One Book / One Caliber

The Complete Reloading Manual for the .308 Winchester

Containing Unabridged Information from U.S. Bullet and Powder Makers

*Accurate * Alliant * Hodgdon * Hornady*
*IMR * Lyman * Nosler * RCBS * Scot*
*Sierra * Speer * Winchester and Others*

2,788 Proven & Tested Loads
148 Various Bullet Designs
63 Different Powders

RELOADING SAFETY RULES

Reloading is an enjoyable and rewarding hobby that is easily conducted with safety. But, like many other human endeavors carelessness or negligence can make reloading hazardous.

The essence of reloading safety is proper handling and storage of primers and powder. By observing the following rules, the chance of hazardous occurrence becomes extremely remote.

Store powder and primers beyond the reach of children and away from heat and open flames. Do not smoke when reloading.

Keep no more powder that needed in an open container Immediately return unused powder to its original factory container.

Don't use any powder unless its identity is positively known. Scrap all mixed powders and those of uncertain or unknown identity.

Do not store primers in bulk. To do so is to create a bomb! Bulk primers will mass detonate. Do not use primers when their identity is lost. Safely dispose of unknown types of primers.

Courtesy of Speer Reloading Manual No. 11

All loading data contained in this book is the result of testing by the various bullet and powder manufacturers. Under carefully controlled conditions and with the components and test equipment specified, this data proved safe in their tests. Since none of the companies, nor the publisher, listed herein has control over the components and equipment which may be used with this published information, no responsibility is implied or assumed for results obtained through its use.

Courtesy of Hornady Manufacturing Company, Inc.

Sierra Bullets cannot and does not accept any liability, either expressed or implied, for results of damage or injury arising from or alleged to have arisen from the use of the data in this manual.

Courtesy of Sierra Bullets

Follow loading recommendations exactly. Don't substitute components for those listed. Start loading with the minimum powder charges. Understand what you are doing and why it must be done in a specific way. Stay alert when reloading. Don't reload when distracted, disturbed or tired.

Courtesy of Nosler Bullets, Inc.

The Complete Reloading Manual for the .308 Winchester

The publisher is deeply indebted to the following companies for their permission to reprint their proprietary reloading information found in this manual.

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TABLE OF CONTENTS
.308 WINCHESTER

TABLE OF CONTENTS
.308 WINCHESTER

TABLE OF CONTENTS
.308 WINCHESTER

DISCLAIMER

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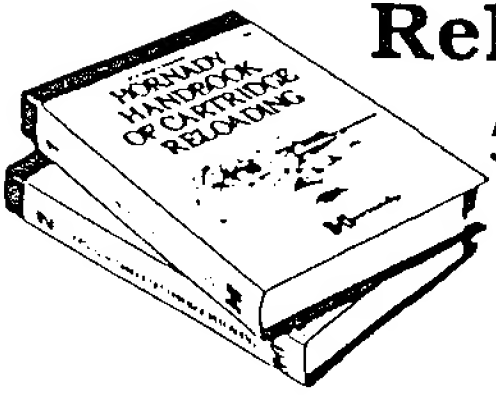
DISCLAIMER

SHOOTER'S LOG

SHOOTER'S LOG

The Hornady Handbook of Cartridge Reloading 5th Ed.



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This two-volume format enables you to have both the loading formulas and ballistics tables open to the same caliber without having to thumb back and forth.

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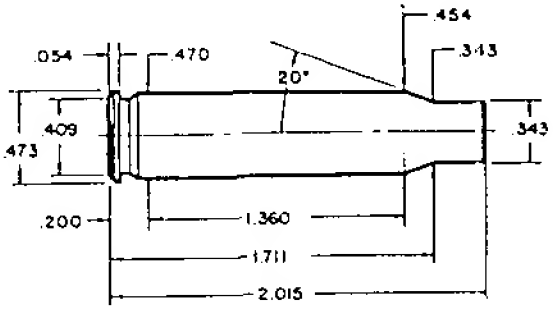
.308 WINCHESTER - HORNADY BULLETS



RIFLE: . . . . . Winchester 70
BARREL: . . . . 22", 1 in 12" Twist
CASE: . . . . . Hornady/Frontier
PRIMER: . . . . . Federal 210

BULLET DIAMETER: . . . . 0.308"
MAXIMUM C.O.L.: . . . . . 2.810"
MAX. CASE LENGTH: . . . 2.015"
CASE TRIM LENGTH: . . . 2.005"

Accurate, versatile, efficient, and popular is the easiest and best way to describe the 308 Winchester. The 308 has been chambered in every feasible action and provides exceptional performance for everything from bench rest shooting to big game.

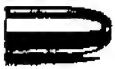
In the beginning the 308 did not have the sporting appeal of the 30-06—anything the 308 could do the 30-06 could do a little better. However, when the sporting public realized the accuracy inherent in the cartridge and the numerous medium-sized actions in which it could be chambered, the popularity steadily grew. The 308 is also the most popular national match course cartridge in use today, and with the wide range of Hornady 30 caliber bullets, it makes an excellent all around North American big game cartridge.

The 308, as a rule, is not finicky as to the type of powder that works well in it—another reason for its popularity. In our test rifle, all powders listed, gave more than acceptable results, with IMR 4064 and N150 providing the best results throughout the range of bullets.

110 GRAIN BULLETS

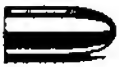
SECTIONAL DENSITY: 0.166
DIAMETER: 0.308"

#23010 V-MAX
B.C.: 0.290 C.O.L.: 2.740"



#3015 RN
B.C.: 0.150 C.O.L.: 2.515"

#3010 SP
B.C.: 0.256 C.O.L.: 2.690"



#3017 FMJ
B.C.: 0.178 C.O.L.: 2.515"

	VELOCITY (FPS–feet per second)					
POWDER	2700	2800	2900	3000	3100	3200
IMR 4198	32.7 gr.	34.4 gr.	36.2 gr.	38.0 gr.	**39.7 gr.**	
H 4198	33.0 gr.	34.9 gr.	36.9 gr.	38.9 gr.	40.8 gr.	**42.8 gr.**
RL-7	33.3 gr.	35.4 gr.	37.4 gr.	39.5 gr.	**41.6 gr.**	
H 322	35.3 gr.	37.7 gr.	40.1 gr.	42.6 gr.	45.0 gr.	**47.4 gr.**
AA 2015 BR	39.8 gr.	41.2 gr.	42.7 gr.	44.1 gr.	45.6 gr.	**47.0 gr.**
IMR 3031	39.9 gr.	41.5 gr.	43.2 gr.	44.8 gr.	46.4 gr.	**48.1 gr.**
IMR 4895	43.9 gr.	45.5 gr.	47.1 gr.	48.7 gr.	50.3 gr.	**51.9 gr.**
RL 12	44.0 gr.	45.7 gr.	47.3 gr.	49.0 gr.	50.7 gr.	**52.3 gr.**

■ *indicates maximum load • use with caution*

130 GRAIN BULLETS

SECTIONAL DENSITY: 0.196
DIAMETER: 0.308"

#3020 SP
B.C.: 0.295 C.O.L.: 2.690"

#3021 SP, SSP
B.C.: 0.295 C.O.L.: 2.690"

	VELOCITY (FPS–feet per second)					
POWDER	2500	2600	2700	2800	2900	3000
VIHT N-130	32.4 gr.	34.7 gr.	37.0 gr.	**39.3 gr.**		
H 322	35.7 gr.	37.8 gr.	39.9 gr.	42.0 gr.	**44.0 gr.**	
AA 2015 BR	37.3 gr.	38.8 gr.	40.4 gr.	41.9 gr.	**43.5 gr.**	
AA 2495	37.6 gr.	39.7 gr.	41.7 gr.	43.8 gr.	**45.9 gr.**	
H 4895	40.0 gr.	41.6 gr.	43.3 gr.	44.9 gr.	46.6 gr.	**48.2 gr.**
IMR 4895	41.0 gr.	42.7 gr.	44.4 gr.	46.1 gr.	47.7 gr.	**49.4 gr.**
RL-12	40.3 gr.	42.2 gr.	44.2 gr.	46.2 gr.	48.1 gr.	**50.1 gr.**
IMR 4320	41.3 gr.	42.9 gr.	44.6 gr.	46.2 gr.	**47.8 gr.**	
VIHT N-140	41.1 gr.	43.0 gr.	44.8 gr.	46.6 gr.	**48.5 gr.**	
RL-15	42.0 gr.	43.6 gr.	45.3 gr.	46.9 gr.	48.5 gr.	**50.1 gr.**
WIN 748	43.4 gr.	45.2 gr.	47.1 gr.	48.9 gr.	50.8 gr.	**52.6 gr.**

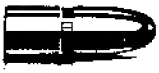
XXXX *indicates maximum load • use with caution*

SHOOTER'S LOG

150-155 GRAIN BULLETS

SECTIONAL DENSITY: 0.226-0.233
DIAMETER: 0.308"

#30302 SST
B.C.: 0.415 C.O.L.: 2.735"

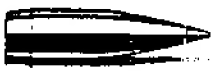


#3035 RN
B.C.: 0.186 C.O.L.: 2.520"

#3031 SP
B.C.: 0.338 C.O.L.: 2.735"

#3037 BT-FMJ
B.C.: 0.398 C.O.L.: 2.780"

#3033 BTSP
B.C.: 0.349 C.O.L.: 2.735"



#30312 A-MAX
B.C.: 0.435 C.O.L.: 2.800"

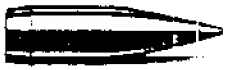
	VELOCITY (FPS–feet per second)					
POWDER	2300	2400	2500	2600	2700	2800
AA 2495	36.8 gr.	38.4 gr.	40.0 gr.	41.7 gr.	**43.3 gr.**	
H 4895	37.2 gr.	38.9 gr.	40.6 gr.	42.3 gr.	**44.0 gr.**	
IMR 4895	37.7 gr.	39.5 gr.	41.2 gr.	43.0 gr.	44.7 gr.	**46.4 gr.**
AA 2460	38.0 gr.	39.6 gr.	41.2 gr.	42.9 gr.	**44.5 gr.**	
VARGET	35.9 gr.	38.2 gr.	40.4 gr.	42.6 gr.	**44.9 gr.**	
IMR 4064	38.4 gr.	40.0 gr.	41.7 gr.	43.3 gr.	**44.9 gr.**	
RL-12	38.6 gr.	40.3 gr.	41.9 gr.	43.5 gr.	**45.1 gr.**	
RL-15	38.3 gr.	40.1 gr.	41.9 gr.	43.6 gr.	45.4 gr.	**47.2 gr.**
VIHT N-140	39.3 gr.	40.9 gr.	42.6 gr. gr.	44.2 gr.	**45.8 gr.**	
WIN 748	40.3 gr.	41.9 gr.	43.5	45.1 gr.	**46.7 gr.**	

■ *indicates maximum load • use with caution*

165-168 GRAIN BULLETS

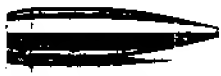
SECTIONAL DENSITY: 0.248-0.253
DIAMETER: 0.308"

#3040 SP
B.C.: 0.387 C.O.L.: 2.750"



#30502 A-MAX
B.C.: 0.475 C.O.L.: 2.800"

#3045 BTSP
B.C.: 0.435 C.O.L.: 2.750"



#30501 BTHP
B.C.: 0.450 C.O.L.: 2.800"

	VELOCITY (FPS–feet per second)					
POWDER	2100	2200	2300	2400	2500	2600
AA 2495	33.1 gr.	35.0 gr.	36.9 gr.	38.8 gr.	**40.7 gr.**	
IMR 4895	35.0 gr.	36.6 gr.	38.3 gr.	40.0 gr.	41.6 gr.	**43.3 gr.**
VARGET	32.6 gr.	34.9 gr.	37.1 gr.	39.4 gr.	41.7 gr.	**44.0 gr.**
H 4895	35.1 gr.	36.8 gr.	38.4 gr.	40.1 gr.	41.7 gr.	**43.3 gr.**
IMR 4320	33.9 gr.	35.9 gr.	38.0 gr.	40.1 gr.	**42.2 gr.**	
RL-15	35.2 gr.	37.0 gr.	38.8 gr.	40.7 gr.	42.5 gr.	**44.3 gr.**
VIHT N-150	36.3 gr.	38.2 gr.	40.2 gr.	42.2 gr.	44.1 gr.	**46.1 gr.**

Bold indicates maximum load • use with caution

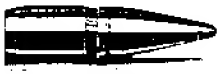
SHOOTER'S LOG

178-180 GRAIN BULLETS

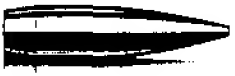
SECTIONAL DENSITY: 0.268-0.271
DIAMETER: 0.308"

#3070 SP
B.C.: 0.425 C.O.L.: 2.740"

#30712 A-MAX
B.C.: 0.495 C.O.L.: 2.800"



#3072 BTSP
B.C.: 0.452 C.O.L.: 2.740"



#30631 BTHP
B.C.: 0.505 C.O.L.: 2.800"

#3075 RN
B.C.: 0.241 C.O.L.: 2.730"

	VELOCITY (FPS–feet per second)					
POWDER	2000	2100	2200	2300	2400	2500
AA 2495	32.6 gr.	34.5 gr.	36.4 gr.	38.3 gr.	**40.2 gr.**	
H 4895	33.0 gr.	34.8 gr.	36.6 gr.	38.4 gr.	**40.2 gr.**	
VARGET	32.0 gr.	34.3 gr.	36.5 gr.	38.7 gr.	41.0 gr.	**43.2 gr.**
IMR 4895	33.8 gr.	35.7 gr.	37.5 gr.	39.3 gr.	**41.1 gr.**	
IMR 4064	34.0 gr.	35.8 gr.	37.6 gr.	39.5 gr.	**41.3 gr.**	
RL-15	34.8 gr.	36.5 gr.	38.1 gr.	39.8 gr.	**41.4 gr.**	
VIHT N-150	34.2 gr.	36.4 gr.	38.5 gr.	40.6 gr.	**42.7 gr.**	
WIN 760	38.4 gr.	40.4 gr.	42.4 gr.	44.4 gr.	46.4 gr.	**48.4 gr.**

■ *indicates maximum load • use with caution*

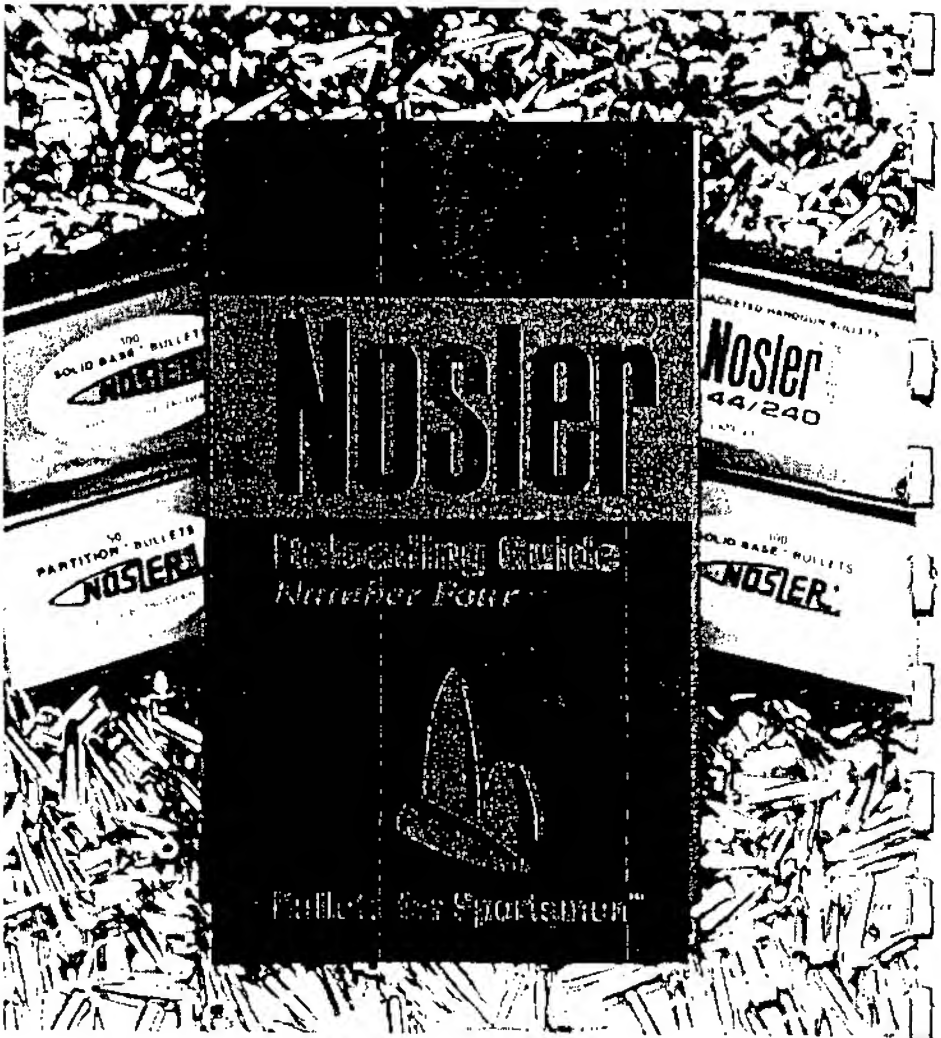
190 GRAIN BULLETS

SECTIONAL DENSITY: 0.286
DIAMETER: 0.308"

#3085 BTSP
B.C.: 0.491 C.O.L.: 2.745"

	VELOCITY (FPS–feet per second)				
POWDER	2000	2100	2200	2300	2400
AA 2495	32.3 gr.	34.2 gr.	36.1 gr.	**38.0 gr.**	
H 4895	32.1 gr.	34.1 gr.	36.1 gr.	38.1 gr.	**40.1 gr.**
VARGET	31.3 gr.	33.7 gr.	36.1 gr.	38.5 gr.	**40.9 gr.**
IMR 4064	33.6 gr.	35.4 gr.	37.3 gr.	39.1 gr.	**41.0 gr.**
IMR 4895	33.8 gr.	35.6 gr.	37.3 gr.	39.1 gr.	**40.9 gr.**
RL 15	34.1 gr.	35.9 gr.	37.8 gr.	39.6 gr.	**41.4 gr.**
VIHT N-150	34.4 gr.	36.5 gr.	38.6 gr.	40.6 gr.	**42.7 gr.**
WIN 760	37.5 gr.	39.9 gr.	42.3 gr.	44.8 gr.	**47.2 gr.**

xx.x *indicates maximum load • use with caution*



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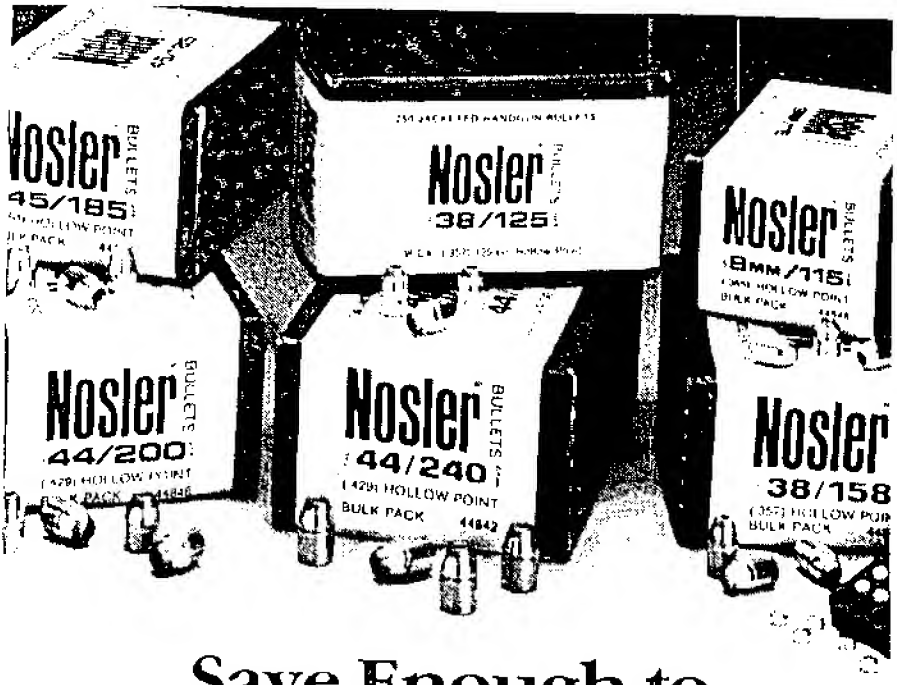

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Handgun

.308 Winchester

By Dave Workman

The .308 Winchester is arguably one of the most versatile rifle cartridges in existence, and that's thanks to such a wide range of bullet weights and styles available. I think it's an excellent choice for any American hunter who can have only one rifle.

