The Complete Reloading Manual for the .338 Lapua Magnum

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TABLE OF CONTENTS
.338 LAPUA MAGNUM

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This new manual contains the most up-to-date reloading information available. Volume 10 contains the loading formulas for all Hornady rifle and pistol bullets. Ballistic tables and charts are available at www.hornady.com. This volume is available at your reloading dealer.

Hornady

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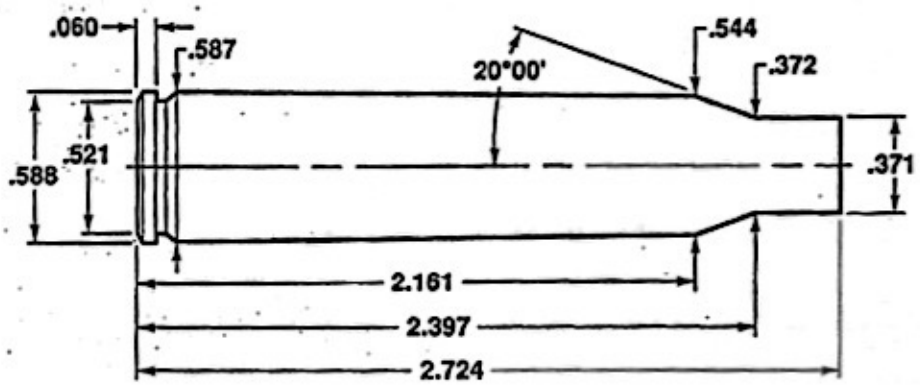

338 LAPUA MAGNUM

RIFLE:	Sako 995	**BULLET DIAMETER:**	0.338"
BARREL:	24½", 1 in 9" Twist	**MAXIMUM C.O.L.:**	3.681"
CASE:	Lapua	**MAX. CASE LENGTH:**	2.724"
PRIMER:	Federal 215	**CASE TRIM LENGTH:**	2.714"

First Edition Hornady Handbook coverage of 338 caliber cartridges was simple, succinct, and basic. At the end of the 1960s there were only two 338s to talk about, the 338 Winchester Magnum (introduced in 1958) and the 340 Weatherby Magnum (introduced in 1962). This new handbook features ten 338s. Clearly there is a trend here; 338 caliber is coming into its own as a preferred North American big game caliber.

As the 338 LAPUA Magnum indicates, the trend has a European side, too. Developed in Finland at the Cartridge Factory LAPUA, Ltd., the new cartridge was introduced in 1987. While it was initially to have been based on a necked-down 416 Rigby case, it required a totally new case to accommodate the pressures first encountered.

The 338 LAPUA Magnum gained its first advocates among military and police SWAT units as a long range sniper cartridge. Effective at 1000 meters, it easily fulfilled original design intentions. Its flat trajectory, accuracy, and ability to deliver abundant energy over great ranges did not go unnoticed by Finnish and Swedish hunters, who favored powerful medium-bore cartridges on moose and bear.

Hornady has recently developed a new 338 285 grain BTHP specifically for the 338 LAPUA Magnum. In our testing it worked best with H 1000 and Retumbo propellants. Additionally Hornady is manufacturing top quality cartridge brass and ammunition for the 338 LAPUA Magnum.

.338 LAPUA MAG. - HORNADY BULLETS

225 GRAIN BULLETS

SECTIONAL DENSITY: 0.281
DIAMETER: 0.338"

225 gr. InterBond®
B.C.: 0.515 C.O.L.: 3.565"
Item No. 33209

225 gr. SST®
B.C.: 0.515 C.O.L.: 3.565"
Item No. 33202

225 gr. InterLock® SP-RP
B.C.: 0.397 C.O.L.: 3.565"
Item No. 3320

VELOCITY (FPS – feet per second)						
POWDER	**2500**	**2600**	**2700**	**2800**	**2900**	**3000**
IMR 4831	74.8 gr.	77.6 gr.	80.4 gr.	83.2 gr.	86.1 gr.	
H4350	76.2 gr.	78.9 gr.	81.7 gr.	84.4 gr.	87.2 gr.	
VIHT N-160	75.5 gr.	78.5 gr.	81.5 gr.	84.5 gr.	87.5 gr.	
Alliant RL-19	78.0 gr.	80.7 gr.	83.6 gr.	86.3 gr.	89.0 gr.	91.8 gr.
Alliant RL-22	80.8 gr.	83.3 gr.	85.7 gr.	88.2 gr.	90.7 gr.	93.2 gr.
H4831	81.9 gr.	84.5 gr.	87.2 gr.	89.9 gr.	92.5 gr.	95.2 gr.
IMR 7828	82.6 gr.	85.1 gr.	87.6 gr.	90.1 gr.	92.6 gr.	
VIHT N-165	81.7 gr.	84.4 gr.	87.2 gr.	89.9 gr.	92.7 gr.	
H1000	86.4 gr.	88.9 gr.	91.5 gr.	94.0 gr.	96.6 gr.	

