## Reloading The .45/70



(WC= WadCutter, SWC= Semi-WadCutter, HP= Hollow Point, RN= Round Nose, FMC= Full Metal Case, FMJ= Full Metal Jacket, JHP= Jacketed Hollow Point and if GC indicated, means Gas Check at bottom of lead bullet)

#### **Loads for .45/70:**

(Note: These are near MAXIMUM loads, you should use 10% less to start.)

(See note on Powders below or read all about various <u>Powders.</u>)

Bullet sizes vary from .458" for jacketed to .459" for some lead in diameter. Due to different barrel lengths, type of bullet, seating depth, primer type and other factors, you may not get near the FPS charted. It is just a guide and the reason you should start under these charges and work up.

These loads are for MODERN guns. Make sure your gun can handle it. Powder Mfgs. Velocities in a test barrel differ from a 4 4/5" revolver by about 175 fps and from 7 1/2" by 50 fps. Some of these velocities were shot in a 10" or a 14" barrel, similar to a Thompson Contender. Recoil is severe with these near MAX loads. You should consider 10% less for starting loads. However, with something like 2400, which is really a pistol powder, too little can be as dangerous as too much. It's a big case. With the powder down at the end near the bullet, it can cause problems or even an explosion with minimum loads (or less). Be advised.

Do not use any of this data with guns designed for black powder loads or any original TRAPDOOR rifles, EXCEPT WHERE NOTED that it is a "TRAPDOOR" Load. If condition of old gun is doubtful, even these loads could be risky. Consider using original Black Powder loads and lead bullet for old guns.

#### 300 grain lead RNFP Cowboy

Trail Boss 14.0 gr. 1199 FPS minimum

Trail Boss 16.5 gr. 1285 FPS MAXIMUM

5744 30.0 gr. 1377 Max Varget 44.1 gr. 1372 Max

#### 300 Grain Jacketed Hollow Point MODERN

H4198 33.0 gr.

Varget 62.0 gr. 2,090 (Compressed load)

2400 30.0 gr. 1,650

Reloader7 50.0 gr. 2,075

IMR 3031 43.0 gr. 1,410

Federal Factory load 1,674 (in Marlin Rifle) (Hi=1692, Lo=1659, ES 33.4)

#### 340 grain LEAD HP TRAPDOOR (hot loads)

A2495BR 51.3 gr. 1,628 (start)

A2495BR 57.0 gr. 1,850 (MAX, I do not recommend)

AA 5744 30.0 gr. 1,494 (MAX) (Also HOT for old trapdoors)

AA 5744 29.0 gr. 1,348 good load

#### 350 grain LEAD RNFP TRAPDOOR (mild loads)

AA5744 27.0 gr. 1,292(in Marlin rifle) (Hi=1328, Lo=1264, ES 64.5)

IMR 3031 36.0 gr. 1,152 (in Marlin rifle) (Hi=1260, Lo=1055, ES 205)

IMR 3031 36.0 gr. 1,154 (in TRAPDOOR rifle) (Hi=1198, Lo=1122, ES 76.3)

Trailboss Use 14 to 16 grains for 1,000 to 1,200 FPS

#### 350 grain JSP (Jacketed Soft Point) MODERN

H4198 32.0 gr. 1,387 FPS

Varget 61.0 gr. 2,027 (Compressed load)

#### 378-385 grain Lead MODERN

A3100 60.0 gr. 1,485

A2495 55.0 gr. 1,935

2400 25.0 gr. 1,340

Reloader 7 45.0 gr. 1,810

AA 5744 28.5 gr. 1,418

#### 378-385 grain Lead TRAPDOOR

A2495BR 45.0 gr. 1,479 (start)

A2495BR 50.0 gr. 1,681 (MAX)

A3100 50.4 gr. 1,159 (start)

A3100 56.0 gr. 1,317 (MAX)

#### 385 grain lead RNFP (C)owboy & (N)ormal loads

Trail Boss 11.8 gr. 955 FPS minimum (C)

