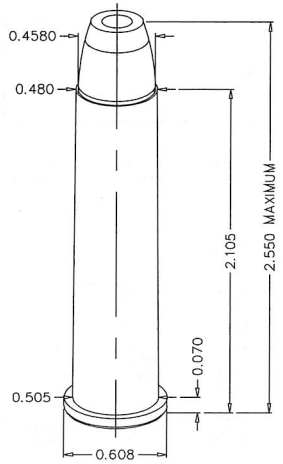
45-70 Government



Test Specifications/ Components

Twist: 1 x 22"
Trim-to Length: 2.095"

Remarks:

The .45-70 Government was one of the last big-bore black powder cartridges adopted for U.S. military service. Originally designated the .45-70-500, this straight-wall .45 caliber cartridge was loaded with 70 grains of black powder and a 500 grain lead bullet. Designed for the full size infantry model of the Springfield Model 1873 Trap-door rifle, this load developed too much recoil when fired in the relatively light carbine issued to mounted troops. In response to complaints about this, Frankford Arsenal began loading the same case with a reduced charge of 55 grains of black powder and a 405 grain lead bullet. Known as the .45-55-405, this load was completely interchangeable with the .45-70 and could be used in either the rifle or carbine.

Any cartridge adopted as our standard service round is virtually guaranteed to be a commercial success, and the .45-70 is no exception. Today, over 120 years after its introduction, the .45-70 remains a popular sporting cartridge. At this time, at least four of our major U.S. arms manufacturers are still chambering rifles for the .45-70 Government cartridge. Lever actions and single shot falling block actions are among the most common, but there are several handguns being chambered for it as well! It would be very interesting to hear what the old cavalry troopers would think of this cartridge in a handgun, after objecting to the .45-70's recoil in a rifle.

Data for the .45-70 is presented in a slightly different format, due to the tremendous difference in action strength of various guns chambered for the cartridge. With the action types used with the .45-70, it might almost be thought of as three entirely different cartridges. Maximum loads for an original trapdoor 1873 Springfield will be fairly mild in a Marlin 1895 or Ruger Number One. Conversely, heavy loads for the Ruger will most likely destroy one of the less robust designs. In the middle, we have such actions as the Winchester Model 1886, Remington-Lee Repeater, and the Navy Arms Rolling Block. Loads for the .45-70 must be appropriate for the action type used. If the handloader has several rifles chambered for the .45-70, especially if they are of differing levels of strength, extreme caution must be used to avoid using the wrong combination of rifle and ammunition. The .45-70 is an excellent cartridge and despite its age, is still one of our better cartridges for truly heavy game at moderate ranges.

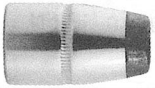
45-70 Government continued

Test Specifications/ Components

Firearm Used: Model 1873 Trapdoor Springfield
Barrel Length: 32 1/2"
Case: R-P
Primer: Remington 9 1/2

1. Loads for the Model 1873 Springfield, Remington Rolling Block, other old black powder rifles, replicas, and modern reproductions.

#8900 .458" 300 grain HP/FN
C.O.A.L. 2.525"



Powder↓/Velocity→	1450	1500	1550	1600	1650	1700
2400	24.5	25.6	26.7	27.7	28.7	29.7
IMR-4227	26.8	28.1	29.4	30.7	32.0	
IMR-4198	31.1	32.4	33.6	34.8	36.0	
IMR-3031	38.4	40.1	41.8	43.5		
Energy/ft.lbs.	**1400**	**1499**	**1600**	**1705**	**1813**	**1925**

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4198	33.6	1550	1600
Hunting Load	IMR-4198	36.0	1650	1813

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

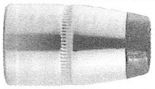
45-70 Government continued

Test Specifications/ Components

Firearm Used: Model 1886 Winchester
Barrel Length: 26"
Case: R-P
Primer: Remington 9 1/2

2. Loads for the Model 1886 Winchester, Sharps-Borchardt, Remington and Navy Arms Rolling Block designs.

#8900 .458" 300 grain HP/FN
C.O.A.L. 2.525"



Powder↓/Velocity→	1550	1600	1650	1700	1750	1800	1850
2400			29.8	30.8	31.8	32.7	33.6
IMR-4227		31.8	32.9	34.0	35.0	36.0	37.0
IMR-4198	36.3	37.3	38.3	39.2	40.1	41.0	
IMR-3031	42.8	44.1	45.4	46.7	48.0	49.2	
IMR-4895	47.5	48.4	49.3	50.2	51.1	52.0	
IMR-4320	47.7	49.0	50.3	51.6	52.8	54.0	
Energy/ft.lbs.	**1600**	**1705**	**1813**	**1925**	**2040**	**2158**	**2279**

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4198	39.2	1700	1925
Hunting Load	IMR-4198	41.0	1800	2158

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

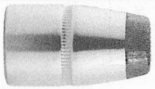
45-70 Government continued

Test Specifications/ Components

Firearm Used: Model 1895 Marlin
Barrel Length: 22"
Case: Federal
Primer: Fed 210

3. Loads for the Model 1895 Marlin and Ruger No. 1 and No. 3 rifles, and Siamese Mauser bolt action.

#8900 .458" 300 grain HP/FN
C.O.A.L. 2.525"



Powder↓/Velocity→	1900	1950	2000	2050	2100	2150	2200
2400	36.9	37.9	38.9	39.9	40.9		
Viht N120			46.5	47.5	48.5	49.5	
IMR-4227	42.4	43.5	44.6				
H4198	48.9	49.8	50.7	51.6	52.5	53.4	54.3
IMR-4198	45.5	46.6	47.7	48.8	49.9	51.0	
XMR-2015		54.9	56.2	57.5			
RE-7		48.8	50.3	51.8	53.3		
IMR-3031	56.1	57.4	58.7	60.0			
Benchmark	55.5	56.5	57.5	58.5	59.5	60.5	61.5
X-Terminator		51.8	53.6	55.4	57.2	59.0	
H335			57.6	59.1	60.6	62.1	63.6
H4895	57.3	59.6	61.9				
IMR-4895	58.7	59.9	61.1				
Varget	59.9	61.5	63.1				
Energy/ft.lbs.	**2405**	**2533**	**2665**	**2800**	**2938**	**3080**	**3224**

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4198	49.9	2100	2938
Hunting Load	H4198	54.3	2200	3224

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