



The PPU ammo feeds reliably, shoots accurately, and provides decent brass for reloading

LONG-RANGE ACCURACY FOR LESS

Bruce Potts explores the performance of PPU ammunition in a classic Mosin Nagant sniper rifle

The Prvi Partizan ammunition factory is situated in the southwest of Serbia, in the town of Uzice, hence PPU for the name of the ammunition. Since 1928, Prvi Partizan has been producing ammunition for the Serbian Army and Police, as well as many foreign armies, and it also produces hunting and sporting ammunition.

The company produces over 400 types of rifle, pistol, revolver and small arms ammunition. It is distributed in Britain by Henry Krank & Co, and has always been held in high regard, not only for its good price but also for its accuracy and consistency, which are equally well thought of. Additionally, the high-quality brass for reloading makes it a cost-effective choice for shooting your hunting or service rifle in these modern times.

Each calibre is produced with many bullet types, different weights, and very close tolerances, providing uniform quality in the

ammunition. In addition to standard expanding bullet types, PPU is perhaps best known for producing ammunition specifically designed for military or service rifles, including calibres such as .303, 7.92mm Mauser, and 7.62x39. The 182gr FMJ 7.62x54R ammunition on test today (at the time of writing) is priced at around £23.99 per box of 20 or £133.00 per case of 100.

The gear

I bought a Mosin Nagant 1944 sniper rifle from Holts Auctioneers, as I wanted to complement my Mauser K98 Sniper

PPU's ammunition offers excellent value for money and delivers consistently good results

for a few test reviews and videos. Kranks were the obvious choice for feeding such rifles, as they have a great reputation for actually stocking what they advertise! The prices are always appealing, especially if you're going to shoot 100 rounds or more, and the staff are both knowledgeable and helpful.

The 7.62x54R ammunition I purchased features a boat-tail design and demonstrated excellent uniformity. The ballistic data listed on the website corresponds to a rifle with a 610mm (24") barrel length, whereas the Nagant sniper rifle has a longer 29" barrel. However, based on experience, wartime barrels often vary significantly in quality, dimensions, and groove diameter, making it particularly interesting to observe how these PPU rounds performed during testing.

Testing

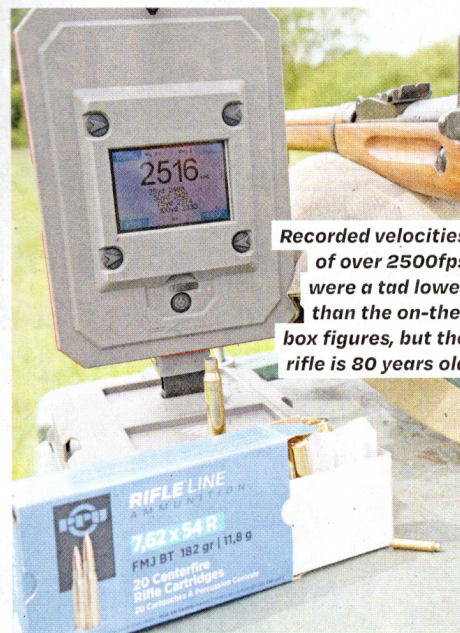
PPU quotes a velocity with the 182gr FMJ bullet of 800m/s (2624fps) at the muzzle, dropping to 744m/s (2440fps) at 100m, 690m/s



The FX True Ballistic chronograph helped me gather some good ballistic data



Recorded velocities of over 2500fps were a tad lower than the on-the-box figures, but the rifle is 80 years old



(2264fps) at 200, and 639m/s (2097fps) at 300m. This equates to 2242J (2822ft/lbs), 1708J (2407ft/lbs), 1278J (2071ft/lbs), and 1101J (1778ft/lbs) of energy, respectively.

I set up a full-sized steel IPSC target made of 500 Hardox from Tom's Targets at 100 yards, which proved excellent for testing bullets, as the visible impact and audible clang of each strike were most welcome. This is especially true when the recoil from the round obscures your vision, and a nice clang indicates a hit, especially when shooting over a 200 yard range.

I also set up the impressive FX True Ballistic chronograph, which utilises Doppler technology to calculate BC values downrange—a feature that proves invaluable for my reloading work and the wildcat rounds I frequently use. I had an average velocity reading for five shots of 2522fps, which equates to 2571ft/lbs of energy. At 50 yards, I had 2427fps|2381ft/lbs, and at 100 yards, it read 2339fps|2212ft/lbs. The average spread was only 31fps, which I thought was pretty damn good, and the BC value worked out at 0.446.

So, when zeroed at 100 yards, the velocity and energy figures at 200, 300, 400, and 500 yards were 2161fps|1888ft/lbs, 1996fps|1611ft/lbs, 1837fps|1364ft/lbs, and



We had groups of 1.5 to 2" at 100 yards, which I think is excellent

1686fps|1149ft/lbs, respectively. I ran the data through the Quickload and QuickTarget ballistic programs to ascertain the true trajectory of this bullet/BC combination.

So, sticking with a 100 yard zero, at 200 yards you'll be down 4.37", at 300 yards minus 16.17", then at 400 yards you'll be 36.72" low, and at 500 yards you'll experience a drop of 67.61". Wind deflection is the curse of all long-range shooting, and with a 10mph wind at a 90-degree angle, the bullet drifts 0.40" at 100 yards, 1.67" at 200, 3.91" at 300 yards, 7.23" at 400 yards, and 11.77" at 500 yards.

Accuracy

As shown in the pictures, the 1944 Nagant sniper rifle, an authentic model with all matching numbers and a well-maintained bore, delivered some acceptable groups at 100 yards. Having sighted it in, which was pretty easy with the PU scope thanks to its elevation and windage turrets (unlike the Mauser

K98, which has windage adjustment on the mounts), the rifle's 'German Type reticle'—a post and twin bars with points at the apex—was very easy to use. I found the fixed-focus PU to be clear in the centre but with obvious vignetting at the circumference.

Aiming at the centre, I achieved a three-shot group measuring 1.65", which I think is amazing. So, a good rifle and even better, consistent ammo! Headshots were a doddle, and again, I managed less than 2 MOA at 100 yards, which is more than acceptable. Future tests out to 500 yards on steels will no doubt prove fruitful as well.

Conclusion

I was thoroughly impressed not only by the construction and quality of each PPU round but also by their consistent performance downrange. Priced at approximately a quid per round, they offer exceptional value for money. I also conducted tests at extended ranges and compared the results with those from a couple of Mauser K98 sniper rifles, but that's a story for another time.

CONTACTS

Henry Krank - PPU Ammunition:
www.henrykrank.co.uk

Toms Targets - Hardox Targets:
www.tomstargets.co.uk

JMS Sporting - Quickload Ballistic Program: www.quickload.co.uk

Holts Auctioneers - Second-Hand Guns: www.holtsauctioneers.co.uk

Sportsman Gun Centre - FX Chronograph:
www.sportsmanguncentre.co.uk

A 7.62x54R round on the left compared to a .308 Win round

