot  | Fed. 209A | WAA20      | 17.4 gr / 11,900 PSI | —                    | —                    |
| 7/8 oz  | Longshot  | Fed. 209A | Windjammer | 17.4 gr / 11,200 PSI | 18.5 gr / 12,000 PSI | —                    |
| 7/8 oz  | Longshot  | Rem. 209P | Fed. 20S1  | 17.6 gr / 10,800 PSI | 18.5 gr / 12,000 PSI | —                    |
| 7/8 oz  | Longshot  | Rem. 209P | PC20       | 17.9 gr / 10,900 PSI | 18.6 gr / 11,600 PSI | —                    |
| 7/8 oz  | Longshot  | Rem. 209P | Rem.RXP20  | 17.7 gr / 10,400 PSI | 18.7 gr / 11,400 PSI | —                    |
| 7/8 oz  | Longshot  | Rem. 209P | WAA20      | 17.2 gr / 11,100 PSI | 18.4 gr / 11,800 PSI | —                    |
| 7/8 oz  | Longshot  | Rem. 209P | Windjammer | 17.9 gr / 10,700 PSI | 18.5 gr / 11,900 PSI | —                    |
| 7/8 oz  | Longshot  | Win. 209  | Fed. 20S1  | 17.6 gr / 10,600 PSI | 18.6 gr / 11,400 PSI | —                    |
| 7/8 oz  | Longshot  | Win. 209  | PC20       | 18.3 gr / 9,600 PSI  | 19.4 gr / 10,600 PSI | 20.5 gr / 11,600 PSI |
| 7/8 oz  | Longshot  | Win. 209  | Rem.RXP20  | 18.4 gr / 9,800 PSI  | 19.3 gr / 10,700 PSI | —                    |
| 7/8 oz  | Longshot  | Win. 209  | WAA20      | 17.8 gr / 10,600 PSI | 18.6 gr / 11,700 PSI | —                    |
| 7/8 oz  | Longshot  | Win. 209  | Windjammer | 18.4 gr / 10,100 PSI | 19.1 gr / 11,000 PSI | 20.0 gr / 12,000 PSI |
| <b>1165 fps      1220 fps      1250 fps</b>                               |           |           |            |                      |                      |                      |
| 1 oz  | HS-6      | Rem. 209P | Rem. SP20  | 19.8 gr / 11,900 PSI | —                    | —                    |
| 1 oz  | HS-6      | Rem. 209P | WAA20F1    | 19.5 gr / 11,800 PSI | —                    | —                    |
| 1 oz  | HS-6      | Win. 209  | WAA20F1    | 21.5 gr / 10,000 LUP | 22.5 gr / 10,900 LUP | —                    |
| 1 oz  | HS-6      | Win. 209  | Rem. SP20  | 23.0 gr / 10,100 LUP | 24.0 gr / 10,800 LUP | —                    |
| 1 oz  | HS-7      | Win. 209  | Rem. SP20  | 23.5 gr / 9,400 LUP  | 24.5 gr / 10,600 LUP | —                    |
| <b>1165 fps      1220 fps</b>   |           |           |            |                      |                      |                      |
| 1 oz  | Longshot  | CCI 209M  | Rem. SP20  | 16.7 gr / 11,700 PSI | —                    | —                    |
| 1 oz  | Longshot  | CCI 209M  | WAA20F1    | 15.5 gr / 11,900 PSI | —                    | —                    |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |
|------|--------|--------|-----|-----------------|--|
|------|--------|--------|-----|-----------------|--|

## 20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS CONT.

|      |          |           |           | 1165 fps             | 1220 fps             |
|------|----------|-----------|-----------|----------------------|----------------------|
| 1 oz | Longshot | Fed. 209A | WAA20F1   | 15.5 gr / 11,900 PSI | —                    |
| 1 oz | Longshot | Rem. 209P | Rem. SP20 | 16.3 gr / 11,800 PSI | —                    |
| 1 oz | Longshot | Rem. 209P | WAA20F1   | 15.8 gr / 11,800 PSI | —                    |
| 1 oz | Longshot | Win. 209  | Rem. SP20 | 16.5 gr / 10,700 PSI | 18.1 gr / 12,000 PSI |
| 1 oz | Longshot | Win. 209  | WAA20F1   | 15.7 gr / 10,900 PSI | 17.2 gr / 12,000 PSI |

## 20 GA., 3", FEDERAL PLASTIC SHELLS

|          |          |           |            | 1175 fps            | 1230 fps             | 1285 fps             |
|----------|----------|-----------|------------|---------------------|----------------------|----------------------|
| 1 1/8 oz | Longshot | CCI 209M  | Fed. 20S1  | 19.6 gr / 9,000 PSI | 21.0 gr / 10,300 PSI | 22.4 gr / 11,500 PSI |
| 1 1/8 oz | Longshot | CCI 209M  | Rem. RXP20 | 19.4 gr / 9,000 PSI | 21.0 gr / 10,000 PSI | 22.6 gr / 10,900 PSI |
| 1 1/8 oz | Longshot | CCI 209M  | WAA20      | 19.2 gr / 8,300 PSI | 20.7 gr / 10,600 PSI | —                    |
| 1 1/8 oz | Longshot | Fed. 209A | Fed. 20S1  | 19.3 gr / 9,300 PSI | 20.6 gr / 10,900 PSI | 21.9 gr / 12,000 PSI |
| 1 1/8 oz | Longshot | Fed. 209A | Rem. RXP20 | 19.6 gr / 9,000 PSI | 21.1 gr / 10,600 PSI | 22.7 gr / 11,000 PSI |
| 1 1/8 oz | Longshot | Fed. 209A | WAA20      | 19.6 gr / 9,700 PSI | 20.7 gr / 10,900 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | Fed. 20S1  | 19.4 gr / 9,000 PSI | 20.3 gr / 10,300 PSI | 22.2 gr / 11,600 PSI |
| 1 1/8 oz | Longshot | Rem. 209P | Rem. RXP20 | 19.5 gr / 8,600 PSI | 21.1 gr / 9,900 PSI  | 22.7 gr / 11,200 PSI |
| 1 1/8 oz | Longshot | Rem. 209P | WAA20      | 19.4 gr / 9,100 PSI | 20.3 gr / 10,400 PSI | 22.1 gr / 11,600 PSI |
| 1 1/8 oz | Longshot | Win. 209  | Fed. 20S1  | 20.6 gr / 8,200 PSI | 21.7 gr / 9,500 PSI  | 22.7 gr / 10,600 PSI |
| 1 1/8 oz | Longshot | Win. 209  | Rem. RXP20 | 20.3 gr / 8,500 PSI | 21.7 gr / 9,600 PSI  | 23.0 gr / 10,600 PSI |
| 1 1/8 oz | Longshot | Win. 209  | WAA20      | 19.6 gr / 8,800 PSI | 21.0 gr / 10,100 PSI | 22.4 gr / 11,300 PSI |

|          |          |           |            | 1185 fps             | 1240 fps             |
|----------|----------|-----------|------------|----------------------|----------------------|
| 1 1/4 oz | Longshot | CCI 209M  | Fed. 20S1  | 20.2 gr / 11,300 PSI | —                    |
| 1 1/4 oz | Longshot | CCI 209M  | Rem. RXP20 | 21.0 gr / 11,000 PSI | —                    |
| 1 1/4 oz | Longshot | CCI 209M  | WAA20F1    | 20.3 gr / 11,400 PSI | —                    |
| 1 1/4 oz | Longshot | Fed. 209A | Fed. 20S1  | 20.2 gr / 11,700 PSI | —                    |
| 1 1/4 oz | Longshot | Fed. 209A | Rem. RXP20 | 20.9 gr / 11,300 PSI | —                    |
| 1 1/4 oz | Longshot | Fed. 209A | WAA20F1    | 20.2 gr / 11,500 PSI | —                    |
| 1 1/4 oz | Longshot | Rem. 209P | Fed. 20S1  | 20.5 gr / 11,600 PSI | —                    |
| 1 1/4 oz | Longshot | Rem. 209P | Rem. RXP20 | 21.5 gr / 10,400 PSI | —                    |
| 1 1/4 oz | Longshot | Rem. 209P | WAA20F1    | 19.9 gr / 11,200 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | Fed. 20S1  | 20.4 gr / 10,300 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | Rem. RXP20 | 21.3 gr / 10,600 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | WAA20F1    | 21.2 gr / 10,300 PSI | 22.2 gr / 11,500 PSI |

