

Using Taper Screw Plug Gauges

1. Understand the Purpose

Tapered screw plug gauges are used to quickly determine if the internal threads of threaded holes are within specified tolerances. Steps for upper and lower limits provide a simple pass/fail assessment without providing detailed measurements.

2. Select the Correct Gauge

Choose the appropriate gauge for the thread size you want to check. These gauges are usually engraved with the thread description and applicable standard that they designed to check.

3. Clean the Workpiece

Before using the gauge, ensure that the threads of the threaded hole are clean and free from debris or burrs. This ensures accurate assessments and prevents any interference during the gauging process.

4. Insert the Gauge

Screw the gauge into the threaded hole until it stops, ensure it enters smoothly without force or resistance. Do not use excessive force once the gauge stops.

5. Interpret the Assessment

The end face of the product being checked should be fall between the upper and lower step limits. Note the upper step is usually the face of the gauge and the lower step is ground into the thread. The distance between the steps represents the tolerance.

6. Record the Assessment

If needed, document the results obtained using the gauge. This record can be useful for quality control purposes or for taking appropriate actions based on the assessment.

7. Clean and Store the Gauges

After use, clean the gauge thoroughly to remove any debris or contaminants then apply a light coat of oil. Store it in a clean, dry place, ensuring it is protected from damage to maintain accuracy for future use.