Topped by 125-grain bullets, it performs superbly on varmints and mid-range game. Use bullets in the 150- to 200-grain range, and the .308 Winchester simply shines in deer country, whether the terrain is open and flat, or steep and timbered.

My pet propellant for .308 Winchester handloads is 4895, because I get consistent results. However, IMR 4064, Winchester 748 and Vihtavouri N 135 are *terrific propellant choices.*

For both the .308 Winchester, and the .300 Savage that was grandpa's gun (and still goes along during deer season), I prefer a 150-grain bullet. Nosler's Ballistic Tip® has turned in excellent accuracy under a wide range of hunting and shooting conditions with good down range velocity and terminal performance. Likewise, the 150-grain Spitzer Partition® is capable of delivering one-hole groups.

Equally important to accuracy is the moderate recoil of the .308 Winchester in virtually every rifle chambered for the cartridge that I've ever fired.

I despise calibers that punish the shoulder, particularly if someone is attempting to teach marksmanship to a youngster or any other new shooter.

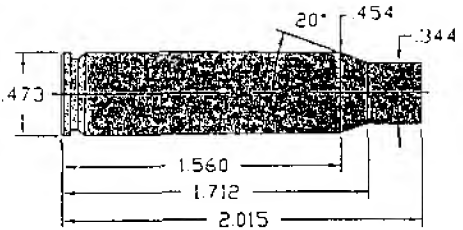
Like my .257 Roberts and the .300 Savage, the .308 Winchester is a cartridge that a younger shooter can easily handle, and become quite proficient with, while pursuing deer, antelope, black bear and other popular game.

For something heavier, the 180-grain Ballistic Tip® and both the 180- and 200-grain Nosler Partitions deliver the goods when used with good propellants, such as H 380 or IMR 4831.

My experience with the .308 Winchester has been a delight, and it's a relationship that is far from over.

Dave is Guns and Shooting Editor of Fishing & Hunting News *and Managing Editor of* Hunter Education Instructor.

308 Winchester
Test Information



RIFLE:	Barrel:	Lilja
	Length:	24"
	Twist:	1-10"
CASE:		Winchester
PRIMER:		Fed. 210M

Comments from the lab

The .308 is inherently a very accurate cartridge, and is at its best with medium-to-fast burning powders such as IMR 4895, IMR 4064, and RL 12. While most large rifle primers work well in the .308, we had our best results using Federal's 210M.

The loads listed here were developed using standard commercial brass. Military brass has less case capacity because of its heavier construction. This results in a smaller combustion chamber, which yields higher pressures. We recommend caution when using military brass, and suggest starting at or below the minimum loads listed.

If you will be loading for a semi-auto and find that crimping is necessary, a taper-crimp is suggested. There is no crimping groove on any of our .30 caliber spitzer products. Crimping with a standard seating die (roll crimping) without a groove can seriously affect accuracy.

The industry maximum overall cartridge length (O.A.L.) was established to assure proper feeding in modern sporting firearms. For the .308 Winchester, this length has been established at 2.810". Optimum accuracy is usually achieved with a slightly longer cartridge length.

.308 WINCHESTER - NOSLER BULLETS

Nosler

125 Grain

125 gr. Solid Base* Ballistic Tip* (green)

Ballistic Coefficient	.366
Sectional Density	.188

*Most Accurate Load Tested
**Compressed Load

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
RL 7	Max. 41.5*	3088 fps	81%
	39.5	2953 fps	77%
	37.5	2818 fps	73%
N 135	Max. 46.5*	3088 fps	90%
	44.5	2979 fps	86%
	42.5	2870 fps	82%
AA 2460	Max. 48.0	3150 fps	93%
	46.0	3040 fps	89%
	44.0*	2930 fps	85%
IMR 4320	Max. 48.0*	3048 fps	90%
	46.0	2883 fps	86%
	44.0	2718 fps	82%
RL 12	Max. 48.0	3100 fps	93%
	46.0	2970 fps	89%
	44.0*	2840 fps	85%
IMR 4895	Max. 45.5*	3010 fps	87%
	43.5	2840 fps	83%
	41.5	2670 fps	80%
H 335	Max. 46.5*	2990 fps	90%
	44.5	2870 fps	86%
	42.5	2750 fps	82%
N 140	Max. 49.5*	3155 fps	96%
	47.5	3045 fps	92%
	45.5	2934 fps	88%
W 748 (Most Accurate Powder Tested)	Max. 51.5*	3214 fps	100%
	49.5	3143 fps	96%
	47.5	3073 fps	92%
AA 3100	Max. 50.0	2660 fps	97%
	48.0	2520 fps	93%
	46.0*	2380 fps	89%

Use Maximum Loads with Caution

.308 Winchester - Nosler Bullets

Nosler

150 Grain

150 gr. Partition* Spitzer

Ballistic Coefficient .387
Sectional Density .226

150 gr. Solid Base* Ballistic Tip* (green)

Ballistic Coefficient .435
Sectional Density .226

*Most Accurate Load Tested
**Compressed Load

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
RL 15	Max. 46.0	2958 fps	93%
	44.0	2843 fps	89%
	42.0*	2728 fps	85%
H 322	Max. 42.0	2702 fps	85%
	40.0	2567 fps	81%
	38.0*	2432 fps	77%
RL 12 (Most Accurate Powder Tested)	Max. 45.5*	2890 fps	92%
	43.5	2780 fps	88%
	41.5	2670 fps	84%
IMR 3031	Max. 45.0	2880 fps	91%
	43.0	2740 fps	87%
	41.0*	2600 fps	83%
N 135	Max. 45.0*	2863 fps	91%
	43.0	2740 fps	87%
	41.0	2617 fps	83%
IMR 4895	Max. 44.5	2802 fps	90%
	42.5	2673 fps	86%
	40.5*	2544 fps	82%
N 140	Max. 46.5	2887 fps	94%
	44.5	2766 fps	90%
	42.5*	2645 fps	86%
IMR 4064	Max. 48.0	2920 fps	97%
	46.0	2830 fps	93%
	44.0*	2740 fps	89%
IMR 4320	Max. 47.0*	2842 fps	95%
	45.0	2727 fps	91%
	43.0	2612 fps	87%
IMR 4831	Max. 52.0	2750 fps	**105%
	50.0	2660 fps	**101%
	48.0*	2570 fps	97%

Use Maximum Loads with Caution

.308 WINCHESTER - NOSLER BULLETS

Nosler

165 Grain

165 gr. Partition* Spitzer

Ballistic Coefficient .410
Sectional Density .248

165 gr. Solid Base* Ballistic Tip* (green)

Ballistic Coefficient .475
Sectional Density .248

*Most Accurate Load Tested
**Compressed Load

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
RL 15	*Max.* 44.0*	2820 fps	91%
	42.0	2740 fps	87%
	40.0	2660 fps	83%
IMR 3031	*Max.* 43.0	2760 fps	89%
	41.0	2620 fps	85%
	39.0*	2480 fps	81%
H 322	*Max.* 40.0	2508 fps	83%
	38.0	2423 fps	79%
	36.0*	2338 fps	75%
IMR 4064	*Max.* 44.5*	2700 fps	91%
	42.5	2630 fps	87%
	40.5	2560 fps	83%
IMR 4895	*Max.* 43.0	2708 fps	89%
	41.0	*2560 fps*	*85%*
	39.0*	2412 fps	81%
N 140	*Max.* 44.5	2695 fps	92%
	42.5	2580 fps	88%
	40.5*	2465 fps	84%
N 150	*Max.* 46.0	2777 fps	95%
	44.0	2671 fps	91%
	42.0*	2565 fps	87%
BL-C(2) *(Most Accurate Powder Tested)*	*Max.* 46.5*	2698 fps	96%
	44.5	2583 fps	92%
	42.5	2468 fps	88%
IMR 4350	*Max.* 50.0	2792 fps	**104%
	48.0	2647 fps	99%
	46.0*	2502 fps	95%
IMR 4831	*Max.* 51.0	2622 fps	**106%
	49.0	2517 fps	**102%
	47.0*	2412 fps	97%

Use Maximum Loads with Caution

.308 WINCHESTER - NOSLER BULLETS

Nosler

180 Grain

**Most Accurate Load Tested*
***Compressed Load*

180 gr. Partition* Protected Point
Ballistic Coefficient .361
Sectional Density .271

180 gr. Partition* Spitzer
Ballistic Coefficient .474
Sectional Density .271

180 gr. Solid Base* Ballistic Tip* (green)
Ballistic Coefficient .507
Sectional Density .271

Powder	*Charge Weight in Grains*	*Muzzle Velocity (fps)*	*Load Density*
RL 15	*Max.* 42.5*	2638 fps	92%
	40.5	2533 fps	87%
	38.5	2428 fps	83%
IMR 4064	*Max.* 44.0	2718 fps	95%
	42.0	2573 fps	91%
	40.0*	2428 fps	86%
IMR 3031	*Max.* 40.0	2443 fps	86%
	38.0	2318 fps	82%
	36.0*	2193 fps	77%
IMR 4895	*Max.* 41.5*	2497 fps	90%
	39.5	2375 fps	85%
	37.5	2253 fps	80%
N 140	*Max.* 43.0	2547 fps	93%
	41.0	2436 fps	88%
	39.0*	2324 fps	84%
IMR 4320	*Max.* 44.0*	2618 fps	95%
	42.0	2483 fps	91%
	40.0	2348 fps	86%
N 150	*Max.* 44.5*	2576 fps	96%
	42.5	2469 fps	92%
	40.5	2363 fps	87%
H 380 *(Most Accurate Powder Tested)*	*Max.* 45.5*	2450 fps	98%
	43.5	2360 fps	94%
	41.5	2270 fps	90%
IMR 4350	*Max.* 50.0*	2698 fps	**108%
	48.0	2593 fps	**104%
	46.0	2488 fps	99%
IMR 4831	*Max.* 50.0*	2650 fps	**108%
	48.0	2520 fps	**104%
	46.0	2390 fps	99%

Use Maximum Loads with Caution

.308 WINCHESTER - NOSLER BULLETS

Nosler

200 Grain

200 gr. Partition*
Spitzer

Ballistic Coefficient .481
Sectional Density .301

**Most Accurate Load Tested*
***Compressed Load*

Powder	*Charge Weight in Grains*	*Muzzle Velocity (fps)*	*Load Density*
IMR 3031	*Max.* 38.0*	2290 fps	82%
	36.0	2180 fps	78%
	34.0	2070 fps	74%
RL 12	*Max.* 40.5*	2410 fps	88%
	38.5	2300 fps	83%
	36.5	2190 fps	79%
IMR 4895	*Max.* 40.0	2347 fps	87%
	38.0	2233 fps	82%
	36.0*	2118 fps	78%
N 140	*Max.* 41.0*	2348 fps	89%
	39.0	2247 fps	85%
	37.0	2146 fps	80%
N 150 *(Most Accurate Powder Tested)*	*Max.* 42.5	2413 fps	92%
	40.5	2322 fps	88%
	38.5*	2232 fps	83%
IMR 4320	*Max.* 43.0*	2408 fps	93%
	41.0	2333 fps	89%
	39.0	2258 fps	85%
H 380	*Max.* 44.5*	2330 fps	96%
	42.5	2240 fps	92%
	40.5	2150 fps	88%
H 414	*Max.* 45.0	2320 fps	98%
	43.0	2210 fps	93%
	41.0*	2100 fps	89%
IMR 4350	*Max.* 48.0	2460 fps	**104%
	46.0	2360 fps	100%
	44.0*	2260 fps	95%
IMR 4831	*Max.* 48.0*	2360 fps	**104%
	46.0	2270 fps	100%
	44.0	2180 fps	95%

Use Maximum Loads with Caution

When You Need ALL the Facts...

The Sierra **4th Edition** Reloading Manuals have the information you need. Rifle and Handgun reloading information are in two separate volumes, and each one covers its subject thoroughly. No matter what brand of bullet, powder, or primer you like to use, the Sierra manuals give you the full story.

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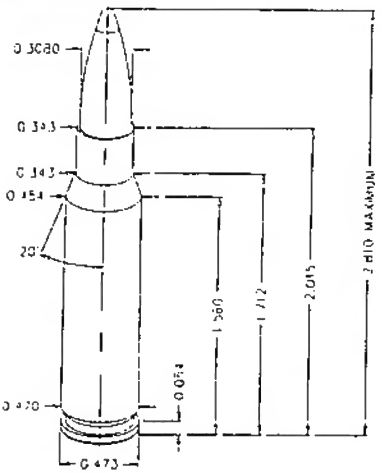
So don't be bashful, go ahead and give us a call.

308 Winchester



Test Specifications/ Components

Firearm Used: Savage 12VSS
Barrel Length: 26"
Twist: 1 x 10"
Case: Federal
Trim-to Length: 2.005"
Primer: Fed 210M

Remarks:

Shortly after the end of World War I, the U.S. Ordnance Corps began looking for a smaller cartridge to replace the 30-06 Springfield. With typical government efficiency, the quest was still being pursued toward the end of the Second World War. By 1944, engineers at Frankford Arsenal had begun to experiment with the 300 Savage case. Designated as the Cartridge, Ball, Cal. 30 T65, the experimental round gave performance roughly equal to the larger 30-06. After a long series of modifications, a revised cartridge case designated as the T65E3 was adopted as the NATO standard on December 15, 1953. The U.S. finally embraced the 7.62mm NATO cartridge in two new weapons adopted in 1957 — the M14 rifle and the M60 machinegun.

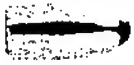
While the military trials were still in progress, Winchester introduced the cartridge to the sporting public as the 308 Winchester. Initially, the 308 was chambered in the bolt action Model 70 rifle. Since then, the cartridge has been chambered by virtually every major arms maker in almost every conceivable action type. Public acceptance was slow, due largely to unflattering comparisons to the 30-06. Despite the initial lukewarm enthusiasm, the 308 has become one of the most useful sporting cartridges.

The 308 is an extremely easy cartridge to reload. Like the 222 Remington and 6mm PPC, the 308 is an extremely accurate cartridge. It probably is the most inherently accurate 30 caliber commercial cartridge ever produced. As a competitive cartridge, the 308 has been used in benchrest, highpower, long-range, silhouette, and 300-meter international matches. Few, if any, other cartridges have been so successful in such a wide range of shooting disciplines. It has also become quite popular as a hunting cartridge and is adequate for most North American big game species, particularly deer-sized game. Though frequently compared to it, the 308 cannot match the performance of the 30-06. The difference between the two, however, is insignificant unless bullets of 180 grains or heavier are discussed. The 30-06's greater capacity and ability to use slower powders give it an undeniable edge. If military brass is used for reloading, the charges shown should be reduced by one to two grains. The

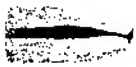
308 Winchester continued

thicker construction of these cases decreases capacity, making a reduction in charge weight a necessity.

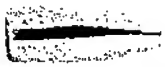
#2100 .308" 110 gr. RN
C.O.A.L. 2.500"



#2105 .308" 110 gr. FMJ
C.O.A.L. 2.500"

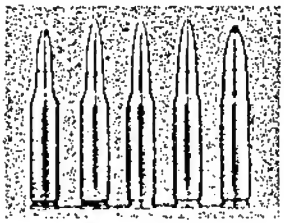


#2110 .308" 110 gr. HP
C.O.A.L. 2.600"



Powder↓/Velocity→	2800	2900	3000	3100	3200	3300
Viht N133	40.0	41.1	42.3	43.4	44.5	
AA-2015	39.8	41.2	42.6	44.0		
RE-7		37.0	38.4	39.9		
IMR-3031	40.5	41.9	43.3	44.6	46.0	
H322		39.3	40.8	42.3	43.8	45.3
AA-2230	38.4	40.3	42.3	44.2	46.1	
748	43.2	45.1	47.1	49.0	50.9	
BL-C(2)	45.0	46.8	48.5	50.3		
H335		41.0	42.9	44.8	46.7	48.6
IMR-4895	43.1	44.4	45.7	47.0	48.3	49.6
IMR-4064	43.5	44.9	46.3	47.7	49.1	
IMR-4320	45.1	46.6	48.2	49.7		
H380	48.3	50.3	52.3			
760		51.9	53.6			
H414	47.7	49.6	51.5	53.3		
Energy/ft.lbs.	1915	2054	2198	2346	2501	2659

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	RE-7	39.9	3100	2346
Hunting Load	H335	46.7	3200	2501

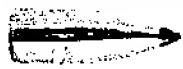


Civilian offspring of NATO's 7.62 x 51mm service cartridge, the 243 Winchester, the wildcat 6.5mm-08, 7mm-08, 308 Winchester and the 358 Winchester.

INDICATES MAXIMUM LOAD – ***USE CAUTION***
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

#2120 .308" 125 gr. SPT
C.O.A.L. 2.700"



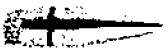
Powder↓/Velocity→	2700	2800	2900	3000	3100
Viht N133	37.9	39.6	41.2	42.9	
RE-7	34.9	36.5	38.2	39.9	
IMR-3031	40.0	41.3	42.6	43.9	
H322	38.2	39.5	40.8	42.1	43.4
AA-2230	39.5	41.0	42.5	44.0	
748	42.8	44.7	46.5	48.4	50.2
BL-C(2)	44.2	46.1	47.9		
H335	41.8	43.1	44.4	45.7	47.0
IMR-4895	42.5	43.7	45.0	46.2	
Viht N135	39.7	41.4	43.1	44.8	46.5
IMR-4064	42.6	44.0	45.5	46.9	
AA-2520	42.3	43.4	44.4	45.5	
IMR-4320	44.0	45.6	47.2	48.8	
RE-15	40.6	42.9	45.2	47.5	
H380	46.2	47.9	49.5		
760	47.0	49.2	51.4	53.6	
H414	46.7	48.6	50.5		
Energy/ft.lbs.	2023	2176	2334	2498	2667

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	[illegible]	[illegible]	2900	2334
Hunting Load	[illegible]	[illegible]	3100	2667

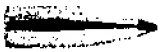
[illegible] – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

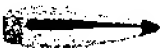
#2115 .308" 150 gr. FMJBT
C.O.A.L. 2.775"



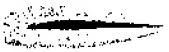
#2130 .308" 150 gr. SPT
C.O.A.L. 2.750"



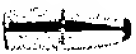
#2125 .308" 150 gr. SBT
C.O.A.L. 2.750"



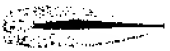
#2190 .308" 150 gr. HPBT MatchKing
C.O.A.L. 2.775"



#2135 .308" 150 gr. RN
C.O.A.L. 2.500"



#2155 .308" 155 gr. HPBT Palma MatchKing
C.O.A.L. 2.775"



Powder/Velocity →	2500	2600	2700	2800	2900
RE-7	34.4	35.7	37.1	38.4	
IMR-3031	37.5	39.1	40.7	42.2	43.3
Benchmark	37.7	39.3	40.9	42.5	
H322	35.9	37.5	39.1	40.7	
AA-2230	36.0	38.1	40.2	42.2	44.3
748		42.8	44.5	46.2	47.9
BL-C(2)		43.6	45.2	46.8	48.4
H335	39.5	40.9	42.2	43.6	44.9
TAC		40.2	41.6	43.0	
AA-2495	39.4	41.1	42.7	44.4	
IMR-4895	39.8	41.1	42.4	43.7	
Varget		41.4	43.1	44.8	
IMR-4064	39.1	40.7	42.3	43.9	45.5
IMR-4320	40.6	42.3	43.9	45.6	47.2
Viht N140	39.9	41.5	43.1	44.7	
RE-15	40.6	42.0	43.4	44.8	
H380	43.4	45.2	46.9	48.7	
760		46.7	48.5	50.2	
H414		46.4	47.4	48.5	49.5
Viht N550	43.6	45.1	46.6	48.1	49.5
IMR-4350	45.8	47.2			
Energy/ft.lbs.	**2081**	**2251**	**2428**	**2611**	**2801**

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	Viht N140	43.1	2700	2428
Hunting Load	IMR-3031	43.8	2900	2801

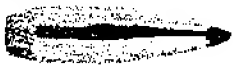
Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION

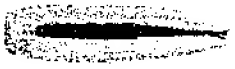
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

#2145 .308" 165 gr. SBT
C.O.A.L. 2.750"



#2140 .308" 165 gr. HPBT
C.O.A.L. 2.750"



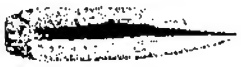
Powder/Velocity→	2400	2500	2600	2700	2750	2800
RE-7	31.8	34.0				
IMR-3031	36.1	37.6	39.1	40.5		
Benchmark		37.4	39.2	41.0		
H322	34.3	36.1	37.8	39.6		
748		40.8	42.1	43.5		
BL-C(2)		40.5	42.7	44.8		
AA-2460		38.0	39.7	41.4		
H335		36.4	39.3	42.2		
TAC		38.6	40.2	41.8		
AA-2495	36.7	38.6	40.4			
IMR-4895	38.3	39.5	40.7	41.9		
Varget	38.5	40.0	41.5	43.0		
IMR-4064	37.6	39.2	40.9	42.5	43.5	
AA-2520	36.3	38.1	40.0	41.8	42.7	
IMR-4320	39.7	41.2	42.8	44.3		
RE-15	38.3	39.9	41.5	43.1		
H380	41.5	43.6	45.6	47.7	48.7	
Viht N540	38.9	40.3	41.8	43.2		
760	40.8	43.0	45.1	47.3	48.4	
Viht N550	40.7	42.2	43.7	45.2	45.9	46.7
IMR-4350	43.0	44.7	46.4	48.1	48.9	
Energy/ft.lbs.	**2110**	**2289**	**2476**	**2670**	**2771**	**2873**

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	AA-2495	40.4	2600	2476
Hunting Load	Viht N550	45.2	2700	2670

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

#2200 .308" 168 gr. HPBT
MatchKing
C.O.A.L. 2.800"



Powder↓/Velocity→	2400	2500	2600	2700
RE-7	32.5	34.9		
IMR-3031	36.3	37.9	39.5	41.1
Benchmark	36.9	38.4	39.9	41.4
748		41.9	43.4	44.8
BL-C(2)		42.7	44.5	
AA-2460		38.1	40.0	41.9
H335		40.3	41.5	42.6
TAC		38.8	40.4	42.0
H4895	37.3	38.6	39.9	
AA-2495	37.7	39.7	41.7	
IMR-4895	38.2	39.8	41.3	
Varget	38.7	40.3	41.9	43.5
IMR-4064	37.8	39.7	41.5	43.4
AA-2520	36.9	38.7	40.4	42.2
IMR-4320	*39.6*	*41.4*	*43.1*	
Viht N140	38.9	40.6	42.3	
RE-15	38.8	40.4	42.0	43.6
H380	42.5	44.4	46.3	48.2
760	44.2	45.9	47.5	49.2
Viht N150	38.9	40.7	42.5	44.3
Viht N550	42.1	43.6	45.0	46.5
IMR-4350	44.5	46.0	47.4	
Energy/ft.lbs.	2148	2331	2521	2719

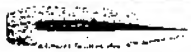
	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	RE-15	42.0	2600	2521

Sierra does not recommend MatchKing bullets for hunting applications.

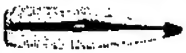
INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

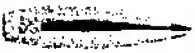
#2275 .308" 175 gr. HPBT MatchKing
C.O.A.L. 2.800"



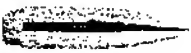
#2150 .308" 180 gr. SPT
C.O.A.L. 2.800"



#2160 .308" 180 gr. SBT
C.O.A.L. 2.800"



#2220 .308" 180 gr. HPBT MatchKing
C.O.A.L. 2.800"



#2170 .308" 180 gr. RN
C.O.A.L. 2.710"

Powder/Velocity →	2200	2300	2400	2500	2600
IMR-3031	33.8	35.5	37.3	39.0	
Benchmark	34.2	35.6	37.0	38.4	
748		39.0	40.5	42.1	43.6
BL-C(2)		38.7	40.8	42.8	44.8
AA-2460		36.8	38.6	40.3	42.0
H335		37.3	39.5		
TAC			37.8	39.4	41.0
AA-2495	34.3	36.9	39.4		
IMR-4895	36.7	37.9	39.1	40.3	41.5
Varget	36.3	38.1	39.9	41.7	
IMR-4064	35.7	37.5	39.3	41.0	42.8
AA-2520		36.0	38.0	39.9	41.9
IMR-4320	37.5	39.2	40.8	42.5	
Viht N540	36.5	38.0	39.5	41.0	
RE-15	35.8	37.6	39.5	41.3	
H380	38.5	40.7	42.9	45.0	47.2
760		42.8	44.7	46.5	48.4
Viht N150	35.5	37.6	39.7	41.8	
Viht N550	38.3	40.1	41.9	43.7	45.5
IMR-4350	40.5	42.3	44.1	45.9	47.7
IMR-4831	43.3	45.3	47.2		
H4831 SC	44.1	46.2	48.3		
Energy/ft.lbs.	1934	2114	2302	2498	2701

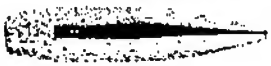
	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	Viht N540	39.5	2400	2302
Hunting Load	RE-15	41.3	2500	2498

Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

#2210 .308" 190 gr. HPBT
MatchKing
C.O.A.L. 2.800"



Powder/Velocity →	2200	2300	2400	2500	2600
IMR-3031	33.2	35.0	36.7	[illegible]	
Benchmark	34.2	35.6	[illegible]		
748		38.9	40.4	41.8	[illegible]
BL-C(2)		38.7	40.8	[illegible]	
AA-2460		36.0	37.8	[illegible]	
H335		35.9	38.2	[illegible]	
TAC	35.4	36.8	[illegible]		
H4895	34.6	36.1	37.7	[illegible]	
IMR-4895	34.8	36.5	38.2	39.8	[illegible]
Varget	35.4	37.4	39.4	[illegible]	
IMR-4064	35.1	36.9	38.7	40.5	[illegible]
AA-2520		36.1	37.8	39.4	[illegible]
IMR-4320	37.2	38.8	40.3	[illegible]	
Viht N140	36.1	37.8	39.6	[illegible]	
Viht N540	36.6	38.1	[illegible]		
RE-15	35.7	37.3	38.8	[illegible]	
H380		41.3	43.3	45.4	[illegible]
760	40.9	42.6	44.3	46.0	[illegible]
Viht N550	38.9	40.4	41.9	[illegible]	
IMR-4350	40.7	42.5	44.3	46.0	[illegible]
IMR-4831	43.2	45.0	[illegible]		
H4831 SC	43.8	45.9	47.9	[illegible]	
Energy/ft.lbs.	2042	2231	2430	2636	2851

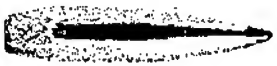
	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4064	40.5	2500	2636

Sierra does not recommend MatchKing bullets for hunting applications.

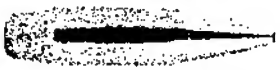
[illegible] INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

308 Winchester continued

#2165 .308" 200 gr. SBT
C.O.A.L. 2.800"



#2230 .308" 200 gr. HPBT
MatchKing
C.O.A.L. 2.800"



Powder/Velocity→	2100	2200	2300	2400	2450
IMR-3031	32.4	34.2	36.0	37.8	38.7
748		38.3	40.1	41.9	42.8
BL-C(2)		38.0	40.0		
AA-2460		35.3	36.9	38.5	39.3
H335		36.6	37.9		
TAC		35.0	36.6		
H4895	33.9	35.3	36.7	38.1	38.8
IMR-4895	34.3	35.8	37.3	38.8	
Varget	34.5	36.3	38.0		
IMR-4064	32.7	34.9	37.1	39.3	40.4
AA-2520	34.3	35.9	37.5	39.1	39.9
IMR-4320	34.8	37.1	39.5	41.8	
Viht N540	35.0	36.6	38.2		
AA-2700	39.0	40.7	42.5	44.2	
RE-15	34.4	36.0	37.6	39.2	
H380		38.8	41.4	44.0	45.3
760		40.0	42.2	44.4	45.5
Viht N150	34.8	36.8	38.8	40.8	41.8
Viht N550	37.2	38.7	40.2	41.7	
IMR-4350	39.5	41.1	42.7	44.3	45.1
IMR-4831	42.0	43.7	45.3		
H4831 SC	44.0	46.4	48.8		
Energy/ft.lbs.	1958	2149	2349	2558	2665

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	Varget	38.0	2300	2349
Hunting Load	Viht N150	41.8	2450	2665

Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.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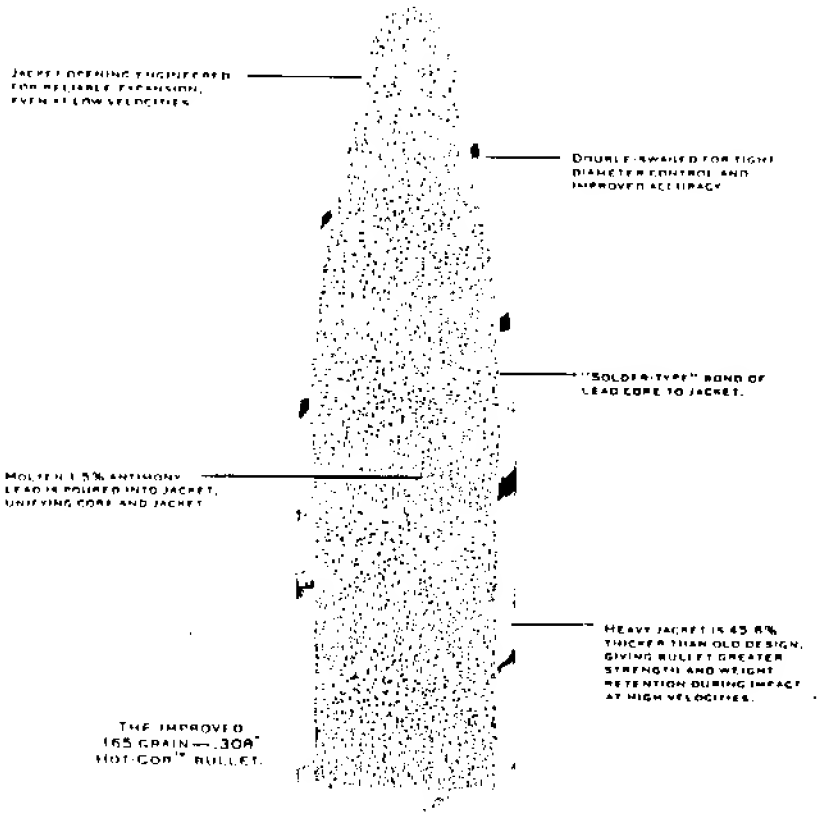

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.308 Winchester - Speer Bullets

Like several other successful sporting cartridges, the 308 Winchester began as a military development. The search for an effective and compact cartridge for machine guns and semi-auto service rifles began shortly after World War I and continued until the experimental T65 cartridge was adopted by the U.S. as the 7.62 NATO service cartridge in 1954.

Winchester beat the military to the punch by introducing the T65 as the 308 Winchester in 1952. The case was almost a half-inch shorter than the 30-06 but, with special ball powders developed for the T65, the 308 could nearly match the ballistics of the older service cartridge. First offered in the Winchester Model 70 bolt action and the Model 88 lever action, the 308 was quickly picked up by other manufacturers. It was a natural for short-action rifles and quickly established a reputation for accuracy.

Winchester barrels for the 308 were made with a 1-in-12 inch twist rate. This limited the heaviest useful bullet weight to 200 grains instead of 220 grains found in the 30-06. Other rifle makers have built 308 rifles using 1-in-10 inch twist barrels. There seems to be little practical difference between the two twist rates with bullets lighter than 200 grains.

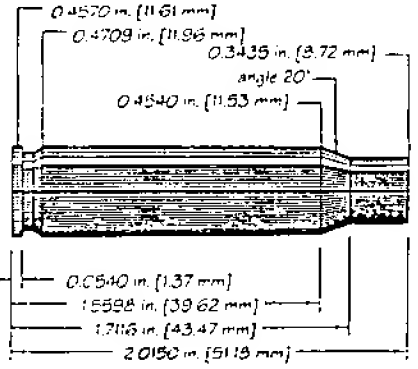
In the hunting field, ballistic differences between the 308 and the 30-06 are negligible. The choice between the two cartridges can often be made by the type of rifle action you prefer. A short bolt-action or a semi-auto, lever- or slide-action favors the 308. In full-length actions, the 30-06 gets the nod. Both cartridges can be used on similar types of game. They are suitable for anything in North America with the exception of the great bears. We prefer a larger, heavier bullet for these animals.

In a target-grade rifle, the 308 can be used very effectively on steel and paper targets out to 1000 yards. Normally bullets such as Speer's 168 match boat tail hollow point are used for competition. In most rifles, the 308 is capable of top-notch accuracy.

Because the 308 Winchester is a military spin-off, surplus cases are readily available. Military cases are often thicker than commercial ones and have less case capacity. Reduce charges developed in commercial cases at least five percent when loading military brass. Also, try to match headstamps for more uniform results.

The commercial IMI cases we used for this testing have a mil-spec capacity and therefore require no reduction. These loads do not exceed the industry maximum average pressure of 52,000 cup.

.308 WINCHESTER - SPEER BULLETS



Max. Case Length: 2.015"
Trim-to Length: 2.005"
Max. Cart. Length: 2.810"
RCBS Shellholder: #3
Barrel Length: 22"
Twist: 1-10"

Test Firearm: Remington 700
Case: IMI
Primers: CCI 200, 250, No. 34
Comments: The No. 34 Primers are the ballistic equivalent of the 250 Primers. They are recommended for military style semi-automatic rifles.

.308" Dia. 100 Grain Sect. Density .151	30 RN-SP					
Ballistic Coefficient	0.124					
C.O.L. Tested At	2.360"					
Speer Part No.	1805					

Powder	Wt. Grs.	Mzl Vel.	Powder	Wt. Grs.	Mzl Vel.	Powder	Wt. Grs.	Mzl Vel.
AA 2460*	**51.0C**	**3345**	Vihtavuori N120	**39.0**	**3143**	IMR 4064	**49.0C**	**3061**
	47.0	3044		35.0	2829		45.0	2816
H322	**48.0**	**3261**	H4895	**48.0C**	**3112**	Re7	**41.0**	**3003**
	44.0	2968		44.0	2770		37.0	2703
Re12	**51.0C**	**3225**	748*	**52.0C**	**3069**	Reduced Load SR 4759	**20.0**	**1941**
	47.0	2883		48.0	2823		16.0	1571

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

.308 WINCHESTER - SPEER BULLETS

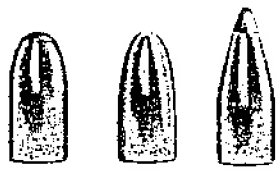
NOTE: Velocities should be held to under 2900 fps with this bullet.

.308" Dia. 110 Grain

Sect. Density .166

	30 HP					
Ballistic Coefficient	0.136					
C.O.L. Tested At	2.405"					
Speer Part No.	1835					

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
IMR 4895	43.0	2869	IMR 3031	42.5	2854	H322	41.0	2794
	39.0	2612		38.5	2590		37.0	2495
IMR 4064	45.5	2860	748*	46.0	2849	Re7	37.0	2787
	41.5	2614		42.0	2609		33.0	2456
H380*	51.0C	2855	IMR 4198	36.0	2837	IMR 4227	29.0	2469
	47.0	2639		32.0	2534		25.0	2121



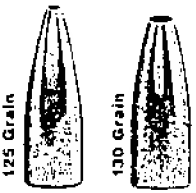
.308" Dia. 110 Grain

Sect. Density .166

	30 RN-SP	30 Carb. RN-FMJ	30 Spire-SP			
Ballistic Coefficient	0.136	0.179	0.273			
C.O.L. Tested At	2.490"	2.490"	2.550"			
Speer Part No.	1845	1846	1855			

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
AA 2460*	50.0C	3218	IMR 3031	48.0C	3130	748*	51.0	3013
	46.0	2832		44.0	2848		47.0	2651
Re12	50.0C	3164	IMR 4895	48.5C	3123	Viht. N120	38.0	3007
	46.0	2816		44.5	2811		34.0	2676
H322	46.0	3156	IMR 4320	51.0C	3068	IMR 4064	48.5C	3007
	42.0	2904		47.0	2823		44.5	2676
Re15	51.0C	3144	Varget	48.0C	3062	760*	51.0C	2687
	47.0	2830		46.0	2916		47.0	2445
AA 2520*	49.0C	3143	H4895	47.0C	3019	Reduced Load IMR 4198	30.0	2268
	45.0	2860		43.0	2657		26.0	1927

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.



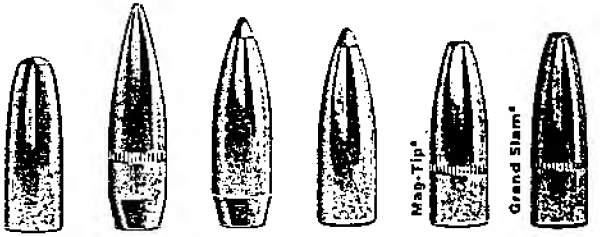
.308" Dia. 125 Grain 130 Grain	30 TNT-HP	30 HP				
Sectional Density	0.188	0.196				
Ballistic Coefficient	0.326	0.263				
C.O.L. Tested At	2.635"	2.615"				
Speer Part No.	1986	2005				

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
	50.0C	**3062**		**50.0C**	**2963**		**47.0C**	**2913**
Re15	46.0	2756	748*	46.0	2726	Varget	45.0	2784
	48.0C	**3061**		**48.0C**	**2947**		**48.0C**	**2903**
AA 2460*	44.0	2694	AA 2520*	44.0	2682	IMR 4064	44.0	2613
	49.0C	**3052**		**44.0**	**2931**	IMR	**45.0C**	**2902**
Re12	45.0	2716	H322	40.0	2638	3031	41.0	2670
	50.0C	**2992**		**46.0C**	**2922**		**49.0C**	**2530**
IMR 4320	46.0	2663	Viht. N135	42.0	2630	IMR 4350	45.0	2252
	46.0C	**2982**	IMR	**46.0C**	**2916**	Reduced Load	**29.0**	**2185**
AA 2230*	42.0	2624	4895	42.0	2654	IMR 4198	25.0	1969

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

SHOOTER'S LOG

.308 Winchester - Speer Bullets

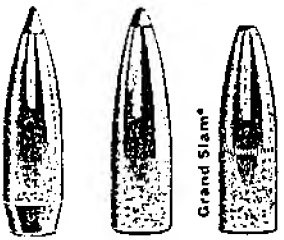


.308" Dia. 150 Grain Sect. Density .226	30 RN-SP	30 BT FMJ	30 BT Spitz-SP	30 Spitz-SP	30 MT-SP	30 GS-SP
Ballistic Coefficient	0.266	0.425	0.423	0.389	0.301	0.305
C.O.L. Tested At	2.490"	2.800"	2.700"	2.700"	2.685"	2.680"
Speer Part No.	2017	2018	2022	2023	2025	2026

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
	49.0C	2919	Viht. N135	46.0C	2822		51.0C	2642
Re15	45.0	2683		42.0	2605	H414*	47.0	2325
AA 2520*	48.0C	2915	IMR 4064	47.0C	2814		44.0	2607
	44.0	2565		43.0	2533	BL-C(2)*	40.0	2372
	47.0	2879	IMR 4320	48.0C	2795		50.0C	2599
H335*	43.0	2562		44.0	2488	760*	46.0	2339
	50.0C	2868	IMR 4895	45.0	2776		49.0C	2578
748*	46.0	2653		41.0	2554	H380*	45.0	2346
	47.0C	2856	IMR 3031	44.0	2762	Reduced Load SR 4759	25.0	1925
Varget	43.0	2632		40.0	2434		21.0	1632

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

SHOOTER'S LOG



.308" Dia. 165 Grain Sect. Density .248	30 BT Spitz-SP	30 Spitz-SP	30 GS-SP			
Ballistic Coefficient	0.477	0.433	0.393			
C.O.L. Tested At	2.800"	2.800"	2.685"			
Speer Part No.	2034	2035	2038			

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
	47.0C	2812	IMR 3031	43.0	2725		44.0	2656
Re15	43.0	2587		39.0	2482	Re12	40.0	2364
AA 2520*	45.0C	2748		46.0	2713	IMR 4350	49.0C	2571
	41.0	2501	748*	42.0	2469		45.0	2314
Viht. N140	46.0C	2744		51.0C	2699		42.0	2550
	42.0	2524	H414*	47.0	2402	BL-C(2)*	38.0	2295
AA 2460*	44.0	2738		51.0C	2679		49.0C	2529
	40.0	2464	760*	47.0	2358	H380*	45.0	2251
IMR 4064	45.0	2727	IMR 4895	43.0C	2673	Reduced Load SR 4759	24.0	1805
	41.0	2482		39.0	2352		22.0	1639

Notes: **Bold print** denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

SHOOTER'S LOG

.308 WINCHESTER - SPEER BULLETS

Remember...
match HP bullets should not be used on game animals.

