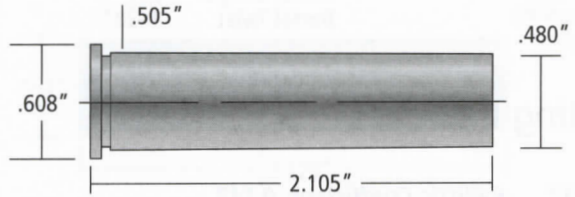
45-70 Government Trapdoor



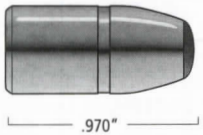
Origin	USA
Ammunition Available	1873
Bullet Diameter	0.457"
Maximum Cartridge O.A.L.	2.550"
Maximum Case Length	2.105"
Trim Length	2.095"

Bullet Specifications

A-Frame™ Flat Nose (.457" diameter)

Grain Weight

350 F/N



B.C. .172
Sec. Den. .238

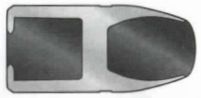
Loaded Cartridge Example

A-Frame™ F/N
(350 grain)

About the Cartridge

The 45-70 is one of the oldest cartridges that remains popular. Most old rimmed cartridges have long since become obsolete, but the 45-70 started making a comeback after years of only minor interest. The round was introduced in the Model 1873 "Trapdoor" Springfield rifle. Adopted by the U.S. military as the standard service cartridge, it was destined to be chambered by most major gun makers early on. Today's 45-70 rifles are far stronger than those made in the late 1800s. Because the 45-70 was introduced when firearms were not nearly as strong as those made today, pressure specifications for this old round are relatively mild by today's standards. Since this cartridge was initially chambered so long ago, it is imperative that you make certain your 45-70 rifle is inspected by a competent gunsmith before firing. Only those rifles in excellent condition warrant consideration for firing. Old guns are best left unfired.

Reloading Data
350 Grain A-Frame™ F/N



Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	350	*H-4198	39.0	1574	42.0	1728	73%
	350	H-4895	49.2	1639	53.0	1833	92%
	350	BL-C(2)	55.8	1676	60.0	1833	105%
Alliant Powder Company							
Swift A-Frame	350	RL-7	33.0	1394	35.5	1575	62%
	350	RL-10x	39.0	1516	42.0	1643	73%
	350	RL-15	51.1	1639	55.0	1819	96%
IMR Powder Company							
Swift A-Frame	350	IMR-3031	46.5	1577	50.0	1737	87%
	350	IMR-4198	39.0	1652	42.0	1768	73%
	350	IMR-4895	47.8	1555	51.5	1712	90%

**Lowest Standard Deviation on Velocity*

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

45-70 Government Trapdoor
350 Grain A-Frame™ F/N

Test Components

Case	Remington	**Barrel Length**	24"
Primer	Federal 210	**Barrel Twist**	1–20"
Test Barrel	Wiseman		

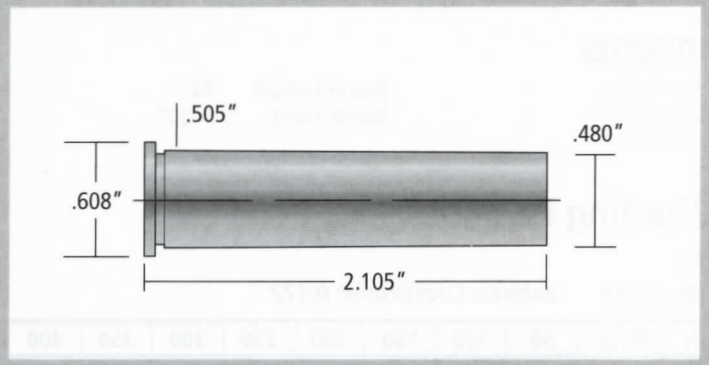
Optimum Hunting Ballistics

100 yard zero

Sectional Density: 0.238 ***Ballistic Coefficient: 0.172***

Distance in Yards	Muzz.	50	100	150	200	250	300	350	400
Velocity	**1650**	1466	1306	1176	1078	1007	952	907	867
Energy	2116	1671	1326	1075	904	789	705	639	585
Bullet Path	-1.5	**+1.3**	**zero**	-6.4	-19.0	-39.2	-67.9	-106.1	-154.9
Deflection @ 10 MPH	--	1.0	4.1	9.4	16.9	26.3	37.3	49.7	63.5
Velocity	**1700**	1511	1344	1206	1100	1024	965	918	877
Energy	2247	1774	1405	1130	941	815	724	655	598
Bullet Path	-1.5	**+1.2**	**zero**	-6.0	-17.9	-37.1	-64.5	-101.2	-148.3
Deflection @ 10 MPH	--	1.0	4.0	9.2	16.6	26.0	37.1	49.6	63.6
Velocity	**1750**	1556	1383	1237	1123	1041	979	929	887
Energy	2381	1882	1487	1190	981	842	745	671	611
Bullet Path	-1.5	**+1.1**	**zero**	-5.6	-16.9	-35.1	-61.2	-96.5	-141.8
Deflection @ 10 MPH	--	0.9	3.8	9.0	16.3	25.7	36.8	49.4	63.5
Velocity	**1800**	1601	1423	1270	1148	1058	992	940	896
Energy	2519	1993	1574	1254	1025	871	766	687	625
Bullet Path	-1.5	**+1.0**	**zero**	-5.3	-15.9	-33.2	-58.2	-92.0	-135.6
Deflection @ 10 MPH	--	0.9	3.7	8.7	16.0	25.3	36.4	49.1	63.2
Velocity	**1850**	1647	1463	1304	1174	1077	1006	952	906
Energy	2661	2108	1664	1321	1071	902	787	704	638
Bullet Path	-1.5	**+0.9**	**zero**	-4.9	-15.0	-31.3	-55.2	-87.6	-129.6
Deflection @ 10 MPH	--	0.9	3.6	8.5	15.6	24.8	36.0	48.7	62.9