Trail Boss 12.8 gr. 1,014 FPS MAXIMUM (C)

Trail Boss 14.0 gr. 1,075 FPS minimum for regular rifle (N)

Trail Boss 16.0 gr. 1,142 FPS MAXIMUM for regular rifle (N)

#### 400 grain Jacketed Soft Point TRAPDOOR Loads

H4895 40.0 gr. 1,312 MAX

H4198 30.0 gr. 1,204 MAX

2400 22.0 gr. 954 Old Rifles\*

2400 25.0 gr. 1,260 MAXIMUM

IMR4064 47.0 gr. 1,391 MAX

IMR3031 34.0 gr. 750 Old Rifles\*

IMR3031 45.0 gr. 1,389 MAXIMUM

#### 400 grain Jacketed Soft Point MODERN Loads

H4895 52.0 gr. 1,668

H4895 56.0 gr. 1,824 MAXIMUM

IMR4198 36.0 gr. 1,368

IMR4198 40.0 gr. 1,596 MAXIMUM

Reloader 7 45.0 gr. 1,677

Reloader 7 49.0 gr. 1,828 MAXIMUM

IMR4064 51.0 gr. 1,391

IMR4064 55.0 gr. 1,718 MAXIMUM

IMR3031 45.0 gr. 1,553

IMR3031 52.2 gr. 1,787 (actual in 22" bbl) Hunting load

IMR3031 53.0 gr. 1,704 MAXIMUM

#### 405 grain lead RNFP Cowboy

Trail Boss 12.0 gr. 971 FPS minimum

Trail Boss 13.0 gr. 1007 FPS MAXIMUM

(Note: one shooter has experimented with using up to 14.6 grains in a Marlin and reported at this level the recoil was about the same as factory loads and felt 14.4 was his best accuracy 100 yard load. There was still some room in the case and likely the case would hold 15 grains of Trail Boss. These loads are NOT recommendations, but just reports from another shooter)

#### 405 grain LEAD MODERN Loads (Gas Check recommended)

A2495	54.0 gr.	1,801	MAX
IMR4895	45.0 gr.		—- Load from Bob Gabler (bpbg@metro.net)
H-4895	48.0 gr.	1,645	MAX
A3100	60.0 gr.	1,422	MAX
AA 5744	28.5 gr.	1,375	MAX
AA 5744	25.7 gr.	1,250	For Cowboy Action shooting

#### 405 grain LEAD TRAPDOOR Loads

IMR 4198 21.5 gr. 733 (MAX is 28.5 @ 1,195 fps)

<sup>\*(</sup>minimum charges in large cases can be dangerous – caution)

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IMR 4198 28.0 gr. 1,125 (from bdmolloy@mlode.com)
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IMR 3031 34.0 gr. 1,061 (Max is 38.5 @ 1,304 fps)

#### 405 grain Jacketed Soft Point TRAPDOOR Loads

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IMR 4198 30.0 gr. 1,250
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IMR 3031 34.0 gr. 1,137 (Max is 39.0 @ 1,356 fps)

#### 420 grain Lead FN TRAPDOOR

A2495BR 45.0 gr. 1,457 (start)

A2495BR 50.0 gr. 1,656 (MAX)

A3100 54.0 gr. 1,251 (start)

A3100 60.0 gr. 1,422 (MAX)