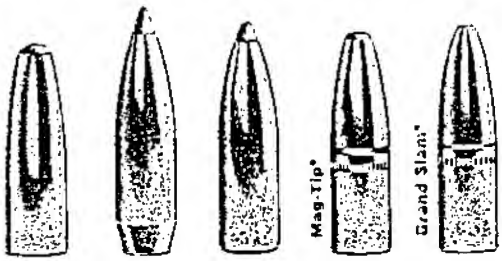
.308" Dia. 168 Grain Sect. Density .253	30 BT HP-Match					
Ballistic Coefficient	0.480					
C.O.L. Tested At	2.800"					
Speer Part No.	2040					

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
Varget ¤	46.0	2751	IMR 4320 ¤	46.0	2700	H414*	49.0	2634
	42.0	2539		42.0	2457		45.0	2318
Viht N150	47.0C	2739	AA 2460* ¤	44.0	2692	760*	49.0	2629
	43.0	2410		40.0	2369		45.0	2418
IMR 4064 ¤	46.0	2724	AA 2520* ¤	44.0	2660	Re12 ¤	44.0	2627
	42.0	2479		40.0	2447		40.0	2312
748* ¤	46.0	2720	IMR 4895 ¤	44.0	2656	BL-C(2)*	45.0	2625
	42.0	2448		40.0	2390		41.0	2336
Re15 ¤	45.0	2710	IMR 3031 ¤	43.0	2654	H380*	49.0C	2556
	41.0	2412		39.0	2442		45.0	2275

Notes: **Bold print denotes maximum loads. They should be used with caution.** C = Compressed Load
* CCI Magnum Primer used with this powder.

¤ = Recommended for gas-operated semi-automatic match rifles.

.308 WINCHESTER - SPEER BULLETS



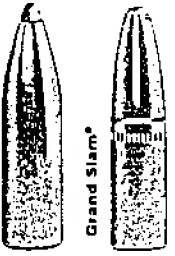
.308" Dia. 180 Grain Sect. Density .271	30 RN-SP	30 8T Spitz-SP	30 Spitz-SP	30 MT-SP	30 GS-SP	
Ballistic Coefficient	0.304	0.540	0.483	0.352	0.416	
C.O.L. Tested At	2.580"	2.800"	2.800"	2.680"	2.680"	
Speer Part No.	2047	2052	2053	2059	2063	

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
	45.0C	2613	IMR	43.0C	2521	AA	41.0	2451
Re15	41.0	2299	4064	39.0	2294	2520*	37.0	2255
AA	43.0	2603		48.0C	2501		48.0C	2440
2460*	39.0	2317	760*	44.0	2301	H380*	44.0	2147
	44.0	2591		48.0C	2484	IMR	41.0	2418
Varget	40.0	2402	H414*	44.0	2186	4895	37.0	2176
Viht.	45.0C	2573	IMR	44.0	2479	IMR	48.0C	2414
N150	41.0	2316	4320	40.0	2256	4350	44.0	2148
	45.0	2553		42.0	2475	Reduced Load IMR	28.0	1854
748*	41.0	2298	H335*	38.0	2277	4198	24.0	1591

Notes: Bold print denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

SHOOTER'S LOG

.308 WINCHESTER - SPEER BULLETS



.308" Dia. 200 Grain Sect. Density .301	30 Spitz-SP	30 GS-SP				
Ballistic Coefficient	0.556	0.448				
C.O.L. Tested At	2.800"	2.680"				
Speer Part No.	2211	2212				

Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.	Powder	Wt. Grs.	Mzl.Vel.
	42.0	2416		47.0C	2374		41.0	2352
Re15	38.0	2126	IMR 4350	43.0	2113	Viht. N140	37.0	2093
	43.0	2416		42.0	2369		40.0	2344
748*	39.0	2223	IMR 4320	38.0	2156	AA 2520*	36.0	2156
AA	40.5	2415		40.0	2366		40.5	2327
2450*	36.5	2199	IMR 4895	36.0	2082	IMR 4064	36.5	2048
	46.0C	2414		47.0C	2363		46.0C	2283
H414*	42.0	2124	H380*	43.0	2127	H4350	42.0	2032
	48.0C	2390		47.0C	2361	Reduced Load IMR	28.0C	1757
760*	44.0	2199	IMR 4831	43.0	2125	4198	24.0	1514

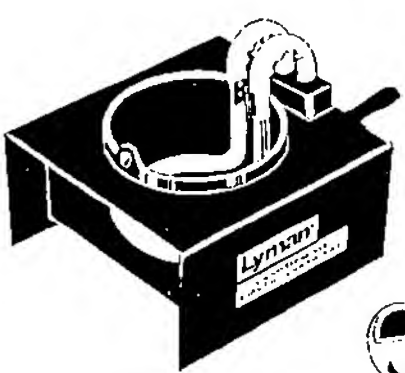
Notes: **Bold print** denotes maximum loads. They should be used with caution. C = Compressed Load
* CCI Magnum Primer used with this powder.

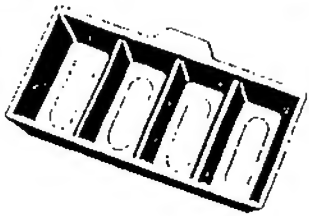
SHOOTER'S LOG

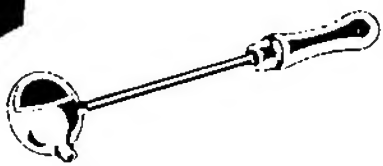
NEW PRODUCTS REPORT

CAST YOUR OWN

And cast high cost to the wind







Enjoy the satisfaction of casting your own bullets, fishing jigs or sinkers. The fully electric Mini-Mag Furnace features a long life, heavy duty heating coil that will give you years of quality melting.

The Mini-Mag Furnace is designed for use with a ladle and has an operating capacity of 8 lbs. It reaches a temperature of over 700° in about 20 minutes and the stable metal base can be used as a pre-heater for mould blocks. The furnace comes with a 3 prong safety cord.

It is the best capacity value available today. Try Lyman and cast with confidence.

See your Lyman dealer for our complete line of casting equipment. Also available direct for $39.95 postpaid. Send check or money order. Visa/MC accepted. Write for free mini-catalog.

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Dept 000, Route 147 Middlefield, CT 06455

Reloading Data Introduction:

The data listed in this section have been tested by our technicians and found to be safe when loaded with our test components and fired (under our laboratory controlled conditions) in our testing equipment. Since Lyman Products Corporation has no control over the manufacture of the various components listed, the actual loading, choice or condition of the firearms and components used, no responsibility for use of this data is implied or assumed.

Components:

The reader should bear in mind that the components listed are not of Lyman manufacture. Therefore, it is impossible that production changes affecting ballistic performance can occur at any time without our knowledge. If there is ever a question as to the correctness of the component specified, write to its manufacturer.

Starting Load:

It is essential that the reader begin with the suggested weight of powder listed in this bracket and work up slowly (following load development precautions) to his best performing load. The novice should use only the "starting load" for a period of time until he builds confidence and experience. Never decrease this charge as an increase in pressure could be encountered.

Maximum Load:

All loads which are listed as maximum were tested and classified as maximum by our techniciana in accordance with our laboratory standards. Under no circumstances should these loads be exceeded, nor should they be quickly accepted by the reader as a safe working maximum for his particular rifle or pistol.

Many reloaders misinterpret the meaning of the "maximum load." They wrongly assume that if a high pressure load proved safe in a test laboratory then it is equally safe under any and all conditions. This is not true. The reader must start with the "starting load" and work up his load carefully. Working with his particular firearm and component combination, he may encounter signs of excess pressure before he reaches the maximum charge listed.

The technician classifies a load as maximum after carefully considering many aspects of its ballistic performance. The maximum average pressure of the load is not the only criteria. Often a load having an acceptable maximum average pressure will be rejected (or reduced) due to its erratic performance. Accuracy must also be considered, particularly when dealing with cast lead alloy bullets. In all instances, the maximum listing represents what our technicians consider to be the maximum working combination for the bullet, powder and caliber listed. These loads do not exceed SAAMI standards.

Accuracy Loads:

When a load is noted as such in the data tables proper, it means that the given combination of components produced the most uniform internal ballistics of any load tested utilizing that particular bullet design.

Unless noted in "Comments," the accuracy load was not fired at targets. The load, however, does have a high potential—assuming all external factors are optimun—for producing outstanding accuracy since uniform internal ballistics are critical to accuracy on target. You cannot have one without the other.

Test Parameters:

Velocities shown were taken at fifteen feet and not corrected to the muzzle.

Each test string began with a clean dry barrel and consisted of ten shots.

Loads exhibiting erratic internal ballistics were not persued.

We had no problem with leading in any of our testing.

Bullets:

Bullet numbers are listed in the introductory specifications for each cartridge and in the headline above the appropriate data block—along with an illustration of that particular bullet.

Please note these bullets are artists' rendering. Comparing your bullet against the drawing could reveal minor differences. Furthermore, minor changes are sometimes made to bullets. These drawings, which appear throughout the data sections, are for general reference only and are not intended to be a precise representation.

Bullet alloy is noted as is the exact weight of each tested bullet.

Not all cast bullets within a given caliber are intended to perform equally. We have used them in the most appropriate chamberings.

Powders:

We have limited our testing to those powders which are manufactured in the United States and which are readily available to the consumer. The following brands are listed: Dupont (now IMR), Winchester, Hercules, Alcan, Hodgdon and Gearhart-Owen.

Compressed Loads:

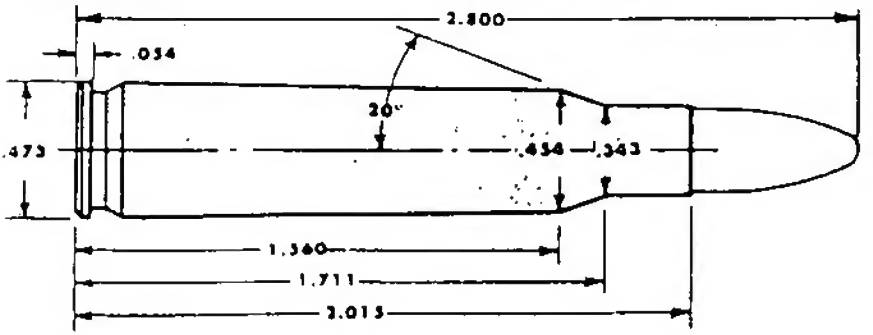
All compressed loads are indicated with a +. Depending upon the volume of the specific cartridge case used by the reader, he may, or may not, have difficulty starting bullets in such loads. If the bullet will not start, reduce the load sufficiently so that 1/10" of space remains in the case neck. Start the bullet into the case and use whatever additional pressure is required to fully seat the bullet. Failure to comply could result in a bulged case.

Filler Wads:

Dacron filler wads in the form of 1/4-inch thick batting were used in conjunction with cast bullet loads, where indicated. This material can be purchased in most yard-goods stores. It should be cut into squares, which seal the case.

When developing a load, if a wad is desired, its should be used from the beginning as the charge weight is increased. It should never be added as an afterthought, once a maximum load has been established, since its presence could result in a pressure increase of 2,000 CUP or more.

.308 WINCHESTER - LYMAN BULLETS



COMMENTS:

There are a lot of shooters who insist on reloading military brass. If you do so reduce maximum charges by a full two grains. This is perhaps the most accurate of the 30 caliber cartridges, and it works well with a wide variety of propellants and bullet weights. It is perhaps the most popular 30 caliber cartridge for cast bullet shooting.

The 110, 125, and 130 grain bullets are, of course, varmint weights. While it is difficult to single out a best propellant for these bullets, we suggest Winchester 748 as a good starting point. Hodgdon H380 is also a fine selection.

For heavier bullets all of Hodgdon H380, IMR 4064 and Winchester 760 are good first choices.

Best cast bullet accuracy usually occurs between 1,600 to 2,000 fps. Bullet #311644 is an excellent choice for long range target shooting or silhouettes.

Those who favor short action rifles will find the 308 among the best possible choices of available cartridges. It will come close to 30-06 performance with all but the heaviest bullets.

.308 WINCHESTER - LYMAN BULLETS

TEST COMPONENTS:

Cases ..... Remington and Winchester
Trim-to Length ..... 2.005"
Primers ..... Winchester 8½-120 and Remington 9½
Primer Size ..... Large Rifle
Lyman Shell Holder ..... No. 2
Cast Bullets Used ..... (Sized to .308" dia.)

*Gas Check Bullets

*#311440, 151 gr.
#301618, 160 gr.
*#311407, 173 gr.
*#311334, 187 gr.
30|620, 200 gr.
*#311359, 113 gr.
*#311466, 151 gr.
*#311291, 169 gr.
*#311041, 170 gr.
*#311467, 178 gr.
*#311332, 180 gr.
*#311644, 190 gr.

TEST SPECIFICATIONS: (Velocity & Pressure)

Firearm Used ..... Universal Receiver
Barrel Length ..... 26"
Twist ..... 1-12"
Groove Dia. ..... .308"

#311359
113 gr. (#2 Alloy) 2.800" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1623	24,000	14.0	2000	39,400
700X	9.0	1540	24,600	12.5	1879	40,300
Green Dot	11.0	1692	25,200	15.0	2049	40,300
PB	10.5	1601	24,600	13.5	1879	38,600
Unique	12.0	1831	24,600	17.0	2272	40,700
SR-7625	12.0	1704	26,400	15.0	1953	39,400
Herco	14.0	1886	25,800	17.0	2159	38,600

Note: Loads shown in shaded panels are maximum.

.308 WINCHESTER - LYMAN BULLETS

#311440
151 gr. (#2 Alloy) 2.325" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1445	26,400	13.5	1742	40,300
700X	9.0	1364	26,400	12.0	1630	39,900
Green Dot	10.5	1472	27,000	13.5	1715	39,900
PB	10.5	1432	30,000	13.0	1609	39,900
Unique	11.5	1616	28,200	15.0	1920	39,900
SR-7625	11.5	1481	30,500	14.0	1661	39,400
Herco	13.5	1694	30,000	16.0	1858	38,600
SR-4756	12.5	1524	26,400	16.0	1795	39,000
630	18.5	1942	30,100	24.4	2301	47,300
2400	17.0	1788	26,000	24.0	2239	46,100
SR-4759	18.0	1790	24,000	26.8	2332	49,300
IMR-4227	18.0	1753	25,300	25.7	2237	46,100
RX7	24.1	2006	26,900	36.0	2611	44,600

Note: Loads shown in shaded panels are maximum.

.308 WINCHESTER - LYMAN BULLETS

#311466* *
151 gr. (#2 Alloy) 2.525" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1466	27,600	13.0	1730	40,700
700X	9.0	1407	28,200	11.5	1625	39,900
Green Dot	10.5	1461	25,200	13.5	1724	38,600
PB	10.0	1405	29,400	12.5	1613	39,400
Unique	11.0	1586	26,400	15.0	1933	41,000
SR-7625	11.0	1490	30,500	13.0	1650	37,700
Herco	13.0	1623	27,600	15.5	1824	39,000
SR-4756	12.5	1512	24,600	16.0	1826	39,900
SR-4759	17.5	1760	22,600	27.0	2401	47,800
IMR-4227	20.0	1771	18,500	31.0	2503	48,300
IMR-4198	21.8	1781	15,200	36.0+	2727	49,900
RX7	23.0	1779	14,800	39.5	2748	47,100
IMR-3031	27.0	1767	15,300	42.0+	2810	49,700
748	38.4	1767	16,500	48.0+	2920	48,000

Note: Loads shown in shaded panels are maximum.
+ Designates a compressed powder charge.

.308 WINCHESTER - LYMAN BULLETS

#301618
160 gr. (#2 Alloy) 2.505" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
RX7	20.2	1739	23,500	33.8	2594	51,600
H4895	25.0	1747	22,900	40.0+	2641	43,500
IMR-4064	26.8	1786	23,200	42.0+	2718	47,800
IMR-43320	25.8	1760	22,900	*41.0	2649	51,100
760	29.8	1797	22,100	43.5	2622	46,100

#311291
169 gr. (#2 Alloy) 2.510" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1367	28,800	12.5	1576	39,900
700X	8.0	1209	23,400	11.5	1547	39,900
Green Dot	11.0	1434	30,000	13.0	1582	37,700
PB	9.0	1220	22,200	12.5	1553	38,100
Unique	10.0	1368	23,400	15.0	1816	37,700
SR-7625	10.0	1290	28,800	13.0	1560	39,900
Herco	12.0	1479	26,400	15.5	1718	37,700
SR-4756	12.0	1416	30,000	14.5	1607	37,700
SR-4759	19.5	1847	22,300	26.0	2255	47,800
IMR-4227	21.6	1867	22,400	27.8	2270	49,500
IMR-4198	24.0	1897	22,700	30.5	2341	48,200
RX7	23.0	1870	21,200	41.5	2602	49,700
IMR-3031	28.5	1868	20,200	39.5+	2653	49,800
748	31.7	1853	21,100	46.0+	2764	49,300

Note: Loads shown in shaded panels are maximum.
* Designates potentially most accurate load.
+ Designates a compressed powder charge.

.308 WINCHESTER - LYMAN BULLETS

#311041 * *
170 gr. (#2 Alloy) 2.617 * OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1355	27,000	12.5	1565	39,000
700X	8.0	1206	24,000	11.5	1505	37,700
Green Dot	11.0	1434	28,800	13.0	1587	35,500
PB	9.0	1201	23,400	12.5	1479	40,300
Unique	10.0	1377	21,600	15.0	1802	37,700
SR-7625	10.0	1272	24,600	13.0	1499	38,600
Herco	12.0	1470	25,800	15.5	1733	37,700
SR-4756	12.0	1392	27,000	14.5	1587	37,700
SR-4759	21.5	1897	26,100	27.7	2345	50,300
IMR-4198	25.0	1898	22,700	34.0	2460	38,700
RX7	27.5	1924	24,100	39.0	2627	48,900
IMR-3031	29.0	1858	23,500	41.8	2709	51,200
748	32.0	1856	20,300	47.0	2790	50,400
H-335	30.0	1847	19,800	44.2	2787	50,200

Note: Loads shown in shaded panels are maximum.
** Used Winchester cases and 8 1/2 - 120 primers.

.308 WINCHESTER - LYMAN BULLETS

#311407
173 gr. (#2 Alloy) 2.605 " OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1342	28,800	12.5	1538	39,400
700X	8.0	1188	24,000	11.5	1479	39,900
Green Dot	10.5	1369	29,400	12.5	1527	37,300
PB	9.0	1195	22,800	12.5	1478	39,900
Unique	10.0	1360	23,400	14.5	1715	39,900
SR-7625	10.0	1254	24,600	12.5	1470	37,700
Herco	12.5	1479	29,400	15.0	1655	37,700
SR-4756	12.0	1388	26,400	14.5	1577	36,400
2400	17.1	1702	26,900	*24.0	2134	48,300
SR-4759	18.7	1851	31,700	23.8	2146	47,400
RX7	24.8	1975	29,600	34.6	2488	48,700
IMR-3031	28.0	1958	26,700	37.1	2486	47,300
748	29.9	1981	26,700	41.0	2510	40,100
H335	26.7	1870	24,200	38.0	2488	41,600
H4895	28.0	1948	26,700	38.4+	2479	42,800

Note: Loads shown in shaded panels are maximum.
* Designates potentially most accurate load.
\+ Designates a compressed powder charge.

