



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 and Weighing,
Mechanical, Thermodynamic, and Time and 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:

Tracy Szerszen
President

Initial Accreditation Date:

January 10, 2017

Issue Date:

January 27, 2021

Expiration Date:

April 30, 2023

Accreditation No.:

93329

Certificate No.:

L21-65

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

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Indicators and LVDTs ^{FO}	0.05 in to 1 in	245 μ m	Non-Rotating Spindle Micrometer Linear Measurement (CAL60) TP-105
Indicators and LVDTs ^{FO}	0.05 in to 16 in	(33.16 + 3.96L) μ m	Gage Blocks TP-104
Internal XHD Displacement ^O	0.025 in to 18 in	749 μ m	Dial Indicator (w/Height Gage) ASTM E2309 & TP-106
Calipers and Micrometers ^{FO}	0.05 in to 24 in	(8.32 + 3.31 L) μ m	Gage Blocks TP-107
Ruler ^{FO}	3 in to 24 in	0.003 in	Standardized Ruler TP-114
Extensometer ^O	0.25 in to 2 in	(2.24 + 60.41 L) μ m	Epsilon 3590VHR & TP-115

Mass, Force, and Weighing Devices

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Balances ^O	1 g to 1 kg	(2.50 X 10 ⁻³ + 1.13 X 10 ⁻⁴ Wt)g	NIST Class F Weights TP-110
Force/Compression Testing Machines, Load Cells, and Load Rings ^O	20 lbf to 1 000 lbf	0.02 % of Reading	Load Cells (with Digital Readout Systems) ASTM E4, TP-101 & TP-103
	1 000 lbf to 10 000 lbf	0.02 % of Reading	
	10 000 lbf to 100 000 lbf	0.04% of Reading	
	100 000 lbf to 1 000 000 lbf	0.15% of Reading	
Scales ^O	1 kg to 40 kg	(-2.97 X 10 ⁻² + 1.45 X 10 ⁻⁴ Wt)g	NIST Class F Weights TP-110
	1 lb to 100 lb	(4.72 X 10 ⁻² + 4.97 X 10 ⁻¹ Wt)g	
	100 lb to 200 lb	(5.31 X 10 ⁻² + (-9.07 X 10 ⁻² Wt)g	



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CALSER Calibrations, LLC

110 E. 6th Street, St., P.O. Box 91, Jacob, IL 62281
Contact Name: Cristy Bohnenstiehl Phone: 618-277-0329

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

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure-Pneumatic Gages and Transducers ^o	10 psi to 300 psi	0.3 psi	Pressure Transducer System (with Digital Readout Systems) D 5084 & TP-102
Vacuum System and Vacuum Gauges ^o	1 inHg to 25 inHg	0.03 inHg	Transducer Based Pressure Measuring Equipment ASTM D 2041 & TP-112

Thermodynamic

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Liquid in Glass Thermometers RTD, Thermocouples ^{FO}	15 °F to 230 °F	0.45 °F	Fluke 9102S Dry Block Calibrator ASTM E77, ASTM E2623, TP-108
	85 °F to 690 °F	0.76 °F	Fluke 9100S Dry Block Calibrator ASTM E644, ASTM E2623 & TP-109
Laboratory Ovens System Accuracy ^o	70 °F to 900 °F	2.7 °F	Data Loggers TP-111

Time and Frequency

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Crosshead Speed ^o	0.2 in/min to 1 in/min	0.01 in/min	Stopwatch & Dial Indicator ASTM 2658 & TP-113
Stopwatch	60 s to 24 hr	0.5 s/day	Stopwatch NIST 960 & TP-116

- 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.



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

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^O would mean that the laboratory performs this calibration onsite at the customer's location.
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.