## 30-06 Springfield

It is safe to say that the 30-06 Springfield is the most successful centerfire cartridge ever developed. Born for battle, it is one of the world's most respected sporting cartridges.

The U.S. military adopted its first rimless 30-caliber service cartridge in 1903 in the famous Model 1903 Springfield service rifle. However, this wasn't the 30-06 we know today. The transitional cartridge is sometimes called the "30-03" to clearly separate it from the final version adopted. Ballistically, the 30-03 was similar to the 30-40 Krag, using the same 220-grain bullet at only slightly higher velocity. In 1906, the cartridge was changed to incorporate a lighter spitzer bullet at higher velocity. Case dimensions were also changed enough to designate the improved version as a different cartridge. Pre-1906 service rifles were modified to shoot the new version. The new cartridge was designated "Ball Cartridge, Caliber 30, Model of 1906." Fortunately, this rather lengthy name was shortened to "30-06" for commercial use.

Almost every U.S. military service cartridge has been a commercial success, and the 30-06 is no exception. Hunters found that its power—quite impressive for 1906—made the 30-06 a versatile game cartridge. It has been used on every species of North American game and has also proved effective on many African plains animals.

Factory ammunition is loaded with a wide range of bullet weights from 125-grain soft points for varmints to the long, 220-grain bullets for large game. The most popular weights for big game fall between 150 and 180 grains. Although somewhat underpowered for the great bears, the 30-06 has been used on them anyway (with varying degrees of success). Normally, bullets capable of deep penetration, such as the 200-grain Trophy Bonded<sup>®</sup> Bear Claw<sup>®</sup>, would be chosen for bear. However, we strongly encourage using larger bores and heavier bullets for big and dangerous bruins.

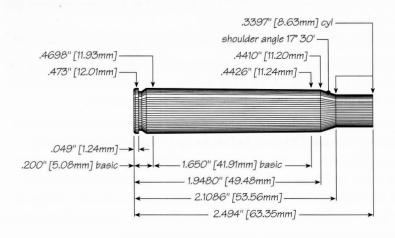
The 30-06 with the Speer 165-grain flat base or boat tail bullet is a flat-shooting cartridge for most western deer hunting. The cartridge can handle the full range of 30-caliber Trophy Bonded Bear Claws for tougher game. The same cartridge loaded with a 180-grain round nose is quite at home in dense eastern woods. Load the 125grain TNT° and you're ready for long shots on varmints. For formal target shooting, the Speer 168-grain match hollow point will print tight groups at long ranges. Are you teaching a youngster how to shoot a centerfire rifle? Load the 100-grain Speer Plinker

at 2000 ft/sec and you have a low-recoil training round. Larger cases make loading accurate reduced loads difficult. The 30-06 case seems to be about the largest 30-caliber case that still allows loading efficient reduced loads.

For the North American hunter who wants one rifle to use on a wide variety of game, the 30-06 is still hard to beat. Velocities are only 200 to 400 ft/sec behind the big 30caliber magnums and the 30-06 uses much less powder and kicks less.

From a handloader's standpoint, the 30-06 is the #1 cartridge in reloading die sales. Thus, one hundred years after its introduction, the 30-06 remains one of the most effective and flexible cartridges on the shooting scene.

The following data do not exceed the industry maximum average pressure of 50,000 CUP.



Max. Case Length:	2.494"	Cart. Case:	Winchester
Trim-to Length:	2.484"	Primer:	CCI 200; 250*
Max Cart. OAL:	3.340"	Test Firearm:	Remington 700
RCBS Shell Holder:	#3	Barrel Length:	22"

NOTE: CCI No. 34 primers may be substituted for CCI 250.



