

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

CALSER Calibrations, LLC

110 E. 6th Street, P.O. Box 91, St. Jacob, IL 62281

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Dimensional, Mass, Force & Weighing, Mechanical, Thermodynamic, and Time & Frequency Calibration (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Initial Accreditation Date:

Issue Date:

Expiration Date:

January 10, 2017

January 20, 2023 March 31, 2025

Accreditation No.:

Certificate No.:

93329

L23-39

Tracy Szerszen President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com





Certificate of Accreditation: Supplement

CALSER Calibrations, LLC

110 E. 6th Street, St., P.O. Box 91, Jacob, IL 62281 Contact Name: Cristy Bohnenstiehl Phone: 618-644-0329

Accreditation is granted to the facility to perform the following calibrations:

Dimensional

Difficitional			
MEASURED INSTRUMENT,	RANGE OR NOMINAL DEVICE	CALIBRATION AND	CALIBRATION
QUANTITY OR GAUGE	SIZE AS APPROPRIATE	MEASUREMENT	EQUIPMENT
		CAPABILITY EXPRESSED	AND REFERENCE
- 11 17 17 FO	0.071	AS AN UNCERTAINTY (±)	STANDARDS USED
Indicators and LVDTs ^{FO}	0.05 in to 6 in	$(39.82 + 13.69 L) \mu in$	Gauge Blocks
			ASME B89.1.10M & TP-104
Calipers ^{FO}	0.05 in to 24 in	$(11.42 + 14.48 L) \mu in$	Gauge Blocks
_			ASME B89.1.14 & TP-107
Micrometers ^{FO}	0.05 in to 24 in	$(5.38 + 18.53 L) \mu in$	Gauge Blocks
		· · · · · · · · · · · · · · · · · · ·	ASME B89.1.13 & TP-118
Ruler ^{FO}	.03125 in to 24 in	0.003 in	Standardized Ruler
			NIST SOP10 & TP-114
Extensometer ^{FO}	0.025 in to 2 in	$(6.86 + 47.54 \text{ L}) \mu \text{in}$	3590VHR
			ASTM E83 & TP-115
Displacement	0.025 in to 8 in	169 μin	Digital Indicator
Measurement System ^O			(w/Gauge Blocks)
			ASTM E2309 & TP-106

Mass, Force, and Weighing Devices

wiass, roice, and weighing bevices			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Scales ^{FO}	1 g to 1 kg 1 kg to 40 kg	$(2.5 \times 10^{-3} + 1.13 \times 10^{-4} \text{Wt}) \text{ g}$ $(-2.97 \times 10^{-2} + 1.45 \times 10^{-4} \text{Wt}) \text{ g}$	NIST Class 5 & 6 Weights ASTM E898 & TP-110
	1 lb to 100 lb 100 lb to 200 lb	$(1.10 \times 10^{-3} + 1.05 \times 10^{-4} \text{Wt}) \text{ lb}$ $(-2.00 \times 10^{-4} + 1.17 \times 10^{-4} \text{ Wt})$ lb	
Force/Compression Testing Machines, Load Cells, and Load Rings ^O	20 lbf to 1 000 lbf 200 lbf to 10 000 lbf 10 000 lbf to 100 000 lbf	0.02 % of Reading 0.01 % of Reading 0.03 % of Reading	Load Cells (w/ Digital Readout Systems) ASTM E4 & TP-101
	100 000 lbf to 1 000 000 lbf	0.01 % of Reading	

Mechanical

MEASURED INSTRUMENT,	RANGE OR NOMINAL DEVICE	CALIBRATION AND	CALIBRATION
QUANTITY OR GAUGE	SIZE AS APPROPRIATE	MEASUREMENT	EQUIPMENT
		CAPABILITY EXPRESSED	AND REFERENCE
		AS AN UNCERTAINTY (±)	STANDARDS USED
Pressure-Pneumatic	10 psi to 300 psi	0.3 psi	Pressure Transducer System
Gauges ^O			(with Digital Readout)
			ASME B40.100 & TP-120
Pressure Transducers ^O	10 psi to 300 psi	0.2 psi	Pressure Transducer System
			(with Digital Readout)
			USBR 1050 & TP-102
Vacuum System and	0.98 inHg to 25 inHg	0.01 inHg	Transducer Based Pressure
Vacuum Gauges ^O		_	Measuring Equipment
			USBR 1050; ASME B40.100 &
			TP-112





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Accreditation is granted to the facility to perform the following calibrations:

Thermodynamic

Thermodynamic			
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Liquid in Glass & Temperature Sensors w/Indicator ^{FO}	15 °F to 230 °F	0.43 °F	Dry Block Calibrator ASTM E77; ASTM E2623 & TP-108
	85 °F to 690 °F	0.55 °F	Dry Block Calibrator ASTM E644; ASTM E2623 & TP-109
Ovens/Furnace/Chamber -	-115°F to 120°F	1.5°F	Data Loggers with Probe
System Accuracy ^O	70 °F to 900 °F	1.3 °F	TP-111

Time and Frequency

Issue: 01/2021

MEASURED INSTRUMENT,	RANGE OR NOMINAL	CALIBRATION AND	CALIBRATION
QUANTITY OR GAUGE	DEVICE SIZE AS	MEASUREMENT	EQUIPMENT
	APPROPRIATE	CAPABILITY EXPRESSED	AND REFERENCE
		AS AN UNCERTAINTY (±)	STANDARDS USED
Universal Testing Machine	0.000 5 in/min to 2 in/min	0.000 1 in/min	Stopwatch & Digital Indicator
Crosshead Speed ^O	/		ASTM E2658; E2309 &
_			TP-113
Stopwatch/Timer ^{FO}	30 s to 24 hr	0.2 s/day	Stopwatch
			NIST 960-12 & TP-116

- 1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
- 2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
- 3. The presence of a superscript FO means that the laboratory performs calibration of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer^{FO} would mean that the laboratory performs this calibration at its fixed location and onsite at customer locations.
- 4. The presence of a superscript O means that the laboratory performs calibration of the indicated parameter onsite at customer locations. Example: Outside Micrometer would mean that the laboratory performs this calibration onsite at the customer's location.



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Accreditation is granted to the facility to perform the following calibrations:

- 5. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location.
- 6. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.

