

**Meiji Techno America Calibration Instructions**

**For Walton-Beckett Reticle**

**In order to do any calibrations for your reticle, you will need the following items:**

1. Centimeter scale ruler
2. Stage micrometer
3. Reticle (eyepiece disc) that can be placed and removed in a10X focusing eyepiece. You may use a crosshair, scale, grid reticle, any Walton-Beckett reticle or Porton reticle.
4. Phase contrast microscope with 10X focusing eyepiece with the ability of reticle installation and 40X objective.

**The Calibrations Needed**

1. **The diameter of the reticle** (eyepiece disc) that will fit in your eyepiece:

MA254- 19mm Walton & Beckett reticle in Models: ML6510, ML6520, and ML6530

MA254/05- 21mm Walton & Beckett reticle in Models MT6510 and MT6530

 **mm**

1. **The Actual Length-** This is the ruler measurement, in millimeters, of the outside perimeter of the eyepiece of any reticle. Such as, taking a ruler and measuring a horizontal line from one end to the other.

 **mm**

1. **The Magnified Length-** This is the same measurement taken with a stage micrometerwhen reticle is installed in a 10X eyepieceand used with a 40X objective. Instead of a ruler, you will now measure the same horizontal line with a the use of your stage micrometer.

 **µm**

1. **The D Value-** This refers to the diameter of the circular parttern of the Walton-Becktett.It is critical to determine the D Value because the circular pattern must measure to the 100µm with the stage micrometer. You may find the D value once the Actual length and magnified length is known.

**Formula:**

**D Value= Actual Length x 100**

 **Magnified length**

**Example: 4.5 x 100= 2.903mm D Value**

 **155**