Hornady ballistics tables are available at hornady.com/ballistics

250 GRAIN BULLETS

SECTIONAL DENSITY: 0.313
DIAMETER: 0.338"

250 gr. BTHP Match
B.C.: 0.670 C.O.L.: 3.565"
Item No. 33361

250 gr. InterLock® SP-RP
B.C.: 0.431 C.O.L.: 3.565"
Item No. 3335

250 gr. InterLock® RN
B.C.: 0.291 C.O.L.: 3.575"
Item No. 3330

VELOCITY (FPS – feet per second)						
POWDER	**2300**	**2400**	**2500**	**2600**	**2700**	**2800**
Alliant RL-19	72.1 gr.	75.3 gr.	78.4 gr.	81.5 gr.	84.6 gr.	87.8 gr.
Alliant RL-22	74.3 gr.	77.3 gr.	80.4 gr.	83.5 gr.	86.6 gr.	89.6 gr.
H4831	75.7 gr.	78.7 gr.	81.8 gr.	84.8 gr.	87.9 gr.	90.9 gr.
IMR 7828	78.9 gr.	81.6 gr.	84.3 gr.	87.0 gr.	89.7 gr.	92.4 gr.
VIHT N-165	75.9 gr.	79.5 gr.	83.0 gr.	86.6 gr.	90.2 gr.	93.7 gr.
H1000	77.9 gr.	81.6 gr.	85.2 gr.	88.9 gr.	92.6 gr.	

Hornady ballistics tables are available at hornady.com/ballistics

INDICATES MAXIMUM LOAD-USE WITH CAUTION

.338 LAPUA MAG. - NOSLER BULLETS

Adam Heggenstaller

338 LAPUA MAGNUM

Even though I had the Nightforce scope cranked up to 15X, the silhouette target standing on the Utah hillside still looked small. Nearly a mile of snow-covered sagebrush separated me from that rectangular piece of steel, making it practically untouchable with all but a handful of cartridges. Nevertheless, I nudged the reticle into the wind, pressed the trigger of my Desert Tactical Arms Stealth Recon Scout rifle and waited to see what would happen 1,600 long yards downrange.

A couple seconds after the suppressor-muffled report, I heard my spotter's voice over my right shoulder. "Hit," he reported, without so much as a hint of surprise in his tone. A military sniper with multiple deployments to Iraq and Afghanistan, he knew exactly what to expect from the .338 Lapua Magnum. I, on the other hand, am still a bit shocked I made that shot.

The .338 Lapua Magnum received CIP recognition about 25 years ago, and its performance at ultra-long ranges, particularly in combat, has since become legendary. Case in point: In November 2009, British Army sniper Craig Harrison used a .338 Lapua Magnum L115A3 rifle, manufactured by Accuracy International, to take out a pair of Taliban combatants in Afghanistan's Helmand Province with two consecutive shots from a verified range of 2,707 yards. In case you don't have your calculator handy, that's more than 1.5 miles.

The cartridge began as a .416 Rigby necked down for a 250-grain, .338 bullet in 1983 at the request of the U.S. Navy. However, testing revealed the parent case was too weak to handle the pressure required to meet the velocity goal of 3,000 fps, and the project was canceled. Lapua later redesigned the .338/416 case by shortening it by almost 2 mm, making the web and a portion of the sidewall thicker—and thus stronger—and hardening the brass at the case head while keeping it comparatively soft at the mouth. The Finnish company named the revamped cartridge the .338 Lapua Magnum and put it into production, with Accuracy International becoming the primary manufacturer of rifles chambered for the round. Other precision-rifle makers soon followed, and today companies including Barrett, Remington and Savage chamber bolt guns for the round.

With a healthy dose of slow-burning powder, the .338 Lapua Magnum is capable of pushing a 250-grain bullet in the neighborhood of 2,900 fps. Under most conditions, that bullet will remain supersonic to 1,200 yards or more, making the .338 Lapua Magnum a favorite of long-range target shooters and hunters who enjoy shooting big game at extended ranges. In military circles, it fills the void between the .300 Winchester Magnum and the .50 BMG. In civilian terms, the .338 Lapua Magnum simply hits stuff a long, long way off.

Adam is the Executive Editor of the National Rifle Association's Shooting Illustrated magazine.

.338 LAPUA MAG. - NOSLER BULLETS

338 Lapua Magnum - 180 grain		MAXIMUM S.A.A.M.I. O.A.C.L.	3.681"
		TESTED O.A.C.L.	B.C.	S.D.
AccuBond®	180gr. Spitzer	3.580"	0.372	0.225

CASE TYPE:	Norma	PRIMER TYPE	Fed. 215
CASE HOLDS:	107.0 Gr. WATER	BARREL Length/Make	26" Pac-Nor
		BARREL Twist	1-10"

POWDER TYPE	POWDER CHG. GRS.		MUZZLE VEL. F.P.S.		LOAD DENSITY (VOLUME)
H414	84.5	MAX.	3337		82%
Most Accurate	82.5	•	3261		80%
Powder Tested	80.5		3220		78%
Magnum	109.0	MAX.	3349	**	103%
	107.0		3292	**	102%
	105.0	•	3234		100%
H4831SC	99.0	MAX.	3400		96%
	97.0		3348		94%
	95.0	•	3273		92%
H1000	104.0	• MAX.	3401	**	102%
	102.0		3384		100%
	100.0		3321		98%
Retumbo	108.0	MAX.	3408	**	106%
	106.0		3360	**	104%
	104.0	•	3284	**	102%
H4350	90.5	MAX.	3421		90%
	88.5	•	3331		88%
	86.5		3280		86%
RL19	95.5	MAX.	3455		97%
	93.5	•	3355		95%
	91.5		3294		93%
IMR 4831	94.5	MAX.	3455		94%
	92.5	•	3359		92%
	90.5		3282		90%
IMR 7828	100.0	MAX.	3456		99%
	98.0	•	3381		97%
	96.0		3274		95%

