

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Touchstone Calibration Service, Inc.

8745 Packard Road
Niagara Falls, NY 14304
Kevin Schul / John Conway
800-701-1719

CALIBRATION

Valid to: **July 7, 2026**

Certificate Number: **AC-1118**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Coordinate Measuring Machines (CMMs) ^{1,2}			ASME B89.4.1-1997 per Sec 5.4.2/5.4.3, 5.5.2, and 5.3: Renishaw Laser Interferometer
X, Y, Z Axis Length Linearity	Up to 7 000 m	$(0.86 + 2.4L) \mu\text{m}$	
Linear Displacement Accuracy (X, Y, Z)	(25.4 to 610) mm	3.1 μm	Starrett-Webber Step Bar
Squareness Deviation	Up to 457 mm	4.3 μm	Ceramic or Granite Square and Indicator
Repeatability	Up to 1 in	100 μin	Reference Sphere
Volumetric Accuracy	Up to 39 in	$(110 + 4.6L) \mu\text{m}$	Ball Bar, Precision Spheres

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

- On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
- L = length in meters.
- This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1118.