SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CROTTS & SAUNDERS, LLC
2709 Boulder Park Court
Winston-Salem, NC 27101
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CALIBRATION

Valid To: November 30, 2025 Certificate Number: 2624.01

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] (±)	Comments
Coordinate Measuring Machines[3] –			
Linear (X, Y, Z Axis)	Up to 1000 mm Up to 3000 mm	2.3 µm (0.57 + 0.5*L*) µm	Step gage Renishaw XL80 laser
Volumetric Repeatability	Up to 1000 mm	0.82 µm	Ball bar
Video/Vision Measuring Machines[3] –			
Linear (X, Y axis)	Up to 450 mm	0.99 µm	Glass scale
Linear (Z axis)	Up to 300 mm	0.45 µm	Gage blocks

Parameter/Equipment	Range	CMC[2] (±)	Comments
Video/Vision Measuring Machines (cont)[3] –			
X-Y Coordinates	(150 mm × 200 mm) to (150 mm × 300 mm)	0.99 µm	Optical grid
	(300 mm × 300 mm) to (625 mm × 625 mm)	1.5 µm	
	(635 mm x 635 mm) to (1500 mm x 1500 mm)	3.9 µm	
Optical Measuring Machines[3] –			
Linear (X, Y axis)	Up to 450 mm	1.6 µm	Glass scale
Magnification	10x to 100x	2.1 µm	Magnification check gage

[1] This laboratory offers commercial 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 numerical value of the nominal length of the device measured in meters.

Accredited Laboratory

A2LA has accredited

CROTTS & SAUNDERS, LLC

Winston-Salem, NC

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 21st day of November 2023.

Mr. Trace McInturff Vice President Accreditation Services
For the Accreditation Council
Certificate Number 2624.01
Valid to November 30, 2025

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