



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

# Certificate of Accreditation

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

# Technical Calibration Solutions Inc. 441 Blue Jay Drive, Brea, CA 92823

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, Electrical, Thermodynamic, Time and Frequency, Mass, Force, and Weighing Devices, and Mechanical 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:

Initial Accreditation Date:

Issue Date:

Expiration Date:

November 07, 2025

November 07, 2025

February 28, 2028

Accreditation No.:

Certificate No.:

132403

L25-820

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: <a href="www.pjlabs.com">www.pjlabs.com</a>





#### **Technology Calibration Solutions**

441 Blue Jay Drive, Brea, CA 92823

Contact Name: Vernadette Teano-Ok Phone: 562-241-7651

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 (±) <sup>1</sup>	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Dimensional	Calipers	Up to 60 in	650 uin	Gauge blocks End Standards	NA17-20MD-07 NA17-20MD-85	F1, F2	О
Dimensional	Micrometers	Up to 60 in	60 uin	Gauge blocks End Standards	NA17-20MD-06	F1, F2	О
Dimensional	Steel Rule	Up to 60 in	0.008 2 Inches	Gauge blocks End Standards	NIST Handbook 44	F1, F2	О
Dimensional	Dial Indicators/ LVDTS	Up to 10 in	0.650 uin	Gauge blocks/ End Standards	T.O. 33K6-4-889-1	F1, F2	О
Electrical	Temperature Calibration, Indication and Control Equipment used with Thermocouple Type J (Source)	-320 °F to 2 400 °F	0.19 °F	Pie Calibrator Electrical Simulation of Thermocouple Output	AMS 2750	F1, F2	О
Electrical	Temperature Calibration, Indication and Control Equipment used with Thermocouple Type J (Measure)	-320 °F to 2 100 °F	0.18 °F	Pie Calibrator Electrical Simulation of Thermocouple Input	AMS 2750	F1, F2	O
Electrical	Temperature Calibration, Indication and Control Equipment used with Thermocouple Type K (Source)	-300 °F to 2 400 °F	0.14 °F	Pie Calibrator Electrical Simulation of Thermocouple Output	AMS 2750	F1, F2	О
Electrical	Temperature Calibration, Indication and Control Equipment used with Thermocouple Type K (Measure)	-300 °F to 1 382 °F	0.15 °F	Pie Calibrator Electrical Simulation of Thermocouple Input	AMS 2750	F1, F2	O
Time and Frequency	Timers	Up to 1.5 hr	0.06 sec	Stopwatch	NIST SP 960-12	F1, F2	О





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FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) <sup>1</sup>	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Mass, Force, and Weighing Devices	Equipment to Measure Force (Tension)	Up to 3 000 lbf 3 000 to 60 000 lbf	0.05 lbf 0.97 lbf	Load Cells and weights	ASTM E4	F1, F2	О
Mass, Force, and Weighing Devices	Equipment to Measure Force (Compression)	Up to 3 000 lbf 3 000 to 60 000 lbf 60 000 to 600 000 lbf	0.05 lbf 0.97 lbf 31 lbf	Load Cells and weights	ASTM E4	F1, F2	О
Mass, Force, and Weighing Devices	Scales/ Balances	Up to 250 lb	0.03 lb	Weight Sets	NA17-20MM-18	F1, F2	0
Mass, Force, and Weighing Devices	Weights (F Class)	Up to 34 kg	0.078 g	Scale	NIST Handbook 44/ NIST Handbook 105-1	F1, F2	0
Thermodynamic	Equipment to Measure Humidity	Up to 95 % RH	0.76 % RH	Visala HM-70	NA17-20MH-09	F1, F2	О
Mechanical	Pressure Gauges	0 psi to 5 000 psi	0.55 PSI	PSI Gauge	T.O 33k6-4-1121-1	F1, F2	О
Mechanical	Vacuum	-25.5 to 0 inHg	0.045 inHg	Vacuum	TO 33k6-4-1121-1	F1, F2	О
Mechanical	Rockwell Hardness (HRC) Indirect	20 HRC to 30 HRC	0.29 HRC	Test Blocks	ASTM E18-24	F1, F2	0
Mechanical	Rockwell Hardness (HRC) Indirect	35 HRC to 59 HRC	0.23 HRC	Test Blocks	ASTM E18-24	F1, F2	О
Mechanical	Rockwell Hardness (HRC) Indirect	60 HRC to 65 HRC	0.21 HRC	Test Blocks	ASTM E18-24	F1, F2	О
Mechanical	Rockwell Hardness (HRBW) Indirect	40 HRBW to 59 HRBW	0.36 HRBW	Test Blocks	ASTM E18-24	F1, F2	О
Mechanical	Rockwell Hardness (HRBW) Indirect	60 HRBW to 79 HRBW	0.36 HRBW	Test Blocks	ASTM E18-24	F1, F2	О
Mechanical	Rockwell Hardness (HRBW) Indirect	80 HRBW to 100 HRBW	0.38 HRBW	Test Blocks	ASTM E18-24	F1, F2	О
Mechanical	Rockwell Hardness (HR45N) Indirect	20 HR45N to 31 HR45N	0.24 HR45N	Test Blocks	ASTM E18-24	F1, F2	О





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FIELD OF MEASURED RANGE EXPANDED CALIBRATION CALIBRATION FLEX CODE LOCATION							
CALIBRATION	INSTRUMENT,	(AND SPECIFICATION	MEASUREMENT	EQUIPMENT AND	MEASUREMENT	FLEX CODE	OF
CALIBRATION	OUANTITY OR GAUGE	WHERE APPROPRIATE)	UNCERTAINTY (±) 1	REFERENCE	METHOD OR		ACTIVITY
	QUANTITI OR GROGE	WHERE MIROIRITE)	CIVELENTATIVIT (±)	STANDARDS USED	PROCEDURES USED		ACHVIII
Mechanical	Rockwell Hardness (HR45N)	37 HR45N to 61	0.26 HR45N	Test Blocks	ASTM E18-24	F1, F2	O
	Indirect	HR45N					
Mechanical	Rockwell Hardness (HR45N)	66 HR45N to 72	0.24 HR45N	Test Blocks	ASTM E18-24	F1, F2	O
	Indirect	HR45N					
Mechanical	Rockwell Hardness (HR30N)	42 HR30N to 50	0.3 HR30N	Test Blocks	ASTM E18-24	F1, F2	0
	Indirect	HR30N					
Mechanical	Rockwell Hardness (HR30N)	55 HR30N to 73	0.26 HR30N	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect	HR30N					
Mechanical	Rockwell Hardness (HR30N)	77 HR30N to 82	0.23 HR30N	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect	HR30N					
Mechanical	Rockwell Hardness (HR15N)	70 HR15N to 77	0.48 HR15N	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect	HR15N					
Mechanical	Rockwell Hardness (HR15N)	78 HR15N to 88	0.41 HR15N	Test Blocks	ASTM E18-24	F1, F2	O
	Indirect	HR15N					
Mechanical	Rockwell Hardness (HR15N)	90 HR15N to 92	0.5 HR15N	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect	HR15N					
Mechanical	Rockwell Hardness (HRA)	20 HRA to 65 HRA	0.47 HRA	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect	/		N			
Mechanical	Rockwell Hardness (HRA)	70 HRA to 78 HRA	0.34 HRA	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect						
Mechanical	Rockwell Hardness (HRA)	80 HRA to 84 HRA	0.25 HRA	Test Blocks	ASTM E18-24	F1, F2	О
	Indirect						





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

- 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		Location		
Code				
O	Conformity assessment activity	is performed	onsite at the	e CABs customer

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.