PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Precision Standards International of St. Augustine, Inc.

11337 Distribution Ave. West, Jacksonville, FL 32256

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

ISO/IEC 17025:2017
& Meets the Requirements of ANSI/NCSI Z540.1-1994
& ANSI/NCSI Z540.3-2006 sub clause 5.3

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

Dimensional, Mass, Force, and Weighing Devices, Mechanical, Thermodynamic and Time and 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:*
March 06, 2009	February 10, 2026	May 31, 2028

Accreditation No.:	*Certificate No.:*
63923	L26-116

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

Precision Standards International of St. Augustine, Inc.

11337 Distribution Ave. West, Jacksonville, FL 32256
Contact Name: Michael Moore Phone: 800-445-7996

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)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Dimensional	Length Standards	0.1 in to 7 in	41 µin	Gage Blocks and Standard Measuring Machine	516 End Rod 444 Pin Gauge Large Set 444.1 Pin Gage Single	F1, F3	F
Dimensional	Length Standards	7 in to 24 in	(14 + 5L) µin	End Rods and Standard Measuring Machine	516 End Rod	F1, F3	F
Dimensional	Calipers	0.1 in to 24 in	660 µin	Gage Blocks CP-810 (Calipers), CP-860 (Micrometers), CP-800 (Dial Indicators), CP-855 (Micrometer Head)	451 Caliper	F1, F3	F, O
Dimensional	Outside Micrometers	0.1 in to 24 in	520 µin	Gage Blocks CP-810 (Calipers), CP-860 (Micrometers), CP-800 (Dial Indicators), CP-855 (Micrometer Head)	448 Micrometer	F1, F3	F
Dimensional	Inside Micrometers	1 in to 32 in	710 µin	Gage Blocks CP-810 (Calipers), CP-860 (Micrometers), CP-800 (Dial Indicators), CP-855 (Micrometer Head)	448 Micrometer	F1, F3	F
Dimensional	Depth Micrometers	0.1 in to 9 in	460 µin	Gage Blocks and Surface Plate	448 Micrometer	F1, F3	F
Dimensional	Micrometer Head	0.1 in to 2 in	94 µin	Gage Blocks and Surface Plate	449 Micrometer Head	F1, F3	F
Dimensional	Height Gauge	0.1 in to 24 in	700 µin	Gage Blocks and Surface Plate	404 Height Gauge	F1, F3	F
Dimensional	Dial Gauge	0.001 in to 4 in	610 µin	Digital Head Micrometer	517 Dial Gauge	F1, F3	F, O
Dimensional	Rule	1 in to 24 in	0.045 in	Steel Rule CP-870	NIST-SOP-10	F1, F2	F
Mass, Force, and Weighing Devices	Balances	0.02 g to 200 g (Resolution: 0.0001g)	0.77 mg	ASTM Class 1 Mass Set	ASTM E-898	F1, F2	F, O

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Mass, Force, and Weighing Devices	Balances	0.02 g to 1 000 g (Resolution:0.001g)	25 mg	ASTMClass 1 Mass Set	ASTM E-898	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	1 g to 6 100 g (Resolution: 0.01 g)	67 mg	ASTM Class 1 Mass Set	ASTM E-898	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	2 g to 31 000 g (Resolution: 0.1 g)	610 mg	ASTM Class 1 Mass Set	ASTM E-898	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	6 g to 31 000 g (Resolution: 1 g)	2 000 mg	ASTM Class 1 Mass Set	ASTM E-898	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	5 lb to 1 000 lb (Resolution: 0.01 lb)	0.62 lb	Class F Mass Set	NIST Handbook 44	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	5 lb to 1 000 lb (Resolution: 0.1 lb)	0.8 lb	Class F Mass Set	NIST Handbook 44	F1, F2	F, O
Mass, Force, and Weighing Devices	Balances	5 lb to 1 000 lb (Resolution: 1 lb)	1.2 lb	Class F Mass Set	NIST Handbook 44	F1, F2	F, O
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	1 g	0.13 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	2 g	0.19 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	3 g	0.2 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	5 g	0.19 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	10 g	0.2 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F

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Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	20 g	0.2 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	30 g	0.21 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	50 g	0.28 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	100 g	0.57 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	200 g	0.51 mg	Modified Substitution Class 1 Mass Set and 200 g x 0.000 1g	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	300 g	19 mg	Modified Substitution Class 1 Mass Set and 1 000 g x 0.001 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	500 g	19 mg	Modified Substitution Class 1 Mass Set and 1 000 g x 0.001 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	1 000 g	25 mg	Modified Substitution Class 1 Mass Set and 1 000 g x 0.001 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	2 000 g	26 mg	Modified Substitution Class 1 Mass Set and 6 000 g x 0. 01 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	3 000 g	71 mg	Modified Substitution Class 1 Mass Set and 6 000 g x 0. 01 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F

