SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

LACO TECHNOLOGIES, INC.
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CALIBRATION

Valid To: November 30, 2026 Certificate Number: 1530.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the organization's compliance with R205 – A2LA's Calibration Program Requirements), accreditation is granted to this laboratory to perform the following calibrations[1, 5]:

I. Fluid Quantities (Leak Standards and Vacuum Gages)

Parameter/Equipment	Range (atm • cc/s)	CMC[2, 3] (±)	Comments
Gas Flow Rate Into Vacuum (Calibrated Leak Standard)	(5×10^{-6}) to (1×10^{-2}) (1×10^{-8}) to (5×10^{-6}) (1×10^{-9}) to (1×10^{-8}) (2×10^{-10}) to (1×10^{-9}) (1×10^{-6}) to 0.1 (3×10^{-9}) to (1×10^{-6})	5.0 % 6.6 % 14 % 21 % 2.2 % 4.6 %	Comparison method using mass spectrometer and master leak standard; helium gas only Constant pressure, volume change method, total pressure technique, all gases
Gas Flow Rate Into Atmosphere (Calibrated Leak Standard)	(1×10^{-5}) to 10 (5×10^{-6}) to (1×10^{-5}) (0.008 36 to 83.6)	3.4 % 11 % 1.4 %	Constant pressure, volume change method, all gases Dry piston flow-meter method, all gases

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II. Mechanical

Parameter/Equipment	Range (Torr)	CMC[2, 4] (±)	Comments
Pressure (Calibration of Vacuum Gauges)	(2×10^{-2}) to 1000 (1×10^{-3}) to (2×10^{-2}) (1×10^{-4}) to (1×10^{-3}) (5×10^{-6}) to (1×10^{-4}) (1×10^{-7}) to (5×10^{-6})	1.0 % 2.0 % 5.1 % 7.1 % 8.0 %	Comparison method using spinning rotor gauge, high-accuracy ion gauge, or capacitance manometer

[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, the value is defined as the percentage of leak rate.

[4] In the statement of CMC, the percent is defined as the percentage of reading.

[5] This scope meets A2LA's *P112 Flexible Scope Policy*.

Accredited Laboratory

A2LA has accredited

LACO TECHNOLOGIES, INC.

Salt Lake City, UT

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 the requirements of ANSI/NCSL Z540-1-1994 and 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 3rd day of January 2025.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1530.01
Valid to November 30, 2026

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