PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

CALSER Calibrations, LLC

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

and hereby declares that the Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

Whereby, technical competence has been confirmed for the associated scope supplement, in the fields of:

Dimensional, Mass, Force & Weighing, Mechanical, Thermodynamic, and Time & Frequency Calibration

(As detailed in the supplement)

Accreditation claims for conformity assessment activities shall only be made from the addresses referenced within this certificate and shall apply solely to those activities identified in the related scope. This Accreditation is granted subject to the Accreditation Body rules governing the Accreditation referred to above, and the Organization hereby commits to observing and complying with those rules in their entirety.

For PJLA:

Tracy Szerszen
President

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

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
January 10, 2017	May 01, 2025	June 30, 2027

Accreditation No.:	*Certificate No.:*
93329	L25-337

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, P.O. Box 91, Saint Jacob, IL 62281
Contact Name: Brandi Carlton Phone: 618-644-0035

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Dimensional	Indicators and LVDTs	0.05 in to 10 in	(39.82 + 13.69 L) µin	Gauge Blocks	ASME B89.1.10M TP-104	F, O
Dimensional	Calipers	0.05 in to 24 in	(11.42 + 14.48 L) µin	Gauge Blocks	ASME B89.1.14 TP-107	F, O
Dimensional	Micrometers	0.05 in to 24 in	(5.38 + 18.53 L) µin	Gauge Blocks	ASME B89.1.13 TP-118	F, O
Dimensional	Ruler	0.031 25 in to 24 in	0.003 in	Standardized Ruler	NIST SOP10 TP-114	F, O
Dimensional	Extensometer	0.025 in to 2 in	(6.86 + 47.54 L) µin	3590VHR	ASTM E83 TP-115	F, O
Dimensional	Displacement Measurement System	0.05 in to 8 in	169 µin	Digital Indicator (w/Gauge Blocks)	ASTM E2309 TP-106	O
Dimensional	Gyratory Compactors (Height Tube)	Up to 120 mm	0.01 mm	Height Tube	TP-122	F, O
Dimensional	Gyratory Compactors (Height Blocks)	Up to 254 mm	0.01 mm	Height Block	TP-122	F, O
Dimensional	Gyratory Compactors (Internal Angle)	Up to 1.30 °	0.011°	Angle Measurement Device	TP-122	F, O
Dimensional	Gyratory & Proctor Molds	Up to 200 mm	0.007 mm	Mitutoyo three-point bore gauge	TP-123	F, O
Dimensional	Gyratory Mold End Plates	Up to 200 mm	0.003 mm	Outside Micrometer	TP-123	F, O
Mass, Force, and Weighing Devices	Scales	1 g to 1 kg	$(2.5 \times 10^{-3} + 1.13 \times 10^{-4}$ Wt) g	NIST Class 5 & 6 Weights	ASTM E898 TP-110	F, O
Mass, Force, and Weighing Devices	Scales	1 kg to 40 kg	$(-2.97 \times 10^{-2} + 1.45 \times 10^{-4}$ Wt) g	NIST Class 5 & 6 Weights	ASTM E898 TP-110	F, O
Mass, Force, and Weighing Devices	Scales	1 lb to 100 lb	$(1.10 \times 10^{-3} + 1.05 \times 10^{-4}$ Wt) lb	NIST Class 5 & 6 Weights	ASTM E898 TP-110	F, O
Mass, Force, and Weighing Devices	Scales	100 lb to 200 lb	$(-2.00 \times 10^{-4} + 1.17 \times 10^{-4}$ Wt) lb	NIST Class 5 & 6 Weights	ASTM E898 TP-110	F, O