0.308"	30 RNSP
Weight, grains	100
<b>Ballistic Coefficient</b>	0.144
Sectional Density	0.151
COAL Tested:	2.935"
Speer Part No.	1805

	S	TART CHARGE	MAXIMUM CHARGE		
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
IMR 3031	53.0	3199	57.0	3448	
IMR 4064	55.0	3152	59.0	3390	
H335*	54.0	3099	58.0	3326	
748*	56.0	3117	60.0	3313	
IMR 4895	51.0	3028	55.0	3268	
IMR 4320	54.0	3000	58.0	3236	
H322	48.0	2943	52.0	3216	
Reloder 7	43.0	2837	47.0	3188	
SR 4759 (reduced load)	16.0	1548	20.0	1960	



0.308"	30 HP
Weight, grains	110
<b>Ballistic Coefficient</b>	0.128
Sectional Density	0.166
COAL Tested:	2.870"
Speer Part No.	1835

5.00	START CHARGE		MAXIMUM CHARGE		
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
760*	52.0	2651	56.0	2865	
748*	44.5	2601	48.5	2850	
IMR 4350	54.0	2621	58.0	2835	
IMR 3031	42.5	2572	46.5	2833	
IMR 4895	44.0	2560	48.0	2810	
Reloder 7	38.0	2514	42.0	2799	
H322	41.0	2504	45.0	2735	
BL-C(2)*	48.0	2511	52.0	2732	
IMR 4227 (reduced load)	29.0	2297	31.0	2475	

NOTE: This bullet not intended for velocities in excess of 2900 fps.







0.308"	30 RNSP	30 TMJ RN	30 Spire SP
Weight, grains	110	110	110
<b>Ballistic Coefficient</b>	0.136	0.179	0.245
Sectional Density	0.166	0.166	0.166
COAL Tested:	2.915"	2.915"	3.000"
Speer Part No.	1845	1846	1855

	S	TART CHARGE	MAX	(IMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
748*	58.0	3151	62.0C	3356	
Reloder 15	56.0	3077	60.0C	3307	
AA 2460*	51.0	3082	55.0	3293	
AA 2520*	52.0	3096	56.0	3288	
Varget	55.0	3018	59.0C	3258	
IMR 4064	54.0	2924	58.0	3212	
Viht. N135	51.0	3003	55.0	3206	
AA 2495	51.0	2909	55.0	3167	
IMR 4320	53.0	2891	57.0	3088	
IMR 4895	50.5	2869	54.5	3080	
H4895	49.0	2818	53.0	3076	
BL-C(2)*	51.0	2779	55.0	3050	
H322	46.0	2754	50.0	2901	
AA 5744 (reduced load)	26.0	1956	27.0	2033	



0.308"	30 TNT HP
Weight, grains	125
<b>Ballistic Coefficient</b>	0.341
Sectional Density	0.188
COAL Tested:	3.100"
Speer Part No.	1986

	ST	START CHARGE		KIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
AA 2460*	49.0	2932	53.0	3129	
IMR 3031	50.0	2824	54.0	3118	
Viht. N135	49.0	2807	53.0	3069	
AA 2015	46.0	2866	50.0	3064	
BL-C(2)*	51.0	2836	·55.0	3060	
AA 2495	50.0	2838	54.0	3059	
AA 2230	47.0	2849	51.0	3057	
H335*	51.0	2834	55.0	3047	
AA 2520*	48.0	2829	52.0	3039	
Varget	51.5	2729	55.5	2993	
H4895	47.0	2708	51.0	2982	
IMR 4320	51.0	2728	55.0	2968	
IMR 4895	48.0	2742	52.0	2959	
H322	44.0	2687	48.0	2877	





30 HP	30 FNSP		
130	130		
0.244	0.212		
0.196	0.196		
3.060"	3.045"		
2005	2007		
	HP 130 0.244 0.196 3.060"	HP FNSP 130 130 0.244 0.212 0.196 0.196 3.060" 3.045"	

	S	TART CHARGE	MAX	KIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
AA 2460*	47.5	2769	51.0	2987	
IMR 4064	51.0	2767	55.0	2979	
H414*	56.0	2752	60.0	2969	
Varget	51.0	2737	55.0	2963	
AA 2015	45.0	2768	49.0	2961	
IMR 3031	48.5	2647	52.5	2960	
H335*	50.0	2724	54.0	2937	
IMR 4895	47.5	2695	51.5	2897	
748*	51.0	2695	55.0	2871	
BL-C(2)*	49.0	2667	53.0	2855	
Viht. N140	48.0	2640	52.0	2830	
H4895	45.0	2624	49.0	2730	
H322	43.0	2519	47.0	2723	
AA 5744 (reduced load)	25.0	1814	27.0	1941	