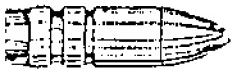
.308 WINCHESTER - LYMAN BULLETS

#311467**
178 gr. (#2 Alloy) 2.750" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	10.0	1352	27,600	12.5	1555	39,900
700X	8.0	1200	22,200	11.5	1513	39,900
Green Dot	11.0	1424	30,000	13.0	1570	37,300
PB	9.5	1240	22,200	12.5	1508	39,400
Unique	10.0	1373	23,400	14.5	1730	38,100
SR-7625	10.5	1320	27,000	13.0	1508	36,900
Herco	12.0	1457	25,800	15.5	1712	37,300
SR-4756	12.0	1379	24,600	14.5	1600	40,700
SR-4759	19.0	1813	28,600	26.3	2243	47,600
IMR-4198	22.5	1782	24,400	32.0	2376	48,100
RX7	23.0	1783	25,000	34.5	2409	41,100
748	30.0	1851	23,000	44.5	2269	47,800
H-335	26.5	2007	29,500	40.0	2575	46,400

Note: Loads shown in shaded panels are maximum.
** Used Winchester cases and 8 1/2 - 120 primers.

.308 WINCHESTER - LYMAN BULLETS



#311332* *
180 gr. (#2 Alloy) 2.705" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
SR-4759	23.5	1827	25,000	26.3	2035	38,600
RX7	28.0	1827	20,800	32.0	2172	35,800
IMR-3031	33.0	2001	20,500	37.5	2361	37,800
AA2015BR	31.0	1891	19,500	36.0	2324	37,900
H-335	32.0	1902	21,800	39.0	2316	36,800
IMR-4895	33.5	1909	20,000	39.0	2372	39,100
Unique	12.2	1425	23,000	15.5	1692	38,000
SR-7625	11.5	1270	21,500	14.0	1492	36,400
SR-4756	13.0	1378	22,700	15.5	1587	36,400
IMR-4227	25.0	1867	24,300	29.0	2126	36,900
IMR-4198	26.5	1856	22,000	32.0	2229	40,200

Note: Loads shown in shaded panels are maximum.
** Used Winchester cases and 8 1/2 - 120 primers.

.308 WINCHESTER - LYMAN BULLETS

#311334
187 gr. (#2 Alloy) 2.795" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Red Dot	9.5	1270	25,800	12.5	1492	38,000
700X	8.0	1142	23,400	11.2	1398	36,900
Green Dot	10.0	1275	25,200	12.5	1461	35,000
PB	9.0	1146	23,400	12.5	1418	38,600
Unique	9.5	1291	21,600	14.5	1680	37,600
SR-7625	10.0	1222	24,000	12.5	1402	37,000
Herco	12.0	1404	27,000	15.0	1610	37,700
SR-4756	12.0	1331	25,800	14.5	1524	35,000
2400	16.4	1602	25,100	23.6	2056	47,100
SR-4759	17.0	1605	24,000	*26.3	2137	48,200
RX7	23.9	1884	28,300	34.9	2380	43,200
IMR-3031	27.5	1802	23,700	37.0	2404	46,800
H335	29.2	1958	25,100	43.5	2500	44,700
H4895	28.3	1879	25,900	40.8	2497	45,500

Note: Loads shown in shaded panels are maximum.
* Designates potentially most accurate load.

.308 WINCHESTER - LYMAN BULLETS

#311644* * *
190 gr. (#2 Alloy) 2.675" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
SR-4759	20.0	1682	21,600	26.0	2029	47,100
RX7	25.0	1738	18,500	33.0	2222	41,700
IMR-3031	32.0	1943	22,700	40.0+	2435	48,100
AA2015BR	28.0	1833	21,200	38.0	2340	47,700
H-335	31.0	1875	22,300	40.0	2409	46,800
IMR-4895	33.0	1923	22,800	42.0+	2447	49,200
Unique	10.5	1289	21,000	14.5	1614	40,700
SR-7625	10.0	1174	21,300	14.0	1501	42,200
SR-4756	11.5	1292	22,000	14.5	1531	37,900
IMR-4198	23.5	1760	21,900	31.0	2192	45,400

#301620
200 gr. (#2 Alloy) 2.600" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
RX7	19.5	1643	26,600	32.2	2280	49,500
H4895	23.8	1673	25,200	38.4	2427	49,200
IMR-4064	24.6	1647	22,800	39.3+	2466	51,300
IMR-4320	24.8	1658	24,800	*36.0	2301	51,700
760	27.8	1670	24,400	41.0	2418	49,500

Note: Loads shown in shaded panels are maximum.
* Designates potentially most accurate load.
+ Designates a compressed powder charge.
*** Used Remington cases and 9 1/2 primers.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.308 WINCHESTER - RCBS BULLETS

Gun: Remington Model 700
Barrel: 22"
Twist: 1-10
Cases: W-W
Primers: CCI 200, *250

Wt. 116 GR.
Dia. .308"
Lube: Rifle

30-115-SP 

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
IMR 4198	25.0 23.0	1975 1806	SR 4759	22.0 20.0	1975 1806
IMR 4227	23.0 22.0	1952 1857	Unique	15.0 13.0	2025 1748

Wt. 148 GR.
Dia. .309"
Lube: Rifle

30-150-FN 

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
IMR 4064	31.0 29.0	1860 1721	IMR 4227	22.0 20.0	1972 1806
IMR 4895	30.0 28.0	1897 1760	Unique	15.0 13.0	1826 1682
SR 4759	23.0 21.0	2070 1925	Red Dot	13.0 11.0	1716 1575
2400	22.0 20.0	2091 1932	700X	12.0 10.0	1663 1542

Wt. 164 GR.
Dia. .309"
Lube: Rifle

30-165-SIL 

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
760	*42.0	2027	BLC2	*27.0	1939
	*40.0	1919		*25.0	1799
IMR 4895	32.0	1992	SR 4759	25.0	2073
	30.0	1860		23.0	1908
Re7	27.5	1992	2400	22.0	2039
	25.5	1849		20.0	1853

Wt. 175 GR.
Dia. .309"
Lube: Rifle

30-180-SP 

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
IMR 4895	34.0	2119	SR 4759	23.0	1978
	32.0	1962		21.0	1831
H332	28.0	1723	H110	17.0	1569
	26.0	1566		15.0	1440
Re7	26.0	1866	Red Dot	13.5	1631
	24.0	1724		12.5	1509
IMR 4227	24.0	1983	SR 4756	12.0	1460
	22.0	1828		10.0	1356

*DENOTES USE OF CCI #250 MAGNUM PRIMER

.308 WINCHESTER - RCBS BULLETS

Wt. 187 GR.
Dia. .308"
Lube: *Rifle*

30-180-SP 

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
748	38.0	2023	**Re7**	25.0	1895
	36.0	1921		23.0	1741
H335	28.0	1918	**296**	*19.0	1788
	26.0	*1768*		*17.0	1590
IMR **4198**	27.0	1935	**Green Dot**	13.3	1513
	25.0	1789		11.3	1288
SR **4759**	25.0	1934	SR **7625**	11.0	1496
	23.0	1782		9.0	1218

*DENOTES USE OF CCI #250 MAGNUM PRIMER

Praise The Load

With the Superior Performance of Hodgdon Powders

Superior accuracy can be achieved through reloading with reliable, consistently performing powder. To achieve this level of consistency, the experts at Hodgdon's select only the finest raw materials and give special attention to blending. Rigorous testing of ***each*** batch of powder further attests to Hodgdon's committment to quality.

For over 45 years, Hodgdon Powder has been a performance leader among shooters. This explains why more winning shooters competing in benchrest matches use Hodgdon Powder.

Hodgdon encourages every shooter to enjoy the advantages and economy of reloading with the superior performance of Hodgdon Powders.

For more information on reloading & Hodgdon Powders, write:

HODGDON POWDER COMPANY, INC.
P.O. Box 2932, Dept. AB
Shawnee Mission, KS 66201

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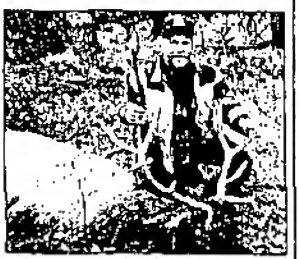


Russ Rolandson
Sales, Speer Bullets
300 Win. Mag. Caliber
165 gr. Speer Grand Slam
72 Gr. Hodgdon H4350 Powder

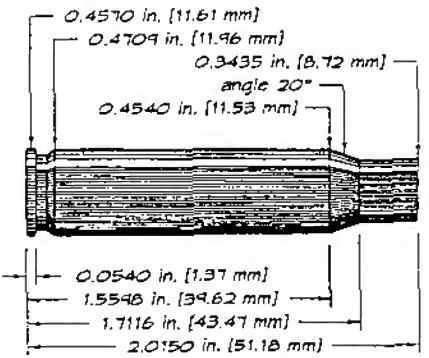
308 WINCHESTER

According to those who know, the 308 WCF is the long-time benchrest champion for cartridges over 6mm. The 308 WCF is an efficient, inherently accurate cartridge. It has found great favor in many competitive arenas, which includes national match and silhouette, to name just a couple.

The 308 WCF was a military development, the T-65 cartridge. It was later standardized as the 7.62 NATO. Winchester promptly dubbed the civilian version the 308 Winchester.

Aside from its prowess on the benchrest circuit, the 308 WCF is widely used in the field on everything from antelope to moose in the ever-popular short bolt action rifles. Overall, the 308 WCF comes up about 200 fps short of the 30-06, or in lay terms, that means the performance level is about 50 to 75 yards shy of the 30-06. That's no problem for short-action fans. The short case, in conjunction with the short action, tends to reduce performance potential with heavier bullets, but it will do well with a host of powders: H380, H335, BL-C(2), H4895 and the match powder for this cartridge, VARGET.

• • •



WINCHESTER
24"
FEDERAL 210M
1:12"
2.005"

.308 WINCHESTER - HODGDON POWDERS

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
308 WINCHESTER						
Case: WINCHESTER			Twist: 1:12"			
Barrel: 24"		Trim: 2.005"	Primer: FEDERAL 210M			
Bullet: 110 GR. BAR XFB			Dia.: .308"	COL: 2.800"		
VARGET	48.0	3134	42,100 CUP	50.0 C	3237	46,100 CUP
BL-C(2)	48.0	3061	42,400 CUP	52.0	3268	51,400 CUP
H335	44.0	3042	46,700 CUP	48.0	3210	50,800 CUP
H4895	45.0	3005	39,000 CUP	49.0 C	3249	49,900 CUP
BENCHMARK	44.0	2958	42,400 CUP	48.0	3181	50,800 CUP
H322	42.0	2988	43,600 CUP	45.0	3136	51,800 CUP
H4198	37.0	2950	40,700 CUP	40.0	3143	51,000 CUP
Bullet: 125 GR. SIE SP			Dia.: .308"	COL: 2.700"		
VARGET	48.0	3049	42,400 CUP	50.0 C	3135	45,700 CUP
BL-C(2)	48.0	2876	35,900 CUP	52.0	3069	42,600 CUP
H335	44.0	2840	37,500 CUP	48.0	3080	48,200 CUP
H4895	45.0	2891	36,800 CUP	49.0 C	3127	48,400 CUP
BENCHMARK	43.0	2821	40,600 CUP	47.5	3070	50,700 CUP
H322	42.0	2888	43,400 CUP	45.0	3052	51,400 CUP
H4198	36.0	2841	46,600 CUP	39.5	2988	49,800 CUP
Bullet: 130 GR. SPR HP			Dia.: .308"	COL: 2.615"		
VARGET	47.0	2975	42,900 CUP	50.0 C	3130	50,400 CUP
BL-C(2)	48.0	2897	42,400 CUP	51.5	3089	49,700 CUP
H335	43.0	2805	40,400 CUP	46.0	2980	49,700 CUP
H4895	45.0	2903	41,800 CUP	49.0 C	3099	50,100 CUP
BENCHMARK	41.0	2704	38,800 CUP	46.0	2985	50,100 CUP
H322	40.0	2754	41,200 CUP	43.0	2924	49,600 CUP
H4198	35.0	2745	44,700 CUP	37.0	2837	49,700 CUP
Bullet: 140 GR. BAR XBT			Dia.: .308"	COL: 2.800"		
VARGET	44.0	2751	42,200 CUP	47.0 C	2929	50,200 CUP
BL-C(2)	45.0	2780	43,100 CUP	48.0	2934	51,200 CUP
H335	40.0	2673	43,300 CUP	42.5	2803	49,700 CUP
H4895	41.0	2636	36,700 CUP	45.0	2897	50,700 CUP
BENCHMARK	39.0	2576	39,100 CUP	43.5	2828	49,900 CUP

NEVER EXCEED MAXIMUM LOADS.

.308 WINCHESTER - HODGDON POWDERS

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 150 GR. NOS BT			**Dia.: .308" COL: 2.800"**			
VARGET	44.0	2788	43,300 CUP	47.0 C	2937	50,300 CUP
BL-C(2)	45.0	2661	40,200 CUP	48.0	2839	50,000 CUP
H335	41.0	2619	42,600 CUP	44.0	2787	51,200 CUP
H4895	43.0	2742	43,200 CUP	45.5	2870	51,000 CUP
BENCHMARK	39.0	2521	38,800 CUP	43.0	2752	49,900 CUP
H322	37.0	2508	39,100 CUP	40.0	2702	50,500 CUP
Bullet: 155 GR. SIE HPBT			**Dia.: .308" COL: 2.775"**			
H414	48.0	2625	40,500 CUP	51.0	2793	50,200 CUP
VARGET	44.0	2759	41,300 CUP	47.0 C	2909	49,400 CUP
BL-C(2)	45.0	2658	37,500 CUP	48.0	2867	49,600 CUP
H335	41.0	2646	42,100 CUP	43.5	2779	49,900 CUP
H4895	43.0	2735	42,000 CUP	46.0	2873	49,700 CUP
BENCHMARK	39.0	2538	41,900 CUP	43.0	2753	50,200 CUP
H322	38.0	2588	42,400 CUP	41.0	2710	49,400 CUP
Bullet: 165 GR. HDY SP			**Dia.: .308" COL: 2.750"**			
H414	48.0	2537	43,500 CUP	52.0	2704	49,200 CUP
VARGET	42.0	2582	40,800 CUP	46.0 C	2773	50,500 CUP
BL-C(2)	44.0	2528	37,700 CUP	47.5	2738	49,700 CUP
H335	39.0	2432	44,500 CUP	42.0	2608	49,100 CUP
H4895	41.0	2525	38,600 CUP	43.5	2694	50,000 CUP
BENCHMARK	38.5	2438	40,200 CUP	42.5	2647	50,500 CUP
Bullet: 168 GR. SIE HPBT			**Dia.: .308" COL: 2.800"**			
VARGET	42.0	2520	41,200 CUP	46.0 C	2731	50,600 CUP
BL-C(2)	44.0	2569	39,400 CUP	47.0	2754	50,200 CUP
H335	39.0	2451	37,700 CUP	42.0	2631	49,300 CUP
H4895	41.0	2551	38,300 CUP	43.5	2703	49,500 CUP
BENCHMARK	38.0	2416	38,100 CUP	42.0	2630	49,300 CUP
Bullet: 175 GR. SIE HPBT			**Dia.: .308" COL: 2.800"**			
H414	46.0	2484	40,300 CUP	49.0	2629	50,100 CUP
VARGET	42.0	2583	42,600 CUP	45.0 C	2690	48,600 CUP
BL-C(2)	43.0	2517	39,200 CUP	46.0	2706	50,300 CUP
H335	38.0	2390	38,800 CUP	41.3	2592	50,100 CUP
H4895	40.0	2489	39,100 CUP	42.7	2647	49,000 CUP
BENCHMARK	38.0	2400	40,100 CUP	41.5	2590	50,800 CUP

NEVER **EXCEED MAXIMUM LOADS.**

.308 WINCHESTER - HODGDON POWDERS

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 180 GR. SPR SP			**Dia.: .308" COL: 2.800"**			
H414	46.0	2433	39,800 CUP	49.0	2573	47,500 CUP
VARGET	41.0	2470	41,200 CUP	45.0 C	2661	49,600 CUP
BL-C(2)	42.0	2460	40,300 CUP	46.0	2660	50,100 CUP
H335	38.0	2374	41,100 CUP	41.0	2528	49,500 CUP
H4895	40.0	2454	41,200 CUP	42.5	2595	49,700 CUP
BENCHMARK	38.0	2363	40,700 CUP	41.3	2542	50,800 CUP
Bullet: 190 GR. HDY HPBT			**Dia.: .308" COL: 2.740"**			
H414	45.0	2368	42,100 CUP	48.0	2504	48,700 CUP
VARGET	41.0	2452	46,100 CUP	44.0 C	2536	49,100 CUP
BL-C(2)	42.0	2396	41,300 CUP	44.5	2543	48,700 CUP
H335	37.0	2246	39,200 CUP	40.0	2449	49,800 CUP
H4895	39.0	2359	40,400 CUP	42.0	2514	49,500 CUP
BENCHMARK	37.0	2288	41,100 CUP	39.5	2418	48,500 CUP
Bullet: 200 GR. SFT SP			**Dia.: .308" COL: 2.700"**			
VARGET	39.0	2288	43,100 CUP	42.0 C	2441	50,100 CUP
BL-C(2)	41.0	2213	40,200 CUP	43.5	2514	49,800 CUP
H335	37.0	2217	41,600 CUP	39.5	2400	50,400 CUP
H4895	38.0	2256	42,400 CUP	41.0 C	2403	49,400 CUP
BENCHMARK	37.5	2227	43,000 CUP	40.0	2355	50,100 CUP

NEVER **EXCEED MAXIMUM LOADS.**

.308 WINCHESTER

Bullet Diameter: .309
Barrel: Winchester 24"

HODGDON POWDER							
STARTING LOADS					MAXIMUM LOADS		
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
150 GR. (GAS CHECK)					H4831	44.0	2053	
					H4895	32.0	2168	
					H4198	24.0	1966	
					H4227	19.0	1699	
180 GR. (GAS CHECK)					H4831	40.0	1856	
					H4895	30.0	2083	
					H4198	24.0	1900	
					H4227	19.0	1590	

NEVER EXCEED MAXIMUM LOADS.