BC=Ballistic Coefficient SD=Sectional Density
*Most Accurate Load Tested **Compressed Load

Use Maximum Loads with Caution

.338 LAPUA MAG. - NOSLER BULLETS

338 Lapua Magnum - 225 grain		MAXIMUM S.A.A.M.I. O.A.C.L.	3.681"	
		TESTED O.A.C.L.	B.C.	S.D.
AccuBond®	225gr. Spitzer	3.580"	0.550	0.281
Partition®	225gr. Spitzer	3.540"	0.454	0.281

CASE TYPE:	Norma	PRIMER TYPE		Fed. 215
CASE HOLDS:	105.0 Gr. WATER	BARREL Length/Make		26" Pac-Nor
		BARREL Twist		1-10"

POWDER TYPE	POWDER CHG. GRS.		MUZZLE VEL. F.P.S.	LOAD DENSITY (VOLUME)
H4831SC	86.0	MAX.	2983	85%
	84.0	*	2939	83%
	82.0		2882	81%
H1000	93.0	MAX.	2989	93%
	91.0		2937	91%
	89.0	*	2874	89%
Viht N165	88.0	MAX.	2999	93%
	86.0	*	2935	91%
	84.0		2892	89%
Viht N560	86.0	MAX.	3028	91%
Most Accurate	84.0	*	2951	89%
Powder Tested	82.0		2899	87%
Magnum	100.0	MAX.	3037	97%
	98.0		3004	95%
	96.0	*	2919	93%
RL19	86.0	MAX.	3044	89%
	84.0		2973	87%
	82.0	*	2936	85%
IMR 7828	89.0	MAX.	3048	90%
	87.0		2958	88%
	85.0	*	2904	86%
Retumbo	97.0	* MAX.	3080	97%
	95.0		3013	95%
	93.0		2953	93%
Viht N170	98.5	* MAX.	3104	** 104%
	96.5		3028	** 102%
	94.5		2989	100%

BC=Ballistic Coefficient SD=Sectional Density
*Most Accurate Load Tested **Compressed Load

Use Maximum Loads with Caution

.338 LAPUA MAG. - NOSLER BULLETS

338 Lapua Magnum - 300 grain			MAXIMUM S.A.A.M.I. O.A.C.L.		3.681"
			TESTED O.A.C.L.	B.C.	S.D.
AccuBond®		300gr. Spitzer	3.650"	0.720	0.375

CASE TYPE:	Nosler		PRIMER TYPE	WLRM
CASE HOLDS:	98.0	Gr. WATER	BARREL Length/Make	24" Pac-Nor
			BARREL Twist	1-10"

POWDER TYPE	POWDER CHG. GRS.		MUZZLE VEL. F.P.S.	LOAD DENSITY (VOLUME)
IMR 7828 SSC	85.0	MAX.	2595	89%
	83.0		2544	87%
	81.0	*	2471	85%
US869	104.0	MAX.	2640 **	115%
	102.0		2590 **	113%
	100.0	*	2525 **	111%
Viht N560	84.0	MAX.	2641	95%
	82.0		2589	93%
	80.0	*	2530	91%
Supreme 780 Most Accurate Powder Tested	84.0	MAX.	2647	90%
	82.0	*	2581	88%
	80.0		2528	85%
RL25	88.0	MAX.	2667	98%
	86.0		2602	95%
	84.0	*	2535	93%
Magnum	91.0	MAX.	2677	94%
	89.0	*	2641	92%
	87.0		2583	90%
H1000	91.0	MAX.	2698	97%
	89.0	*	2634	95%
	87.0		2586	93%
Retumbo	94.0	MAX.	2732 **	101%
	92.0		2663	99%
	90.0	*	2611	97%

BC=Ballistic Coefficient SD=Sectional Density
*Most Accurate Load Tested **Compressed Load

Use Maximum Loads with Caution

338 Lapua Magnum continued

#2610 .338" 215 gr. SBT
C.O.A.L. 3.575"

Powder↓/Velocity→	2900	2950	3000	3050	3100	3150	3200	3250	3300
IMR-4350	81.7	83.2	84.7	86.2	87.7	89.2			
H4350 EXT	81.2	82.7	84.3	85.8	87.4	88.9	90.5	92.0	
RE-19	84.9	86.2	87.6	88.9	90.2	91.5	92.9	94.2	95.5
Viht N560	87.1	88.5	89.8	91.2	92.6	93.9	95.3	96.6	98.0
IMR-4831	85.3	86.5	87.7	88.9	90.1	91.3	92.5	93.7	94.9
XMR-3100	87.9	89.1	90.4	91.6	92.9	94.1	95.3	96.6	97.8
H4831 SC	86.8	87.9	88.9	90.0	91.0	92.1	93.1	94.2	95.2
MagPro	91.8	93.2	94.6	96.0	97.5	98.9	100.3	101.7	
Viht N165	90.7	92.1	93.5	94.9	96.3	97.7	99.1		
RE-22	85.2	86.6	87.9	89.3	90.7	92.1	93.4	94.8	
WXR	86.2	87.6	89.0	90.4	91.8	93.2	94.6	96.0	
IMR-7828	90.8	91.7	92.6	93.4	94.3	95.2	96.1	96.9	97.8
H1000	94.8	96.2	97.6	99.0	100.3	101.7	103.1		
Magnum	93.9	95.5	97.0	98.6	100.1	101.7			
Retumbo	94.5	95.9	97.3	98.6	100.0				
Viht N170	97.4	98.8	100.2	101.5	102.9	104.3			
Energy/ft.lbs.	4015	4155	4297	4442	4588	4738	4889	5043	5200

