

DEPTH MICROMETER INSTRUCTION MANUAL

INTRODUCTION

The depth micrometer is used to measure the depth of holes, slots, and the height of steps.

FEATURES

- 1. Interchangeable rods provide a wide measuring range.
- 2. Precision rods that do not need to be reset when they are interchanged.
- 3. A ratchet stop that keeps constant measuring force on the surface of the rod face, as it touches the work piece.
- 4. Includes a locking clamp.

SPECIFICATIONS

Range		Resolution		Quantity
Metric	Inch	Metric	Inch	of rods
0-25mm	0-1"	0.01mm	0.001"	1
0-50mm	0-2"			2
0-100mm	0-4"			4
0-150mm	0-6"			6
0-200mm	0-8"			8
0-300mm	0-12"			12

DEPTH MICROMETER COMPONENTS

- 1. Interchangeable rod
- 2. Measuring base
- 3. Fixed thimble
- 4. Friction thimble
- 5. Locking clamp
- 6. Ratchet stop



DEPTH MICROMETER



READING METHOD

- 1. To determine the main scale reading, align the thimble so that the main scale zero line coincides with the reference surface or the surface to be measured. Then, look at the main scale and note the reading on the sleeve immediately to the left of the thimble. This reading will be in increments of the depth micrometer's smallest graduations.
- 2. The thimble on the depth micrometer is marked with lines or numbers that represent fractions of the smallest graduation on the main scale. To determine the thimble scale reading, observe the lines or numbers on the thimble that are visible above the sleeve. Each line or number represents a fraction of the main scale graduation, which is typically 0.01 inches or 0.1 millimeters. Count the number of visible lines or numbers on the thimble, and add that fraction to the main scale reading to get the total depth measurement.
- 3. Once you have determined the main scale reading and the thimble scale reading, you can take the final reading. To do this, simply add the two readings together to get the total depth measurement. Make sure to note the unit of measurement, whether it is inches or millimeters, and any fractions or decimals that are part of the measurement. It's important to be careful when taking the final reading, as even a small error in adding the two readings together can result in an inaccurate measurement.

NOTES

- 1. Before setting the zero on a depth micrometer, ensure that the measuring faces are clean and free of debris. Ensure that the measuring faces are resting flat on a clean and level surface. This is necessary to ensure that the zero-reference point is accurate. To set zero, gently loosen the thimble lock until the thimble can be rotated freely. With the thimble unlocked, rotate it clockwise or counterclockwise until the measuring faces touch the flat surface. Be gentle and avoid forcing the thimble beyond its limit. Once the measuring faces are in contact with the flat surface, rotate the thimble until the zero on the thimble scale aligns with the zero on the main scale. Once the zero points are aligned, lock the thimble in place by tightening the thimble lock. To ensure that the zero is set correctly, remove the depth micrometer from the flat surface and check the main scale reading. It should read zero, indicating that the depth micrometer is correctly calibrated. If the zero setting is incorrect, repeat step A until the zero is set accurately. It's important to set the zero on a depth micrometer before taking any measurements to ensure that the readings are accurate and reliable.
- 2. Measure only when the work piece is in clamped (static) state.
- 3. The center line of the measuring rod must be kept perpendicular to the surface of the work piece to
- 4. The flat end of the rod must touch the steel ball in the micron bolt.



WARNING

The safety information given must be understood by any person using or maintaining these products