(Source: Hodgdon Reloading Manual # 26)

.308 WINCHESTER MATCH LOADS (7.62MM NATO)

USING WINCHESTER CASES

Barrel Length: 24"
Bullet Diameter: .308
Primer Size: WINCHESTER 120
Maximum Case Length: 2.015
Trim to Length: 2.005

HODGDON POWDER

	STARTING LOADS				MAXIMUM LOADS			
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
150 GR. (B.T.)	BL-C(2)	47.0	2769	46,000	BL-C(2)	49.0	2878	48,000
	H335	43.0	2619	43,800	H335	45.0	2806	47,500
	H4895	41.0	2694	45,700	H4895	43.0	2822	50,200
	H322	40.0	2606	44,400	H322	42.0	2727	49,000
168-172 GR. (B.T.)	H380	46.0	2515	42,800	H380	48.0	2634	46,500
	BL-C(2)	44.0	2492	43,500	BL-C(2)	46.0	2614	46,500
	H335	40.0	2429	43,400	H335	42.0	2548	47,000
	H4895	38.0	2403	43,000	H4895	40.0	2525	47,000
	H322	37.0	2399	42,400	H322	39.0	2506	47,200
180 GR. (B.T.)	H4350	45.0	2310	42,800	H4350	47.0	2437	46,500
	H414	44.0	2349	43,100	H414	46.0	2488	47,600
	H380	43.0	2311	42,900	H380	45.0	2448	47,000
	BL-C(2)	42.0	2439	44,600	BL-C(2)	44.0	2544	49,000
	H335	38.0	2340	44,000	H335	40.0	2469	48,400
	H4895	37.0	2330	43,600	H4895	39.0	2434	47,000
	H322	36.0	2221	42,000	H322	38.0	2379	46,500

NEVER **EXCEED MAXIMUM LOADS.**

(Source: Hodgdon Reloading Manual # 26)

.308 WINCHESTER MATCH LOADS (7.62MM NATO)

USING WINCHESTER CASES
(CONTINUED)

HODGDON POWDER (CONTINUED)

	STARTING LOADS				MAXIMUM LOADS			
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
190 GR. (B.T.)	H4831	45.0	2120	31,100	H4831	48.0	2409	44,000
	H4350	44.0	2206	38,800	H4350	46.0	2427	47,000
	H414	44.0	2269	38,000	H414	46.0	2440	48,000
	H380	43.0	2347	40,900	H380	45.0	2510	50,100
	BL-C(2)	40.0	2344	46,100	BL-C(2)	42.0	2474	50,200
	H335	36.0	2204	44,300	H335	38.0	2419	49,400
200 GR. (B.T.)	H4831	44.0	2194	39,200	H4831	47.0	2306	45,000
	H4350	44.0	2212	43,400	H4350	46.0	2354	48,000
	H414	43.0	2240	43,700	H414	45.0	2391	47,000
	H380	42.0	2252	44,000	H380	44.0	2380	47,400
	BL-C(2)	40.0	2210	43,000	BL-C(2)	42.0	2361	47,100
	H335	37.0	2221	44,100	H335	39.0	2346	47,000
220 GR. (B.T.)	H4831	44.0	2090	40,400	H4831	47.0	2266	47,000
	H4350	43.0	2139	44,700	H4350	45.0	2297	50,000
	H414	42.0	2144	43,900	H414	44.0	2292	47,000
	H380	41.0	2104	43,600	H380	43.0	2239	47,200
	BL-C(2)	38.0	2111	44,200	BL-C(2)	40.0	2224	47,400
	H335	35.0	2099	43,000	H335	37.0	2229	47,900

NEVER **EXCEED MAXIMUM LOADS.**

(Source: Hodgdon Reloading Manual # 26)

.308 WINCHESTER MATCH LOADS (7.62MM NATO)

USING GI CASES

Barrel Length: 24"
Bullet Diameter: .308
Primer Size: WINCHESTER 120
Maximum Case Length: 2.015
Trim to Length: 2.005

HODGDON POWDER

	STARTING LOADS				MAXIMUM LOADS			
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
150 GR. (B.T.)	BL-C(2)	45.0	2581	43,700	BL-C(2)	47.0	2719	47,200
	H335	42.0	2589	42,400	H335	44.0	2728	47,000
	H4895	40.0	2567	44,200	H4895	42.0	2735	48,400
	H322	38.0	2516	41,700	H322	41.0	2692	48,500
168-172 GR. (B.T.)	H380	43.0	2340	40,400	H380	45.0	2459	46,900
	BL-C(2)	41.0	2360	41,600	BL-C(2)	43.0	2565	47,600
	H335	38.0	2399	43,000	H335	40.0	2558	47,500
	H4895	37.0	2388	44,000	H4895	39.0	2508	48,200
	H322	36.0	2330	41,600	H322	38.0	2442	46,900
180 GR. (B.T.)	H4350	44.0	2259	41,100	H4350	46.0	2343	46,000
	H414	44.0	2388	44,100	H414	46.0	2469	48,000
	H380	42.0	2294	41,600	H380	44.0	2395	47,000
	BL-C(2)	40.0	2311	43,700	BL-C(2)	42.0	2434	47,200
	H335	37.0	2282	43,200	H335	39.0	2414	47,100
	H4895	36.0	2304	44,200	H4895	38.0	2432	48,400
190 GR. (B.T.)	H4350	44.0	2227	41,900	H4350	46.0	2311	46,600
	H414	43.5	2264	43,100	H414	45.5	2368	47,400
	H380	42.0	2230	42,400	H380	44.0	2314	47,200
	BL-C(2)	39.0	2199	43,100	BL-C(2)	41.0	2349	47,000
	H335	35.5	2141	42,200	H335	37.5	2310	46,900
	H4895	35.5	2139	43,700	H4895	37.5	2292	47,800

NEVER EXCEED MAXIMUM LOADS.

(Source: Hodgdon Reloading Manual # 26)

.308 WINCHESTER MATCH LOADS (7.62MM NATO)

USING GI CASES
(CONTINUED)

HODGDON POWDER (CONTINUED)								
	STARTING LOADS				MAXIMUM LOADS			
BULLET	POWDER	GRS.	VEL.	CUP	POWDER	GRS.	VEL.	CUP
200 GR. (B.T.)	H4350	43.5	2201	42,400	H4350	45.5	2270	46,900
	H414	43.0	2231	43,500	H414	45.0	2344	48,000
	H380	41.5	2181	41,700	H380	43.5	2303	46,900
	BL-C(2)	37.0	2100	40,000	BL-C(2)	39.0	2264	46,900
	H335	34.5	2111	40,200	H335	36.5	2249	47,000
	H4895	34.5	2152	42,200	H4895	36.5	2272	47,900
220 GR. (B.T.)	H4350	42.0	2156	43,100	H4350	43.0	2207	46,000
	H414	41.0	2119	44,100	H414	43.0	2255	48,500
	H380	40.0	2047	40,400	H380	42.0	2191	47,100
	BL-C(2)	35.5	2017	41,000	BL-C(2)	37.5	2127	47,200
	H335	33.5	2009	41,400	H335	35.5	2116	47,500
	H4895	33.5	2041	42,000	H4895	35.5	2130	47,000

NEVER EXCEED MAXIMUM LOADS.

(Source: Hodgdon Reloading Manual # 26)

Introduction

There has been a re-evaluation of the criteria for selecting data for inclusion. This means there will be some disagreement with previous data. The data in this guide takes precedence over all prior publications. ***Previous editions of this loading guide should be discarded.***

For instance, we left out load combinations that were 'position sensitive'. This is what occurs when the load density is low. Velocity with the powder at the bullet is different from the velocity with the powder at the primer. More of these were noted with the ball propellants than with the extruded propellants.

In light of the growth of IPSC shooting, 38 Super Auto loads that make the 'major' classification (bullet weight x velocity = 175,000) are identified. While we have tested many combinations of components in 9mm Luger to attempt to meet 'major' requirements; we have not been able to find a load that makes the power floor for 'major' without exceeding SAAMI pressure recommendations. And while we were able to find loads for 38 Super Auto, they were not with lighter bullets. Turn to the data section for specific details.

In the charge tables, the 'START' charge listed for each load is our suggested beginning point with the components listed. There is the possibility that changing the named components could cause the maximum charge to be excessive, thus a reduction of the charge would be necessary. Some batches of military brass may require reducing the maximum charge by 8-12% to keep chamber pressure in line.

If you find signs of excessive pressure while using loads in this loading guide, STOP TESTING and verify all data and loading procedures. If they seem to be in order, check with our lab facility before proceeding.

Charge weights were obtained using industry standard pressure barrels. When time permitted, off-the-shelf weapons were used to obtain velocity figures. The guns used are noted.

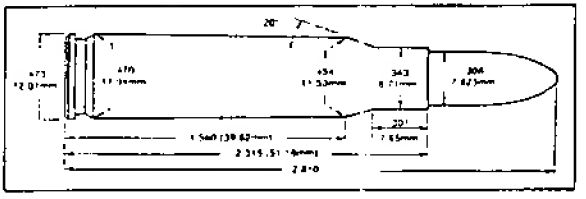
In reloading, the prime concern should always be SAFETY. **Always** wear eye protection when reloading, even when working with the 'non-volatile' components. **Always** keep the reloading area clean. **Never** have more than one propellant within easy reach at any given time. Avoid having similar looking bullets of different weights on the bench at the same time. Read the safety notes before loading.

We have not found magnum primers to offer any particular advantage with our handgun powders. But, there are some rifle cartridges where they were used.

Handgun loads using the slower powders (No.7, No.9, and 1680) require heavy crimp and high bullet pull to insure consistency - particularly with cast bullet loads or in extremely cold weather. Be sure your dies are capable of this, otherwise the consistency of the load will be affected.

In the text, bullet weights for cast bullets - identified by (L) are actual weights, not the nominal weights.

.308 WINCHESTER



The .308 Winchester was introduced in 1952 as the sporting version of the newly adopted U.S. T-65 or NATO 7.62x51mm military round. It was adopted as the official U.S. military rifle cartridge in 1954 along with the M-14 rifle.

The .308 was the result of the military's experiments to retain the power of the .30-06 cartridge in a smaller package. The advent of Winchester ball powder permitted loading the 7.62x51mm to equal the velocities of .30-06 service ammunition.

Since 1954 the .308 Winchester has become the premier .30 caliber target cartridge and has gained a loyal following among hunters.

Because this is also a military cartridge, there is an almost infinite variety of components available for loading the .308. When using military cases, the handloader must exercise caution because many of these are much heavier than commercial brass. Charge weights may require up to 12% reduction to maintain pressures within safe limits.

The SAAMI Maximum Average Pressure for the .308 Winchester is 52,000 C.U.P. and 62,000 P.S.I.

.308 WINCHESTER

Gun	HS PRECISION	Max Length	2.015"
Barrel Length	24"	Trim Length	1.995"
Primer	CCI 200	OAL Max	2.810"
Case	REM	OAL Min	2.490"

Bullet	START LOADS Powder	Grains	Vel.	MAXIMUM LOADS Powder	Grains	Vel.	C.U.P.	Cartridge Length	Comment
152 (L) RNGC	5744	23.5	2011	5744	27.0	2230	38,500	2.530"	Lyman
165 (L) SIL	5744	24.3	1905	5744	27.0	2165	37,200	2.700"	Penny's
SRA 110 HP	2015	40.5	2806	2015	45.0	3189	48,100	2.595"	
	2230	42.8	2790	2230	47.5	3171	49,300		
	2460	43.7	2810	2460	48.5	3193	49,300		
	2495	42.3	2659	2495	47.0	3022	42,700		Compressed
	2520	42.8	2658	2520	47.5	3020	41,500		Compressed

.308 WINCHESTER - ACCURATE POWDERS

Bullet	START LOADS Powder	Grains	Vel.	MAXIMUM LOADS Powder	Grains	Vel.	C.U.P.	Cartridge Length	Comment
NOS 125 BT	2015	39.2	2656	2015	43.5	3018	49,700	2.780"	
	2230	42.0	2655	2230	47.0	3017	49,800		
	2460	42.0	2652	2460	47.0	3014	48,600		
	2495	42.3	2579	2495	47.0	2931	45,200		Compressed
	2520	42.8	2600	2520	47.5	2955	45,100		Compressed
	4064	41.4	2507	4064	46.0	2849	39,300		Compressed
HDY 150 SP	2015	37.4	2432	2015	41.5	2764	49,700	2.745"	
	2230	39.2	2367	2230	43.5	2712	48,400		
	2460	40.5	2430	2460	45.0	2765	48,500		
	2495	41.4	2469	2495	46.0	2806	47,900		Compressed
	2520	41.9	2472	2520	46.5	2809	48,700		Compressed
	4064	40.9	2428	4064	45.5	2760	46,500		Compressed
	2700	43.7	2205	2700	48.5	2506	45,900		Compressed
SRA 168 HPBT	2015	36.0	2325	2015	40.0	2642	50,500	2.800"	
	2230	37.8	2297	2230	42.0	2610	49,500		
	2460	38.3	2289	2460	42.5	2601	48,600		
	2495	40.1	2336	2495	44.5	2654	47,900		Compressed
	2520	40.5	2367	2520	45.0	2712	50,200		
	4064	38.7	2262	4064	43.0	2571	43,000		Compressed
	2700	42.3	2194	2700	47.0	2493	48,800		Compressed
SRA 175 HPBT	2230	36.0	2244	2230	40.0	2551	60,000**	2.800"	
	2460	36.4	2242	2460	40.5	2548	58,500**		Very Consistent
	2495	37.3	2272	2495	41.5	2582	58,800**		
	2520	37.8	2285	2520	42.0	2597	61,000**		
	4064	39.1	2303	4064	43.5	2618	59,300**		
	2700	42.3	2280	2700	47.0	2591	57,800**		Compressed
NOS 180 BT	2230	36.0	2146	2230	40.0	2439	48,800	2.800"	
	2460	37.4	2177	2460	41.5	2474	49,500		
	2495	38.7	2281	2495	43.0	2592	50,800		
	2520	40.1	2302	2520	44.5	2616	49,200		
	4064	37.8	2170	4064	42.0	2466	43,800		Compressed
	2700	42.3	2174	2700	47.0	2470	40,000		Compressed
WIN 180 FS	2230	34.8	2141	2230	38.5	2434	49,900	2.715"	
	2460	35.1	2170	2460	39.0	2467	50,200		
	2495	32.4	2058	2495	36.0	2339	51,000		
	2520	37.3	2218	2520	41.5	2521	48,600		
	2700	40.9	2149	2700	45.5	2443	49,200		
SRA 190 HPBT	2230	34.7	2084	2230	38.5	2368	47,700	2.800"	
	2460	35.1	2083	2460	39.0	2367	48,400		
	2495	36.0	2108	2495	40.0	2395	45,300		
	2520	37.4	2128	2520	41.5	2418	47,100		
	4064	36.9	2125	4064	41.0	2415	44,700		Compressed
	2700	40.5	2035	2700	45.0	2312	46,000		
NOS 200 (Part)	2230	34.2	2004	2230	38.0	2277	46,500	2.800"	
	2460	34.2	1990	2460	38.0	2261	43,900		
	2495	34.7	2012	2495	38.5	2286	47,100		
	2520	36.3	2041	2520	40.3	2319	45,500		
	4064	36.0	2009	4064	40.0	2284	42,800		Compressed
	2700	39.6	1962	2700	44.0	2229	46,600		
SRA 220 HPBT	2230	32.4	1883	2230	36.0	2140	45,300	2.800"	
	2460	33.3	1911	2460	37.0	2172	46,200		
	2495	34.7	1959	2495	38.5	2226	47,300		
	2520	34.2	1896	2520	38.0	2154	44,900		
	4064	35.1	1925	4064	39.0	2188	45,100		Compressed
	2700	37.8	1900	2700	42.0	2159	48,300		
.30 Caliber Sabots*									
REM SS SABOT	2230	46.8	3249	2230	52.0	3693	47,600	2.530"	Compressed

* IMI Case

** Pressure data in P.S.I.

LONG RANGE

.308 WINCHESTER

Gun	HS PRECISION	Max Length	2.015"
Barrel Length	24"	Trim Length	1.995"
Primer	CCI 200	OAL Max	2.810"
Case	REM	OAL Min	2.490"

Bullet	START LOADS Powder	Grains	Vel.	MAXIMUM LOADS Powder	Grains	Vel.	C.U.P.	Cartridge Length	Comment
SRA 168 HPBT	2015BR	36.0	2325	2015BR	40.0	2642	50,500	2.800"	
	2230	37.6	2297	2230	42.0	2610	49,500		
	2460	38.3	2289	2460	42.5	2601	48,600		
	2495BR	40.1	2336	2495BR	44.5	2654	47,900		Compressed
	2520	40.5	2387	2520	45.0	2712	50,200		
	2700	42.3	2194	2700	47.0	2493	48,800		Compressed
SRA 180 HPBT	2230	36.0	2148	2230	40.0	2439	46,800	2.800"	
	2460	37.4	2177	2460	41.5	2474	49,500		
	2495BR	38.7	2281	2495BR	43.0	2592	50,800		
	2520	40.1	2302	2520	44.5	2616	49,700		
	2700	42.3	2174	2700	47.0	2470	40,000		Compressed
SRA 190 HPBT	2230	34.7	2084	2230	38.5	2368	47,700	2.800"	
	2460	35.1	2083	2460	39.0	2367	46,400		
	2495BR	36.0	2108	2495BR	40.0	2395	45,300		
	2520	37.4	2128	2520	41.5	2418	47,100		
	2700	40.5	2035	2700	45.0	2312	46,000		
SRA 220 HPBT	2230	32.4	1883	2230	36.0	2140	45,300	2.800"	
	2460	33.3	1911	2460	37.0	2172	46,200		
	2495BR	34.7	1959	2495BR	38.5	2228	47,100		
	2520	34.2	1896	2520	38.0	2154	44,900		
	2700	37.8	1900	2700	42.0	2159	48,300		

SHOOTER'S LOG

SIERRA "PALMA" BULLET DATA

The proprietary 155 HPBT bullet developed for the U.S. Palma Authority by Sierra has been released for use by the general public. The obvious users will be Palma Competitors. It should also appeal to those who shoot the M-14/M-1A and the M1 Garand. Accordingly we developed data for the .308 Win and the .30-06 to accommodate these shooters as well as the Palma competitors. The Palma Match bullet requires a muzzle velocity of approximately 2935 fps and a rifling twist of no slower than 1/13" to properly stabilize and remain above the speed of sound at 1,000 yards. The barrels of "Palma" type rifles are sufficiently long to maximize the muzzle velocity. However, the majority of its use will probably be the 200 and 300 yard phases of the National Match Course in order to enhance recovery from recoil in rapid fire. M1 Garand shooters in particular should be happy with a bullet that approximates the projectile weight that the gas system was designed around with the external ballistics and accuracy needed for NRA High Power Competition.

While the .30-06 data is intended for use in the M1 Garand, it should work equally well in bolt guns. Slower propellants probably will not develop sufficient velocity, even in a bolt action, and are not suitable for the Garand's gas system. They are not included for that reason. All loading data shown in this section is considered to be maximum by the technical staff at Accurate Arms Co., Inc. and should be reduced by 10% for starting charges. Do not exceed the loads listed above even if your particular rifle shows no signs of excess pressure.

– William T. Folin, Jr.

.308 WINCHESTER

Gun	WILSON	Max Length	2.015"
Barrel Length	24"	Trim Length	1.995"
Primer	FC 210 M	OAL Max	2.810"
Case	LAPUA	OAL Min	2.490"

Bullet	LOADING DATA Powder	Grains	Vel	P S I	Carriage Length	Comment
SRA 155 "PALMA"	2015BR	41.5	2781	59,500	2.775"	
	2230	43.0	2783	58,300		
	2460	44.0	2806	58,400		
	2495BR	44.0	2828	59,100		
	2520	46.0	2846	58,600		

SHOOTER'S LOG

.308 WINCHESTER - ALLIANT POWDERS

ALLIANT

CASE: FEDERAL | BARREL: 24" | PRIMER: FEDERAL 210

POWDER	STARTING LOADS GRS.	VEL.	PRESSURE	MAXIMUM LOADS GRS.	VEL.	PRESSURE
BULLET: 110 GR. SIE JHP			**DIA. .308"**			**C.O.L. 2.600"**
RELODER 12				50.5	3200	57,400 PSI
RELODER 7				42.5	3130	47,200 CUP
BULLET: 125 GR. SIE SP			**DIA. .308"**			**C.O.L. 2.700"**
RELODER 12				49.0	3040	57,400 PSI
RELODER 7				40.0	2920	47,100 CUP
BULLET: 150 GR. SIE SP			**DIA. .308"**			**C.O.L. 2.600"**
RELODER 15				46.3	2580	57,300 PSI
RELODER 12				45.0	2755	57,100 PSI
RELODER 7				37.0	2750	46,900 CUP
BULLET: 165 GR. BAR XFB			**DIA. .308"**			**C.O.L. 2.750"**
RELODER 15				43.5	2675	57,000 PSI
RELODER 12				43.5	2590	57,200 PSI
BULLET: 180 GR. SPR SP			**DIA. .308"**			**C.O.L. 2.750"**
RELODER 15				44.0	2645	57,500 PSI

NEVER EXCEED MAXIMUM LOADS.

.308 Winchester - IMR Powders

IMR

CASE: REMINGTON	BARREL: 23"	PRIMER: REMINGTON 9 1/2	
BULLET: 110 GR. HDY SP	**DIA. .308"**		**C.O.L. 2.600"**
IMR 4320	49.0 C	3010	47,600 CUP
IMR 4064	47.0 C	2955	43,300 CUP
IMR 4895	49.0 C	3130	49,200 CUP
IMR 3031	45.0 C	2990	42,200 CUP
IMR 4198	33.5	3015	51,100 CUP
BULLET: 150 GR. REM SPCL	**DIA. .308"**		**C.O.L. 2.700"**
IMR 4320	45.0	2710	52,000 CUP
IMR 4064	46.0 C	2300	51,500 CUP
IMR 4895	44.5	2780	52,000 CUP
IMR 3031	45.0 C	2330	52,000 CUP
BULLET: 180 GR. REM SPCL	**DIA. .308"**		**C.O.L. 2.725"**
IMR 4320	44.5 C	2550	52,000 CUP
IMR 4064	43.5 C	2580	51,700 CUP
IMR 4895	42.5 C	2540	50,900 CUP
IMR 3031	41.5 C	2550	51,700 CUP

NEVER EXCEED MAXIMUM LOADS.

The information presented is based upon results obtained in our ballistics laboratory. Safe loading practices should be observed at all times. Since IMR Powder Company has no control over the circumstances of loading, we assume no liability for the results obtained, and we guarantee only that our powder meets our manufacturing standards.