## 20 GA., 3", REMINGTON NITRO STEEL PLASTIC SHELLS (LEAD SHOT)

|          |          |           |               | 1175 fps             | 1230 fps             | 1285 fps             |
|----------|----------|-----------|---------------|----------------------|----------------------|----------------------|
| 1 1/8 oz | Longshot | CCI 209M  | BP2 Trap Com. | 19.5 gr / 10,100 PSI | 20.5 gr / 11,100 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | BP2 Trap Com. | 19.6 gr / 9,300 PSI  | 21.0 gr / 10,800 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | Fed. 20S1     | 20.1 gr / 8,500 PSI  | 21.4 gr / 9,800 PSI  | 22.7 gr / 11,100 PSI |
| 1 1/8 oz | Longshot | Win. 209  | Rem. RXP20    | —                    | —                    | 23.0 gr / 11,900 PSI |
| 1 1/8 oz | Longshot | Win. 209  | WAA20         | 20.0 gr / 8,900 PSI  | 21.4 gr / 10,200 PSI | 22.7 gr / 11,500 PSI |

|          |          |           |            | 1185 fps             | 1240 fps |
|----------|----------|-----------|------------|----------------------|----------|
| 1 1/4 oz | Longshot | CCI 209M  | Fed. 20S1  | 20.0 gr / 12,000 PSI | —        |
| 1 1/4 oz | Longshot | CCI 209M  | PC20       | 20.1 gr / 11,300 PSI | —        |
| 1 1/4 oz | Longshot | CCI 209M  | Rem. RXP20 | 20.2 gr / 11,500 PSI | —        |
| 1 1/4 oz | Longshot | CCI 209M  | WAA20      | 20.0 gr / 11,500 PSI | —        |
| 1 1/4 oz | Longshot | Rem. 209P | Fed. 20S1  | 20.5 gr / 10,900 PSI | —        |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |
|------|--------|--------|-----|-----------------|--|
|------|--------|--------|-----|-----------------|--|

## 20 GA., 3", REMINGTON NITRO STEEL PLASTIC SHELLS (LEAD SHOT) CONT.

|          |          |           |            | 1185 fps             | 1240 fps             |
|----------|----------|-----------|------------|----------------------|----------------------|
| 1 1/4 oz | Longshot | Rem. 209P | PC20       | 20.6 gr / 10,300 PSI | —                    |
| 1 1/4 oz | Longshot | Rem. 209P | RXP20      | 20.3 gr / 11,000 PSI | —                    |
| 1 1/4 oz | Longshot | Rem. 209P | WAA20      | 20.4 gr / 11,500 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | Fed 20S1   | 20.5 gr / 11,500 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | PC20       | 21.0 gr / 10,600 PSI | 22.4 gr / 12,000 PSI |
| 1 1/4 oz | Longshot | Win. 209  | Rem. RXP20 | 20.7 gr / 11,100 PSI | —                    |
| 1 1/4 oz | Longshot | Win. 209  | WAA20      | 20.7 gr / 11,300 PSI | —                    |

## 20 GA., 3", REMINGTON PREMIER PLASTIC SHELLS

|          |          |           |            | 1175 fps             | 1230 fps             |
|----------|----------|-----------|------------|----------------------|----------------------|
| 1 1/8 oz | Longshot | CCI 209M  | PC20       | 17.6 gr / 11,400 PSI | —                    |
| 1 1/8 oz | Longshot | CCI 209M  | Rem. RXP20 | 17.7 gr / 11,500 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | PC20       | 17.6 gr / 10,900 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | Rem. RXP20 | 17.7 gr / 11,500 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | WAA20      | 17.6 gr / 12,000 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | Fed. 20S1  | 18.2 gr / 10,800 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | PC20       | 18.3 gr / 10,500 PSI | 19.3 gr / 12,000 PSI |
| 1 1/8 oz | Longshot | Win. 209  | Rem. RXP20 | 17.7 gr / 10,200 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | WAA20      | 18.1 gr / 11,400 PSI | —                    |

## 20 GA., 3", WINCHESTER COMPRESSION-FORMED SUPER-X TYPE SHELLS

|          |          |           |            | 1175 fps             | 1230 fps             |
|----------|----------|-----------|------------|----------------------|----------------------|
| 1 1/8 oz | Longshot | Rem. 209P | Rem. RXP20 | 18.4 gr / 11,200 PSI | —                    |
| 1 1/8 oz | Longshot | Rem. 209P | WAA20      | 18.0 gr / 11,200 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | Fed. 20S1  | 18.7 gr / 10,400 PSI | —                    |
| 1 1/8 oz | Longshot | Win. 209  | Rem. RXP20 | 18.5 gr / 10,500 PSI | 20.0 gr / 11,800 PSI |
| 1 1/8 oz | Longshot | Win. 209  | WAA20      | 18.6 gr / 10,900 PSI | 19.5 gr / 12,000 PSI |

|          |      |           |       | 1220 fps             |
|----------|------|-----------|-------|----------------------|
| 1 1/8 oz | HS-7 | Rem. 209P | WAA20 | 27.0 gr / 11,200 LUP |
| 1 1/8 oz | HS-7 | Win. 209  | WAA20 | 27.0 gr / 11,100 LUP |

|          |      |           |       | 1135 fps             |
|----------|------|-----------|-------|----------------------|
| 1 1/4 oz | HS-7 | Rem. 209P | WAA20 | 24.0 gr / 11,000 LUP |
| 1 1/4 oz | HS-7 | Win. 209  | WAA20 | 24.0 gr / 10,900 LUP |

## 28 GA., 2 3/4", CHEDDITE PLASTIC SHELLS

|        |           |           |           | 1200 fps             | 1225 fps             | 1250 fps             |
|--------|-----------|-----------|-----------|----------------------|----------------------|----------------------|
| 3/4 oz | Universal | Ched. 209 | Fed. 28S1 | 14.5 gr / 11,000 PSI | 14.9 gr / 11,800 PSI | —                    |
| 3/4 oz | Universal | Ched. 209 | Rem. PT28 | 14.5 gr / 10,700 PSI | 15.2 gr / 11,700 PSI | 15.4 gr / 12,300 PSI |
| 3/4 oz | Universal | Fio. 616  | Fed. 28S1 | 14.2 gr / 11,300 PSI | 14.4 gr / 12,400 PSI | —                    |
| 3/4 oz | Universal | Fio. 616  | Rem. PT28 | 14.2 gr / 11,400 PSI | 14.5 gr / 12,400 PSI | —                    |

|        |          |           |           | 1225 fps             | 1250 fps             | 1275 fps             | 1300 fps             |
|--------|----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| 3/4 oz | Longshot | Ched. 209 | Fed. 28S1 | 15.2 gr / 10,300 PSI | 15.6 gr / 10,800 PSI | 16.0 gr / 11,300 PSI | 16.4 gr / 11,800 PSI |
| 3/4 oz | Longshot | Ched. 209 | Rem. PT28 | 14.9 gr / 9,600 PSI  | 15.5 gr / 10,100 PSI | 16.0 gr / 10,600 PSI | 16.6 gr / 11,100 PSI |
| 3/4 oz | Longshot | Fio. 616  | Fed. 28S1 | 15.0 gr / 10,300 PSI | 15.5 gr / 10,900 PSI | 15.9 gr / 11,400 PSI | 16.4 gr / 12,100 PSI |
| 3/4 oz | Longshot | Fio. 616  | Rem. PT28 | 15.1 gr / 9,400 PSI  | 15.6 gr / 10,000 PSI | 16.1 gr / 10,500 PSI | 16.6 gr / 11,100 PSI |

|          |           |           |           | 1200 fps             |
|----------|-----------|-----------|-----------|----------------------|
| 13/16 oz | Universal | Ched. 209 | Fed. 28S1 | 14.5 gr / 12,400 PSI |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |
|------|--------|--------|-----|-----------------|
|------|--------|--------|-----|-----------------|