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4350	87.7	3100	4588
Hunting Load	Viht N165	99.1	3200	4889

USE MAXIMUM LOADS WITH CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

338 Lapua Magnum continued

#9300 .338" 300 gr. HPBT MatchKing
C.O.A.L. 3.680"
requires a 1x10" twist barrel or faster

Powder↓/Velocity→	2500	2550	2600	2650	2700	2750
IMR-4350	72.9	74.7	76.4	78.2		
Viht N560	76.7	78.5	80.2	82.0	83.7	
H4831 SC	76.2	78.1	80.0	81.9		
RE-22	75.9	77.6	79.2	80.9		
WXR	76.6	78.4	80.1	81.9		
IMR-7828	78.8	80.5	82.2	83.9		
H1000	82.7	84.6	86.5	88.4	90.3	92.2
H870	89.4	91.4	93.3	95.3	97.2	
Viht N170	84.3	86.0	87.7	89.4	91.1	
Energy/ft.lbs.	4164	4332	4504	4679	4857	5038

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4350	78.2	2650	4679

Sierra does not recommend MatchKing bullets for hunting applications.

USE MAXIMUM LOADS WITH CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

.338 LAPUA MAG. - ACCURATE POWDERS

Bullet Weight (Grains)	Bullet Make	Bullet Type	Start Load (Grains)	Start Velocity (FPS)	Max Load (Grains)	Max Velocity (FPS)	Max Pressure (PSI)	COL (Inches)	Comp. Load
338 LAPUA MAGNUM									
Barrel: 28" ¦ Twist: 1-10" ¦ Primer: WIN WLRM ¦ Bullet Diameter: 0.338"									
Case: LAPUA ¦ Max Case Length: 2.724" ¦ Trim Length: 2.714"									
ACCURATE MAGPRO									
200	HDY	SP	97.5	3,039	108.3	3,369	64,538	3.530	C
200	NOSLER	BST	99.5	3,062	110.5	3,355	60,494	3.605	C
200	NOSLER	PART	95.7	3,112	106.4	3,381	64,227	3.740	
200	NOSLER	E-TIP	95.3	3,108	105.9	3,342	64,882	3.720	
210	NOSLER	PART	89.5	2,955	99.4	3,224	64,263	3.610	
210	BARNES	TSX-BT	92.8	2,985	103.2	3,236	64,900	3.525	
215	SIERRA	SBT GK	92.9	2,978	103.2	3,262	64,553	3.628	
225	HDY	SP	92.4	2,810	102.6	3,126	64,301	3.555	
225	NOSLER	A-BOND	93.0	2,921	103.4	3,188	64,717	3.730	
225	NOSLER	PART	91.8	2,927	102.0	3,169	64,371	3.650	
225	SIERRA	SPT PH	91.8	2,907	102.0	3,162	64,919	3.588	
225	BARNES	TSX-FB	89.5	2,828	99.5	3,108	64,813	3.525	
230	LHG	MMF	90.9	2,937	101.1	3,210	64,566	3.660	C
245	LHG	M-HYB	90.0	2,882	100.0	3,142	64,616	3.970	
250	HDY	BTHP	87.6	2,747	97.3	3,040	64,795	3.682	
250	LAPUA	SCENAR	86.5	2,740	96.1	3,009	64,217	3.625	
250	NOSLER	PART	87.1	2,724	96.8	2,967	64,578	3.595	
250	SIERRA	SBT GK	86.8	2,755	96.4	3,007	64,339	3.575	
250	SIERRA	HPBT	86.3	2,747	95.9	3,014	64,469	3.705	
250	BARNES	TSX-FB	85.1	2,675	94.6	2,940	64,782	3.525	
265	BARNES	TAC-TX	83.6	2,584	92.9	2,864	64,571	3.670	
285	HDY	BTHP-M	82.8	2,561	92.0	2,817	64,328	3.750	
285	BARNES	TAC-TX	81.3	2,497	90.4	2,753	64,864	3.625	
300	BERGER	HYBRID	80.3	2,497	89.2	2,737	64,656	3.825	
300	LAPUA	SCENAR	80.1	2,476	89.0	2,713	64,750	3.700	
300	SIERRA	HPBT MK	79.9	2,473	88.7	2,721	64,781	3.715	

C = Compressed Charge

USE MAXIMUM LOADS WITH CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

.338 LAPUA MAG. - ALLIANT POWDERS

WARNING

The information displayed on this site, including ballistic data, was derived from tightly controlled laboratory conditions. This information and data may vary considerably depending on many factors, including the components used, component assembly, the type of firearm used, reloading techniques, safety precautions practiced, etc.

Never mix any two powders regardless of type, brand, or source. Never substitute any smokeless powder for Black Powder or its substitute.