.308 Winchester - Scot Powders

3032

Powder Charge	Bullet Weight & Type	Muzzle Velocity
43.0 grains	110 grain FMJ	3,000 fps
47.0 grains	110 grain FMJ	3,170 fps
40.0 grains	150 grain FMJ	2,640 fps
44.0 grains	150 grain FMJ	2,820 fps
36.0 grains	180 grain FMJ	2,340 fps
40.0 grains	180 grain FMJ	2,540 fps
33.0 grains	200 grain FMJ	2,070 fps
37.0 grains	200 grain FMJ	2,280 fps

4065

Powder Charge	Bullet Weight & Type	Muzzle Velocity
44.0 grains	110 grain FMJ	2,770 fps
48.0 grains	110 grain FMJ	2,970 fps
42.0 grains	150 grain FMJ	2,600 fps
46.0 grains	150 grain FMJ	2,800 fps
39.0 grains	180 grain FMJ	2,330 fps
43.0 grains	180 grain FMJ	2,530 fps
37.0 grains	200 grain FMJ	2,120 fps
41.0 grains	200 grain FMJ	2,340 fps

4197

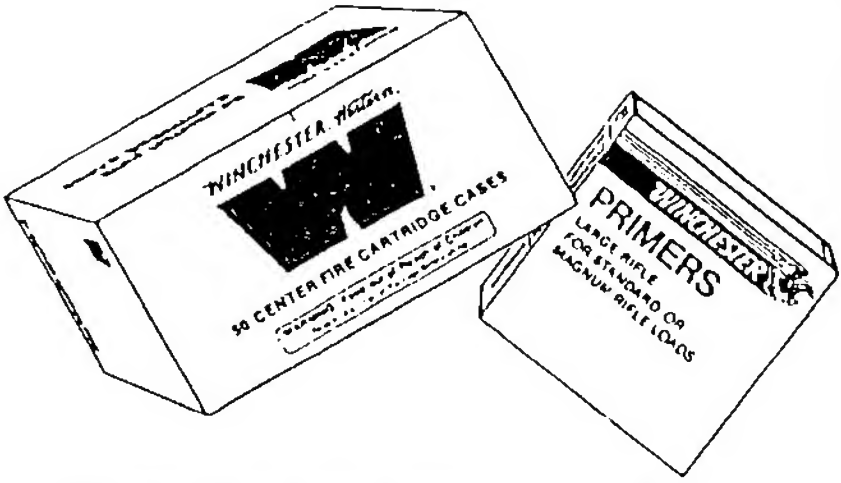
Powder Charge	Bullet Weight & Type	Muzzle Velocity
28.5 grains	120 grain LRN	2,060 fps
30.5 grains	120 grain LRN	2,170 fps
28.0 grains	155 grain LRN	2,020 fps
30.0 grains	155 grain LRN	2,120 fps
27.0 grains	175 grain LRN	1,910 fps
29.0 grains	175 grain LRN	2,020 fps

4197 (Con't)

Powder Charge	Bullet Weight & Type	Muzzle Velocity
26.0 grains	190 grain LRN	1,790 fps
28.5 grains	190 grain LRN	1,935 fps

= WARNING =

The Scot Powder Company makes no warranties or guarantees with respect to the safety or suitability of these products or the reloading information contained on these pages, either express or implied. Buyer and user assume any and all risk, responsibility and liability for any and all injury (including death), loss or damage arising from usage!



Get Superior Control With Winchester

Reloaders make strenuous demands on their components, and that's the reason why, year after year, more reloaders depend on Winchester.

Winchester is the only ammunition company that makes all of its own components, from raw materials through final product, for the control reloaders demand. Winchester primers are tested for consistent and dependable ignition in extreme temperatures. They are non-corrosive and non-mercuric, and they're carefully controlled for weight and height.

Winchester's patented smokeless, clean-burning BALL POWDER propellants are free-flowing for precise metering and chemically stable for consistent muzzle velocity, and reduced flash and barrel erosion.

Winchester metallic components offer the consistent performance found in factory loads.

WINCHESTER

WINCHESTER Centerfire Rifle Components

When selecting reloading supplies, be sure to look for the following finest quality **Winchester** components.

Primers

WLR, #8-1/2 - 120, Large Rifle
WLRM, #8-1/2M - 120, Large Rifle Magnum
WSR, #6-1/2 - 116, Small Rifle

BALL POWDER Propellants

680 Powder, 1 Lb. Container
748 Powder, 1 and 8 Lb. Containers
760 Powder, 1 and 8 Lb. Containers

Unprimed Rifle

U218	218 Bee	U300H	300 H&H Mag.
U22H	22 Hornet	U300	300 Savage
U22250	22-250 Rem.	U307	307 Win.
U220S	220 Swift	U308	308 Win.
U223R	223 Rem.	U3220	32-20 Win.
U225	225 Win.	U338	338 Win.Mag.
U243	243 Win.	U348	348 Win
U6MMR	6mm Rem.	U356	356 Win.
U2520	25-20 Win.	U358	358 Win.
U2506	25-06 Rem.	U375H	375 H&H Mag.
U257P	257 Roberts +P	U375W	375 Win.
U264	264 Win. Mag.	U4440	44-40 Win.
U270	270 Win.	U44M	44 Rem. Mag.
U284	284 Win.	U4570	45-70 Govt.
U7MM	7mm Mauser	U458	458 Win. Mag.
U3006	30-06 Springfield		
U3040	30-40 Krag		
U300WM	300 Win. Mag.		

WINCHESTER

CASE: WINCHESTER | BARREL: 24" | PRIMER: WINCHESTER LR

POWDER	STARTING LOADS GRS.	VEL.	PRESSURE	MAXIMUM LOADS GRS.	VEL.	PRESSURE
BULLET: 110 GR. WIN SP			**DIA. .308"**			**C.O.L. 2.800" MAX**
748				53.2	3300	46,000 CUP
BULLET: 125 GR. WIN SP			**DIA. .308"**			**C.O.L. 2.800" MAX**
748				52.0	3175	50,000 CUP
BULLET: 150 GR. WIN FS			**DIA. .308"**			**C.O.L. 2.800" MAX**
748				43.0	2540	45,100 PSI
BULLET: 165 GR. WIN FS			**DIA. .308"**			**C.O.L. 2.800" MAX**
748				42.0	2400	43,800 PSI
BULLET: 180 GR. WIN SP			**DIA. .308"**			**C.O.L. 2.800" MAX**
760				48.0	2580	43,000 CUP
748				46.5	2510	48,500 CUP
BULLET: 190 GR. WIN HPBT			**DIA. .308"**			**C.O.L. 2.800" MAX**
748				42.0	2445	49,000 CUP
BULLET: 200 GR. WIN SP			**DIA. .308"**			**C.O.L. 2.800" MAX**
760				45.7	2430	46,500 CUP
748				43.0	2435	50,000 CUP

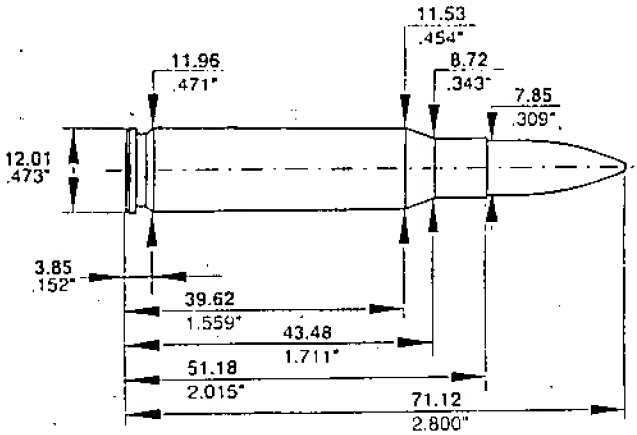
NEVER **EXCEED MAXIMUM LOADS.**

= WARNING =

Winchester makes no warranties express or implied, limited or full; specifically disclaim any and all warranties of fitness for a particular purpose and merchantability; and specifically disclaim any and all liability for consequential damages of any kind whatsoever. Failure to comply with these warnings or to use this data exactly as shown may result in accidents with serious injury and/or death to the shooter and/or bystanders.

.308 Winchester

CIP max. dimensions in millimetres, SAAMI in inches



Country of origin:	USA
Year of introduction:	1952
Max. bullet diameter:	7.85 mm (.309")
Max. cartridge length:	71.12 mm (2.800")
Max. case length:	51.18 mm (2.015"), trim to 51.00 mm (2.008")
Max. CIP piezo pressure:	415 MPa (60175 psi)

This American service cartridge was developed to replace the .30-06 Springfied. It was originally known as the T65E3 as conceived by Olin/ Winchester. The military adoption of the new cartridge was delayed until 1954, so Winchester renamed it for civil use in 1952 as the .308 Winchester and chambered one bolt-action and one semi-auto rifle for it.

The .308 Winchester became the standard rifle for military and civilian matches, as an all-around hunting cartridge, and it gained success among bench rest shooters, too. The .308 Winchester became the standard NATO cartridge in Europe under the name 7.62 NATO, until the 5.56 NATO, i. e. .223 Remington, came along. Today the .308 Winchester is also widely used by SWAT teams all around the world.

Components for the .308 Winchester are widely available, including military surplus. The .30 caliber bullet selection is the largest in the industry. For example, the light 6.5 g/100 grain hollow point LAPUA G477 is successfully used for moving target shooting, giving a minimal recoil and plenty of practice for the running moose.

Rifles chambered for the .308 Winchester are available everywhere. For those wanting a self-loader rifle it is a good choice; after all, it was originally designed for a self-loader, the M14 of the United States armed forces.

.308 Winchester

TEST COMPONENTS:

Test barrel: 610 mm (24"), 1 in 12" twist, manufactured to meet CIP minimum dimensions.

Primers: Large Rifle

Cases: LAPUA, trim-to length 51.00 mm (2.008")

Reloading Data, English Units:

Bullet				Powder	Starting Load		Maximum Load		
Weight [grs]	Type	Mfg.	C.O.L. [in.]	Type	Weight [grs]	Velocity [fps]	Weight [grs]	Velocity [fps]	Pressure [psi]
100	HP	LAPUA	2.638	N120	32.3	2782	36.0	3051	max.
				N130	36.3	2927	40.7	3202	max.
				N135	41.4	2972	46.8	3287	max.
110	HP	Sako	2.657	N120	36.3	2800	40.0	3069	max.
				N130	39.9	2892	44.1	3145	max.
				N133	43.2	2937	47.6	3210	max.
123	FMJ	LAPUA	2.634	N130	35.4	2602	41.1	2923	max.
				N135	42.4	2746	46.0	2953	max.
125	Ballistic Tip	Nosler	2.756	N130	37.9	2742	41.7	2977	max.
				N133	41.1	2782	44.9	3028	max.
				N135	42.8	2796	47.2	3048	max.
				N140	45.3	2804	49.9	3070	max.

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INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

.308 Winchester

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Reloading Data, English Units:

Bullet				Powder	Starting Load		Maximum Load		
Weight [grs]	Type	Mfg.	C.O.L. [in.]	Type	Weight [grs]	Velocity [fps]	Weight [grs]	Velocity [fps]	Pressure [psi]
150	Mega	LAPUA	2.638	N135	31.7	2162	39.1	2557	max.
				N140	32.2	2126	40.8	2564	max.
				N540	34.3	2185	42.6	2613	max.
150	SPBT	Sierra	2.756	N133	37.8	2525	42.0	2730	max.
				N135	40.4	2558	44.3	2776	max.
				N140	42.3	2546	46.8	2814	max.
				N150	44.2	2576	48.2	2790	max.
150	Lock Base	LAPUA	2.795	N540	42.9	2558	47.3	2835	max.
150	HPBT	Sierra	2.795	N140	40.8	2495	45.8	2761	max.
				N540	42.1	2478	46.9	2821	max.
				N150	42.5	2526	47.0	2767	max.
				N550	44.8	2523	49.7	2796	max.
155	Scenar	LAPUA	2.795	N135	34.4	2230	40.7	2615	max.
				N140	36.7	2227	43.3	2624	max.
				N150	39.0	2335	46.8	2680	max.
155	Silver Jacket Scenar	LAPUA	2.795	N140	41.1	2497	46.3	2799	max.
				N150	41.9	2536	46.9	2815	max.
				N540	41.7	2543	47.0	2848	max.
155	HPBT	Sierra	2.795	N135	37.1	2413	41.4	2645	max.
				N140	39.3	2435	44.2	2682	max.
				N540	40.2	2437	45.2	2722	max.
				N150	42.6	2540	46.6	2760	max.
				N550	44.9	2578	49.8	2859	max.
156	SPBT	Sako	2.685	N135	39.2	2418	43.1	2668	max.
				N140	41.1	2416	45.4	2695	max.
				N150	43.6	2509	48.3	2771	max.
165	SPBT	Speer	2.795	N133	37.1	2369	40.7	2583	max.
				N135	38.8	2401	42.7	2627	max.
				N140	40.6	2419	44.9	2666	max.
				N150	41.6	2437	46.3	2681	max.
				N550	44.3	2473	48.2	2694	max.
167	Scenar	LAPUA	2.795	N140	40.0	2358	44.0	2604	max.
				N540	39.8	2381	43.9	2637	max.
				N150	41.9	2428	46.1	2657	max.
				N550	44.4	2480	48.9	2719	max.
167	Silver Jacket Scenar	LAPUA	2.795	N140	40.9	2474	44.7	2710	max.
				N150	41.5	2457	45.8	2710	max.
				N540	41.4	2448	46.3	2740	max.

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INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

.308 Winchester

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Reloading Data, English Units:

Bullet				Powder	Starting Load		Maximum Load		
Weight [grs]	Type	Mfg.	C.O.L. [in.]	Type	Weight [grs]	Velocity [fps]	Weight [grs]	Velocity [fps]	Pressure [psi]
168	HPBT	Sierra	2.795	N140	38.3	2313	42.9	2558	max.
				N540	39.9	2357	44.6	2626	max.
				N150	40.5	2390	44.5	2607	max.
				N550	43.4	2461	47.3	2701	max.
170	FMJBT	LAPUA	2.795	N135	37.9	2351	41.6	2572	max.
				N140	39.9	2371	44.1	2614	max.
				N540	40.6	2343	44.8	2656	max.
				N150	41.3	2419	45.9	2647	max.
				N550	43.4	2401	48.5	2772	max.
175	HPBT	Sierra	2.795	N140*	37.3	2247	41.4	2473	max.
				N540*	39.4	2326	43.1	2557	max.
				N150*	39.0	2313	43.7	2546	max.
				N550*	41.7	2368	45.8	2604	max.
180	SP	Hornady	2.795	N135	36.3	2196	40.4	2430	max.
				N140	38.5	2225	42.8	2477	max.
				N150	40.4	2324	44.5	2514	max.
180	X	Barnes	2.795	N540	34.7	2074	39.5	2353	max.
				N550	37.9	2163	42.6	2417	max.
185	FMJBT	LAPUA	2.795	N135	36.0	2159	39.9	2425	max.
				N140	38.2	2241	42.2	2474	max.
				N540	39.5	2316	42.8	2509	max.
185	Scenar	LAPUA	2.795	N150	39.2	2263	43.5	2460	max.
				N550	42.3	2303	46.4	2536	max.
185	Silver Jacket Scenar	LAPUA	2.795	N140	38.8	2297	42.8	2539	max.
				N150	39.1	2320	44.0	2559	max.
				N550	42.8	2303	47.2	2654	max.
185	Forex	LAPUA	2.732	N540	36.0	2074	42.0	2408	max.
				N150	35.6	2063	43.3	2433	max.
				N550	39.0	2109	46.0	2499	max.
190	HPBT	Sierra	2.795	N140	37.5	2199	41.6	2414	max.
				N540	37.9	2188	42.4	2467	max.
				N150	38.6	2195	42.5	2420	max.
				N550	40.9	2265	45.6	2517	max.
200	SP	Speer	2.795	N140	36.0	2052	39.9	2256	max.
				N150	36.9	2092	40.4	2259	max.

*) These loads have been tested with 175 gr. Berger VLD's. too.

INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

.308 Winchester - Barnes Bullets

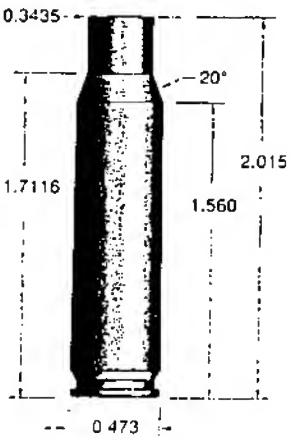
I had torrid romances with the .338 and .300 Winchester Magnums back when their ballistics were considered mystical and spell binding. Neither caliber ever failed to end the hunt when the time was at hand.

To become proficient with any firearm, one must practice religiously. I was tired of the excessive tenderizing of my shoulder with two or three 50-round sessions a month with the .338 or the .300 magnums, hence, my move to the .308 Winchester.

My elk load consists of a Barnes 165-grain X-Bullet powered by 46 grains of Varget. The bullet moves out at a little more than 2,700 fps and groups rather well. I have trusted this load out to 250 yards, which, no matter where you hunt, is a long shot for elk. Within 250 yards and with proper bullet placement, the .308 Winchester will down elk with aplomb. Some folks think one needs "laser-like" trajectories and 3,000 fps plus from a 180-grain bullet to slay a mature elk, but even on moose, I would opt for the 180-grain XBT fueled by a dose of IMR-4350.

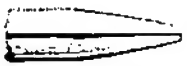
Would I trust the .308 Winchester if I couldn't load Barnes bullets? Probably, but I wouldn't be near as confident.