**28 GA., 2 3/4", CHEDDITE PLASTIC SHELLS CONT.**

| 1200 fps   |           |           |           |                      |                      |                      |                      |
|--|-----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| 13/16 oz   | Universal | Ched. 209 | Rem. PT28 | 14.7 gr / 12,500 PSI |                      |                      |                      |
| 1200 fps      1225 fps      1250 fps      1275 fps |           |           |           |                      |                      |                      |                      |
| 13/16 oz   | Longshot  | Ched. 209 | Fed. 28S1 | 15.2 gr / 10,800 PSI | 15.6 gr / 11,400 PSI | 16.0 gr / 12,100 PSI | —                    |
| 13/16 oz   | Longshot  | Ched. 209 | Rem. PT28 | 15.2 gr / 10,000 PSI | 15.7 gr / 10,500 PSI | 16.2 gr / 11,000 PSI | 16.7 gr / 11,600 PSI |
| 13/16 oz   | Longshot  | Fio. 616  | Fed. 28S1 | 15.0 gr / 10,900 PSI | 15.5 gr / 11,700 PSI | 16.0 gr / 12,500 PSI | —                    |
| 13/16 oz   | Longshot  | Fio. 616  | Rem. PT28 | 14.9 gr / 10,300 PSI | 15.4 gr / 10,400 PSI | 15.8 gr / 11,400 PSI | 16.3 gr / 12,000 PSI |

**28 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS**

| 1200 fps |           |           |           |                      |                      |                      |                      |
|----------|-----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| 3/4 oz   | Universal | CCI 209SC | Fed. 28S1 | 14.3 gr / 10,600 PSI | 15.1 gr / 11,400 PSI | 15.3 gr / 11,800 PSI | —                    |
| 3/4 oz   | Universal | CCI 209SC | Rem. PT28 | 14.5 gr / 10,000 PSI | 15.0 gr / 10,900 PSI | 15.5 gr / 11,100 PSI | —                    |
| 3/4 oz   | Universal | Fed. 209A | Rem. PT28 | 14.2 gr / 11,400 PSI | —                    | —                    | —                    |
| 3/4 oz   | Universal | Win. 209  | Fed. 28S1 | 14.5 gr / 10,700 PSI | 15.0 gr / 11,500 PSI | 15.5 gr / 12,400 PSI | —                    |
| 3/4 oz   | Universal | Win. 209  | PC28      | 14.8 gr / 10,700 PSI | 15.2 gr / 11,300 PSI | 15.6 gr / 11,900 PSI | —                    |
| 3/4 oz   | Universal | Win. 209  | Rem. PT28 | 14.5 gr / 10,200 PSI | 15.2 gr / 10,900 PSI | 15.8 gr / 11,700 PSI | —                    |
| 1225 fps |           |           |           |                      |                      |                      |                      |
| 3/4 oz   | Longshot  | CCI209M   | Fed. 28S1 | 15.3 gr / 10,000 PSI | 15.8 gr / 10,600 PSI | 16.3 gr / 11,200 PSI | 16.8 gr / 11,800 PSI |
| 3/4 oz   | Longshot  | CCI209M   | Rem. PT28 | 15.5 gr / 9,900 PSI  | 15.9 gr / 10,600 PSI | 16.3 gr / 11,200 PSI | 16.6 gr / 11,700 PSI |
| 3/4 oz   | Longshot  | Fed. 209A | Fed. 28S1 | 15.2 gr / 11,000 PSI | 15.6 gr / 11,600 PSI | 15.9 gr / 12,000 PSI | —                    |
| 3/4 oz   | Longshot  | Fed. 209A | Rem. PT28 | 15.3 gr / 10,400 PSI | 15.8 gr / 11,000 PSI | 16.2 gr / 11,400 PSI | 16.7 gr / 12,000 PSI |
| 3/4 oz   | Longshot  | Rem. 209P | Fed. 28S1 | 15.1 gr / 10,500 PSI | 15.6 gr / 11,100 PSI | 16.0 gr / 11,500 PSI | 16.5 gr / 12,000 PSI |
| 3/4 oz   | Longshot  | Rem. 209P | Rem. PT28 | 15.1 gr / 9,800 PSI  | 15.6 gr / 10,400 PSI | 16.1 gr / 11,100 PSI | 16.6 gr / 11,800 PSI |
| 3/4 oz   | Longshot  | Win. 209  | Fed. 28S1 | 15.7 gr / 10,200 PSI | 16.1 gr / 10,800 PSI | 16.5 gr / 11,400 PSI | 16.9 gr / 11,900 PSI |
| 3/4 oz   | Longshot  | Win. 209  | Rem. PT28 | 15.8 gr / 9,600 PSI  | 16.2 gr / 10,000 PSI | 16.6 gr / 10,400 PSI | 17.0 gr / 10,800 PSI |

| 1200 fps |           |           |           |                      |                      |                      |   |
|----------|-----------|-----------|-----------|----------------------|----------------------|----------------------|---|
| 13/16 oz | Universal | CCI 209SC | Fed. 28S1 | 14.9 gr / 12,100 PSI | —                    | —                    | — |
| 13/16 oz | Universal | CCI 209SC | PC28      | 15.0 gr / 12,400 PSI | —                    | —                    | — |
| 13/16 oz | Universal | CCI 209SC | Rem. PT28 | 15.1 gr / 11,100 PSI | —                    | —                    | — |
| 13/16 oz | Universal | Win. 209  | Fed. 28S1 | 14.9 gr / 12,300 PSI | —                    | —                    | — |
| 13/16 oz | Universal | Win. 209  | PC28      | 14.9 gr / 12,000 PSI | —                    | —                    | — |
| 13/16 oz | Universal | Win. 209  | Rem. PT28 | 14.9 gr / 11,600 PSI | —                    | —                    | — |
| 13/16 oz | Longshot  | CCI209M   | Fed. 28S1 | 15.5 gr / 11,400 PSI | —                    | —                    | — |
| 13/16 oz | Longshot  | CCI209M   | Rem. PT28 | 15.3 gr / 10,600 PSI | 15.8 gr / 11,300 PSI | 16.5 gr / 12,000 PSI | — |
| 13/16 oz | Longshot  | Fed. 209A | Fed. 28S1 | 14.9 gr / 11,900 PSI | 15.4 gr / 12,500 PSI | —                    | — |
| 13/16 oz | Longshot  | Fed. 209A | Rem. PT28 | 15.2 gr / 10,900 PSI | 15.6 gr / 11,500 PSI | 16.0 gr / 12,200 PSI | — |
| 13/16 oz | Longshot  | Rem. 209P | Fed. 28S1 | 14.7 gr / 11,800 PSI | 15.0 gr / 12,200 PSI | —                    | — |
| 13/16 oz | Longshot  | Rem. 209P | Rem. PT28 | 15.5 gr / 11,000 PSI | 15.9 gr / 11,400 PSI | 16.3 gr / 11,800 PSI | — |
| 13/16 oz | Longshot  | Win. 209  | Fed. 28S1 | 15.2 gr / 11,000 PSI | 15.5 gr / 12,300 PSI | —                    | — |
| 13/16 oz | Longshot  | Win. 209  | Rem. PT28 | 15.7 gr / 10,200 PSI | 16.1 gr / 10,900 PSI | 16.5 gr / 11,500 PSI | — |
| 7/8oz    | HS-7      | Rem. 209P | Rem. PT28 | 19.5 gr / 10,900 PSI | —                    | —                    | — |
| 7/8 oz   | HS-7      | Win. 209  | PC28      | 19.2 gr / 10,700 PSI | —                    | —                    | — |

