

Micrometer Calibration Standards

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Measuring & Inspection



Photo: U.S. Navy photo by Mass Communication Specialist 1st Class Rebekah Adler — Public domain — via Wikimedia Commons (US_Navy_100714-N-3852A-178_Machinist's_Mate_Fireman_Ryant_Delossantos_from_Manila_Philippines_performs_calibration_of_a_micrometer_tool_)

Micrometer calibration standards are precision gauge blocks or rods of exact known length used to check and adjust micrometer zero and reading accuracy, keeping measuring instruments trustworthy in inspection lessons.

Key Features

- Gauge blocks or plain rods
- Known dimensions within tolerance
- Hardened and lapped faces
- Certs with calibration values
- Cases with dimension tags

Typical Uses in the Workshop

- Check micrometer zero and accuracy
- Verify calipers against a master
- Teach calibration procedures
- Support quality inspection lessons

Safe Operation

1. Clean the standard and the anvils
2. Close the micrometer on the standard
3. Compare the reading with the known size
4. Adjust or zero the micrometer as needed
5. Record the calibration check

SAFETY NOTES

- Handle standards with gloves - skin oil affects readings
- Never drop gauge blocks
- Store in the case, face-protected
- Do not use as feeler stock
- Keep the calibration kit secure

Maintenance & Consumables

- Clean and re-oil the standards
- Check for burrs and damage
- Recertify periodically
- Store in the case with foam
- Log calibration results

Specification & Buying Notes

A set of grade calibration rods covering the micrometer ranges used - from 25 mm up - lets classes verify instruments. Quality certified standards are worth the cost.