#### 475 grain Lead FN Modern (reduce for Trapdoor)

AA 5744 27.0 gr. 1,253

#### 500 grain Jacketed MODERN Loads

A2495 46.0 gr. 1,538 MAX

A3100 60.0 gr. 1,441 MAX

H4198 28.0 gr. 1,082 MAX

Varget 50.0 gr. 1,603 MAX

#### 500 grain LEAD MODERN Loads

A2495 49.0 gr. 1,670 MAX

A3100 60.0 gr. 1,493 MAX

AA 5744 26.0 gr. 1,217 MAX

AA 5744 24.0 gr. 1,128

Varget 35.0 gr. 1,169 good

Varget 37.0 gr. 1,255 max

Discussion: This is a very old cartridge. It was introduced in 1870's in the Springfield "Trapdoor" rifle. Do not use any of this data with guns designed for black powder loads or any original TRAPDOOR rifles, EXCEPT WHERE NOTED that it is a "TRAPDOOR" Load. It's best to use new brass. Some old cartridges also used corrosive primers. I recommend lead bullets and loads in the neighborhood of 1100 to 1200 fps as maximum for TRAPDOOR rifles, unless you are sure of the gun.

Bullseye, Unique, Reloader 7 thru 19 and 2400 are products of Alliant (formerly Hercules) Powders. Universal, HP38, HS6, HS7, VARGET, H4198 and H4895 are products of Hodgdon Powders. IMR 4227, IMR 3031 and IMR 4895 are products of IMR (formerly DuPont) Powder Company. No.2, No. 5, No.7, No. 9, #5744, #2230, A2495, A3100, and #2460 are products of Accurate Arms Company. 231 is a fast burning powder from Winchester.

References: Accurate Arms Co. 1996 Reloading booklet — Alliant Powder Co. Reloaders' Guide (1995) — Hodgdon's Basic Reloaders Manual (1996) — Speer Reloading Manual, #12 — Winchester Reloading Components Manual, 14th edition — Lyman Piston & Revolver Reloading

Handbook, 2nd edition. — VihtaVuori Oy Company,reloading booklet (1995) — Numerous magazine articles on reloading special calibers and personal loads where noted.

## Reloading data for 45-70 Government

**Bullet** Hornady HP (29,000 psi) 300 gr

**Bullet weight** 19.4 g / 300 gr

**B.C** 0.197

**C.O.L** 64.5 mm / 2.539

# 4500

Gunpowder	Charge Weight	Velocity m/s	Velocity fps
Norma 200	Max 53.0 Min 50.0	615 582	2018 1910
Norma 201	Max 55.0 Min 53.0	578 555	1896 1821

**Bullet weight** 22.7 g / 350 gr

**B.C** 0.189

**C.O.L** 64.5 mm / 2.539

# 4502

Gunpowder	Charge Weight	Velocity m/s	Velocity fps
Norma 200	Max 46.0	551	1808
	Min 44.0	524	1719
Norma 201	Max 50.0	537	1762
	Min 48.0	517	1696



## 45-70 Government (Lever Actions)

.458"	45 JHP
Weight (grains)	300
Ballistic Coefficient	0.206
Sectional Density	0.204
COAL Tested	2.530"
Speer Part No.	2482

			START CHARGE			MAXIMUM CHARGE
Propellant	Case	Primer	Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
IMR 8208	Winchester	CCI 200	59.5	1927	63.4	2115
Hodgdon BENCHMARK	Winchester	CCI 200	58.0	1915	62.4	2114
Alliant Reloder 7	Winchester	CCI 200	43.0	1852	47.0	2011
Hodgdon H4895	Winchester	CCI 200	58.0	1739	62.0	1987
IMR 4166	Winchester	CCI 200	53.0	1783	59.0	1982
Hodgdon Varget	Winchester	CCI 200	57.0	1794	61.0	1976
Alliant Reloder 10X	Winchester	CCI 200	48.0	1837	52.0	1973
Hodgdon H322	Winchester	CCI 200	52.0	1675	56.0	1951
IMR 4895	Winchester	CCI 200	57.0	1723	61.0	1924
IMR 3031	Winchester	CCI 200	55.0	1690	59.0	1918
Vihtavuori N133	Winchester	CCI 200	50.0	1692	54.0	1915
IMR 4064	Winchester	CCI 200	57.0	1733	61.0	1908
XMR 2015	Winchester	CCI 200	51.0	1706	55.0	1878
IMR 4320	Winchester	CCI 200	55.0	1581	59.0	1827
IMR 4198	Winchester	CCI 200	39.0	1609	43.0	1765
XMP 5744	Winchester	CCI 200	36.0	1559	40.0	1745
IMR SR 4759	Winchester	CCI 200	29.0	1481	31.0	1603