**28 GA., 2 3/4", FIOCCHI PLASTIC TARGET SHELLS**

| 1200 fps |           |          |           |                      |                      |                      |   |
|----------|-----------|----------|-----------|----------------------|----------------------|----------------------|---|
| 3/4 oz   | Universal | Fio. 616 | Fed. 28S1 | 14.3 gr / 11,200 PSI | 14.6 gr / 11,800 PSI | 15.0 gr / 12,300 PSI | — |
| 3/4 oz   | Universal | Fio. 616 | PC28      | 14.2 gr / 10,900 PSI | 14.8 gr / 11,300 PSI | 15.2 gr / 11,800 PSI | — |



# SHOT SHELL data

| SHOT   | POWDER    | PRIMER    | WAD       | CHARGE/PRESSURE      |                      |                      |                      |
|--|-----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| <b>28 GA., 2 3/4", FIOCCHI PLASTIC TARGET SHELLS CONT.</b> |           |           |           |                      |                      |                      |                      |
|  |           |           |           | 1200 fps             | 1225 fps             | 1250 fps             |                      |
| 3/4 oz   | Universal | Fio. 616  | Rem. PT28 | 14.2 gr / 10,600 PSI | 14.8 gr / 11,000 PSI | 15.1 gr / 11,900 PSI |                      |
|  |           |           |           | 1225 fps             | 1250 fps             | 1275 fps             | 1300 fps             |
| 3/4 oz   | Longshot  | Ched. 209 | Fed. 28S1 | 14.9 gr / 10,200 PSI | 15.4 gr / 10,900 PSI | 15.9 gr / 11,600 PSI | 16.5 gr / 12,300 PSI |
| 3/4 oz   | Longshot  | Ched. 209 | Rem. PT28 | 15.1 gr / 9,800 PSI  | 15.6 gr / 10,400 PSI | 16.1 gr / 10,900 PSI | 16.5 gr / 11,400 PSI |
| 3/4 oz   | Longshot  | Fio. 616  | Fed. 28S1 | 15.1 gr / 10,700 PSI | 15.5 gr / 11,300 PSI | 15.9 gr / 11,800 PSI | 16.2 gr / 12,300 PSI |
| 3/4 oz   | Longshot  | Fio. 616  | Rem. PT28 | 15.2 gr / 10,000 PSI | 15.6 gr / 10,400 PSI | 16.1 gr / 11,000 PSI | 16.6 gr / 11,500 PSI |
| 13/16 oz   | Universal | Fio. 616  | Fed. 28S1 | 14.5 gr / 12,400 PSI | —                    | —                    | —                    |
| 13/16 oz   | Universal | Fio. 616  | PC28      | 14.5 gr / 12,100 PSI | —                    | —                    | —                    |
| 13/16 oz   | Universal | Fio. 616  | Rem. PT28 | 15.0 gr / 11,900 PSI | —                    | —                    | —                    |
|  |           |           |           | 1200 fps             | 1225 fps             | 1250 fps             | 1275 fps             |
| 13/16 oz   | Longshot  | Ched. 209 | Fed. 28S1 | 14.7 gr / 11,300 PSI | 15.2 gr / 11,900 PSI | 15.7 gr / 12,500 PSI | —                    |
| 13/16 oz   | Longshot  | Ched. 209 | Rem. PT28 | 15.3 gr / 10,700 PSI | 15.6 gr / 11,100 PSI | 16.0 gr / 11,700 PSI | 16.5 gr / 12,300 PSI |
| 13/16 oz   | Longshot  | Fio. 616  | Fed. 28S1 | 14.8 gr / 11,300 PSI | 15.3 gr / 11,800 PSI | 15.9 gr / 12,500 PSI | —                    |
| 13/16 oz   | Longshot  | Fio. 616  | Rem. PT28 | 15.0 gr / 10,600 PSI | 15.4 gr / 11,200 PSI | 15.8 gr / 11,800 PSI | 16.2 gr / 12,400 PSI |
| 7/8 oz   | HS-7      | Rem. 209P | PC28      | 19.0 gr / 10,100 PSI | —                    | —                    | —                    |
| 7/8 oz   | HS-7      | Win. 209  | Rem. PT28 | 19.5 gr / 11,100 PSI | —                    | —                    | —                    |
| <b>28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS</b>        |           |           |           |                      |                      |                      |                      |
|  |           |           |           | 1200 fps             |                      |                      |                      |
| 3/4 oz   | Universal | CCI 209SC | PC28      | 13.6 gr / 12,200 PSI |                      |                      |                      |
| 3/4 oz   | Universal | CCI 209SC | Rem. PT28 | 13.8 gr / 12,100 PSI |                      |                      |                      |
| 3/4 oz   | Universal | CCI 209SC | WAA28     | 13.8 gr / 11,600 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Fed. 209A | WAA28     | 13.5 gr / 12,200 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Rem. 209P | PC28      | 13.6 gr / 12,000 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Rem. 209P | Rem. PT28 | 13.8 gr / 12,000 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Rem. 209P | WAA28     | 13.9 gr / 11,700 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Win. 209  | PC28      | 13.5 gr / 12,400 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Win. 209  | Rem. PT28 | 13.8 gr / 12,100 PSI |                      |                      |                      |
| 3/4 oz   | Universal | Win. 209  | WAA28     | 13.8 gr / 11,500 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | CCI 209SC | Rem. PT28 | 17.0 gr / 10,900 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | CCI 209SC | WAA28     | 17.0 gr / 10,300 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Fed. 209A | Rem. PT28 | 16.7 gr / 11,700 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Fed. 209A | WAA28     | 16.7 gr / 11,000 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Rem. 209P | Rem. PT28 | 17.1 gr / 11,000 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Rem. 209P | WAA28     | 17.1 gr / 10,400 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Win. 209  | Rem. PT28 | 17.0 gr / 11,500 PSI |                      |                      |                      |
| 3/4 oz   | HS-6      | Win. 209  | WAA28     | 17.0 gr / 10,700 PSI |                      |                      |                      |
|  |           |           |           | 1225 fps             | 1250 fps             | 1275 fps             | 1300 fps             |
| 3/4 oz   | Longshot  | CCI209M   | PC 28     | 14.4 gr / 12,000 PSI | 14.9 gr / 12,300 PSI | —                    | —                    |
| 3/4 oz   | Longshot  | CCI209M   | Rem. PT28 | 14.1 gr / 11,100 PSI | 14.6 gr / 11,900 PSI | —                    | —                    |
| 3/4 oz   | Longshot  | CCI209M   | WAA28     | 14.4 gr / 11,500 PSI | 14.9 gr / 11,900 PSI | 15.4 gr / 12,400 PSI | —                    |
| 3/4 oz   | Longshot  | Fed. 209A | PC 28     | 14.3 gr / 12,000 PSI | —                    | —                    | —                    |
| 3/4 oz   | Longshot  | Fed. 209A | Rem. PT28 | 14.0 gr / 11,700 PSI | 15.3 gr / 12,500 PSI | —                    | —                    |
| 3/4 oz   | Longshot  | Fed. 209A | WAA28     | 14.2 gr / 11,200 PSI | 14.7 gr / 12,000 PSI | —                    | —                    |
|  |           |           |           | 1225 fps             | 1250 fps             | 1275 fps             | 1300 fps             |
| 3/4 oz   | Longshot  | Rem. 209P | PC 28     | 14.5 gr / 11,200 PSI | 15.0 gr / 11,800 PSI | 15.5 gr / 12,300 PSI | —                    |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |  |  |
|------|--------|--------|-----|-----------------|--|--|--|
|------|--------|--------|-----|-----------------|--|--|--|

