



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994

PACIFIC CALIBRATION SERVICES, INC.
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CALIBRATION

Valid To: February 28, 2021

Certificate Number: 2029.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,5}:

I. Dimensional

Parameter/Equipment	Range	CMC ² (±)	Comments
Calipers ³	(0.0001 to 24) in	0.00010 in	Using gage blocks
Dial/Digital Indicators ³	(0.001 to 2) in	0.0012 in	Dial/digital indicator calibrator

II. Mechanical

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Extensometers ³	(0.0001 to 1) in	0.00018 in	ASTM E83 with micrometer head
Force ³ – Compression	(30 to 500 000) lbf	0.26 %	ASTM E4 with load cells
Tension	(20 to 50 000) lbf	0.22 %	

Parameter/Equipment	Range	CMC ^{2,4} (\pm)	Comments
Pressure Gauges and Transducers ³ – Hydraulic	(10 to 10 000) psi	0.23 %	ASME B40-100 with deadweight tester
Balances and Scales ³	(200 to 1000) g (1 to 10) kg (10 to 20) kg	0.11 g 0.12 g 0.13 g	Class 2 and F weights
	(5 to 30) lb	0.0018 lb	Class F weights

III. Thermodynamics

Parameter/Equipment	Range	CMC ^{2,4,6} (\pm)	Comments
Temperature – Measure ³	(-40 to 204) °C	0.11 °C	ThermoProbe TL1-A Reference Thermometer
Temperature - Measuring Equipment ³	(-40 to 204) °C	0.11 °C	ThermoProbe TL1-A Reference Thermometer

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 and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. 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, percentages are percentage of reading, unless otherwise indicated.

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

⁶ 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

PACIFIC CALIBRATION SERVICES, INC.

San Jose, CA

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 19th day of July 2019.

A handwritten signature in blue ink, positioned above a horizontal line.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2029.01
Valid to February 28, 2021

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