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 $\textit{Maximum loads should be used with CAUTION} \bullet \textit{C} = \textit{Compressed Load}$ 

# 45-70 Government (Lever Actions) with 300 gr JHP



Max Case Length: 2.105"

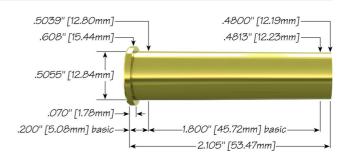
Trim-to Length: 2.095"

**Max Cart. OAL:** 2.550"

RCBS Shell Holder: # 14

Test Firearm: Universal Receiver

Barrel Length: 24"



45	Speer Part No.	Weight, grains	COAL Tested	Ballistic Coefficient	Sectional Density
300 gr JHP	2482	300	2.530	.206	.204

			START CHARGE		MAXIN	//UM CHARGE
Propellant	Cartridge Case	Primer	Grain	Velocity (ft/sec)	Grain	Velocity (ft/sec)
Hodgdon Benchmark	Hornady	CCI 200	58.0	1914	62.4	2113
IMR 4166	Hornady	CCI 200	53.0	1782	59.0	1981
IMR 8208 XBR	Hornady	CCI 200	59.5	1927	63.4	2115

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## 45-70 Government (Strong Actions)

.458"	45 JHP
Weight (grains)	300
Ballistic Coefficient	0.206
Sectional Density	0.204
COAL Tested	2.530"
Speer Part No.	2482

			START CHARGE			MAXIMUM CHARGE
Propellant	Case	Primer	Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Vihtavuori N133	Winchester	CCI 200	56.0	1982	60.0	2202
Alliant Reloder 10X	Winchester	CCI 200	53.0	2015	57.0	2167
Hodgdon H322	Winchester	CCI 200	57.0	1929	61.0 C	2145
Hodgdon BENCHMARK	Winchester	CCI 200	57.0	1912	61.0	2139
Accurate 2015	Winchester	CCI 200	57.0	1930	61.0	2120
Hodgdon H4895	Winchester	CCI 200	62.0	2006	64.0 C	2115
Hodgdon Varget	Winchester	CCI 200	63.0	2018	65.0 C	2087
IMR 4895	Winchester	CCI 200	62.0	1961	64.0 C	2060
Alliant Reloder 7	Winchester	CCI 200	50.0	1873	54.0	2050
IMR 4320	Winchester	CCI 200	61.0	1909	65.0 C	2048
IMR 4198	Winchester	CCI 200	44.0	1817	48.0	2037
IMR 3031	Winchester	CCI 200	59.0	1929	61.0 C	2023
IMR 4064	Winchester	CCI 200	61.0	1891	63.0 C	2002

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## 45-70 Government (Strong Actions)

.458"	45 SPFN Hot-Cor®
Weight (grains)	350
Ballistic Coefficient	0.218
Sectional Density	0.238
COAL Tested	2.710"
Speer Part No.	2478

			START CHARGE		MAXIMUM CHARGE		
Propellant	Case	Primer	Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)	
Accurate 2015	Winchester	CCI 200	54.0	1926	60.0	2146	
Vihtavuori N133	Winchester	CCI 200	56.0	1943	60.0 C	2117	
IMR 4198	Winchester	CCI 200	46.5	1941	51.5	2061	
Hodgdon H4895	Winchester	CCI 200	57.0	1774	63.0 C	2030	
MR 3031	Winchester	CCI 200	55.0	1823	61.0 C	2027	
Hodgdon H322	Winchester	CCI 200	54.0	1879	60.0	2027	
MR 4895	Winchester	CCI 200	55.0	1839	61.0 C	2027	
Alliant Reloder 10X	Winchester	CCI 200	46.0	1893	50.0	1993	
IMR 4064	Winchester	CCI 200	56.0	1675	62.0 C	1917	
MR 4320	Winchester	CCI 200	58.0	1751	62.0 C	1888	
IMR SR 4759 (reduced load)	Winchester	CCI 200	28.0	1346	32.0	1503	

