## **ACME Machine Scope Review**

Tested/Reviewed By: Kyle Edwards, Osprey Group USA.

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**Scope Tested/Reviewed:** ACME Machine 6-24x50mm variable power Front Focal Plane with 30mm tube and MOA dials and reticle.

Rifle Used: M24 Sniper Weapon System (Remington 700) chambered in .308 caliber.

Ammunition Used: Hornady .308 caliber 168 grain Hollow Point Boat-Tailed.

**Testing/Review Areas:** Overall design and operation, zeroing and grouping, scope box drill, parallax confirmation settings, range estimation using the reticle, and engaging steel targets at distance.

The scope price is very attractive, although many companies start low to get a buying frenzy and get their name out there, they almost always end up being just as expensive as Leupold (Vortex for example). If this scope can maintain a lower price range and provide a durable scope with good glass, I believe it could sell for an extended period of time without having to constantly compete with the top scope companies, resulting in a lot of R&D and engineering to stay competitive at the high price market. The 24 power is very high, especially for the 50mm objective lens and 30mm tube. From a sales perspective to civilians, they buy what they think they need, not what they need; civilians think the more power the better. For 30mm tube, it is cheaper and easier for civilians to get rings.

For MOA holdoff to reach 1000m the reticle would require over 42 MOA from the crosshairs. The reticle has only 30 MOA on the reticle from the crosshair center.

The turret locking screw seemed to be made of a light metal which can result in stripping the allen key hole, I would suggest using a heavy metal for this. The elevation turret is in revolutions of 12MOA which makes it hard for doing the math fast under stress for come-ups. Using 10MOA per revolution would be easier, or going to a larger turret wheel with 20MOA per revolution.

Zeroing the rifle at 100 meters, using an M24 Sniper Weapon System (Remington 700 .308) with a MARS rail, resulted in being 5 revolutions up on elevation and 3<sup>rd</sup>

revolution on windage. The scope performed great on grouping at 6x power and 24x power. Group sizes were a  $\frac{1}{2}$ " 5-round group (1/2 MOA), multiple  $\frac{1}{4}$ " (1/4 MOA) 3-rounds groups on 24x power, and  $\frac{1}{2}$ " (1/2 MOA) 3-round groups on 6x power. The parallax was set to 350 yards for correct parallax at 100 meters. The zero target boxes are 1"x1" squares.

## 5-Round Shot Group at 100m on 24x Power





The box drill was used to ensure the scope elevation and windage turrets had precise clicks when dialing in a box around the zero and coming back to zero. The scope performed great in this drill.

For range estimation, I estimated a human sized target to be 905 meters, the actual distance was 910 meters. The reticle lines are pretty thick, however, I found this to be pretty easy to determine the center of the reticle line and it helped see the crosshair when on 6x power. If the left and right MOA subtensions on the reticle, as well as the very top MOA subtension, had a ½ MOA mark, it would help for getting even more accurate with range estimation. Having ½ MOA subtensions on the rest of the reticle would just make it way to busy.

The scope performed very well in engaging targets at distance using both MOA reticle holds and dialing in come-ups. This showed to me that the clicks were precise as well as the reticle. Supporting this was also the the zeroing process, box drill, and range estimation.

Overall performance of this scope, especially for the price, was excellent. The biggest flaw I found was the parallax setting being incorrect. If ACME Machine can keep this scope under the \$600 range for either MOA or mil options, I believe it could sell very well as there is a huge market for scopes capable of long range precision shooting that is not in the Leupold, Schmidt & Bender, Vortex, or NightForce price ranges.