

Introduction

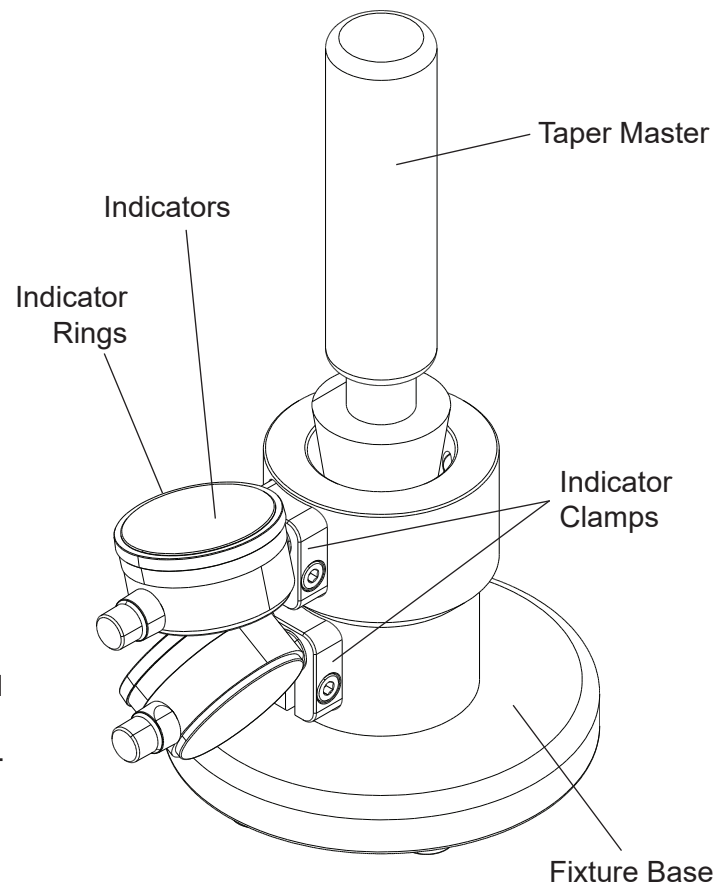
The tool holder inspection gauge is designed to inspect tool holder taper diameters for wear and other potential problems. Verifying tool holder tapers are correct can help to maximize spindle life and improve part finish.

Please note that the taper inspection gauge will only check diameter on two planes along with taper angle. The gauge will not detect nicks or localized damage to the taper. We recommend using series 430.110 taper sleeve gauges in conjunction with the taper inspection gauge for this purpose.

The tool holder taper inspection gauge includes the **Fixture Base** and two **Indicators** (0.002mm or 0.0001 inch resolution). An optional 430.110 certified **Taper Master** is strongly recommended for zeroing the **Indicators**. If a master is not available, a known-good tool holder can be used in place of the master.

Setup

1. Insert **Taper Master**. To improve repeatability, allow the weight of the master to seat it (pressing down will cause variation in readings).
2. Install the **Indicators** in the **Indicator Clamps**. Tighten using a 3mm hex wrench until the **Indicators** can still be moved but with enough friction so that they will stay in position.
3. Adjust **Indicator** positions until both read close to zero. To improve readability, positioning “zero point up” on indicators when the gauge is viewed from the front is recommended.
4. Fully tighten **Indicator Clamps**. Use care not to over-tighten.
5. Turn **Indicator Rings** to fine-adjust readings to zero.



Using the Gauge

1. Insert the tool holder to be tested.
2. For more complete inspection of the tool holder taper, we recommend checking at several points on the diameter.
3. To prevent wear, lift and re-seat the tool holder (do not “spin”).
4. To improve repeatability, allow the weight of the tool holder to seat it. Pressing down on the holder will cause variation in readings.
5. Recommended variance generally is +0.002 to -0.004mm (+0.0001 to -0.0002 inch). Users need to determine what is acceptable for their specific application.

Storage and Care

- **Indicators** can remain installed for storage but we recommend removal to prevent damage during shipment.
- The **Taper Master** should be lightly oiled after use.
- Periodic recertification of the **Taper Master** and **Indicators** is recommended.