Thread Height Gage - TH-3000 Series

Thread Height:
Thread height is the distance from the crest to the root measured perpendicular to the pitch line. A connection with a shallow thread height may pull apart under stress.

Gage Description:
The TH-3000 series of gages inspect variations in internal thread height for a variety of thread forms. The gages use a precision contact point that seats in the thread of the part during inspection. Some of the TH-3000 gages require zeroing on a setting standard. Once zeroed, the gage is applied to a part and the deviation from zero can be read from the gages' indicator.

Zeroing the Gage
1. For models TH-3004 and TH-3006, loosen the thumbscrew and remove the clamp sleeve. For all other models, proceed to step 2.
2. Loosen the indicator clamp.
3. Place the contact point in the square notch of the setting standard.
4. Turn the indicator dial to align the needle with zero.
5. Place the contact point back into the square notch of the standard to verify zero.
6. Place the contact point into the V-notch of the standard and rock the gage back and forth to re-verify zero.
7. Tighten the indicator clamp.
8. Replace the clamp sleeve and tighten the thumbscrew for appropriate models. Be sure to properly align the contact point with the hole in the clamp sleeve.

Inspecting a Part
1. Insert the gage into the threaded part. For models TH-3004 and TH-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. Rock the gage from side to side to locate the largest indicator reading.
4. Take another measurement farther back on the part.
5. Record findings on an inspection report.
6. Verify repeatability periodically by placing the gage on the standard.