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Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	5 000 g	66 mg	Modified Substitution Class 1 Mass Set and 6 000 g x 0. 01 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	10 000 g	130 mg	Modified Substitution Class 1 Mass Set and 30 000 g x 0. 1 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	20 000 g	610 mg	Modified Substitution Class 1 Mass Set and 30 000 g x 0. 1 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	25 000 g	610 mg	Modified Substitution Class 1 Mass Set and 30 000 g x 0. 1 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Mass NIST Class F tolerances or greater	30 000 g	610 mg	Modified Substitution Class 1 Mass Set and 30 000 g x 0. 1 g Balance	436 SOP8 Medium Accuracy Calibration of Mass Standards	F1, F3	F
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	10 lbf to 100 lbf	(0.16 + 0.005 3F)lbf	Class F Mass Set ATSM E74-18	459 ASTM E74	F1, F2	F, O
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	100 lbf to 1 000 lbf	(0.44 + 0.001 4F) lbf	Class F Mass Set ASTM E4-16	459 ASTM E74	F1, F2	F, O
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	300 lbf to 4 900 lbf	1.5 lbf	5 000 lbf Load Cell	455 ASTM E4	F1, F2	F, O
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	4 900 lbf to 25 000 lbf	7 lbf	25 000 lbf Load Cell	455 ASTM E4	F1, F2	F, O
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	25 000 lbf to 110 000 lbf	34 lbf	110 000 lbf Load Cell	455 ASTM E4	F1, F2	F, O

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Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension/ Compression)	110 000 lbf to 600 000 lbf	(35.6 + 0.000 24F) lbf	600 000 lbf Load Cell	455 ASTM E4	F1, F2	F, O
Mechanical	Pressure Gauges	2 psi to 10 000 psi	(0.081 + 9.42 x 10^{-4}P) psi	Dead Weight Tester and Class F Weights CP-700G	433 Pressure Gauge Calibration 423 ASTM D4944 Speedy 461 Type B Pressure Meter	F1, F3	F, O
Mechanical	Torque Hand Tools	0.25 lbf•ft to 8.3 lbf•ft	(0.08 + 0.004 8T) lbf•ft	8.3 lbf•ft Torque Transducer CP T9001 33K6-4-2193-1	427 Torque Wrench	F1, F3	F
Mechanical	Torque Hand Tools	7.7 lbf•ft to 16.67 lbf•ft	1.6 % of Reading	16.67 lbf•ft Torque Transducer CP T9001 33K6-4-2193-1	427 Torque Wrench	F1, F3	F
Mechanical	Torque Hand Tools	16.67 lbf•ft to 167 lbf•ft	(0.14 + 0.011T) lbf•ft	167 lbf•ft Torque Transducer CP T9001 33K6-4-2193-1	427 Torque Wrench	F1, F3	F
Mechanical	Torque Hand Tools	167 lbf•ft to 500 lbf•ft	1.2% of reading	500 lbf•ft Torque Transducer CP T9001 33K6-4-2193-1	427 Torque Wrench	F1, F3	F
Mechanical	Torque Hand Tools	500 lbf•ft to 1 000 lbf•ft	1.1% of reading	1 000 lbf•ft Torque Transducer CP T9001 33K6-4-2193-1	427 Torque Wrench	F1, F3	F
Mechanical	Torque Transducers	0.083 lbf•ft to 1 000 lbf•ft	(0.05 + 0.009 6T) lbf•ft	Torque Arms and Class F Masses	511 Torque Transducer	F1, F3	F
Thermodynamic	Liquid in Glass Thermometer	0 °C to 260 °C	0.72 °C	Temperature Well and ASTM E1 Mercury in Glass Thermometer Set Supported by CP-E563	429 Thermometer 430 Ice Bath	F1, F3	F, O

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Thermodynamic	Bi Metal Thermometer	0 °C to 260 °C	4.3 °C	Temperature Well and ASTM E1 Mercury in Glass Thermometer Set Supported by CP-E563	429 Thermometer 430 Ice Bath	F1, F3	F, O
Thermodynamic	Type K Thermocouple	0 °C to 260 °C	1.3 °C	Temperature Well and ASTM E1 Mercury in Glass Thermometer Set Supported by CP-E563	429 Thermometer 430 Ice Bath	F1, F3	F, O
Thermodynamic	Type T Thermocouple	0 °C to 260 °C	0.74 °C	Temperature Well and ASTM E1 Mercury in Glass Thermometer Set Supported by CP-E563	429 Thermometer 430 Ice Bath	F1, F3	F, O
Time and Frequency	Stop Watches	3 h to 24 h	960 ms	NIST Time Signals	NIST 960-12 (method) ASTM 523	F1, F2	F

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

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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.