

TUBING & CASING THREAD INSPECTION- External & Internal Thread Height



Thread Height Gauge- TH-3000 Series

Thread Height:

Thread height is the distance from the crest to the root measured perpendicular to the pipe axis. Depth of the helical thread groove is measured perpendicular to the thread crest & root cones on 8 Round & Buttress forms. Incorrect thread height may be caused by a chipped, broken, or incorrectly ground insert.

Purpose:

The TH-3000 Series of gages inspect variations in external & internal thread height for a variety of thread forms. The gages use a precision contact point, which seats in the thread of the part during inspection. The actual thread height can be read from the gages indicator.



TH-3002R
TH-3001R



TH-3004/TH-3006

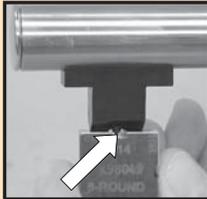
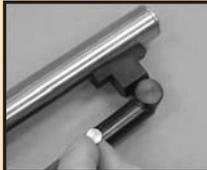


Standards

Thread Height Inspection with TH-3000 Series

Internal Setup

1. Loosen the thumbscrew to remove the clamp sleeve. The TH-3004 and 3006 models contain a clamp sleeve, which must be removed before zeroing on a setting standard.
2. Place the anvil of the gage on the setting standard and position the contact point in the groove of the standard.
3. Turn the indicator dial to align the needle with zero.
4. Tighten the indicator Bezel clamp.
5. Replace the clamp sleeve on the clamp arm. Be sure to properly align the contact point with the hole in the clamp sleeve.



Internal Gauge Operation

1. Insert the gage into the threaded part. For model TH-3004 and 3006, retract the clamp arm before inserting the gage into the part.
2. Position the contact point in the root of the thread and rest the anvil on the thread crests.
3. Tilt the gage from side to side to locate the largest indicator reading.
4. Record any deviations on an inspection or calibration report.
5. Compare the readings with the measurement specified in API Specification 5B.



External Setup

1. For model TH-3001R: place the gage on a flat surface. For all other models: place the contact point into the groove of the setting standard.
2. Tilt the gage from side to side to locate the shortest depth location. Then, turn the indicator Bezel to align the needle with zero.
3. Tighten the indicator Bezel clamp and remove the gage from the standard. Remember to recheck the zero position.



External Gauge Operation

1. Place the contact point into the thread groove of the part.
2. Push down on the gage until the gage body rests on the crests of the thread.
3. Tilt the gage from side to side to locate the shortest depth location.
4. Record any deviations on an inspection or calibration report.
5. Compare the readings with the measurement specified in API Specification 5B.