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# 45-70 Government (Lever Actions) with 400 gr SPFN



Max Case Length: 2.105"

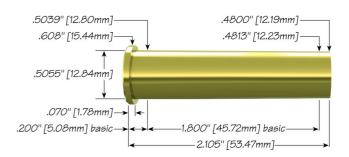
Trim-to Length: 2.095"

**Max Cart. OAL:** 2.550"

RCBS Shell Holder: # 14

Test Firearm: Universal Receiver

Barrel Length: 24"



45	Speer Part No.	Weight, grains	COAL Tested	Ballistic Coefficient	Sectional Density
400 gr SPFN	2479	400	2.540"	.259	.272

			START CH	HARGE MAX	IMUM CHARGE
Propellant	Cartridge Case	Primer	Grain Vel	ocity (ft/sec) Grain	n Velocity (ft/sec)
Alliant AR-Comp	Winchester	CCI200	53.0 180	<b>56.0</b>	1933
Alliant Power Pro Varmint	Winchester	CC1200	55.0 173	<b>59.0</b>	1868
Hodgdon Benchmark	Winchester	CC1200	49.5 160	)4 <b>53.5</b>	1785
IMR 4166	Winchester	CC1200	43.5 146	60 47.8	1601
IMR 8208 XBR	Winchester	CCI 200	50.5 161	10 <b>54.5</b>	1791

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## 45-70 Government (Lever Actions)

.458"	45 SPFN
Weight (grains)	400
Ballistic Coefficient	0.259
Sectional Density	0.272
COAL Tested	2.540"
Speer Part No.	2479

			START	CHARGE	MAXIMUM CHARGE	
Propellant	Case	Primer	Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant AR-Comp	Winchester	CCI 200	53.0	1803	56.0	1933
Hodgdon H335	Winchester	CCI 250	54.0	1724	58.0	1876
Accurate 2015	Winchester	CCI 200	48.0	1685	52.0	1871
Alliant Power Pro Varmint	Winchester	CCI 200	55.0	1733	59.0	1868
Vihtavuori N133	Winchester	CCI 200	47.0	1672	51.0	1847
Winchester 748	Winchester	CCI 250	58.0	1679	62.0 C	1839
Hodgdon H4895	Winchester	CCI 200	52.0	1669	56.0 C	1829
IMR 8208	Winchester	CCI 200	50.5	1610	54.5	1791
Hodgdon BENCHMARK	Winchester	CCI 200	49.5	1604	53.5	1785
IMR 4064	Winchester	CCI 200	51.0	1550	55.0	1720
IMR 3031	Winchester	CCI 200	49.0	1538	53.0	1706
Hodgdon H322	Winchester	CCI 200	45.0	1431	49.0	1652
Alliant Reloder 10X	Winchester	CCI 200	40.0	1483	44.0	1641
IMR 4320	Winchester	CCI 200	49.0	1442	53.0	1615
IMR 4166	Winchester	CCI 200	43.5	1443	47.8	1601
IMR 4198	Winchester	CCI 200	36.0	1361	40.0	1595
IMR SR 4759 (reduced load)	Winchester	CCI 200	26.0	1172	30.0	1343

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 $\textit{Maximum loads should be used with CAUTION} \bullet \textit{C} = \textit{Compressed Load}$ 



## 45-70 Government (Strong Actions)

.458"	45 SPFN
Weight (grains)	400
Ballistic Coefficient	0.259
Sectional Density	0.272
COAL Tested	2.540"
Speer Part No.	2479