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USE THIS DATA WITH ALLIANT BRAND POWDERS ONLY.

REDUCE LOADING DATA 10% TO START AND WORK-UP.

DO NOT EXCEED THE LOADS DISPLAYED.

Praise The Load

With the Superior Performance of Hodgdon Powders

Superior accuracy can be achieved through reloading with reliable, consistently performing powder. To achieve this level of consistency, the experts at Hodgdon's select only the finest raw materials and give special attention to blending. Rigorous testing of ***each*** batch of powder further attests to Hodgdon's committment to quality.

For over 45 years, Hodgdon Powder has been a performance leader among shooters. This explains why more winning shooters competing in benchrest matches use Hodgdon Powder.

Hodgdon encourages every shooter to enjoy the advantages and economy of reloading with the superior performance of Hodgdon Powders.

For more information on reloading & Hodgdon Powders, write:

HODGDON POWDER COMPANY, INC.
P.O. Box 2932, Dept. AB
Shawnee Mission, KS 66201

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Russ Rolandson
Sales, Speer Bullets
300 Win. Mag. Caliber
165 gr. Speer Grand Slam
72 Gr. Hodgdon H4350 Powder

.338 LAPUA MAG. - HODGDON POWDERS

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
338 LAPUA MAGNUM						
Case: Norma			Twist: 1:9"			
Barrel: 24"		Trim: 2.714"	Primer: Federal 215M, Large			
Rifle Magnum Match						
Bullet: 160 GR. BAR TTSX			**Dia: .338"**		**Col: 3.565"**	
IMR 7828	98.7	3330	54,000 PSI	105.0	3531	62,800 PSI
H4831	98.5	3290	52,900 PSI	104.8C	3472	61,200 PSI
Hybrid 100V	90.0	3413	54,000 PSI	96.3C	3606	62,400 PSI
IMR 4831	93.0	3346	51,500 PSI	99.0	3589	62,500 PSI
H4350	89.3	3348	54,100 PSI	95.0	3511	61,800 PSI
H414	87.4	3341	54,700 PSI	93.0	3502	62,400 PSI
IMR 4350	90.2	3350	53,700 PSI	96.0	3525	61,200 PSI
760	87.4	3341	54,700 PSI	93.0	3502	62,400 PSI
Bullet: 185 GR. BAR TSX			**Dia: .338"**		**Col: 3.530"**	
H1000	100.0	3051	49,300 PSI	106.0C	3218	57,300 PSI
IMR 7828	94.0	3133	54,200 PSI	100.0	3312	62,000 PSI
H4831	93.7	3085	52,500 PSI	100.0	3281	61,500 PSI
Hybrid 100V	85.2	3198	54,600 PSI	90.6	3354	62,100 PSI
IMR 4831	89.0	3176	53,000 PSI	94.6	3371	62,800 PSI
H4350	85.0	3120	53,200 PSI	90.4	3311	63,400 PSI
H414	81.8	3124	56,100 PSI	87.0	3247	62,400 PSI
IMR 4350	85.4	3122	53,000 PSI	90.8	3307	61,800 PSI
760	81.8	3124	56,100 PSI	87.0	3247	62,400 PSI
Bullet: 200 GR. SPR SP			**Dia: .338"**		**Col: 3.525"**	
Retumbo	96.0	2928	43,700 CUP	104.0C	3189	52,600 CUP
H1000	92.0	2854	42,300 CUP	102.0C	3116	52,500 CUP
IMR 7828	89.0	2965	44,300 CUP	95.0	3133	52,300 CUP
H4831	83.0	2855	44,900 CUP	92.0	3086	53,200 CUP
Hybrid 100V	81.0	2975	47,100 CUP	88.0	3155	53,200 CUP
IMR 4831	85.5	2970	47,600 CUP	91.0	3162	53,100 CUP
H4350	79.0	2925	45,900 CUP	85.5	3099	52,500 CUP
H414	74.0	2840	45,000 CUP	81.0	3058	53,000 CUP
IMR 4350	83.0	3001	47,400 CUP	88.0	3161	52,700 CUP

C = Compressed Charge

NEVER EXCEED MAXIMUM LOADS.

