22 K-Hornet

Test Specifications:

Firearm Used: Cooper Model 38

Barrel Length: 22”

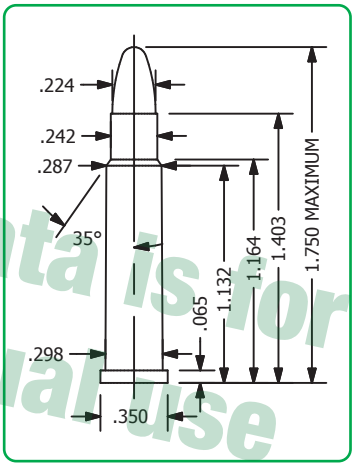
Twist: 1 x 14”

Components:

Case: Winchester

Trim-to Length: 1.384”

Primer: Fed 205M



Remarks:

Over the years, the practice of “improving” a case by fireforming it in an improved chamber has become fairly common. The goal in such conversions usually centers around increased case capacity and in turn, velocity. The 22 K-Hornet is not only a good example of fireforming, but was also one of the first cases to undergo such modification. Developed by Lysle Kilbourn in early 1940, the 22 K-Hornet offers nearly a nine percent increase in case capacity over the standard Hornet. On the receiving end, this normally translates into a three to five percent improvement in velocity. Despite its age, the K-Hornet is still an excellent choice for varminting situations that do not require extreme long range performance. The mild mannered Hornets may be just the solution for areas where noise can be a problem. Cases are readily available, and case forming entails nothing more difficult than firing 22 Hornet ammunition in a K-Hornet chamber.

In reviewing historical data for the 22 K-Hornet, we found much of the early loading data to be, shall we say, “optimistic.” Several sources, such as P.O. Ackley’s Handbook for Shooters and Reloaders and C.S. Landis’ Twenty two Caliber Varmint Rifles quote velocities as high as 3450 fps from the diminutive 22 K-Hornet. These are most likely the result of estimated velocities based on trajectories, field impressions and no doubt, shooters’ egos. Chronographs, which were not widely available when these books were written, have no egos to bruise. In developing this data, our 22 K-Hornet showed some improvement over the standard Hornet, but rarely more than 100 150 fps. Despite the lack of any significant improvement in ballistic performance, the more modern case configuration of the K-Hornet allows for positive headspacing on the shoulder, and should provide better case life.

Many recent sources have criticized the Hornet’s accuracy, but this is clearly a function of the quality of the individual firearms involved. With a match grade barrel, proper bedding and a good chambering job, the Hornet will hold its own against almost any “modern” cartridge. Our test rifle, a Cooper Model 38, proved to be extremely accurate. We found a wide variety of component combinations that consistently produced five shot groups of less than 1/2 inch at 100 yards. For varminting chores out to 175-200 yards, this is a superbly accurate combination.

22 K-HORNET

	Bullet	Caliber	Weight	Type	C.O.A.L.
	#1200	.224"	40gr.	Hornet	1.720"
	#1385	.224"	40gr.	HP	1.730"
	#1440	.224"	40gr.	BlitzKing	1.800"

Powder ∨ Velocity >	2600	2650	2700	2750	2800	2850	2900	2950
H110	10.6	10.7	10.9	11.0	11.2	11.3	11.5	11.6
A #9	9.7	9.9	10.0	10.2	10.4	10.6	10.7	10.9
2400	9.6	9.8	10.1	10.3	10.5	10.8	11.0	
Viht N110	9.0	9.4	9.8	10.1	10.5	10.9	11.3	
A 1680	12.6	12.8	13.1	13.3	13.6	13.8	14.1	14.3
H4227	10.4	10.7	11.0	11.2	11.5	11.8		
Energy Ft. lbs	**600**	**624**	**647**	**672**	**696**	**721**	**747**	**773**

Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs
Accuracy Load	Viht N110	10.9	2850	721
Hunting Load	A 1680	14.1	2900	747

	Bullet	Caliber	Weight	Type	C.O.A.L.
	#1210	.224"	45gr.	Hornet	1.720"
	#1310	.224"	45gr.	SPT	1.730"

Powder ∨ Velocity >	2400	2500	2600	2700	2800
H110	9.8	10.2	10.6	10.9	11.3
A #9	9.3	9.7	10.2	10.6	
296	9.7	10.1	10.5	10.9	11.3
2400	9.1	9.5	9.9	10.3	10.7
Viht N110	8.7	9.3	10.0	10.6	
A 1680	11.4	12.0	12.6	13.1	13.7
Energy Ft. lbs	**575**	**624**	**675**	**728**	**783**

Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs
Accuracy Load	Viht N110	10.0	2600	675
Hunting Load	A 1680	13.1	2700	728

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

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22 K-Hornet

	Bullet	Caliber	Weight	Type	C.O.A.L.
	#1320	.224"	50gr.	SMP	1.730"
	#1330	.224"	50gr.	SPT	1.775"
	#1340	.224"	50gr.	Blitz	1.775"
	#1450	.224"	50gr.	BlitzKing	1.800"

Powder ∨ Velocity >	2200	2300	2400	2500	2600	2700
H110	9.2	9.6	9.9	10.3	10.6	
296	9.2	9.6	9.9	10.3	10.6	
2400	8.1	8.6	9.1	9.6	10.1	
Viht N110	8.0	8.6	9.3	9.9	10.5	
H4227	9.5	9.9	10.3	10.8	11.2	11.6
A 1680	10.8	11.3	11.8	12.2	12.7	13.2
Energy Ft. lbs	**537**	**587**	**639**	**694**	**750**	**809**

Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs
Accuracy Load	H4227	11.2	2600	750
Hunting Load	H4227	11.2	2600	750

	Bullet	Caliber	Weight	Type	C.O.A.L.
	#1410	.224"	52gr.	HPBT MatchKing	1.775"
	#1400	.224"	53gr.	HP MatchKing	1.775"

Powder ∨ Velocity >	2200	2300	2400	2500	2600
H110	9.1	9.5	10.0	10.4	
296	9.1	9.5	9.9	10.3	
2400	8.8	9.2	9.7	10.1	
Viht N110	8.5	9.2	9.8	10.5	
H4227	9.5	10.0	10.5	11.0	11.5
A 1680	10.3	10.9	11.5	12.1	12.7
Energy Ft. lbs	**559**	**611**	**665**	**722**	**780**

Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs
Accuracy Load	H4227	11.5	2600	780

Sierra does not recommend MatchKing bullets for hunting applications.