

45-70 GOVERNMENT

Test Specifications:

Twist: 1 x 22"

Components:

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, 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

Test Specifications:

Firearm Used: Model 1873 Trapdoor Springfield

Barrel Length: 32 1/2"


Components:

Case: R P

Primer: Remington 9 1/2

Remarks:

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

Bullet Caliber Weight Type								C.O.A.L.
	#8900	.458"	300gr.	HP/FN				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	
Special Load	Powder	Grains	Velocity fps	Energy Ft. lb				
Accuracy Load	IMR 4198	33.6	1550	1600				
Hunting Load	IMR 4198	36.0	1650	1813				

45-70 GOVERNMENT

Test Specifications:

Firearm Used: Model 1886 Winchester

Barrel Length: 26"


Components:

Case: R P

Primer: Remington 9 1/2

Remarks:

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

Bullet	Caliber	Weight	Type	C.O.A.L.					
	#8900	.458"	300gr.	HP/FN	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		
Special Load	Powder	Grains	Velocity fps	Energy Ft. lb					
Accuracy Load	IMR 4198	39.2	1700	1925					
Hunting Load	IMR 4198	41.0	1800	2158					

45-70 GOVERNMENT

Test Specifications:

Firearm Used: Model 1895 Marlin

Barrel Length: 22"


Components:

Case: Federal

Primer: Fed 210

Remarks:

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

	Bullet	Caliber	Weight	Type	C.O.A.L.			
	#8900	.458"	300gr.	HP/FN	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		2404	2533	2664	2799	2937	3079	3224
Special Load	Powder	Grains	Velocity fps	Energy Ft. lb				
Accuracy Load	IMR 4198	49.9	2100	2937				
Hunting Load	H4198	54.3	2200	3224				