

Graduation: 0.01mm



- 1-Locking wrench
- 2-Sleeve
- 3-Thimble
- 4-Ratchet stop
- 5-Spanner

1. Calibration the outside micrometers before measuring:

- Clean the measuring surface of the micrometer with soft cloth.
- Loosen the locking screw, rotate the thimble, when the two measuring surface are closed, but not in contact, rotate the ratchet stop, and reading after hearing squeak. If the zero position has deviation, use the spanner to set zero.
- For the micrometers above 25mm, do calibration with setting standard. Same as the above method.

How to use spanner:

- Tighten the locking screw, use spanner to rotate sleeve (Fig.1), adjust the reading to be zero
- Finish calibration.



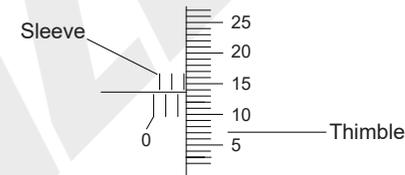
Fig.1

2. Measurement:

- During measurement, make sure there are no cutting chips or other debris on the measuring faces and workpiece surface, or it will lead to inaccurate results.

- Rotate the micrometer to be slightly larger than the measured workpiece, put the workpiece into the micrometer, rotating the thimble. When the measuring surface is in contact with the workpiece to rotate the ratchet stop. Then get the reading after hear squeak.

- 3. During reading, the line of sight is perpendicular to the scale, in order to avoid parallax. The reading is the sum of the fixed sleeve reading and the thimble reading. Results are as follows:



Sleeve reading: 2.5mm
 Thimble reading: 0.137mm(7 is estimated)

 Reading: 2.637mm

Attention:

- In micrometer calibration, the operating direction must strictly align with the direction used during measurement. This is essential to eliminate errors induced by the micrometer's own weight.
- During measurement, When the measuring faces are nearly touching the workpiece, rotate the ratchet stop gently. Overly forceful rotation not only lead to unreliable measurement data, but also risks damaging the internal precision threads.
- During storage, a gap of 0.1mm to 1mm shall be left between the measuring surfaces.
- After a long time to store the outside micrometers, the spindle has a protective oil film, use dust-free cloth to wipe the oil film before measuring.