			START	CHARGE	MAXIMUM CHARGE		
Propellant	Case	Primer	Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)	
IMR 8208	Winchester	CCI 200	58.0	1961	62.0	2107	
Hodgdon BENCHMARK	Winchester	CCI 200	57.0	1969	61.0	2102	
Accurate 2015	Winchester	CCI 200	52.0	1857	56.0 C	2029	
Hodgdon H4895	Winchester	CCI 200	56.0	1836	60.0 C	2007	
Vihtavuori N133	Winchester	CCI 200	51.0	1837	55.0	2005	
Hodgdon H335	Winchester	CCI 250	58.0	1844	62.0 C	1964	
MR 4166	Winchester	CCI 200	54.0	1813	58.2	1951	
Hodgdon H322	Winchester	CCI 200	51.0	1724	55.0	1935	
Alliant Reloder 10X	Winchester	CCI 200	47.0	1774	51.0	1929	
MR 4198	Winchester	CCI 200	42.0	1631	46.0	1819	
MR 3031	Winchester	CCI 200	50.0	1565	54.0 C	1790	
IMR 4064	Winchester	CCI 200	52.0	1601	56.0 C	1764	
IMR 4320	Winchester	CCI 200	53.0	1615	57.0	1761	
IMR SR 4759(reduced load))	Winchester	CCI 200	28.0	1349	32.0	1533	

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<sup>\*</sup>Recommend crimping case mouth into front cannelure groove.

\*This data is intended for use only in modern, Marlin 1895 rifles in good condition. Do not use this data in Springfield Trapdoor rifles.

\*The SAAMI MAP value for this cartridge is 28,000 psi. We shot the 1895 Marlin data to 42,000 psi.

\*Do not use Barnes' spitzer shaped bullets in tubular magazines.

♦ Indicates most accurate load

#### .45-70 1895 Marlin

**Bullet Style:** TSX FN **Primer:** Fed GM210M **B.C.** 0.136

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Mini	imum	Maximum			
	Powder	Charge (grains)	Velocity (fps)	Charge (grains)	Velocity (fps)	Load Density (%)	
•	VIT N120	50.0	2378	53.5	2553	98	
•	AA 1680	53.5	2413	57.5	2609	96	

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: TSX FNPrimer: Fed GM210MB.C.0.163

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Min	imum	Maximum			
		Charge	Velocity	Charge	Velocity	Load	
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)	
•	VIT N120	44.0	2162	47.5	2301	97	
	AA 1680	47.0	2230	50.0	2314	92	

#### .45-70 1895 Marlin

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: Original FNPrimer: Fed GM210MB.C.0.227

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Min	imum	Maximum		
		Charge Velocity		Charge	Velocity	Load
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
•	H4198	49.5	2254	53.5	2428	94
	AA 2230	58.0	2268	65.0	2446	99

Bullet Weight: 400 grCase Trim Length: 2.095"S.D.0.272Bullet Style: Original FNPrimer: Fed GM210MB.C.0.302

COAL: 2.515" Barrel Length: 24"

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Min	imum		Maximum	
		Charge Velocity		Charge	Velocity	Load
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
•	X-Terminator	49.5	1847	53.5	1968	98



\*Crimping is not required for single shot rifles.

\*This data is intended for use only in Ruger #1 & #3 rifles in good condition. Do not use this data in any other type of firearm.

\*The SAAMI MAP value for this cartridge is 28,000 psi. We shot the Ruger #1 data to 55,000 psi.

\*The COALs with Barnes Original Spitzer bullets, as well as with 300 and 350 grain Spitzer TSX bullets, exceed the SAAMI maximum COAL of 2.550". This is not an issue, as these bullets and loads are intended for use only in Ruger #1 and #3 single shot rifles.

