# VCO–1 MIL BDC FFP RETICLE

The VCO-1 MIL reticle is designed for both fast target acquisition and precision shooting, and offers features such as fast acquisition open circle, BDC marks, and distance ranging marks. At 1x magnification, the reticle displays a large, open circle that helps with rapid target acquisition. This feature is ideal for close-quarters combat or dynamic shooting scenarios, as the magnification increases (up to 8x), the open circle gradually disappears at the edges of the field of view, allowing the shooter to focus on finer aiming points for precision shooting without distractions.

The VCO-1 MIL reticle features a distance ranging function. Shooters can align the mark lines below or above the center point with a USPSA (United States Practical Shooting Association) target's "shoulder" to quickly estimate the distance to the target. This significantly improves shooting efficiency in various scenarios.

1x @100m

4x @100m

8x @100m

Red indicated illuminated portion of the reticle
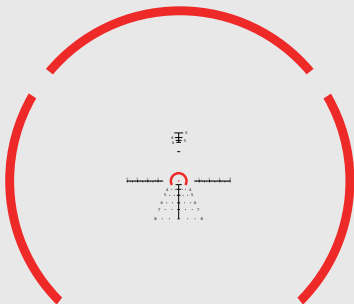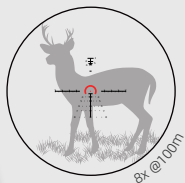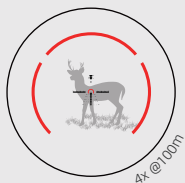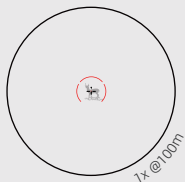
RAPID ACQUISITION RING RETICLE

It has 3 space area on the circle, each is 10MIL long, The eticle allows the shooter to quickly acquire a target by framing it within the circle. It also helps to center the reticle on the target, especially when the shooter is quickly moving from one target to the next. The reticle assists in fast and accurate sight alignment, which is critical in shooting sports. The open circle gradually disappears at the edges of the field of view, there will be no obstruction of your eyesight.
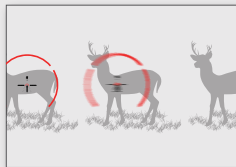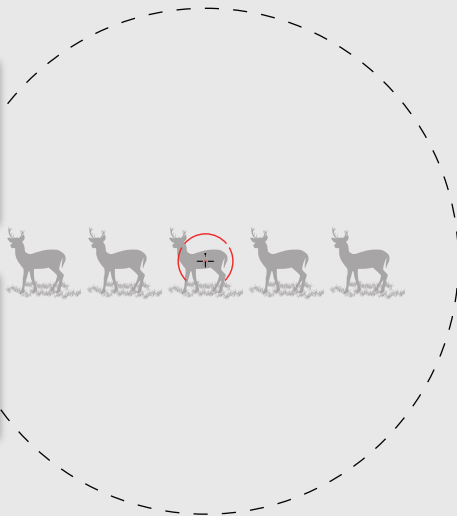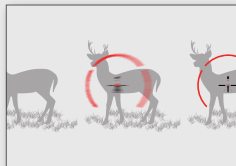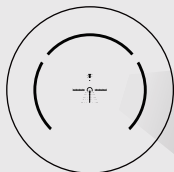
Exhibit 1

Exhibit 2

FAST RANGING

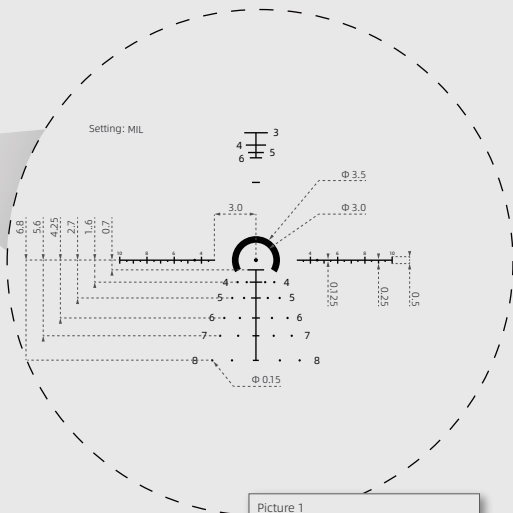Setting: MIL

The upper part of the reticle is 45cm wide and 75cm high, designed for USPSA targets, it is used to help shooters estimate the range of their targets quickly. You can achieve fast ranging by horizontally aligning the width of the target or vertically aligning the height of the target.

If you vertically align the bottom of the USPSA target, and its highest point reaches mark 3 on the reticle, then the target is 300 meters away from you. (Picture 1)

If horizontally align the USPSA target's width, and its shoulder at the widest point reaches mark 3 on the reticle, then the target is 300 meters away from you. (Picture 2)

45cm / 18in

75cm / 30in
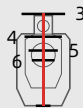
Picture 1

Red indicates the height of the target
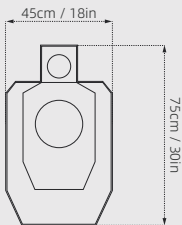
Picture 2

Red indicates the shoulder width of the target

HOW TO MEASURE TARGET HEIGHT & LENGTH

To use the VCO-1 MIL reticle for ranging, the shooter first needs to know the height of the target in question. Once the height of the target is determined, the shooter can use the VCO-1 MIL reticle to measure the target in mils.

Height of Target (yards) / mils * 1000 = Distance to Target (yards)

If the height of target is in Inches, then the formula should be:
Height of Target (inches) / mils * 27.78 = Distance to Target (yards)
(1 inch ≈ 0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:
Height of Target (meters) / mils * 1000 = Distance to Target (meters)

Red indicates the height of the target

If the height of an adult male is 5.91ft, and measures 5Mils across the reticle, that is:
Distance to Target (yards) / 27.78 * Mils = Height of Target (inches)

5.91ft = 70.9 inches
70.9 (inches) / 5 mil x 27.78 = 394 (yards)
2.0 (yards) / 5 MIL x 1000 = 394 (yards)
1.8 (meters) / 5 MIL x 1000 = 360 (meters)

If the distance of the target is determined, then the shooter can use the VCO-1 MIL reticle to measure the target length. You can use the following formula:

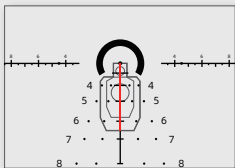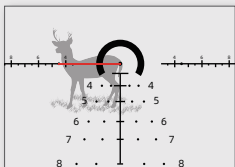**Distance to Target (yards) / 1000 * Mils = Length of Target (yards)**

Distance to Target (yards) / 27.78 * Mils = Length of Target (inches)
(1 inch ≈ 0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:
Distance to Target(meters) / 1000 * Mils = Length of Target (meters)

Red indicates MILs of the target in reticle

If the Distance to Target is 400m, and the target measures 4.5Mils across the reticle, then the target length is:

400 (meters) / 1000 * 4.5 MIL = 1.8 (meters)
437 (yards) / 1000 * 4.5 MIL = 2.0 (yards)
437 (yards) / 27.78 * 4.5 MIL = 70 (inchs)

Measure the object in yards to find the distance in yards, and use meters to yield distances in meters.