## 28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS CONT.

|        |          |           |           | 1225 fps             | 1250 fps             | 1275 fps             | 1300 fps             |
|--------|----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| 3/4 oz | Longshot | Rem. 209P | Rem. PT28 | 14.3 gr / 11,300 PSI | 14.9 gr / 12,000 PSI | 15.4 gr / 12,500 PSI | —                    |
| 3/4 oz | Longshot | Rem. 209P | WAA28     | 14.3 gr / 11,000 PSI | 14.8 gr / 11,600 PSI | 15.2 gr / 12,000 PSI | 15.6 gr / 12,400 PSI |
| 3/4 oz | Longshot | Win. 209  | PC 28     | 14.9 gr / 10,900 PSI | 15.4 gr / 11,600 PSI | 15.8 gr / 12,100 PSI | —                    |
| 3/4 oz | Longshot | Win. 209  | Rem. PT28 | 14.7 gr / 10,900 PSI | 15.3 gr / 11,300 PSI | 15.9 gr / 11,900 PSI | 16.4 gr / 12,300 PSI |
| 3/4 oz | Longshot | Win. 209  | WAA28     | 14.5 gr / 10,700 PSI | 15.1 gr / 11,200 PSI | 15.6 gr / 11,600 PSI | 16.2 gr / 12,200 PSI |

## 28 GA., 2 3/4", WINCHESTER AA PLASTIC SHELLS

|        |           |           |           | 1200 fps             | 1225 fps             | 1250 fps             |
|--------|-----------|-----------|-----------|----------------------|----------------------|----------------------|
| 3/4 oz | Universal | CCI 209SC | PC28      | 13.0 gr / 12,000 PSI | —                    | —                    |
| 3/4 oz | Universal | CCI 209SC | Rem. PT28 | 13.2 gr / 12,200 PSI | —                    | —                    |
| 3/4 oz | Universal | CCI 209SC | WAA28     | 13.0 gr / 12,400 PSI | —                    | —                    |
| 3/4 oz | Universal | Rem. 209P | Rem. PT28 | 13.2 gr / 11,900 PSI | —                    | —                    |
| 3/4 oz | Universal | Win. 209  | WAA28     | 13.0 gr / 10,800 PSI | —                    | —                    |
| 3/4 oz | Universal | Win. 209  | PC28      | 13.2 gr / 11,900 PSI | —                    | —                    |
| 3/4 oz | HS-6      | CCI 209SC | WAA28     | 16.6 gr / 11,500 PSI | —                    | —                    |
| 3/4 oz | HS-6      | Rem. 209P | PC28      | 16.4 gr / 12,400 PSI | —                    | —                    |
| 3/4 oz | HS-6      | Rem. 209P | WAA28     | 17.1 gr / 10,900 PSI | 17.5 gr / 11,800 PSI | 17.8 gr / 12,100 PSI |
| 3/4 oz | HS-6      | Win. 209  | Rem. PT28 | 16.7 gr / 12,000 PSI | —                    | —                    |
| 3/4 oz | HS-6      | Win. 209  | WAA28     | 17.1 gr / 10,900 PSI | 17.5 gr / 11,600 PSI | 17.9 gr / 12,300 PSI |

|        |          |           |           | 1225 fps             | 1250 fps             | 1275 fps             |
|--------|----------|-----------|-----------|----------------------|----------------------|----------------------|
| 3/4 oz | Longshot | CCI209M   | PC 28     | 14.1 gr / 12,200 PSI | —                    | —                    |
| 3/4 oz | Longshot | CCI209M   | Rem. PT28 | 14.1 gr / 12,000 PSI | —                    | —                    |
| 3/4 oz | Longshot | CCI209M   | WAA28     | 14.1 gr / 12,100 PSI | —                    | —                    |
| 3/4 oz | Longshot | Fed. 209A | PC 28     | 14.2 gr / 12,100 PSI | —                    | —                    |
| 3/4 oz | Longshot | Fed. 209A | Rem. PT28 | 14.4 gr / 12,300 PSI | —                    | —                    |
| 3/4 oz | Longshot | Fed. 209A | WAA28     | 14.0 gr / 11,900 PSI | —                    | —                    |
| 3/4 oz | Longshot | Rem. 209P | PC 28     | 14.0 gr / 12,300 PSI | —                    | —                    |
| 3/4 oz | Longshot | Rem. 209P | Rem. PT28 | 14.2 gr / 11,300 PSI | 14.6 gr / 12,200 PSI | —                    |
| 3/4 oz | Longshot | Rem. 209P | WAA28     | 14.2 gr / 11,900 PSI | —                    | —                    |
| 3/4 oz | Longshot | Win. 209  | PC 28     | 14.6 gr / 11,700 PSI | 15.0 gr / 12,300 PSI | —                    |
| 3/4 oz | Longshot | Win. 209  | Rem. PT28 | 14.4 gr / 11,300 PSI | 15.0 gr / 12,000 PSI | 15.5 gr / 12,300 PSI |
| 3/4 oz | Longshot | Win. 209  | WAA28     | 14.3 gr / 11,300 PSI | 15.1 gr / 12,100 PSI | —                    |

## 28 GA., 2 3/4" WINCHESTER AA HS AND SUPER-X HS PLASTIC SHELLS

|        |           |           |           | 1200 fps             | 1225 fps          | 1250 fps | 1275 fps |
|--------|-----------|-----------|-----------|----------------------|-------------------|----------|----------|
| 3/4 oz | Universal | CCI 209M  | BP SG 28  | 14.3 gr / 11,000 PS  | 14.6 / 11,800 PSI | —        | —        |
| 3/4 oz | Universal | CCI 209M  | Rem. PT28 | 14.1 gr / 10,200 PS  | 14.7 / 11,300 PSI | —        | —        |
| 3/4 oz | Universal | CCI 209M  | WAA28HS   | 14.2 gr / 12,100 PSI | —                 | —        | —        |
| 3/4 oz | Universal | Rem. 209P | BP SG 28  | 14.2 gr / 10,400 PSI | 14.7 / 11,100 PSI | —        | —        |
| 3/4 oz | Universal | Rem. 209P | Fed. 28S1 | 13.8 gr / 11,600 PSI | 14.5 / 12,000 PSI | —        | —        |
| 3/4 oz | Universal | Rem. 209P | Rem. PT28 | 14.5 gr / 10,500 PSI | —                 | —        | —        |
| 3/4 oz | Universal | Rem. 209P | WAA28HS   | 14 gr / 11,300 PSI   | —                 | —        | —        |
| 3/4 oz | Universal | Win. 209  | BP SG 28  | 14.3 gr / 11,400 PSI | —                 | —        | —        |
| 3/4 oz | Universal | Win. 209  | Fed. 28S1 | 14.1 gr / 11,500 PSI | —                 | —        | —        |
| 3/4 oz | Universal | Win. 209  | Rem. PT28 | 14.3 gr / 10,700 PSI | 14.7 / 11,300 PSI | —        | —        |
| 3/4 oz | Universal | Win. 209  | WAA28HS   | 14.1 gr / 12,200 PSI | —                 | —        | —        |
| 3/4 oz | HS-6      | CCI 209M  | BP SG 28  | 18 gr / 10,100 PSI   | —                 | —        | —        |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |  |  |
|------|--------|--------|-----|-----------------|--|--|--|
|------|--------|--------|-----|-----------------|--|--|--|

