



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HUMBOLDT MFG CO. dba HUMBOLDT SCIENTIFIC INC.
875 Tollgate Rd
Elgin, IL 60123
Nestor Chonillo Phone: 708 468 6386

CALIBRATION

Valid To: July 31, 2025

Certificate Number: 3956.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1, 4}:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2, 5} (±)	Comments
Linear Displacement – Measure	(0.08 to 0.4) in (0.4 to 1.0) in (1.0 to 2.0) in	0.001 in 0.0007 in 0.005 in	Bore micrometer
Digital Dial Indicators	Up to 2 in	180 µin	Bore micrometer

II. Mechanical

Parameter/Equipment	Range	CMC ^{2, 3} (±)	Comments
Load Cells	(50 to 500) lbf (500 to 1000) lbf (1000 to 2000) lbf (2000 to 5000) lbf (5000 to 10 000) lbf	0.95 % 0.47 % 0.35 % 0.28 % 0.12 %	Reference load cells



Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Load Ring	(50 to 500) lbf (500 to 1000) lbf (1000 to 2000) lbf (2000 to 5000) lbf (5000 to 10 000) lbf (10 000 to 22 000) lbf	0.39 % 0.40 % 1.5 % 0.61 % 0.30 % 0.34 %	Reference load cells
Pressure Gauge	Up to 150 psi	0.18 %	Reference pressure transducer

¹ This laboratory offers commercial 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 In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.

⁴ This scope meets A2LA's *P112 Flexible Scope Policy*.

⁵ 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.



Accredited Laboratory

A2LA has accredited

HUMBOLDT MFG CO. dba HUMBOLDT SCIENTIFIC INC.

Elgin, IL 60123

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 5th day of May 2023.

A blue ink signature of Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3956.02
Valid to July 31, 2025

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