

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

PRECISION INSTALLATIONS 501 Gorham Avenue Woodbridge, NJ 07095 Steve Brown Phone: 732 855 1510

CALIBRATION

Valid To: February 28, 2026

Certificate Number: 1717.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1, 6}:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2, 4, 5} (±)	Comments
Measuring Microscope (Toolmaker's, Metallurgical, Field of View) ³ –			
Linear Accuracy	Up to 2 in	60 µin	Glass line scales and gage blocks
Eyepiece Reticle Line Pitch	1x to 2000x	(0.0041/ <i>L</i>) %	Glass line scales
Field of View (FOV) – Measuring Software:			
Manual Systems Automated Systems	Up to 4 in	32 μin 14 μin	Glass scales, gage blocks, precision spheres, pin gages, and ring gages
Automateu Systems		14 μ111	gages, and ring gages

Parameter/Equipment	Range	CMC ^{2, 4, 5} (±)	Comments
Optical and Video Measuring Systems, Optical Comparators, Profile Projectors, Video CMM, Video Measuring Machines, Vision Systems, and Measuring (Toolmaker's) Microscopes ³ –			
Linear Accuracy	Manual Systems: Up to 12 in (12 to 25) in (25 to 50) in	80 μin (60 + 2 <i>L</i>) μin (45 + 3 <i>L</i>) μin	Glass scales and Gage blocks
	Vision Systems: Up to 12 in (12 to 25) in (25 to 50) in	(45 + 2 <i>L</i>) μin (33 + 3 <i>L</i>) μin (15 + 4 <i>L</i>) μin	
Field of View (FOV) – Measuring Software:			
Automated Systems	Up to 4 in	14 µin	Glass scales, gage blocks, precision spheres, pin gages, and ring gages
Video and Vision Systems Squareness ³ –			
X-Y X-Z and Y-Z	Up to (18 x 18) in Up to (3 x 3) in	100 μin 100 μin	Glass grids perpendicularity fixture
Optical Comparator Magnification (Projector Lens) ³	5x 10x 20x 25x 30x 31.25x 40x 50x 62.5x 100x All other magnifications not listed above between 5x and 500x	0.03 % 0.03 % 0.03 % 0.03 % 0.04 % 0.05 % 0.06 % 0.05 %	Glass scales, precision spheres, and pin gages

¹ This laboratory offers commercial calibration service and field calibration service.

- ² 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 calibrations 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 calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.
- ³ Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

⁴ In the statement of CMC, L is the length in inches of the calibration standard used during the calibration.

⁶ This scope meets A2LA's *P112 Flexible Scope Policy*.

Page 3 of 3

⁵ In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.





Accredited Laboratory

A2LA has accredited

PRECISION INSTALLATIONS

Woodbridge, NJ

for technical competence in the field of

Calibration

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 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 2nd day of April 2024.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 1717.01 Valid to February 28, 2026

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.