## 28 GA., 2 3/4" WINCHESTER AA HS AND SUPER-X HS PLASTIC SHELLS CONT.

|         |          |           |           | 1200 fps             | 1225 fps             | 1250 fps             | 1275 fps             |
|---------|----------|-----------|-----------|----------------------|----------------------|----------------------|----------------------|
| 3/4 oz. | HS-6     | CCI 209M  | WAA28HS   | 17.5 gr / 10,400 PSI | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Fed. 209A | BP SG 28  | 17.5 gr / 10,600 PSI | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Fed. 209A | WAA28HS   | 17.5 gr / 11,000 PSI | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Rem. 209P | BP SG 28  | 18 gr / 9,600 PSI    | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Rem. 209P | WAA28HS   | 18 gr / 10,600 PSI   | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Win. 209  | BP SG 28  | 18 gr / 9,700 PSI    | —                    | —                    | —                    |
| 3/4 oz. | HS-6     | Win. 209  | WAA28HS   | 18 gr / 10,600 PSI   | —                    | —                    | —                    |
| 3/4 oz. | Longshot | CCI 209M  | BP SG 28  | 13.9 gr / 9,700 PSI  | 14.5 gr / 10,400 PSI | 15 gr / 10,900 PSI   | 15.5 gr / 11,500 PSI |
| 3/4 oz. | Longshot | CCI 209M  | Fed. 28S1 | 14 gr / 10,200 PSI   | 14.5 gr / 10,900 PSI | 14.9 gr / 11,500 PSI | —                    |
| 3/4 oz. | Longshot | CCI 209M  | Rem. PT28 | 14.2 gr / 9,200 PSI  | 14.7 gr / 9,900 PSI  | 15.1 gr / 10,200 PSI | 15.6 gr / 11,200 PSI |
| 3/4 oz. | Longshot | CCI 209M  | WAA28HS   | 14.1 gr / 10,700 PSI | 14.5 gr / 11,200 PSI | 15 gr / 11,900 PSI   | —                    |
| 3/4 oz. | Longshot | Fed. 209A | BP SG 28  | 14 gr / 9,700 PSI    | 14.6 gr / 10,200 PSI | 15.2 gr / 10,800 PSI | —                    |
| 3/4 oz. | Longshot | Fed. 209A | Fed. 28S1 | 14.1 gr / 10,000 PSI | 14.6 gr / 10,900 PSI | 15 gr / 11,000 PSI   | —                    |
| 3/4 oz. | Longshot | Fed. 209A | Rem. PT28 | 14.1 gr / 9,200 PSI  | 14.6 gr / 10,000 PSI | 15 gr / 10,600 PSI   | 15.5 gr / 11,400 PSI |
| 3/4 oz. | Longshot | Fed. 209A | WAA28HS   | 13.9 gr / 10,500 PSI | 14.4 gr / 11,200 PSI | 14.9 gr / 12,000 PSI | —                    |
| 3/4 oz. | Longshot | Rem. 209P | BP SG 28  | 14.5 gr / 9,200 PSI  | 15 gr / 9,800 PSI    | 15.5 gr / 10,400 PSI | —                    |
| 3/4 oz. | Longshot | Rem. 209P | Fed. 28S1 | 14.4 gr / 9,500 PSI  | 14.9 gr / 10,200 PSI | 15.4 gr / 10,800 PSI | 15.9 gr / 11,400 PSI |
| 3/4 oz. | Longshot | Rem. 209P | Rem. PT28 | 14.7 gr / 8,700 PSI  | 15.1 gr / 9,400 PSI  | 15.6 gr / 10,200 PSI | 16 gr / 10,800 PSI   |
| 3/4 oz. | Longshot | Rem. 209P | WAA28HS   | 14.5 gr / 9,900 PSI  | 14.9 gr / 10,600 PSI | 15.4 gr / 11,400 PSI | —                    |
| 3/4 oz. | Longshot | Win. 209  | BP SG 28  | 14.4 gr / 9,200 PSI  | 14.9 gr / 9,700 PSI  | 15.5 gr / 10,200 PSI | 16 gr / 10,800 PSI   |
| 3/4 oz. | Longshot | Win. 209  | Fed. 28S1 | 14.5 gr / 9,500 PSI  | 14.9 gr / 10,100 PSI | 15.3 gr / 10,700 PSI | 15.7 gr / 11,200 PSI |
| 3/4 oz. | Longshot | Win. 209  | Rem. PT28 | 14.6 gr / 8,900 PSI  | 15.1 gr / 9,600 PSI  | 15.6 gr / 10,300 PSI | 16 gr / 10,800 PSI   |
| 3/4 oz. | Longshot | Win. 209  | WAA28HS   | 14.6 gr / 9,800 PSI  | 14.9 gr / 10,100 PSI | 15.5 gr / 11,100 PSI | —                    |

|           |          |           |           | 1175 fps             | 1200 fps             |
|-----------|----------|-----------|-----------|----------------------|----------------------|
| 13/16 oz. | Longshot | CCI 209M  | BP SG 28  | 14 gr / 10,800 PSI   | —                    |
| 13/16 oz. | Longshot | CCI 209M  | Fed. 28S1 | 14 gr / 11,700 PSI   | —                    |
| 13/16 oz. | Longshot | CCI 209M  | Rem. PT28 | 14.5 gr / 10,400 PSI | 14.8 gr / 11,200 PSI |
| 13/16 oz. | Longshot | CCI 209M  | WAA28HS   | 14 gr / 12,000 PSI   | —                    |
| 13/16 oz. | Longshot | Fed. 209A | BP SG 28  | 14 gr / 11,100 PSI   | —                    |
| 13/16 oz. | Longshot | Fed. 209A | Fed. 28S1 | 14 gr / 11,800 PSI   | 14.2 gr / 12,200 PSI |
| 13/16 oz. | Longshot | Fed. 209A | Rem. PT28 | 14.2 gr / 10,600 PSI | —                    |
| 13/16 oz. | Longshot | Fed. 209A | WAA28HS   | 14 gr / 12,100 PSI   | —                    |
| 13/16 oz. | Longshot | Rem. 209P | BP SG 28  | 14.2 gr / 10,300 PSI | —                    |
| 13/16 oz. | Longshot | Rem. 209P | Fed. 28S1 | 14.2 gr / 11,200 PSI | —                    |
| 13/16 oz. | Longshot | Rem. 209P | Rem. PT28 | 14.3 gr / 9,900 PSI  | —                    |
| 13/16 oz. | Longshot | Win. 209  | BP SG 28  | 14.2 gr / 10,400 PSI | —                    |
| 13/16 oz. | Longshot | Win. 209  | Fed. 28S1 | 14.3 gr / 11,400 PSI | —                    |
| 13/16 oz. | Longshot | Win. 209  | Rem. PT28 | 14.5 gr / 9,700 PSI  | —                    |
| 13/16 oz. | Longshot | Win. 209  | WAA28HS   | 14.2 gr / 11,700 PSI | —                    |

|         |         |           |            | 1225 fps            | 1275 fps           |
|---------|---------|-----------|------------|---------------------|--------------------|
| 7/8 oz. | Lil'Gun | Rem. 209P | BP SG28 II | 23.9 gr / 9,600 PSI | 25 gr / 10,600 PSI |
| 7/8 oz. | Lil'Gun | Win. 209  | BP SG28 II | 23.7 gr / 9,600 PSI | 25 gr / 10,500 PSI |

## 410 BORE, 2 1/2", CHEDDITE PLASTIC SHELLS

|         |         |           |            | 1200 fps             | 1225 fps             |
|---------|---------|-----------|------------|----------------------|----------------------|
| 1/2 oz. | LIL'GUN | Ched. 209 | Fed. 410SC | 13.0 gr / 11,100 PSI | 13.3 gr / 12,000 PSI |

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |  |
|------|--------|--------|-----|-----------------|--|
|------|--------|--------|-----|-----------------|--|