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Mass, Force, and Weighing Devices	Force/Compression Testing Machines, Load Cells, and Load Rings	20 lbf to 1 000 lbf	0.02 % of Reading	Load Cells (w/ Digital Readout Systems)	ASTM E4 TP-101	O
Mass, Force, and Weighing Devices	Force/Compression Testing Machines, Load Cells, and Load Rings	200 lbf to 10 000 lbf	0.01 % of Reading	Load Cells (w/ Digital Readout Systems)	ASTM E4 TP-101	O
Mass, Force, and Weighing Devices	Force/Compression Testing Machines, Load Cells, and Load Rings	10 000 lbf to 100 000 lbf	0.03 % of Reading	Load Cells (w/ Digital Readout Systems)	ASTM E4 TP-101	O
Mass, Force, and Weighing Devices	Force/Compression Testing Machines, Load Cells, and Load Rings	100 000 lbf to 1 000 000 lbf	0.01 % of Reading	Load Cells (w/ Digital Readout Systems)	ASTM E4 TP-101	O
Thermodynamic	Liquid in Glass & Temperature Sensors w/Indicator	15 °F to 230 °F	0.43 °F	Dry Block Calibrator	ASTM E77 ASTM E2623 TP-108	F, O
Thermodynamic	Liquid in Glass & Temperature Sensors w/Indicator	85 °F to 690 °F	0.55 °F	Dry Block Calibrator	ASTM E644; ASTM E2623 TP-109	F, O
Thermodynamic	Ovens/Furnace/Chamber - System Accuracy	-115°F to 120°F	1.3 °F	Data Loggers with Probe	TP-111	F, O
Thermodynamic	Ovens/Furnace/Chamber - System Accuracy	70 °F to 1 000 °F	1.5°F	Data Loggers with Probe	TP-111	F, O
Thermodynamic	Infrared Thermometers	82 °F to 752 °F	2.8 °F	Blackbody IR Thermometer Calibrator	ASTM E2847-21 TP-125	F, O
Time and Frequency	Universal Testing Machine (Crosshead Speed)	0.000 5 in/min to 2 in/min	0.001 5 in/min	Stopwatch & Digital Indicator	ASTM E2658 ASTM E2309 TP-113	O

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Time and Frequency	Stopwatch/Timer	60 s to 24 hr	0.2 s/day	Stopwatch	NIST 960-12 TP-116	F, O
Time and Frequency	Gyratory Compactors (Speed of Rotation)	Up to 60 RPM	0.15 RPM	Extech Tachometer Stopwatch	TP-122	F, O
Mechanical	Gyratory Compactors (Pressure)	1 500 N to 18 000 N	2.4 N	Proving Ring Load Cells	TP-122	F, O
Mechanical	Torque Wrenches	Up to 9 lbf-in	0.46 % of Reading	Huanyu HP-10	ASME B107.28 TP-121	F, O
Mechanical	Torque Wrenches	9 lbf-in to 90 lbf-in	0.71 % of Reading	Huanyu HP-100	ASME B107.28 TP-121	F, O
Mechanical	Torque Wrenches	100 lbf-in to 1 000 lbf-in	0.38 % of Reading	CDI 10002-I-ETT	ASME B107.28 TP-121	F, O
Mechanical	Torque Wrenches	20 lbf-ft to 200 lbf-ft	0.046 % of Reading	AKO TSD111/200	ASME B107.28 TP-121	F, O
Mechanical	Torque Wrenches	200 lbf-ft to 2 000 lbf-ft	0.075 % of Reading	AKO TSD2011	ASME B107.28 TP-121	F, O
Mechanical	Vacuum System and Vacuum Gauges	0.52 mmHg to 760 mmHg	0.087 mmHg	Transducer Based Pressure Measuring Equipment	USBR 1050 ASME B40.100 TP-112	F, O
Mechanical	Pressure Gages	-14.5 psi to 300 psi	0.022 % of Rdg + 0.074 psi	Fluke 2700G	ASME B40.100 TP-120	F, O
Mechanical	Pressure Gages	200 psi to 1 000 psi	0.044 % of Rdg + 0.41 psi	Fluke 700G08	ASME B40.100 TP-120	F, O
Mechanical	Pressure Gages	1 000 psi to 5 000 psi	0.026 % of Rdg + 0.12 psi	Fluke 700G30	ASME B40.100 TP-120	F, O
Mechanical	Pressure Gages	2 000 psi to 10 000 psi	0.03 % of Rdg + 0.71 psi	Fluke 700G31	ASME B40.100 TP-120	F, O
Mechanical	Pressure Transducers	10 psi to 300 psi	0.3 psi	Transducer Based Pressure Measuring Equipment	USBR 1050 TP-102	F, O

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Mechanical	Concrete Air Meter (Pressure Method)	Up to 10% of air in concrete	0.42% of air in concrete	Air Meter Graduate, Scale	ASTM C231 TP-124	F, O

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. Location of activity:

Location Code	Location
F	Conformity assessment activity is performed at the CABs fixed facility
O	Conformity assessment activity is performed onsite at the CABs customer location

4. 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.

5. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.