

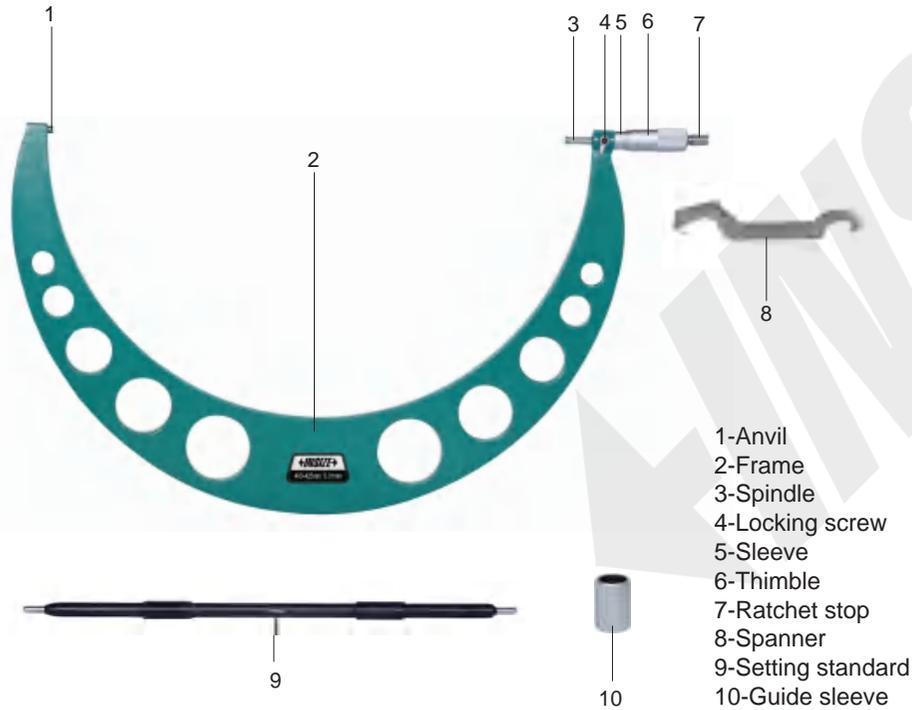


# OPERATION INSTRUCTION

## Outside Micrometer

Graduation: 0.01mm

Code	Range	Accuracy
3216-325	300-325mm	10μm
3216-350	325-350mm	10μm
3216-375	350-375mm	11μm
3216-400	375-400mm	11μm
3216-425	400-425mm	12μm
3216-450	425-450mm	12μm
3216-475	450-475mm	13μm
3216-500	475-500mm	13μm



### 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.

How to use spanner:

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

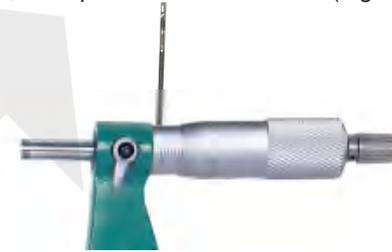


Fig.1

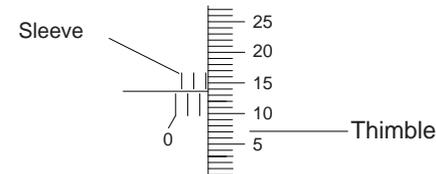
### 2. Measurement:

- When the measuring face is close to, but not in contact with the workpiece, rotate the ratchet stop until you hear click, but can not rotate friction thimble, which will damage the internal precision threads.

Caution: When the measuring faces is close to, but not in contact with the workpiece, do not apply excessive force to rotate the ratchet stop, as it will lead to inaccurate results and may damage the internal precision threads.

### 3. During reading, the line of sight is perpendicular to the scale, in order to avoid parallax .

The reading is the sum of barrel, thimble, and setting standard. Results are as follows:



Sleeve reading: 2.5mm  
 Thimble reading: 0.137mm(7 is estimated)  
 Setting standard: 300mm  
 Reading : 302.637mm

### 4. Notes:

- Please take care to protect the measuring surface of the micrometer to avoid scratches or damage. Micrometer should be oiled after use to prevent rust.
- If the micrometer has been stored for a long time and there is a protective oil film on the measuring rod, the oil film on the measuring rod should be wiped clean with a dust-free cloth when using the micrometer.
- Micrometer calibration should be clamped in the same way as the actual measurement, to avoid measurement errors due to the different effects of the deformation of the ruler frame weight.
- The working temperature is 0-40°C.

MN-3216-E

V0