

Height Gauge Calibration Procedure

Memorial University Technical Services

Document No.: TS-0050

Revision: 3

1.0 Standards and Equipment

The following equipment is required:

Granite Plate
Master Gauge Block Set

NOTE: Standards and equipment used must have a valid calibration certificate

2.0 Calibration Procedure

“TS-0072 Height Gauge Calibration Record Sheet” must be used

Clean the Height Gauge’s measuring surfaces, the granite plate, and the gauge blocks to be used

- NOTE: 1. Digital Height Gauges only need one scale to be verified*
- 2. Zero the Height Gauge at the start and adjust as required by the manufacturers’ specifications. If you cannot zero it then mark it as a fail*
 - 3. When testing the Height Gauge, one of the points must be near the lower limit that the instrument can measure, another somewhere in the middle, and the third near the upper limit*
 - 4. Use a conversion factor of 25.40 mm/in to convert gauge block lengths to Metric from Imperial*

Step 1:

Measure the ambient temperature and record it. If the temperature is $<18^{\circ}\text{C}$ or $>24^{\circ}\text{C}$, see the Division Manager for further instructions.

Step 2:

Test Characteristic: Inspect the anvils and the Sliding Scale

Test Method: Visual, Touch

Acceptable Limit: No damage, nicks, or burrs. Should have straight and parallel faces, smooth movement over the whole length with no free play

Step 3:

Test Characteristic: Measuring Scale

Test Method: Using gauge blocks, measure and record 5 different heights, stack and wring blocks as necessary. Use the inspection grade granite plate

Acceptable Limit: +/- 0.002" or 0.05mm

Step 4:

Test Characteristic: Anvils

Test Method: If different anvils are available for the height gauge, make and record one measurement for each

Acceptable Limit: +/- 0.002" or 0.05mm