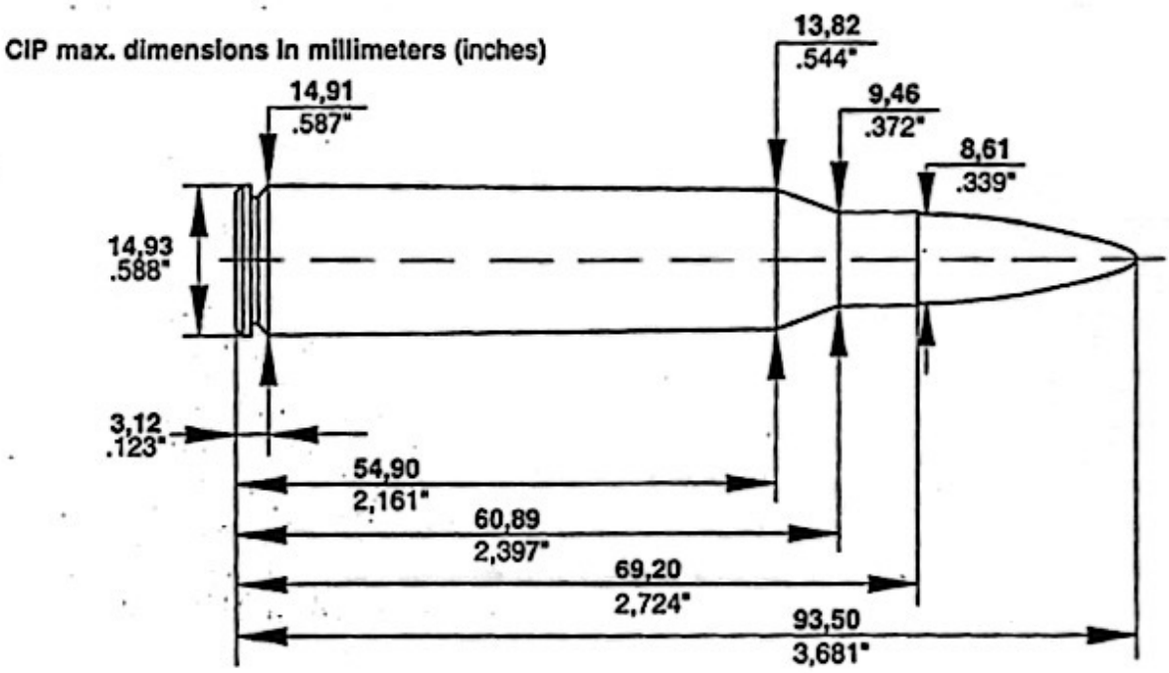
.338 LAPUA MAG. - HODGDON POWDERS

Powder	Starting Loads Grs.	Vel.	Pressure	Maximum Loads Grs.	Vel.	Pressure
Bullet: 250 GR. HDY SP			**Dia: .338″**		**Col: 3.550″**	
US 869	101.5	2728	47,000 CUP	108.0	2879	51,100 CUP
Retumbo	90.0	2620	43,200 CUP	98.0C	2853	52,000 CUP
H1000	88.0	2567	41,400 CUP	98.0C	2838	52,800 CUP
IMR 7977	89.2	2691	49,200 PSI	97.0	2927	61,300 PSI
IMR 7828	83.0	2636	46,200 CUP	88.5	2802	52,100 CUP
Supreme 780	84.6	2700	43,900 CUP	90.0	2841	50,600 CUP
H4831	79.0	2600	46,100 CUP	85.0	2740	52,200 CUP
Hybrid 100V	75.0	2619	45,500 CUP	81.0	2765	52,200 CUP
IMR 4831	80.0	2657	47,700 CUP	85.0	2801	52,900 CUP
H4350	74.0	2615	48,300 CUP	78.0	2742	52,300 CUP
Bullet: 265 GR. BAR TTSX BT Col: 3.685″					**Dia: .338″**	
US 869	93.8	2518	48,400 PSI	100.0	2677	55,900 PSI
Retumbo	76.4	2483	50,400 PSI	83.0	2660	60,600 PSI
H1000	77.7	2510	52,800 PSI	83.6	2656	61,100 PSI
IMR 7977	81.2	2558	51,600 PSI	83.5	2698	60,100 PSI
IMR 7828	76.1	2533	54,000 PSI	81.0	2658	60,500 PSI
Supreme 780	79.5	2627	57,000 PSI	83.3	2719	61,700 PSI
H4831	74.6	2518	54,400 PSI	79.4	2642	61,600 PSI
IMR 4831	70.5	2503	53,800 PSI	75.0	2634	62,300 PSI

C = Compressed Charge

NEVER EXCEED MAXIMUM LOADS.

.338 LAPUA Magnum



Country of origin:	**Finland**
Year of introduction:	**1987**
Max. bullet diameter:	**8,61 mm (.339")**
Max. cartridge length:	**93,50 mm (3,681")**
Max. case length:	**69,20 mm (2,727"), trim to 69,00 mm (2,714")**
Max. CIP piezo pressure:	**420 MPa (69000 psi)**

The .338/416 was originally developed by Jerry Haskins of Research Armament Industries (RAI), Jim Bell and Boots Obermeyer for the U.S. Navy long range sniper rifle program in the early 1980s. Further development of the .338/416 was undertaken by Lapua in the mid-1980s and an improved version known as the .338 Lapua Magnum with a strengthened case and new bullets was introduced in 1987.

The .338 Lapua Magnum case is basically a necked down .416 Rigby, but reinforced to withstand higher 68150 psi (470 MPa) chamber pressures.

The .338 Lapua Magnum accepts all .338 caliber bullets, but best performance is achieved with 250 grain projectiles, as most rifles chambered for this cartridge have barrels with a 1 turn in 10 inches rifling twist. With appropriate powders the .338 Lapua Magnum can be loaded up to 3000+ fps (900 m/s) muzzle velocities.

There is a large number of .338 caliber wildcats and factory loaded cartridges dedicated to long range target shooting and military sniper use. To date, the .338 Lapua Magnum remains the only .338 caliber cartridge adopted by military forces; .338 Lapua Magnum (8,6 x 70 mm) caliber precision rifles have been adopted by several military organisations and law enforcement agencies around the world.

