



# Mil-dot Reticle

## Technical Sheet

The **Mil-dot Reticle** is designed specifically to enhance a shooter's long range accuracy and ranging capabilities under a variety of field conditions.

A "Mil" is the abbreviation for Milliradian. A "Mil" is an angular measurement that is equal to 1/6400<sup>th</sup> of a circle, which is equivalent to approx 1 Yard wide at 1,000 Yards distance. 1 MIL is equal to 3.6 inches at 100 Yards.

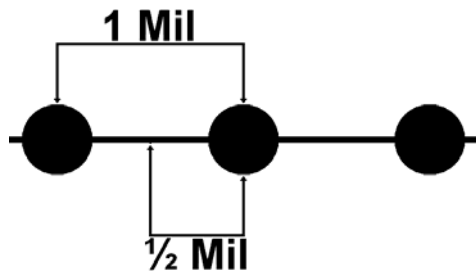
The Mil-dot reticle is divided into 5 Mil-dot increments (Picture: A).

Any known size target (height or width) can be ranged using a mathematical formula.

$$\frac{\text{TARGET size in Yards} \times 1,000}{\text{Size of the Object in Mil}} = \text{Target's Range in Yards}$$

1 Yard is 36 inches (3 feet). Divide your Target's Size in inches by 36 inches to get your Target size in Yards.

The distance from the Center of a Dot to the Center of the next Dot is 1 Mil. The distance from the Center of a Dot to the middle of the line between Dots is 1/2 Mil.

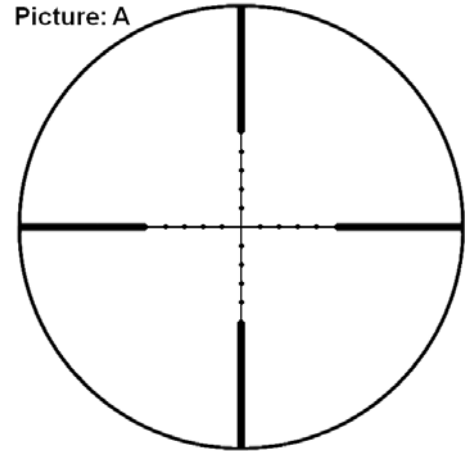


**For Example:** the silhouette target is 18 inches wide (Picture: B). The target's width is 1 1/2 Mil using the scope's Mil-dot reticle over the target. Using the ranging formula above, we get the follow results:

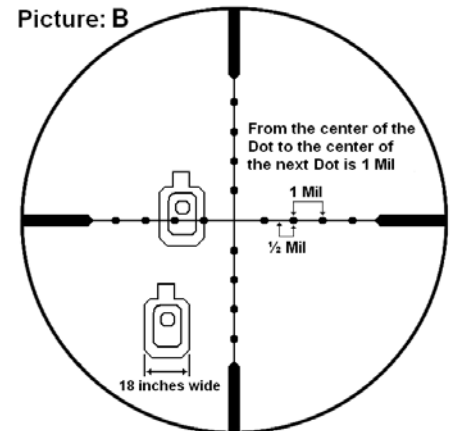
**TARGET'S width = 18" inches wide = 0.500 Yard**

$$\frac{.500 \text{ Yard} \times 1,000}{1\frac{1}{2} \text{ Mil}} = \frac{500}{1.5} = 333 \text{ Yards}$$

Picture: A



Picture: B



This picture depicts a **close-up** of the center portion of the reticle for more detail.

| MIL-DOT TABLE FOR TARGETS IN INCHES |       |       |       |       |       |       |       |       |       |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| INCHES                              | 8     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    |
| YARDS                               | 0.222 | 0.278 | 0.333 | 0.389 | 0.444 | 0.500 | 0.556 | 0.611 | 0.667 |
| MIL 1                               | 222   | 278   | 333   | 389   | 444   | 500   | 556   | 611   | 667   |
| MIL 1.5                             | 148   | 185   | 222   | 259   | 296   | 333   | 371   | 407   | 445   |
| MIL 2                               | 111   | 139   | 167   | 195   | 222   | 250   | 278   | 306   | 334   |
| MIL 2.5                             | 89    | 111   | 133   | 156   | 178   | 200   | 222   | 244   | 267   |
| MIL 3                               | 74    | 93    | 111   | 130   | 148   | 167   | 185   | 204   | 222   |
| MIL 3.5                             | 63    | 79    | 95    | 111   | 127   | 143   | 159   | 175   | 191   |
| MIL 4                               | 56    | 70    | 83    | 97    | 111   | 125   | 139   | 153   | 167   |
| MIL 4.5                             | 49    | 62    | 74    | 86    | 99    | 111   | 124   | 136   | 148   |
| MIL 5                               | 44    | 56    | 67    | 78    | 89    | 100   | 111   | 122   | 133   |

| MIL-DOT TABLE FOR TARGETS IN FEET |       |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|-------|
| FEET                              | 3     | 4     | 5     | 6     | 7     |
| YARDS                             | 1.000 | 1.333 | 1.667 | 2.000 | 2.333 |
| MIL 1                             | 1000  | 1333  | 1667  | 2000  | 2333  |
| MIL 1.5                           | 667   | 889   | 1111  | 1333  | 1555  |
| MIL 2                             | 500   | 667   | 834   | 1000  | 1167  |
| MIL 2.5                           | 400   | 533   | 667   | 800   | 933   |
| MIL 3                             | 333   | 444   | 556   | 667   | 778   |
| MIL 3.5                           | 286   | 381   | 476   | 571   | 667   |
| MIL 4                             | 250   | 333   | 417   | 500   | 583   |
| MIL 4.5                           | 222   | 296   | 370   | 444   | 518   |
| MIL 5                             | 200   | 267   | 333   | 400   | 467   |