



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Hexagon Metrology, Inc.
Hexagon Manufacturing Intelligence – Portable Service
46444 Hexagon Way
Novi, MI 48377
(and the satellite as listed on the scope)

Fulfills the requirements of

ISO/IEC 17025:2017

and the national standard

ANSI/NCSL Z540-1-1994 (R2002)

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 14 December 2022

Certificate Number: AC-1745



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND
ANSI/NCSL Z540-1-1994 (R2002)**

Hexagon Metrology, Inc.
Hexagon Manufacturing Intelligence – Portable Service
 46444 Hexagon Way
 Novi, MI 48377
 Mike Blake
 248-449-9403

CALIBRATION

Valid to: **December 14, 2022**

Certificate Number: **AC-1745**

Length – Dimensional Metrology

Parameter / Equipment ¹	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method and/or Equipment
Length Bar Standard	Up to 1.2 m	$(2.8 + 0.47L) \mu\text{m}$	CMM
Articulated Arm CMM (AACMM) – Volumetric Performance	Up to 1.2 m	$(4 + 0.67L) \mu\text{m}$	ASME B89.4.22 Sections 5.3 and 5.4 Length Bar Standard
Articulated Arm CMM (AACMM) – Volumetric Performance	Up to 1.2 m	$(2.6 + 0.63L) \mu\text{m}$	ISO 10360-2 Sections 6.3 and 6.4 (adapted) Step Gage

Length – Dimensional Metrology

Parameter / Equipment ¹	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method and/or Equipment
Articulated Arm CMM (AACMM) – Probing Size Error (P Size) ² Probing Form Error (P Form) ² Articulated Location Error (LDia) ² Length Measurement Error Unidirectional (EUni)	Sphere Diameter: Up to 51 mm Up to 51 mm Up to 51 mm Length: Up to 3 m	0.22 μm 0.13 μm 0.16 μm (2 + 2L) μm	ISO 10360-12 Test Sphere Test Sphere Test Sphere Scale Bar with conical seat
Articulated Arm Coordinate Measuring Machines (AACMM) with Optical Distance Sensors: Articulated Location Value (LDia) ²	Sphere Diameter: 51 mm	0.25 μm	ISO 10360-8 Annex D Test Sphere
Test Sphere Diameter ² Form ²	25.4 mm 50.0 mm 25.4 mm 50.0 mm	1.6 μm 4.4 μm 1 μm 1 μm	CMM

Services performed at satellite location

9004 Research Drive
Irvine, CA 92618
Mike Blake 248-449-9403

CALIBRATION

Valid to: **December 14, 2020**

Certificate Number: **AC-1745**

Length – Dimensional Metrology

Parameter / Equipment ¹	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method and/or Equipment
Length (Tracker with or without T-scan or T-probe)	(125 to 2 550) mm	14.1 µm	Scale Bar (Brunson kit, modular)
Length (Theodolites - Industrial Measurement Systems)	(125 to 2 550) mm	14.1 µm	Scale Bar (Brunson kit, modular)

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:

1. 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.
2. L = Length in meter.
3. Dimensions are nominal value
4. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1745.



R. Douglas Leonard Jr., VP, PILR SBU