♦ Indicates most accurate load

#### .45-70 Ruger No. 1

Bullet Weight: 250 grCase Trim Length: 2.095"S.D.0.170Bullet Style: TSX FNPrimer: Fed GM210MB.C.0.136

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Mini	imum	Maximum		
		Charge	Velocity	Charge	Velocity	Load
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
•	VIT N110	41.0	2444	44.0	2568	91
	SR 4759	40.0	2401	43.5	2540	105
	IMR 4227	48.5	2469	52.0	2572	101
	XMP 5744	50.0	2424	53.5	2523	102
	H4227	47.5	2550	51.0	2692	98
	AA 1680	59.0	2631	63.0	2816	105

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: Original SPPrimer: Fed GM210MB.C.0.291

COAL: 2.640" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

Minimum			Maximum			
Powder	Charge (grains)	Velocity (fps)	Charge (grains)	Velocity (fps)	Load Density (%)	
SR 4759	38.5	2190	42.0	2314	94	
VIT N120	51.5	2409	55.5	2562	94	
IMR 4227	47.0	2314	51.0	2459	92	
XMP 5744	49.0	2300	53.0	2440	94	
H4227	46.5	2344	50.0	2486	89	
AA 1680	54.0	2450	59.0	2588	91	

#### .45-70 Ruger No. 1

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: Original FNPrimer: Fed GM210MB.C.0.227

COAL: 2.515 Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

	Minimum		Maximum		
	Charge	Velocity	Charge	Velocity	Load
Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
SR 4759	38.5	2205	42.0	2322	93
VIT N120	52.0	2416	57.0	2567	95
IMR 4227	46.0	2269	51.0	2444	91
XMP 5744	48.0	2280	53.0	2430	92
H4227	45.5	2329	49.5	2467	87
AA 1680	55.0	2441	60.5	2582	92

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: TSX FBPrimer: Fed GM210MB.C.0.230

COAL: 2.770" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

	Minimum		Maximum		
	Charge	Velocity	Charge	Velocity	Load
Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
VIT N120	44.5	2195	48.5	2357	84
IMR 4227	44.0	2183	48.5	2352	90
H4227	42.0	2230	47.0	2384	86
H4198	52.5	2394	57.5	2569	105
IMR 4198	49.0	2319	54.0	2488	105
RL 7	53.0	2299	58.5	2505	105

Bullet Weight: 300 grCase Trim Length: 2.095"S.D.0.204Bullet Style: TSX FNPrimer: Fed GM210MB.C.0.163

COAL: 2.515" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Minimum		Maximum		
		Charge	Velocity	Charge	Velocity	Load
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
	SR 4759	35.5	2131	38.5	2242	103
	VIT N120	49.0	2370	51.5	2450	105
•	IMR 4227	44.0	2213	47.0	2326	101
	XMP 5744	45.0	2182	48.0	2287	102
	H4227	43.0	2273	45.5	2378	97
	AA 1680	53.0	2364	56.0	2488	104

#### .45-70 Ruger No. 1

Bullet Weight: 350 grCase Trim Length: 2.095"S.D.0.238Bullet Style: TSX FBPrimer: Fed GM210MB.C.0.271

COAL: 2.770" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Minimum		Maximum		
		Charge	Velocity	Charge	Velocity	Load
	Powder	(grains)	(fps)	(grains)	(fps)	Density (%)
	SR 4759	34.0	1831	37.0	1969	94
	VIT N120	40.5	1969	44.0	2110	85
•	IMR 4227	40.5	1964	44.5	2102	91
	XMP 5744	43.0	1954	47.0	2105	94
	H4227	40.0	1985	43.5	2122	88
	AA 1680	42.5	1986	46.5	2139	81

Bullet Weight: 400 grCase Trim Length: 2.095"S.D.0.272Bullet Style: Original FNPrimer: Fed GM210MB.C.0.302

COAL: 2.515 Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

		Minimum		Maximum		
	Powder	Charge (grains)	Velocity (fps)	Charge (grains)	Velocity (fps)	Load Density (%)
	IMR 4227	40.0	1904	42.5	2022	89
	H4227	39.5	1900	42.0	2018	87
	AA 1680	46.0	2018	50.0	2149	89
•	H4198	46.0	2009	50.0	2162	103
	IMR 4198	44.0	1988	48.0	2131	105
	RL 7	48.0	1996	52.0	2157	105