## 410 BORE, 2 1/2", CHEDDITE PLASTIC SHELLS CONT.

|        |         |           |            | 1200 fps             | 1225 fps             |
|--------|---------|-----------|------------|----------------------|----------------------|
| 1/2 oz | LIL'GUN | Ched. 209 | Rem. SP410 | 12.8 gr / 11,400 PSI | 13.1 gr / 11,800 PSI |
| 1/2 oz | LIL'GUN | Fio. 616  | Fed. 410SC | 13.0 gr / 11,600 PSI | 13.3 gr / 11,900 PSI |
| 1/2 oz | LIL'GUN | Fio. 616  | Rem. SP410 | 12.7 gr / 11,200 PSI | 13.0 gr / 12,300 PSI |
| 1/2 oz | H110    | Ched. 209 | Fed. 410SC | 15.7 gr / 8,700 PSI  | 16.0 gr / 9,900 PSI  |
| 1/2 oz | H110    | Ched. 209 | Rem. SP410 | 15.5 gr / 8,800 PSI  | 15.7 gr / 9,800 PSI  |

## 410 BORE, 2 1/2", FEDERAL TARGET SHELLS

|        |         |           |            | 1200 fps             |
|--------|---------|-----------|------------|----------------------|
| 1/2 oz | LIL'GUN | CCI 209SC | Fed. 410SC | 12.9 gr / 11,800 PSI |
| 1/2 oz | LIL'GUN | CCI 209SC | Rem. SP410 | 12.8 gr / 11,400 PSI |
| 1/2 oz | LIL'GUN | CCI 209SC | WAA41      | 12.8 gr / 11,700 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | Fed. 410SC | 12.9 gr / 11,800 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | Rem. SP410 | 13.0 gr / 11,700 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | WAA41      | 13.0 gr / 11,100 PSI |
| 1/2 oz | LIL'GUN | Rem. 209P | Fed. 410SC | 13.0 gr / 11,000 PSI |
| 1/2 oz | LIL'GUN | Rem. 209P | Rem. SP410 | 13.1 gr / 11,200 PSI |
| 1/2 oz | LIL'GUN | Rem. 209P | WAA41      | 13.1 gr / 10,800 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | Fed. 410SC | 12.9 gr / 11,600 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | Orange PC  | 12.8 gr / 11,500 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | Rem. SP410 | 12.8 gr / 11,700 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | WAA41      | 12.8 gr / 11,700 PSI |
| 1/2 oz | H110    | Fed. 209A | Fed. 410SC | 15.0 gr / 10,200 PSI |
| 1/2 oz | H110    | Fed. 209A | Orange PC  | 15.5 gr / 8,500 PSI  |
| 1/2 oz | H110    | Win. 209  | Orange PC  | 15.5 gr / 8,400 PSI  |
| 1/2 oz | H110    | Win. 209  | WAA41      | 15.0 gr / 9,700 PSI  |

## 410 BORE, 2 1/2", REMINGTON-PETERS "SP" PLASTIC SHELLS

|        |         |           |            | 1200 fps             |
|--------|---------|-----------|------------|----------------------|
| 1/2 oz | LIL'GUN | Rem. 209P | Rem. SP410 | 13.0 gr / 10,900 PSI |
| 1/2 oz | LIL'GUN | Rem. 209P | WAA41      | 13.1 gr / 10,200 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | Rem. SP410 | 12.7 gr / 11,700 PSI |
| 1/2 oz | LIL'GUN | Win. 209  | WAA41      | 12.8 gr / 11,600 PSI |
| 1/2 oz | H110    | Rem. 209P | Rem. SP410 | 15.0 gr / 9,400 PSI  |
| 1/2 oz | H110    | Rem. 209P | Fed. 410SC | 15.0 gr / 9,500 PSI  |
| 1/2 oz | H110    | Rem. 209P | Orange PC  | 16.5 gr / 7,000 PSI  |

## 410 BORE, 2 1/2", REMINGTON-PETERS "STS" PLASTIC SHELLS

|        |         |           |            | 1200 fps             |
|--------|---------|-----------|------------|----------------------|
| 1/2 oz | LIL'GUN | CCI 209SC | Fed. 410SC | 12.9 gr / 11,800 PSI |
| 1/2 oz | LIL'GUN | CCI 209SC | Orange PC  | 13.0 gr / 11,300 PSI |
| 1/2 oz | LIL'GUN | CCI 209SC | Rem. SP410 | 12.9 gr / 11,600 PSI |
| 1/2 oz | LIL'GUN | CCI 209SC | WAA41      | 12.8 gr / 11,300 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | Fed. 410SC | 12.9 gr / 11,600 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | Orange PC  | 13.1 gr / 11,000 PSI |
| 1/2 oz | LIL'GUN | Fed. 209A | Rem. SP410 | 12.9 gr / 10,900 PSI |

# SHOT SHELL data

| SHOT | POWDER | PRIMER | WAD | CHARGE/PRESSURE |
|------|--------|--------|-----|-----------------|
|------|--------|--------|-----|-----------------|

## 410 BORE, 2 1/2", REMINGTON-PETERS "STS" PLASTIC SHELLS

| 1200 fps |         |           |            |                      |
|----------|---------|-----------|------------|----------------------|
| 1/2 oz   | LIL'GUN | Fed. 209A | WAA41      | 12.9 gr / 11,200 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Fed. 410SC | 13.0 gr / 11,000 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Orange PC  | 13.3 gr / 10,400 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Rem. SP410 | 13.2 gr / 10,800 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | WAA41      | 13.0 gr / 10,600 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Fed. 410SC | 12.6 gr / 11,800 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Orange PC  | 12.9 gr / 11,100 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Rem. SP410 | 12.6 gr / 11,600 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | WAA41      | 12.9 gr / 11,500 PSI |
| 1/2 oz   | H110    | Fed. 209A | Fed. 410SC | 14.2 gr / 10,600 PSI |
| 1/2 oz   | H110    | Rem. 209P | Fed. 410SC | 14.7 gr / 9,600 PSI  |
| 1/2 oz   | H110    | Rem. 209P | Orange PC  | 15.2 gr / 9,300 PSI  |
| 1/2 oz   | H110    | Rem. 209P | Rem. SP410 | 14.8 gr / 8,900 PSI  |
| 1/2 oz   | H110    | Win. 209  | WAA41      | 14.0 gr / 10,000 PSI |

## 410 BORE, 2 1/2", WINCHESTER COMPRESSION-FORMED AA PLASTIC SHELLS

| 1200 fps |         |           |            |                      |
|----------|---------|-----------|------------|----------------------|
| 1/2 oz   | LIL'GUN | CCI 209SC | Fed. 410SC | 11.9 gr / 12,300 PSI |
| 1/2 oz   | LIL'GUN | CCI 209SC | Orange PC  | 12.4 gr / 11,800 PSI |
| 1/2 oz   | LIL'GUN | CCI 209SC | Rem. SP410 | 12.3 gr / 12,000 PSI |
| 1/2 oz   | LIL'GUN | CCI 209SC | WAA41      | 12.3 gr / 12,000 PSI |
| 1/2 oz   | LIL'GUN | Fed. 209A | Fed. 410SC | 12.2 gr / 12,400 PSI |
| 1/2 oz   | LIL'GUN | Fed. 209A | Orange PC  | 12.6 gr / 11,700 PSI |
| 1/2 oz   | LIL'GUN | Fed. 209A | Rem. SP410 | 12.6 gr / 11,800 PSI |
| 1/2 oz   | LIL'GUN | Fed. 209A | WAA41      | 12.6 gr / 11,500 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Fed. 410SC | 12.5 gr / 12,400 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Orange PC  | 12.5 gr / 11,100 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | Rem. SP410 | 12.6 gr / 11,500 PSI |
| 1/2 oz   | LIL'GUN | Rem. 209P | WAA41      | 12.5 gr / 11,700 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Fed. 410SC | 12.0 gr / 12,400 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Orange PC  | 12.5 gr / 11,600 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | Rem. SP410 | 12.5 gr / 12,200 PSI |
| 1/2 oz   | LIL'GUN | Win. 209  | WAA41      | 12.2 gr / 12,300 PSI |
| 1/2 oz   | H110    | Win. 209  | WAA41      | 14.0 gr / 9,900 LUP  |
| 1/2 oz   | H110    | Win. 209  | Fed. 410SC | 14.0 gr / 9,100 LUP  |
| 1/2 oz   | H110    | Fed. 209A | Orange PC  | 15.0 gr / 9,000 PSI  |
| 1/2 oz   | H110    | Win. 209  | Orange PC  | 14.0 gr / 9,500 PSI  |