45-70 Government Lever Action



Origin	**USA**
Ammunition Available	**1873**
Bullet Diameter	**0.457″**
Maximum Cartridge O.A.L.	**2.550″**
Maximum Case Length	**2.105″**
Trim Length	**2.095″**

Bullet Specifications

A-Frame™ Flat Nose (.457″ diameter)

Grain Weight

350 F/N

B.C. .172
Sec. Den. .238

Loaded Cartridge Example

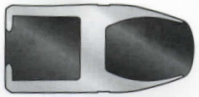
A-Frame™ F/N
(350 grain)

About the Cartridge

The 45-70 Government was introduced in 1873, when neither rifle nor cartridge brass design was as efficient and strong as it is today. Because there are many thousands of old firearms from the early days still in service, factory loads and data for all 45-70 rifles must be in line with the relatively low strength of these old guns. Not only has the design of rifle and cartridge cases improved, but metals, both in rifle and cartridge case construction, have improved greatly during the last 140 years. Today's rifles and carbines, such as the new (relatively speaking) and popular Marlin lever guns will handle moderately higher pressure for improved performance. For this reason, Swift has developed special loads that are appropriate for these modern Marlin lever guns. The loads in this section are intended only for modern rifles with actions at least as strong as today's Marlin Model 1895.

Reloading Data

350 Grain A-Frame™ F/N



Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	350	H-4198	46.5	1921	50.0	2118	87%
	350	H-4895	55.8	1912	60.0	2118	105%
	350	Benchmark	55.3	2053	59.5	2172	104%
Alliant Powder Company							
Swift A-Frame	350	RL-7	46.9	1894	50.5	2050	88%
	350	RL-10x	46.5	1844	50.0	1985	87%
IMR Powder Company							
Swift A-Frame	350	IMR-4198	46.0	1964	49.5	2088	86%
	350	*IMR-8208XBR	54.4	1916	58.5	2064	102%

Lowest Standard Deviation on Velocity

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

45-70 Govt Lever Action

350 Grain A-Frame™ F/N

Test Components

Case	Remington	**Barrel Length**	24"
Primer	Federal 210	**Barrel Twist**	1–20"
Test Barrel	Wiseman		

Optimum Hunting Ballistics

100 yard zero

Sectional Density: 0.238 ***Ballistic Coefficient: 0.172***

Distance in Yards	Muzz.	50	100	150	200	250	300	350	400
Velocity	**2000**	1785	1588	1411	1260	1141	1053	988	937
Energy	3109	2477	1959	1548	1234	1011	862	759	682
Bullet Path	-1.5	**+0.6**	**zero**	-4.1	-12.5	-26.5	-47.1	-75.5	-112.9
Deflection @ 10 MPH	--	0.8	3.3	7.7	14.3	23.2	34.1	46.9	61.1
Velocity	**2050**	1832	1630	1448	1291	1164	1070	1001	947
Energy	3267	2608	2065	1631	1296	1054	890	779	698
Bullet Path	-1.5	**+0.6**	**zero**	-3.8	-11.8	-25.0	-44.7	-71.9	-107.7
Deflection @ 10 MPH	--	0.7	3.2	7.5	13.9	22.6	33.4	46.1	60.4
Velocity	**2100**	1878	1673	1486	1323	1189	1088	1015	958
Energy	3428	2743	2175	1717	1361	1100	921	800	714
Bullet Path	-1.5	**+0.5**	**zero**	-3.6	-11.2	-23.7	-42.4	-68.4	-102.8
Deflection @ 10 MPH	--	0.7	3.0	7.2	13.5	22.0	32.7	45.3	59.5
Velocity	**2150**	1925	1716	1525	1356	1216	1107	1029	970
Energy	3593	2881	2288	1808	1430	1149	953	823	731
Bullet Path	-1.5	**+0.4**	**zero**	-3.4	-10.5	-22.4	-40.2	-65.0	-98.1
Deflection @ 10 MPH	--	0.7	2.9	7.0	13.1	21.4	31.9	44.4	58.6
Velocity	**2200**	1972	1759	1564	1390	1243	1128	1044	981
Energy	3762	3023	2406	1902	1503	1201	989	847	748
Bullet Path	-1.5	**+0.4**	**zero**	-3.2	-10.0	-21.2	-38.1	-61.8	-93.5
Deflection @ 10 MPH	--	0.7	2.9	6.8	12.7	20.8	31.1	43.5	57.6