Bullet Weight: 400 grCase Trim Length: 2.095"S.D.0.272Bullet Style: Original SPPrimer: Fed GM210MB.C.0.389

COAL: 2.640" Barrel Length: 24"
Case: Starline Twist Rate: 1:20"

	Minimum		Maximum			
Powder	Charge (grains)	Velocity (fps)	Charge (grains)	Velocity (fps)	Load Density (%)	
SR 4759	33.0	1785	35.5	1905	94	
VIT N120	44.0	1982	47.5	2117	95	
IMR 4227	40.0	1911	43.0	2055	91	
XMP 5744	40.5	1888	45.0	2035	94	
H4227	39.5	1915	42.5	2055	89	
AA 1680	45.5	2006	50.0	2185	91	



#### 45 Automatic +P

Bullet Weight: 160 gr Case Trim Length: 0.888 " S.D. 0.112 Bullet Style: TAC-XP Primer: Rem 2 1/2 B.C. 0.133

COAL: 1.235 " Barrel Length: 5.00 " Case: R-P Twist Rate: 1:16 "

	Starting Load		Maximum Load	
	Charge	Velocity	Charge	Velocity
Powder	(grains)	(fps)	(grains)	(fps)
Bullseye (Alliant)	5.7	1022	6.4	1122
Titegroup (Hodgdon)	5.3	987	6.0	1111
A-No.2 (Accurate)	5.3	935	6.0	1132
Win 231 (Winchester)	6.3	1033	7.0	1124
Zip (Ramshot)	6.3	956	7.0	1108
IMR 700X (IMR)	6.1	1048	6.8	1164
A-No.5 (Accurate)	9.7	1069	10.4	1152
Power Pistol (Alliant)	8.5	1116	9.2	1186
HS-6 (Hodgdon)	10.1	1013	10.8	1202
Silhouette (Ramshot)	8.7	1131	9.4	1208

Bullet Weight: 185 gr Case Trim Length: 0.888 " S.D. 0.13
Bullet Style: TAC-XP Primer: Rem 2 1/2 B.C. 0.167

COAL: 1.235 " Barrel Length: 5.00 " Case: R-P Twist Rate: 1:16 "

	Starting Load		Maximum Load	
	Charge	Velocity	Charge	Velocity
Powder	(grains)	(fps)	(grains)	(fps)
Bullseye (Alliant)	4.7	863	5.4	975
Titegroup (Hodgdon)	4.5	863	5.2	991
A-No.2 (Accurate)	4.7	809	5.4	921
Win 231 (Winchester)	5.1	844	5.8	959
Zip (Ramshot)	5.3	843	6.0	982
IMR 700X (IMR)	4.9	839	5.6	972
A-No.5 (Accurate)	8.3	943	9.0	1021
Power Pistol (Alliant)	7.3	959	8.0	1057

## Search

# Reloading data for 45-70 Government (43,500 PSI)

**Bullet** Hornady HP (43,500 psi) 300 gr

**Bullet weight** 19.4 g / 300 gr

**B.C** 0.197

**C.O.L** 64.5 mm / 2.539

# 4500

Gunpowder	Charge Weight	Velocity m/s	Velocity fps
Norma 200	Max 60.0 Min 58.0	698 676	2290 2218
Norma 201	Max 63.0 Min 60.0	665 624	2182 2047

Bullet	Hornady RN (43,500 psi) 350 gr
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**Bullet weight** 22.7 g / 350 gr

**B.C** 0.189

**C.O.L** 64.5 mm / 2.539

# 4502

Gunpowder	Charge Weight	Velocity m/s	Velocity fps
Norma 200	Max 55.0	645	2116
	Min 50.0	582	1910
Norma 201	Max 59.0	635	2083
	Min 54.0	584	1916