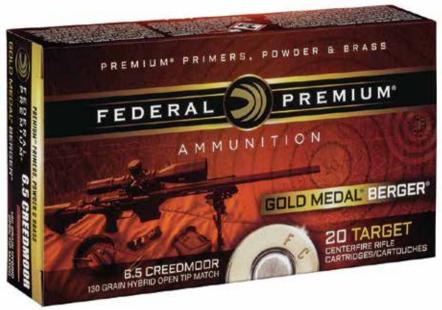
Federal Premium's Gold Medal Berger target ammo

Con Kapralos





he burgeoning popularity of long-range shooting, using both conventional-style and tactical rifle platforms, has really taken off in the past few years. Hitting targets consistently out to 1000m and more and challenging both shooter and equipment to shoot groups under Minute of Angle has become possible with state-of-the-art barrelled actions, stocks and optics.

While we can agree that tailored handloads are instrumental in striving for best accuracy and precision, there are more than a few of us who don't handload. Fortunately, Federal Premium has a solution with an array of match-quality ammunition specifically geared towards long-range shooting - the Gold Medal Berger target series.

Berger are synonymous with the best target bullets you can buy - they've 'been there, done that' in countless victories by benchrest and target shooters worldwide. While target shooters worth their salt religiously handload, Federal realised a market exists for assorted factory loads in its Gold Medal series with premium Berger bullets for those either new to long-range target shooting or seasoned campaigners looking for something different.

Gold Medal Berger target loads include the following calibres and bullet options:

.223 Remington 73gr Boat-Tail Hollow-Point (BTHP), .308 Winchester 185gr Juggernaut Open Tip Match (OTM), 6.5 Grendel and 6.5 Creedmoor both with 130gr AR Hybrid OTM bullet. Australian importer and distributor Nioa supplied review samples in .308 Winchester and 6.5 Creedmoor.

At a glance

Each carton contains 20 rounds along with all relevant load information and a detailed ballistics table for the load, listing calibre and bullet-type as well as velocity, energy and both average and long-range trajectories from the muzzle out to 500 yards in 100-yard increments. Ballistic coefficients for the loaded Berger bullet in G1 and G7 specifications are also included. All loads in the series feature Federal Premium Gold Medal match primers, specifically formulated propellants and quality Federal Premium brass cases for unparalleled precision and performance.

.308 Winchester 185gr **Juggernaut Open Tip Match** This is an excellent load for high-

performing target or long-range shooting. The Berger Juggernaut is a tactical, high BC (Ballistic Coefficient) bullet designed

with the Open Tip Match profile and Boat-Tailed base. Its design employs an extralong tangent ogive which gives a high BC and makes the bullet easier to shoot, ballistically speaking.

The OTM name is a requirement of the military in that any bullet used for training must carry this designation. The ballistic table specifies a muzzle velocity of 2600fps but firing 10 loads through a chronograph gives a better indication of its quality, with an average velocity of 2613fps and standard deviation of 9fps, that single figure ensuring remarkable consistency.

This load was shot through two hunting rifles with sporter weight barrels and at 100m achieved groups around the 25mm (1MOA) mark or less, one in single figures at 8mm. A target or long-range barrel with twist rate optimised for heavier bullet weight (ideally 1:11) could really show what this load's capable of. Table 1 shows the ballistic information on the carton.

6.5 Creedmoor 130gr **Hybrid Open Tip Match**

Development of the 6.5 Creedmoor in the late 2000s was dependent largely on the use of high BC bullets for maximum longrange performance and Federal opted for the 130gr Hybrid Open Tip Match bullet for

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this load. The 130gr Hybrid bullet still has the Boat-Tail base but as its name suggests, has markedly different properties, in particular with bullet design.

The nose of the Hybrid has two distinct shapes, as the bearing surface ends, a tangent ogive begins which results in the bullet being less sensitive to seating depth. As you move forward along the tangent portion, the profile changes to a secant ogive, a hallmark of Berger's VLD (Very Low Drag) design. These two properties combined with the tailored ballistics designed into the load make this bullet highly efficient into the wind, just what's required in the 6.5 Creedmoor.