.338 LAPUA MAG. - VIHTAVOURI POWDERS

Bullet						Powder	Starting load				Maximum load			
Weight		Type	Mfg	C.O.L		Type	Weight		Velocity		Weight		Velocity	
[g]	[grs]			[mm]	[in.]		[g]	[grs]	[m/s]	[fps]	[g]	[grs]	[m/s]	[fps]
18,5	285	HPBT	Hornady	93,5	3.681	N165	4,81	74.2	733	2405	5,49	84.7	812	2664
						N560	4,93	76.1	759	2490	5,48	84.6	837	2746
						N170	5,25	81.0	741	2431	5,96	92.0	831	2726
						N570	5,44	84.0	781	2562	6,07	93.7	863	2831
18,5	285	TSX	Barnes	93,0	3.661	N560	4,12	63.6	684	2244	4,78	73.8	772	2533
						N170	4,30	66.4	654	2146	5,20	80.2	768	2520
						N570	4,70	72.5	728	2388	5,31	81.9	806	2644
19,4	300	HPBT	Sierra	91,5	3.602	N165	4,57	70.5	695	2281	5,20	80.2	766	2513
						N560	4,70	72.5	722	2370	5,37	82.8	800	2624
						N170	5,15	79.4	719	2360	5,86	90.4	792	2599
						N570	5,39	83.2	776	2546	5,92	91.3	826	2710
						24N41	5,52	85.2	735	2410	6,28	96.8	809	2653
19,4	300	Scenar	Lapua	93,5	3.681	N165	4,47	69.0	685	2247	5,30	81.8	785	2575
						N560	4,64	71.6	709	2326	5,33	82.3	814	2671
						N170	4,90	75.6	712	2336	5,74	88.6	811	2661
						N570	5,19	80.1	732	2402	5,99	92.4	837	2746
						24N41	5,43	83.8	729	2392	6,23	96.1	821	2694
19,4	300	HPBT	Berger	93,5	3,681	N560	5,31	66,5	688	2257	5,05	77,9	777	2549
						N170	4,10	63,3	660	2165	5,10	78,7	752	2467
						N570	4,50	69,4	707	2320	5,24	80,9	790	2592

F = Case full

A = Accuracy load

USE MAXIMUM LOADS WITH CAUTION

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

.338 LAPUA MAG. - BARNES BULLETS

.338 Lapua

185-grain TSX BT

Sectional Density .231
Ballistic Coefficient .352
C.O.A.L 3.530"

Suggested Bullet Use

Powder Brand	Minimum Charge (grains)	Minimum Velocity (fps)	Maximum Charge (grains)	Maximum Velocity (fps)	Load Density (%)
MagPro	96.5	3198	101.5	3333	90
RL 22	88.5	3157	93.5	3300	91
H1000	97.0	3120	102.0	3253	100
Magnum	99.5	3203	104.5	3336	94
*RL 25	95.5	3206	100.5	3359	97
Retumbo	97.0	3159	102.0	3306	102

185-grain MRX BT

Sectional Density .231
Ballistic Coefficient .379
C.O.A.L 3.560"

Suggested Bullet Use

210-grain TSX BT

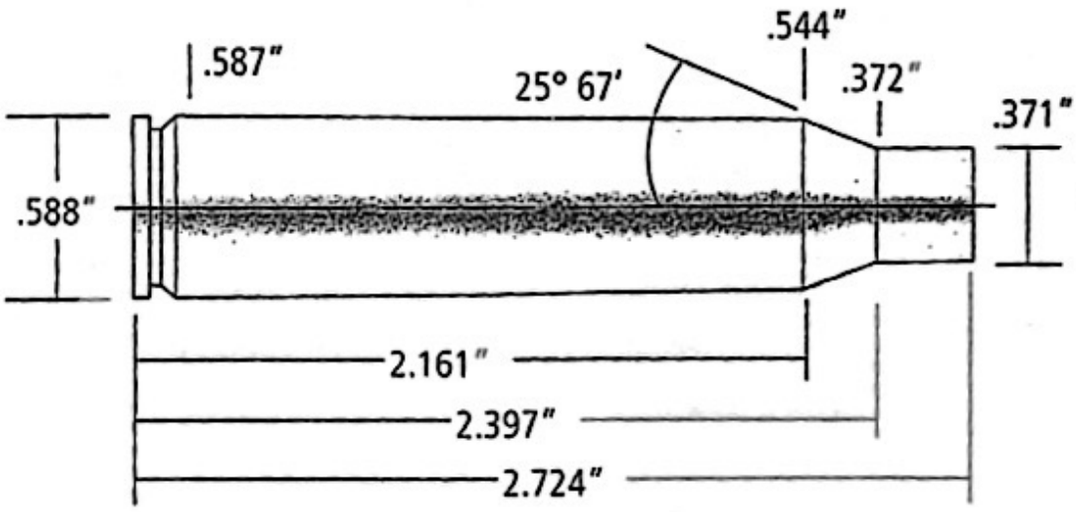
Sectional Density .263
Ballistic Coefficient .404
C.O.A.L 3.530"

Suggested Bullet Use

Powder Brand	Minimum Charge (grains)	Minimum Velocity (fps)	Maximum Charge (grains)	Maximum Velocity (fps)	Load Density (%)
MagPro	90.5	2976	95.5	3105	87
H1000	91.0	2935	96.0	3062	96
Magnum	94.0	3001	100.5	3170	93
RL 25	90.5	3018	95.5	3148	95
Retumbo	92.0	2972	97.0	3114	100
US869	105.5	2960	112.0	3092	101
*VIT N170	94.0	2961	99.0	3107	98