0.308"	30 RNSP	30 FMJ BT	30 Spitz BTSP	30 Spitz SP	30 MT SP	30 GS SP
Weight, grains	150	150	150	150	150	150
<b>Ballistic Coefficient</b>	0.235	0.425	0.417	0.377	0.278	0.295
Sectional Density	0.226	0.226	0.226	0.226	0.226	0.226
COAL Tested:	3.130"	3.295"	3.250"	3.250"	3.165"	3.160"
Speer Part No.	2017	2018	2022	2023	2025	2026

	START CHARGE		MAX	KIMUM CHARGE
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
H380*	54.0	2658	58.0	2847
IMR 4350	55.0	2591	59.0	2834
Viht. N540	45.0	2633	49.0	2829
H414*	54.0	2603	58.0	2803
Varget	49.0	2559	53.0	2781
760*	53.0	2531	57.0	2778
H4350	55.0	2514	59.0C	2765
IMR 4064	48.0	2520	52.0	2738
Reloder 15	48.0	2523	52.0	2728
IMR 4895	45.5	2516	49.5	2722
Reloder 19	58.0	2521	62.0C	2722
AA 2460*	44.0	2557	48.0	2716
H4895	42.0	2427	46.0	2572
AA 5744 (reduced load)	26.0	1933	28.0	2052

## Lab Notes:

Look at the H4895 data above. The start load of 42.0 grains is only slightly faster than the same bullet weight in the 30-30 Winchester with the same bullet weight. This is an excellent hunting load for new shooters or those who are recoil-sensitive.



0.308"	30 TBBC SP
Weight, grains	150
<b>Ballistic Coefficient</b>	0.335
Sectional Density	0.226
COAL Tested:	3.250"
Speer Part No.	1759

	S	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
760*	55.0	2807	59.0	2985	
IMR 4350	56.0	2768	60.0C	2971	
H4350	54.0	2783	58.0	2954	
Viht. N540	48.0	2737	52.0	2918	
Reloder 19	58.0	2715	62.0C	2911	
Varget	47.0	2673	51.0	2875	
Reloder 15	47.0	2663	51.0	2867	



Dave Pupo, Machine Shop, CCI/Speer Operations; 300 WSM 180-grain Fusion® ammo; Alaskan caribou.

Maximum Loads should be used with CAUTION • C = Compressed Load • \* Magnum Primer used with this powder.







0.308"	30 Spitz BTSP	30 Spitz SP	30 GS SP
Weight, grains	165	165	165
<b>Ballistic Coefficient</b>	0.520	0.444	0.354
Sectional Density	0.248	0.248	0.248
COAL Tested:	3.250"	3.250"	3.165"
Speer Part No.	2034	2035	2038

No. of the least	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
760*	53.0	2601	57.0	2803
H4831SC	60.0	2508	62.0C	2772
IMR 4350	54.0	2476	58.0	2747
Viht. N540	43.0	2570	47.0	2740
Reloder 22	58.0	2504	62.0C	2725
H4350	54.0	2464	58.0C	2724
H414*	52.0	2494	56.0	2723
H380*	51.0	2517	55.0	2707
Varget	46.0	2438	50.0	2671
IMR 4831	55.0	2419	59.0	2670
Viht. N140	46.0	2465	50.0	2663
IMR 4064	46.5	2410	50.5	2640
Reloder 19	55.0	2351	59.0C	2614
AA 2520*	42.0	2333	46.0	2595
SR 4759 (reduced load)	21.0	1616	25.0	1941



0.308"	30 TBBC SP
Weight, grains	165
<b>Ballistic Coefficient</b>	0.342
Sectional Density	0.248
COAL Tested:	3.290"
Speer Part No.	1760

Propellant	S	START CHARGE		MAXIMUM CHARGE	
	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec	
760*	53.0	2601	57.0	2803	
H4831SC	60.0	2508	62.0C	2772	
IMR 4350	54.0	2476	58.0	2747	
Viht. N540	43.0	2570	47.0	2740	
Reloder 22	58.0	2504	62.0C	2725	
H4350	54.0	2464	58.0C	2724	



0.308"	30 Match BTHP
Weight, grains	168
<b>Ballistic Coefficient</b>	0.534
Sectional Density	0.253
COAL Tested:	3.295"
Speer Part No.	2040

