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 external 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.

Thread Height Inspection with TH-3000 Series Gages

Zeroing the Gage

1. For model TH-3001R, place the gage on a flat surface. For models with balanced dial indicators, place the contact contact point of the gage into the square groove of the setting standard.

2. Rock the gage back and forth to locate the shortest depth location.

3. Turn the indicator dial to align the needle with zero.

4. Place the contact point back into the square notch of the standard and rock the gage back and forth to verify zero.

5. Place the contact point into the V-notch of the standard and rock the gage back and forth to re-verify zero.

6. Tighten the indicator clamp.

Inspecting a Part

1. Place the contact point into the thread of the part and push down on the gage until the body rests on the crests of the thread.

2. Rock the gage back and forth to locate the shortest depth location.

3. Repeat step 2 on two other locations farther back on the part.

4. Record findings on an inspection report.

5. Verify repeatability periodically by placing the gage on the standard.