Maximum loads should be used with caution - Always Start With Minimum Loads.
* *Most Accurate Load*

338 Lapua Magnum



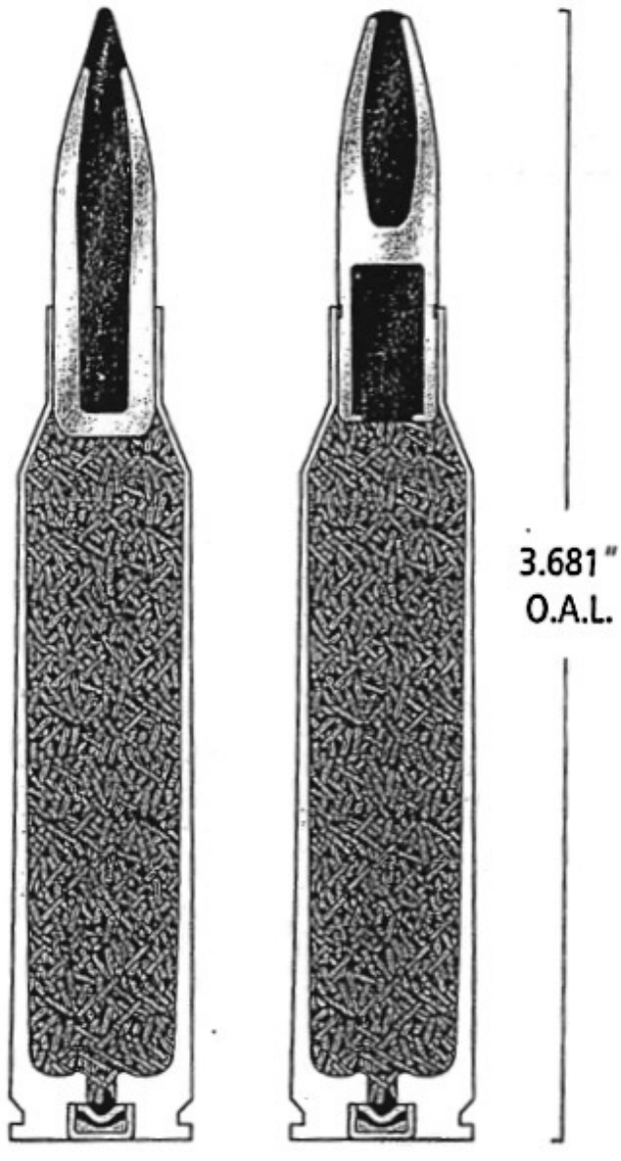
Origin	Finland
Ammunition Available	1987
Bullet Diameter	0.338"
Maximum Cartridge O.A.L.	3.681"
Maximum Case Length	2.724"
Trim Length	2.714"

About the Cartridge

The 338 Lapua Magnum was developed at the Lapua cartridge factory in Finland and introduced in 1987. It is the largest commercial 338 cartridge used in the U.S. Unfired Norma test cases for the 338 Lapua Magnum hold about 113 grains of water. This compares with 111 grains for the 338 Remington Ultra Magnum (Remington cases), 102 grains for the 340 Weatherby Magnum (Weatherby cases), and 85 grains of water for the 338 Winchester Magnum (Winchester cases). The 338 Lapua Magnum tops out what is becoming quite a list of 338 cartridges introduced to the American hunter during the last 40 years. As with other cartridges in this class, they are not for the weak of shoulder. It takes nerves of steel to shoot such a cartridge well, not only in terms of recoil but muzzle blast.

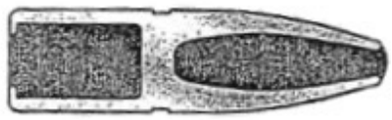
.338 LAPUA MAG. - SWIFT BULLETS

Loaded Cartridge Example



Reloading Data

225 Grain A-Frame™



Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	225	H-1000	87.0	2769	93.5	2862	88%
	225	H-4831	79.0	2717	85.0	2870	80%
Alliant Powder Company							
Swift A-Frame	225	*RL-22	78.6	2697	84.5	2884	80%
	225	RL-25	86.5	2807	93.0	3004	88%
IMR Powder Company							
Swift A-Frame	225	IMR-4831	74.9	2730	80.5	2867	76%
	225	IMR-7828	78.6	2702	84.5	2896	80%

**Lowest Standard Deviation on Velocity*

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

Reloading Data

275 Grain A-Frame™

Bullet		Powder	Starting Load		Maximum Load		
Type	Grain Wt.	Type	Grain Wt.	Velocity	Grain Wt.	Velocity	Load Density
Hodgdon Powder Company							
Swift A-Frame	275	H-1000	78.1	2474	84.0	2589	82%
	275	*H-4831	72.1	2435	77.5	2560	76%
Alliant Powder Company							
Swift A-Frame	275	RL-22	71.1	2396	76.5	2544	75%
	275	RL-25	78.6	2508	84.5	2686	82%
IMR Powder Company							
Swift A-Frame	275	*IMR-4831	68.4	2413	73.5	2542	72%
	275	IMR-7828	72.1	2439	77.5	2582	76%

**Lowest Standard Deviation on Velocity*

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