Propellant	S	START CHARGE		KIMUM CHARGE
	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Viht. N160	57.0	2581	61.0	2825
H4350	56.0	2563	60.0C	2795
IMR 4350	55.0	2558	59.0	2782
†H380*	51.0	2454	55.0	2736
IMR 7828*	58.0	2547	62.0	2706
Reloder 19	57.0	2464	61.0C	2697
H4831*	57.0	2426	61.0C	2661
IMR 4831*	56.0	2376	60.0	2633
H414*	50.0	2429	54.0	2633
760*	50.0	2389	54.0	2628
†IMR 4895	44.0	2437	48.0	2605
†IMR 4064	45.0	2367	49.0	2549

<sup>†-</sup>denotes propellant suitable for gas-operated semi-auto match rifles.











0.308"	30 RNSP	30 Spitz BTSP	30 Spitz SP	30 MT SP	30 GS SP
Weight, grains	180	180	180	180	180
<b>Ballistic Coefficient</b>	0.312	0.545	0.411	0.349	0.374
Sectional Density	0.271	0.271	0.271	0.271	0.271
COAL Tested:	3.130"	3.250"	3.160"	3.160"	3.160"
Speer Part No.	2047	2052	2053	2059	2063

TOTAL STATE OF	START CHARGE		MAX	KIMUM CHARGE
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
H4350	54.0	2640	58.0C	2756
IMR 4064	46.0	2583	50.0	2756
Reloder 22	58.0	2618	62.0C	2721
H4831SC	60.0	2581	62.0C	2719
IMR 4831	55.0	2544	59.0C	2684
760*	51.0	2540	55.0	2677
H414*	51.0	2545	55.0	2673
Reloder 19	55.0	2458	59.0C	2640
IMR 4350	52.0	2497	56.0C	2639
AA 4350	53.0	2445	57.0C	2615
Viht. N160	52.0	2331	56.0	2556
Reloder 15	45.0	2411	49.0	2551
IMR 4895	43.0	2365	47.0	2537
IMR 4198 (reduced load)	26.0	1723	30.0	2000



0.308"	30 TBBC SP
Weight, grains	180
<b>Ballistic Coefficient</b>	0.357
Sectional Density	0.271
COAL Tested:	3.320"
Speer Part No.	1765

Propellant	START CHARGE		MAXIMUM CHARGE	
	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
IMR 7828	58.0C	2627	60.0C	2729
H4350	52.0	2630	54.0	2707
Reloder 22	56.0	2616	58.0C	2699
H4831SC	57.0	2606	59.0C	2689
IMR 4350	52.0	2568	54.0	2666
760*	51.0	2574	53.0	2658
Viht. N540	46.0	2518	48.0	2615





0.308"	30 Spitz SP	30 GS SP
Weight, grains	200	200
<b>Ballistic Coefficient</b>	0.478	0.453
Sectional Density	0.301	0.301
COAL Tested:	3.295"	3.160"
Speer Part No.	2211	2212

"y" rhand	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
H4350	53.0	2337	57.0C	2554
Reloder 22	54.0	2263	58.0C	2499
Reloder 25	58.0	2357	60.0C	2481
H414*	49.0	2319	53.0	2453
IMR 4350	50.0	2247	54.0	2449
H4831SC	53.0	2219	57.0C	2447
IMR 4831	52.0	2283	56.0C	2429
Viht. N160	50.0	2198	54.0	2386
Reloder 15	43.0	2203	47.0	2371
H1000	57.0	2152	61.0C	2371
H380*	46.0	2162	50.0	2361
760*	47.0	2240	51.0	2348
Reloder 19	51.0	2158	55.0	2335
IMR 4064	42.0	2146	46.0	2312
IMR 4198 (reduced load)	27.0	1721	31.0	1988



0.308"	30 TBBC SP		
Weight, grains	200		
<b>Ballistic Coefficient</b>	0.392		
Sectional Density	0.301		
COAL Tested:	3.330"		
Speer Part No.	1770		

Propellant	START CHARGE		MAXIMUM CHARGE	
	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Reloder 25	56.0	2481	58.0C	2571
Reloder 22	53.0	2433	55.0	2515
IMR 7828	53.0	2416	55.0	2502
H4350	48.0	2386	50.0	2462
H4831SC	52.0	2367	54.0	2447
IMR 4350	48.0	2357	50.0	2447
AA 3100	52.0	2353	54.0	2443