## 410 BORE, 2 1/2", WINCHESTER AA HS PLASTIC SHELLS

|         |         |           |            | 1200 fps             | 1250 fps | 1300 fps |
|---------|---------|-----------|------------|----------------------|----------|----------|
| 1/2 oz. | Lil'Gun | CCI 209M  | Fed. 410SC | 13.2 gr / 12,300 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | CCI 209M  | Orange PC  | 13.3 gr / 11,500 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | CCI 209M  | Rem. SP410 | 13.2 gr / 11,700 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | CCI 209M  | WAA41HS    | 13.3 gr / 12,100 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | Fed. 209A | Fed. 410SC | 13.3 gr / 11,900 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | Fed. 209A | Orange PC  | 13.4 gr / 11,000 PSI | —        | —        |
| 1/2 oz. | Lil'Gun | Fed. 209A | Rem. SP410 | 13.3 gr / 11,600 PSI | —        | —        |

**SHOT POWDER PRIMER WAD CHARGE/PRESSURE**

## 410 BORE, 2 1/2", WINCHESTER AA HS PLASTIC SHELLS CONT.

|         |         |           |            | 1200 fps             | 1250 fps             | 1300 fps             |
|---------|---------|-----------|------------|----------------------|----------------------|----------------------|
| 1/2 oz. | Lil'Gun | Fed. 209A | WAA41HS    | 13.7 gr / 11,900 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Rem. 209P | Fed. 410SC | 13.5 gr / 11,800 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Rem. 209P | Orange PC  | 13.3 gr / 10,600 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Rem. 209P | Rem. SP410 | 13.5 gr / 11,200 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Rem. 209P | WAA41HS    | 13.8 gr / 11,600 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Win. 209  | Fed. 410SC | 13.2 gr / 11,500 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Win. 209  | Orange PC  | 13.3 gr / 10,900 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Win. 209  | Rem. SP410 | 13.3 gr / 11,100 PSI | —                    | —                    |
| 1/2 oz. | Lil'Gun | Win. 209  | WAA41HS    | 13.5 gr / 11,700 PSI | —                    | —                    |
| 1/2 oz. | H110    | CCI 209M  | Fed. 410SC | 14.3 gr / 10,100 PSI | —                    | —                    |
| 1/2 oz. | H110    | CCI 209M  | Rem. SP410 | 14.5 gr / 9,600 PSI  | 15.2 gr / 10,100 PSI | 16.2 gr / 11,900 PSI |
| 1/2 oz. | H110    | CCI 209M  | WAA41HS    | 14.5 gr / 9,900 PSI  | 15.1 gr / 10,700 PSI | 16 gr / 11,700 PSI   |
| 1/2 oz. | H110    | Fed. 209A | Fed. 410SC | 14.6 gr / 9,600 PSI  | 15.3 gr / 10,200 PSI | 16.3 gr / 11,300 PSI |
| 1/2 oz. | H110    | Fed. 209A | Orange PC  | 15.2 gr / 8,600 PSI  | 15.7 gr / 9,300 PSI  | 16.8 gr / 10,200 PSI |
| 1/2 oz. | H110    | Fed. 209A | Rem. SP410 | 14.6 gr / 8,600 PSI  | 15.3 gr / 9,400 PSI  | 16.3 gr / 10,400 PSI |
| 1/2 oz. | H110    | Fed. 209A | WAA41HS    | 14.6 gr / 9,600 PSI  | 15.3 gr / 10,200 PSI | 16.5 gr / 10,800 PSI |
| 1/2 oz. | H110    | Rem. 209P | Rem. SP410 | 16 gr / 6,900 PSI    | 16.5 gr / 8,400 PSI  | 17.4 gr / 9,300 PSI  |
| 1/2 oz. | H110    | Rem. 209P | WAA41HS    | 16 gr / 7,400 PSI    | 16.5 gr / 9,000 PSI  | 17.6 gr / 9,900 PSI  |
| 1/2 oz. | H110    | Win. 209  | Fed. 410SC | 15.2 gr / 9,400 PSI  | 15.7 gr / 10,000 PSI | 16.3 gr / 11,000 PSI |
| 1/2 oz. | H110    | Win. 209  | Orange PC  | 15.5 gr / 8,100 PSI  | 16.1 gr / 8,600 PSI  | 17 gr / 9,800 PSI    |
| 1/2 oz. | H110    | Win. 209  | Rem. SP410 | 15 gr / 8,300 PSI    | 15.5 gr / 9,200 PSI  | 16.7 gr / 10,100 PSI |
| 1/2 oz. | H110    | Win. 209  | WAA41HS    | 15.3 gr / 8,900 PSI  | 16.3 gr / 9,300 PSI  | 16.7 gr / 10,400 PSI |

## 410 BORE, 3", FEDERAL PLASTIC GAME SHELLS

|           |         |           |            | 1135 fps             |
|-----------|---------|-----------|------------|----------------------|
| 11/16 oz. | LIL'GUN | Fed. 209A | Fed. 410SC | 13.0 gr / 13,400 PSI |
| 11/16 oz. | LIL'GUN | Fed. 209A | WAA41      | 13.0 gr / 12,400 PSI |
| 11/16 oz. | LIL'GUN | Rem. 209P | Rem. SP410 | 13.1 gr / 12,900 PSI |
| 11/16 oz. | LIL'GUN | Win. 209  | Fed. 410SC | 12.9 gr / 13,500 PSI |
| 11/16 oz. | LIL'GUN | Win. 209  | WAA41      | 12.8 gr / 12,900 PSI |
| 11/16 oz. | H110    | Fed. 209A | Fed. 410SC | 14.9 gr / 12,300 PSI |
| 11/16 oz. | H110    | Win. 209  | WAA41      | 15.0 gr / 11,800 PSI |

## 410 BORE, 3", REMINGTON "SP" PLASTIC SHELLS

|           |         |           |            | 1135 fps             |
|-----------|---------|-----------|------------|----------------------|
| 11/16 oz. | LIL'GUN | Rem. 209P | Rem. SP410 | 12.8 gr / 12,900 PSI |
| 11/16 oz. | LIL'GUN | Win. 209  | WAA41      | 12.7 gr / 13,500 PSI |
| 11/16 oz. | H110    | Rem. 209P | Rem. SP410 | 15.0 gr / 11,800 PSI |
| 11/16 oz. | H110    | Win. 209  | WAA41      | 14.5 gr / 12,800 PSI |

## 410 BORE, 3", WINCHESTER COMPRESSION-FORMED PLASTIC SHELLS

|           |         |           |           | 1100 fps             | 1135 fps |
|-----------|---------|-----------|-----------|----------------------|----------|
| 11/16 oz. | LIL'GUN | CCI 209   | Orange PC | 12.2 gr / 13,300 PSI | —        |
| 11/16 oz. | LIL'GUN | CCI 209   | WAA41     | 11.6 gr / 13,400 PSI | —        |
| 11/16 oz. | LIL'GUN | Rem. 209P | Orange PC | 12.3 gr / 13,500 PSI | —        |









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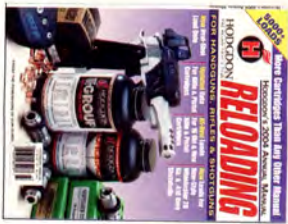
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