— G. Todd Fowler

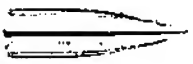


Case: Winchester	*Parent Case:* None
Primer: Federal GM 210M	*Trim To:* 2.005"
Barrel: 24"	

.308 WINCHESTER - BARNES BULLETS



110-grain XFB
S.D. .166 B.C. .322
Suggested Bullet Use



110-grain Solid
S.D. .166 B.C. .337
Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	46.0	3030	50.0	3294
AA 2520	47.0	3056	51.0	3316
RL 7	37.0	2941	41.0	3259
RL 15	46.0	3015	50.0	3277
H335*	45.0	3102	49.0	3378
H4895	45.0	2913	49.0	3172
BL-C(2)	48.0	3012	52.0	3263
H380	49.0	2722	53.0	2944
H414	50.0	2826	54.0	3052
IMR 3031	43.0	2980	47.0	3257
IMR 4895	46.0	3090	50.0	3359
IMR 4320	47.0	3033	51.0	3291
IMR 4064	45.0	2958	49.0	3221
VIT N133	42.0	3025	46.0	3313
VIT N135	45.0	3002	49.0	3269
Win 748*	48.0	3040	52.0	3293
Win 760	50.0	2833	54.0	3060

XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
** Recommended powder*

SHOOTER'S LOG

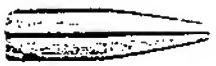
.308 Winchester

125-grain Solid

S.D. .188 B.C. .372

Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	45.0	2891	49.0	3148
AA 2520	46.0	2941	50.0	3197
RL 7	37.0	2810	41.0	3114
RL 12	44.0	2915	48.0	3180
RL 15	45.0	2856	49.0	3110
H335	43.0	2873	47.0	3140
H4895	43.0	2902	47.0	3172
BL-C(2)	48.0	2907	52.0	3149
H380	49.0	2754	53.0	2979
H414*	50.0	2743	54.0	2962
IMR 3031	41.0	2870	45.0	3150
IMR 4895	42.5	2814	46.5	3079
IMR 4320	44.0	2800	48.0	3055
IMR 4064	44.0	2858	48.0	3118
VIT N133*	40.5	2860	44.5	3142
VIT N135	44.0	2872	48.0	3133
Win 748*	46.0	2835	50.0	3082
Win 760	49.0	2746	53.0	2970



130-grain XBT

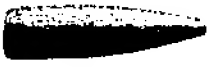
S.D. .196 B.C. .374

Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	45.0	2891	49.0	3148
AA 2520	46.0	2941	50.0	3197
RL 7	37.0	2810	41.0	3114
RL 12*	44.0	2915	48.0	3180
RL 15	45.0	2856	49.0	3110
H335	43.0	2873	47.0	3140
H4895	43.0	2902	47.0	3172
BLC 2	48.0	2907	52.0	3149
H380	49.0	2754	53.0	2979
H414	50.0	2743	54.0	2962
IMR 3031*	41.0	2870	45.0	3150
IMR 4320	44.0	2800	48.0	3055
IMR 4895	42.5	2814	46.5	3079
IMR 4064*	44.0	2858	48.0	3118
VIT N133	40.5	2860	44.5	3142
VIT N135	44.0	2872	48.0	3133
Win 748	46.0	2835	50.0	3082
Win 760	49.0	2746	53.0	2970

XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
* *Recommended powder*

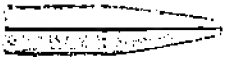
.308 Winchester



130-grain XLC BT
S.D. .196 B.C. .374

Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	42.0	2888	46.0	3154
RL 7	36.5	2761	40.5*	3053
RL 15	46.5	2938	50.5	3182
H4895	44.0	2929	48.0	3186
BL-C(2)	51.5	3058	55.5	3288
IMR 4895*	44.0	2898	48.0	3152
IMR 4320	44.5	2884	48.5	3134
IMR 4064	44.5	2921	48.5	3175
WIN 748*	47.5	2981	51.5	3224



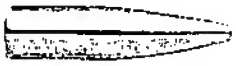
140-grain XBT
S.D. .211 B.C. .398

Suggested Bullet Use

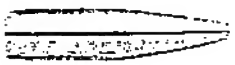
Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	43.0	2749	47.0	3005
AA 2520	44.5	2821	48.5	3075
RL 12	41.5	2717	45.5	2979
RL 15	44.0	2824	48.0	3081
H335	40.5	2681	44.5	2946
H4895*	41.5	2759	45.5	3025
BL-C(2)	46.0	2787	50.0	3029
H380	48.0	2607	52.0	2824
H414	49.0	2703	53.0	2924
IMR 3031	40.0	2719	44.0	2991
IMR 4895*	41.0	2675	45.0	2936
IMR 4320	43.0	2766	47.0	3023
IMR 4064	42.0	2721	46.0	2980
Norma 202	41.5	2724	45.5	2987
VIT N135	42.0	2725	46.0	2985
Win 748*	45.0	2786	49.0	3034
Win 760	49.0	2677	53.0	2896

XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
* *Recommended powder*

.308 Winchester

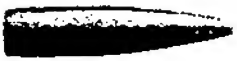


150-grain XFB
S.D. .226 B.C. .386
Suggested Bullet Use



150-grain XBT
S.D. .226 B.C. .428
Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	41.0	2522	45.0	2768
AA 2520	42.0	2650	46.0	2902
RL 12	41.5	2670	45.5	2927
RL 15	43.0	2713	47.0	2965
H335	39.0	2538	43.0	2798
H4895	41.0	2555	45.0	2804
BL-C(2)*	44.5	2683	48.5	2924
H380	47.0	2615	51.0	2838
H414	47.0	2606	51.0	2828
IMR 3031	39.0	2669	43.0	2943
IMR 4895*	40.0	2638	44.0	2902
IMR 4320	43.0	2709	47.0	2961
IMR 4064*	41.0	2634	45.0	2891
Norma 202	40.0	2575	44.0	2832
VIT N135	41.0	2595	45.0	2848
Win 748	45.0	2753	49.0	2998
Win 760	47.0	2581	51.0	2801

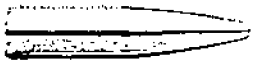


150-grain XLC BT
S.D. .226 B.C. .428
Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	40.0	2747	44.0	3014
AA 2520	44.0	2854	48.0	3106
RL 15	43.0	2745	47.0	2993
H4895	42.0	2727	46.0	2979
Varget*	43.5	2768	47.5	3015
BL-C(2)*	46.0	2855	50.0	3096
IMR 4895	42.0	2742	46.0	2995
IMR 4320	42.0	2731	46.0	2983
IMR 4064*	42.0	2744	46.0*	2998
Norma 202	40.0	2660	44.0	2918
Win 748	44.0	2830	48.0	3080
Win 760	50.0	2788	54.0	3005

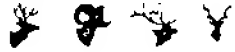
XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
** Recommended powder*

.308 Winchester

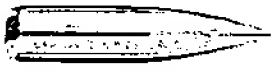


165-grain XFB
S.D. .247 B.C. .456

Suggested Bullet Use

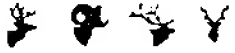


Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	38.0	2326	42.0	2571
AA 2520	41.0	2485	45.0	2727
RL 15	41.0	2545	45.0	2793
H335	38.0	2432	42.0	2688
H4895	39.5	2554	43.5	2813
BL-C(2)*	42.0	2506	46.0	2745
H380	45.0	2472	49.0	2692
H414	46.0	2525	50.0	2745
IMR 3031	37.5	2503	41.5	2770
IMR 4895*	39.0	2496	43.0	2752
IMR 4320	41.0	2550	45.0	2799
IMR 4064*	39.0	2495	43.0	2751
IMR 4350	45.0	2499	49.0	2721
Norma 202	38.0	2414	42.0	2668
VIT N135	38.5	2414	42.5	2665
VIT N150	42.0	2488	46.0	2725
Win 748	42.0	2540	46.0	2782
Win 760	46.0	2565	50.0	2788



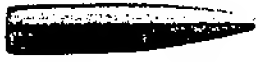
165-grain XBT
S.D. .247 B.C. .505

Suggested Bullet Use



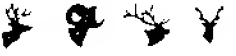
165-grain Solid
S.D. .248 B.C. .481

Suggested Bullet Use



165-grain XLC BT
S.D. .247 B.C. .505

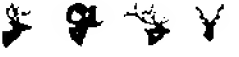
Suggested Bullet Use



Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2230	40.0	2648	44.0	2905
AA 2520	44.0	2716	48.0	2956
RL 15	42.0	2640	46.0	2884
H4895	42.0	2650	46.0	2895
Varget*	42.5	2639	46.5	2880
BL-C(2)*	45.0	2703	49.0	2936
IMR 4895*	42.0	2639	46.0	2883
IMR 4320	42.0	2605	46.0	2846
IMR 4064	42.0	2669	46.0	2916
Norma 202	40.5	2568	44.5	2814
VIT N150	44.5	2681	48.5	2915
Win 748	43.0	2701	47.0	2945
Win 760	49.0	2701	53.0	2915

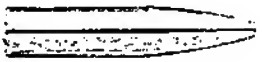
168-grain XLC BT
S.D. .253 B.C. .476

Suggested Bullet Use

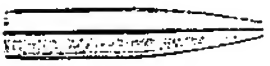


XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
* *Recommended powder*

.308 Winchester

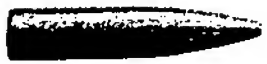


180-grain XFB
S.D. .271 B.C. .511
Suggested Bullet Use

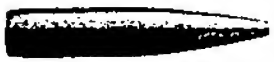


180-grain XBT
S.D. .271 B.C. .552
Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2520	40.0	2345	44.0	2580
AA 2700	45.0	2401	49.0	2614
H4895*	36.0	2220	40.0	2467
H380	43.0	2262	47.0	2472
H414	43.0	2251	47.0	2460
H4350	43.0	2247	47.0	2456
H4831	45.0	2290	49.0	2494
IMR 3031	36.0	2296	40.0	2551
IMR 4895*	37.0	2274	41.0	2520
IMR 4320	39.0	2360	43.0	2602
IMR 4064*	37.0	2345	41.0	2598
IMR 4350	43.0	2276	47.0	2488
Norma 202	36.5	2292	40.5	2543
VIT N150	40.5	2355	44.5	2588
Win 748	39.0	2333	43.0	2572
Win 760	44.0	2325	48.0	2536



180-grain XLC FB
S.D. .271 B.C. .511
Suggested Bullet Use

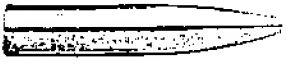


180-grain XLC BT
S.D. .271 B.C. .552
Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2520	41.0	2450	45.0	2689
AA 2700	48.0	2568	52.0	2782
H4895	40.0	2433	44.0	2676
Varget*	40.5	2402	44.5	2639
H380	49.0	2576	53.0	2786
H414	47.0	2484	51.0	2695
H4350	47.0	2459	51.0	2668
IMR 3031	36.0	2323	40.0	2581
IMR 4895*	39.0	2377	43.0	2621
IMR 4320	40.0	2360	44.0	2596
IMR 4064*	40.0	2425	44.0	2667
IMR 4350	46.0	2389	50.0	2597
Norma 202	38.0	2328	42.0	2573
VIT N150	41.0	2387	45.0	2620
Win 748	40.0	2407	44.0	2648
Win 760	46.5	2484	50.5	2698

XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets.
Maximum loads should be used with caution - Always Start With Minimum Loads.
** Recommended powder*

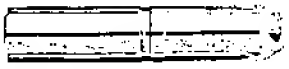
.308 Winchester



200-grain XFB
S.D. .301 B.C. .550

Suggested Bullet Use

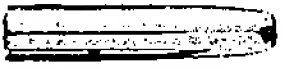
Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2520*	38.0	2233	42.0	2468
AA 2700	42.0	2179	46.0	2387
RL 15*	37.0	2193	41.0	2430
H380	42.0	2109	46.0	2310
H414	42.0	2211	46.0	2422
IMR 4064	35.0	2146	39.0	2391
IMR 4350	42.0	2220	46.0	2431
Win 760	42.0	2243	46.0	2462



220-grain Solid
S.D. .331 B.C. .305

Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2460	35.5	2109	39.5	2347
RL 15*	35.5	2083	39.5	2318
H380*	40.5	2064	44.5	2268
H414	41.0	2078	45.0	2281
IMR 4064	33.0	2031	37.0	2277
IMR 4350	40.0	2117	44.0	2329



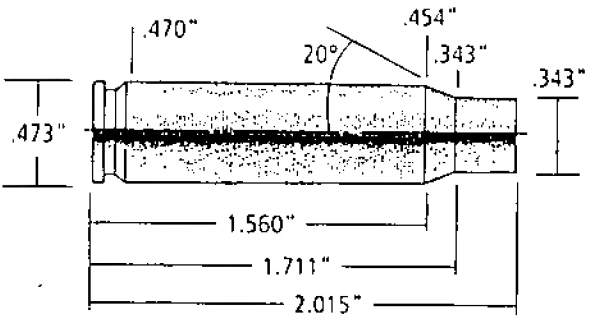
250-grain Original
S.D. .376 B.C. .417

Suggested Bullet Use

Powder	Charge Weight (grains)	Velocity (fps)	Maximum Load	Velocity (fps)
AA 2460	32.0	1841	36.0	2071
RL 15*	34.0	1915	38.0	2140
H380	38.0	1935	42.0	2139
H414	39.0	2000	43.0	2205
IMR 4064	31.0	1864	35.0	2104
IMR 4350	39.0	1959	43.0	2160

XLC Coated X-Bullet data cannot be used with other bullets, including non-coated X-Bullets. Maximum loads should be used with caution - Always Start With Minimum Loads.
** Recommended powder*

308 Winchester



Origin	USA
Ammunition Available	1952
Bullet Diameter	0.308"
Maximum Cartridge O.A.L.	2.810"
Maximum Case Length	2.015"
Trim Length	2.005"

About the Cartridge

The 308 Winchester is a compact, efficient cartridge introduced with its civilian name in 1952. It was adopted as the 7.62mm NATO service round in 1954 and is about a half-inch shorter than the 30-06 service round that it replaced in the U.S. military. The 308 Winchester is useful in the same game categories as the 30-06 Springfield with the exception that it is not suited to loading with the heaviest 30-caliber bullets. The 308 has a lot going for it over longer 30-caliber cartridges in that it can be chambered in petite, fast-operating, compact, short-action bolt guns. With the short case ideally suited to medium-fast burning rifle propellants, the round performs well not only in standard 22-inch barrels but in shorter carbine-length barrels as well. The fact that the round burns less propellant than its larger counterparts makes for slightly less recoil, yet another reason why it is suited to compact, lightweight rifles.

Test Components

Case	Federal
Primer	CCI-200
Test Barrel	Wiseman
Barrel Length	24"
Barrel Twist	1-12"

** Lowest Standard Deviation on Velocity*

Reloading Data

150 Grain Scirocco™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift Scirocco	150	H-414	46.5	2666	50.0	2898	110%
	150	*H-4895	42.3	2759	45.5	2927	100%
	150	Varget	43.7	2729	47.0	2888	103%
Alliant Powder Company							
Swift Scirocco	150	RL-15	42.8	2704	46.0	2923	101%
IMR Powder Company							
Swift Scirocco	150	IMR-3031	39.5	2668	42.5	2842	93%
	150	IMR-4064	41.9	2694	45.0	2881	99%
	150	IMR-4895	41.4	2689	44.5	2863	98%

☐ Indicates maximum load—never exceed maximum load!
Loads less than minimum charges shown are not recommended

Test Components

Case	Federal
Primer	CCI-200
Test Barrel	Wiseman
Barrel Length	24"
Barrel Twist	1–12"

** Lowest Standard Deviation on Velocity*

Reloading Data

165 Grain Scirocco™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift Scirocco	165	H-414	45.1	2577	48.5	2768	110%
	165	H-4895	40.9	2615	44.0	2785	100%
	165	*Varget	42.3	2603	45.5	2760	103%
Alliant Powder Company							
Swift Scirocco	165	RL-15	41.4	2587	44.5	2771	101%
IMR Powder Company							
Swift Scirocco	165	IMR-3031	39.1	2604	42.0	2749	95%
	165	IMR-4064	41.4	2621	44.5	2790	101%
	165	IMR-4895	40.5	2600	43.5	2741	99%

☐ Indicates maximum load—never exceed maximum load!
Loads less than minimum charges shown are not recommended

Test Components

Case	Federal
Primer	CCI-200
Test Barrel	Wiseman
Barrel Length	24"
Barrel Twist	1–12"

** Lowest Standard Deviation on Velocity*

Reloading Data

165 Grain A-Frame™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	165	H-414	47.4	2602	51.0	2840	107%
	165	H-4895	41.4	2585	44.5	2787	93%
	165	Varget	43.2	2624	46.5	2795	98%
Alliant Powder Company							
Swift A-Frame	165	RL-15	43.2	2652	46.5	2817	98%
IMR Powder Company							
Swift A-Frame	165	IMR-3031	39.5	2566	42.5	2757	89%
	165	IMR-4064	41.9	2620	45.0	2811	95%
	165	*IMR-4895	41.9	2596	45.0	2810	95%

☐ Indicates maximum load—never exceed maximum load!
Loads less than minimum charges shown are not recommended

Test Components

Case	Federal
Primer	CCI-200
Test Barrel	Wiseman
Barrel Length	24"
Barrel Twist	1–12"

** Lowest Standard Deviation on Velocity*

Reloading Data

180 Grain Scirocco™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift Scirocco	180	BL-C(2)	40.9	2442	44.0	2610	104%
	180	H-4895	39.5	2495	42.5	2637	100%
	180	Varget	40.9	2495	44.0	2651	104%
Alliant Powder Company							
Swift Scirocco	180	RL-15	40.5	2504	43.5	2651	103%
IMR Powder Company							
Swift Scirocco	180	IMR-3031	38.1	2479	41.0	2613	97%
	180	IMR-4064	40.5	2521	43.5	2671	103%
	180	*IMR-4895	39.1	2449	42.0	2604	99%

☐ **Indicates maximum load—never exceed maximum load!**
Loads less than minimum charges shown are not recommended

Test Components

Case	Federal
Primer	CCI-200
Test Barrel	Wiseman
Barrel Length	24"
Barrel Twist	1–12"

** Lowest Standard Deviation on Velocity*

Reloading Data

180 Grain A-Frame™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	180	H-414	45.6	2547	49.0	2715	106%
	180	*H-4895	40.0	2474	43.0	2661	93%
	180	Varget	41.4	2470	44.5	2651	96%
Alliant Powder Company							
Swift A-Frame	180	RL-15	41.9	2548	45.0	2703	97%
IMR Powder Company							
Swift A-Frame	180	IMR-4064	40.5	2492	43.5	2653	94%
	180	IMR-4350	46.5	2453	50.0	2682	108%
	180	IMR-4895	39.5	2417	42.5	2623	92%

☐ Indicates maximum load—never exceed maximum load!
Loads less than minimum charges shown are not recommended

SHOOTER'S LOG

POWDER BURNING RATE CHART

Current Canister Grade Powders in order of approximate burning rate.
(R1 being the fastest, 748 the slowest)
This list is approximate only and not to be used for developing loads.

1. R-1, Norma
2. N31, Vihtavuori
3. TITEWAD, Accurate Arms
4. RED DOT, Alliant
5. CLAYS, Hodgdon
6. "HI-SKOR" 700-X, IMR Co.
7. BULLSEYE, Alliant
8. TITEGROUP Hodgdon
9. American Select, Alliant
10. SOLO 1000, Accurate Arms
11. GREEN DOT, Alliant
12. INTERNATIONAL, Hodgdon
13. PB, IMR Co.
14. N320, Vihtavuori
15. WST, Winchester
16. No.2, Accurate Arms
17. SR 7625, IMR Co.
18. HP-38, Hodgdon
19. 231, Winchester
20. UNIQUE, Alliant
21. UNIVERSAL, Hodgdon
22. Power Pistol, Alliant
23. N330, Vihtavuori
24. HERCO, Alliant
25. WSF, Winchester
26. N340, Vihtavuori
27. "HI-SKOR" 800-X, IMR Co.
28. SR4756, IMR Co.
29. NO. 5, Accurate Arms,
30. HS-6, Hodgdon
31. 3N37, Vihtavuori
32. N350, Vihtavuori
33. BLUE DOT, Alliant
34. No. 7, Accurate Arms
35. 2400, Alliant
36. No. 9, Accurate Arms
37. R123, Norma
38. N110, Vihtavuor
39. H110 Hodgdon
40. 296, Winchester
41. IMR4227, IMR Co.
42. H4227, Hodgdon
43. SR4759, IMR Co.
44. 1680, Accurate Arms
45. 200, Norma
46. Reloader 7, Alliant
47. IMR4198, IMR Co.
48. H4198, Hodgdon
49. N120, Vihtavuori
50. H322, Hodgdon
51. 2015 BR, Accurate Arms
52. N130, Vihtavuori
53. IMR3031, IMR Co.
54. N133, Vihtavuori
55. H335, Hodgdon
56. N135, Vihtavuori
57. 2230, Accurate Arms
58. 2460, Accurate Arms
59. H4895, Hodgdon
60. IMR4895, IMR Co.
61. RELODER-12, Alliant
62. IMR-4320, IMR Co.
63. 3100, Accurate Arms
64. IMR 4064, IMR Co.
65. 202, Norma
66. 2520, Accurate Arms
67. RELODER-15, Alliant
68. N140, Vihtavuori
69. VARGET, Hodgdon
70. 748, Winchester

This is a unique reloading/information manual. It contains currently available data regarding loading information for this individual cartridge. This data is compiled from the leading U.S. Bullet and gunpowder manufacturers.

This manual is not intended to replace the many comprehensive, in-depth reloading manuals available from a host of publishers, but instead provide you with a quick and easy-to-use reference source which will enable you to compare loads, types of powders, bullets and shot charges for components you may have on hand.

Loadbooks USA, Inc., also offers the following cartridges in this series of unique One Book/One Caliber reloading manuals: .22 Hornet, .220 Swift, .222 Remington, .223 Remington, .22-250 Remington, .225 Winchester, .243 Winchester, .244/6mm Remington, 6.5x55 Swedish, .25-06 Remington, .250-3000 Savage, .270 Winchester, 7x57 Mauser, 7mm-08 Remington, .280 Remington, .284 Winchester, 7mm Remington Magnum, 7.62x39mm, 7.62x54mm Russian, .30-30 Winchester, .303 British, .308 Winchester, .30-06 Springfield, .300 Winchester Magnum, .300 Weatherby Magnum, .300 Savage, 30/40 Krag, .300 & .375 H & H Magnum, .338 Winchester Magnum, 8mm Remington Magnum, 8mm/06 & .338/06, 8mm Mauser, .356 & .358 Winchester, .35 Whelen, .35 Remington & .350 Remington Magnum, .375 & .458 Winchester, .444 Marlin, .45-70 Government, .25 & .32 A.C.P., .32 H&R Magnum, .380 ACP, 9mm Luger, .38 Super, .38 Special, .357 Magnum, 10mm/.41 Auto, .41 Magnum, .44 Magnum, .44 Special, .45 ACP, .45 Colt, .454 Casull, and The Weatherby Magnums covering 10 different Weatherby calibers.

There's also two shotshell books for the 12 Gauge, and the 20/28 Gauge and .410 bore. Plus there's a large reloading manual covering 30 calibers for the Thompson/Center Contender single-shot pistol and the Remington XP-100 pistol.

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