Federal quotes muzzle velocity of 2875fps and energy of 2386ft/lb and testing through my chronograph, 10 rounds gave average muzzle velocity of 2903fps with standard deviation of 11fps. Accuracy testing at 100m

Table I - .308 Winchester 185gr **Juggernaut Open Tip Match**

	Muzzle	100 yards	200 yards	300 yards	400 yards	500 yards
Velocity (fps)	2600	2442	2289	2143	2001	1864
Energy (ft-lb)	2777	2449	2153	1886	1644	1428
**Average Range		0	-4.3	-15.4	-33.9	-61.2
**Long Range		2.2	0	-8.9	-25.2	-50.0

**Height of bullet trajectory in inches above or below line of sight if zeroed at 0 yards. Sights 1.5" above bore line.

GI BC:	G7 BC:
0.552	0.283

GI v G7 BC. GI and G7 refers to aerodynamic drag models on 'standard' projectile shapes. GI looks like a flat-based bullet, G7 better approximates the geometry of a long-range bullet. When choosing a drag model for a ballistic software program, GI is preferred for flat-based bullets, G7 better for long-range Boat-tailed.

Table 2 - 6.5 Creedmoor 130gr **Hybrid Open Tip Match**

	Muzzle	100 yards	200 yards	300 yards	400 yards	500 yards
Velocity (fps)	2875	2709	2560	2396	2247	2104
Energy (ft-lb)	2386	2119	1877	1657	1457	1277
**Average Range		0	-3.2	-11.8	-26.5	-48.1
**Long Range		1.6	0	-6.9	-20.0	-40.0

**Height of bullet trajectory in inches above or below line of sight if zeroed at 0 yards. Sights 1.5" above bore line

GI BC: G7 BC: 0.560 0.287

was done using a Kimber Open Country and 6.5 Creedmoor, both excellent hunting rifles which can also be used at long-range. The 130gr Hybrid OTM load performed well - through the Kimber it gave a threeshot, five-group average of 18mm and with the 6.5 Creedmoor an average of 21mm, the smallest at 9mm and 13mm. Ballistic information for the 6.5 Creedmoor is shown in Table 2.

Long-range shooting

Velocity and group testing had used up most of the ammunition but I still had a few rounds to shoot at 300m, the maximum allowed at the range. Having dialled the Kimber Open Country in 6.5 Creedmoor for a 200m zero and .308 sporter for the same

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See them at the SSAA SHOT Expo, Melbourne Oct 19,20



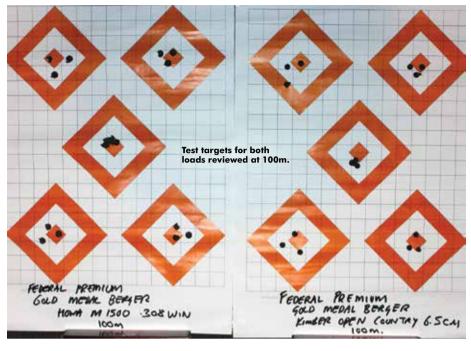
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Point of Impact, it would be interesting to see if the ballistics on the carton would match the range test.

I'd have liked to test at more than 300m but a hot, dry summer meant venturing into the field was a no-go, but tests at 300m agreed with Federal's ballistics. The .308 Winchester loads shot several three-shot groups approximately 9" below the zero and the 6.5 Creedmoor grouped 7" below the zero point. All three-shot groups at 300m were less than 75mm, or MOA at that distance, which was pleasing.

The use of quality bullets tailored to premium propellants and match-quality primers and brass cases make Gold Medal Berger target ammunition a winner for fans of punching paper or hitting metal gongs at long-range.





Accuracy testing of Gold Medal Berger - 100m					
Load and test platform	Best group	Worst group	Average*		
.308 Winchester 185gr Juggernaut OTM - Howa M1500 sporter	I2mm	25mm	19mm		
.308 Winchester 185gr Juggernaut OTM - Ruger M77 sporter	8mm	I9mm	15mm		
6.5 Creedmoor 130gr Hybrid OTM - Kimber Open Country	9mm	30mm	18mm		
6.5 Creedmoor 130gr Hybrid OTM - Sako A7	13mm	24mm	21mm		
*Average taken from five three-shot gr	oups.		•		



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