



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

IIA LAB SERVICES, LLC - IRVINE  
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MECHANICAL

Valid To: March 31, 2025

Certificate Number: 2275.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following dimensional testing on metals, plastics and ceramics, aerospace, automotive parts, and medical devices and calibrations<sup>1,6</sup>:

I. Dimensional Testing/Calibration<sup>1</sup>

Parameter	Range	CMC <sup>2,4,5,7</sup> ( $\pm$ )	Comment
Length (1D) <sup>9</sup> – Parts & Fixtures	(28 x 21 x 10) in (700 x 530 x 250) mm	(28 + 1.6L) $\mu$ m (0.71 + 0.0016L) $\mu$ m	Computer controlled CMM
	Up to 1 in Up to 25 mm	(11 + 29L) $\mu$ m (0.28 + 0.029L) $\mu$ m	ID/OD Super micrometer
Length (2D) <sup>9</sup> – Parts & Fixtures	Up to 2 in Up to 50 mm Up to 4 in Up to 100 mm	(13 + 19L) $\mu$ m (0.32 + 0.019L) $\mu$ m (16 + 14L) $\mu$ m (0.4 + 0.014L) $\mu$ m	Contour tracing
	(15 x 15) in (380 x 380) mm	(120 + 17L) $\mu$ m (3.0 + 0.017L) $\mu$ m	Multi-sensor optical system

Parameter	Range	CMC <sup>2, 4, 5, 7</sup> ( $\pm$ )	Comment
Length (3D) <sup>9</sup> – Parts & Fixtures	(28 x 21 x 10) in (700 x 530 x 250) mm  8 ft Sphere 2.4 m Sphere  Up to 35 in Up to 900 mm	(28 + 1.7L) $\mu$ in (0.71 + 0.0017L) $\mu$ m  (226 + 2.4L) $\mu$ in (5.7 + 0.00241L) $\mu$ m  (250 + 37L) $\mu$ in (6.4 + 0.037L) $\mu$ m	Computer controlled CMM  Articulating arm CMM  Structured light scanner
Diameter – Measure <sup>9</sup> Parts & Fixtures	Up to 2 in Up to 50 mm	(22 + 4.8L) $\mu$ in (0.55 + 0.0048L) $\mu$ m	Laser micrometer
Surface Roughness – Measure <sup>9</sup>	Up to 250 $\mu$ in, Ra Up to 6.4 $\mu$ m, Ra	(0.74 + 0.048A) $\mu$ in (0.02 + 0.000 05A) $\mu$ m	Tactile surface profilometry

## II. Dimensional Testing<sup>8</sup>

Parameter	Range	CMC <sup>2, 4</sup> ( $\pm$ )	Comments
Length (1D) <sup>3</sup> – Parts & Fixtures	(28 x 21 x 10) in (700 x 530 x 250) mm  Up to 1 in Up to 25 mm  Up to 0.008 in Up to 0.2 mm  Up to 1 in Up to 25 mm  Up to 12 in Up to 300 mm  Up to 24 in Up to 600 mm	(28 + 1.6L) $\mu$ in (0.71 + 0.0016L) $\mu$ m  (11 + 29L) $\mu$ in (0.28 + 0.029L) $\mu$ m  850 $\mu$ in 21 $\mu$ m  (90 + 16L) $\mu$ in (2.3 + 0.016L) $\mu$ m  (690 + 26L) $\mu$ in (18 + 0.026L) $\mu$ m  (870 + 1L) $\mu$ in (22 + 0.001L) $\mu$ m	Computer controlled CMM  ID/OD Super micrometer  Dial indicator  Micrometer  Calipers  Height gauge

Parameter	Range	CMC <sup>2, 4, 5</sup> ( $\pm$ )	Comment
Length (2D) <sup>3</sup> – Parts & Fixtures – Detector Accuracy Z Length Accuracy X	Up to 2 in Up to 50 mm  Up to 4 in Up to 100 mm  (15 x 15) in (380 x 380) mm	(13 + 19L) $\mu$ in (0.32 + 0.019L) $\mu$ m  (16 + 14L) $\mu$ in (0.4 + 0.014L) $\mu$ m  (120 + 17L) $\mu$ in (3.0 + 0.017L) $\mu$ m	Contour tracing   Multi-sensor optical system
Length (3D) <sup>3</sup> – Parts & Fixtures	(28 x 21 x 10) in (700 x 530 x 250) mm  8 ft Sphere 2.4 m Sphere  Up to 35 in Up to 900 mm	(28 + 1.7L) $\mu$ in (0.71 + 0.0017L) $\mu$ m  (226 + 2.4L) $\mu$ in (5.7 + 0.0024L) $\mu$ m  (250 + 37L) $\mu$ in (6.4 + 0.037L) $\mu$ m	Computer controlled CMM  Articulating arm CMM  Structured light scanner
Diameter <sup>3</sup> – Parts & Fixtures	Up to 2 in Up to 50 mm	(22 + 4.8L) $\mu$ in (0.55 + 0.0048L) $\mu$ m	Laser micrometer
Surface Roughness <sup>3</sup> – Parts & Fixtures	Up to 250 $\mu$ in, Ra Up to 6.4 $\mu$ m, Ra	(0.74 + 0.048A) $\mu$ in (0.02 + 0.000 05A) $\mu$ m	Tactile surface profilometry

<sup>1</sup> This laboratory offers commercial dimensional testing/calibration service.

<sup>2</sup> Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine measurements of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific measurement performed by the laboratory may be greater than the CMC uncertainty due to the behavior of the customer's device and to influences from the circumstances of the specific measurement.

<sup>3</sup> This test is not equivalent to that of a calibration.

<sup>4</sup> In the imperial statement of CMC uncertainty,  $L$  represents the numerical value of the nominal length of the device measured in inches and in the metric statement of CMC uncertainty,  $L$  represents the numerical value of the nominal length of the device measured in millimeters.

<sup>5</sup> In the statement of CMC uncertainty,  $A$  represents the numerical value of the surface roughness reading of the device in corresponding units.

<sup>6</sup> This scope meets A2LA's P112 Flexible Scope Policy.

<sup>7</sup> The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.

<sup>8</sup> This laboratory offers commercial dimensional testing service only.

<sup>9</sup> This laboratory meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program for the types of dimensional tests listed and is considered equivalent to that of a calibration.



# Accredited Laboratory

A2LA has accredited

## IIA LAB SERVICES - IRVINE

Irvine, CA

for technical competence in the field of

### Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of R205 – Specific Requirements: Calibration Laboratory Accreditation Program. 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).



Presented this 17<sup>th</sup> day of March 2023

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2275.01  
Valid to March 31, 2025  
Revised November 8, 2023

*For the tests and calibrations to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*