PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Willrich Precision Instrument Company

80 Broadway, Cresskill, NJ 07626

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, Mechanical, and Mass, Force, and Weighing 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:*
October 10, 2017	June 19, 2024	August 31, 2026
Revision Date:	*Accreditation No.:*	*Certificate No.:*
July 16, 2025	93289	L24-457-R1

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

Willrich Precision Instrument Company

80 Broadway, Cresskill, NJ 07626
Contact Name: George Chitos Phone: 201-567-1411

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	Optical Comparators (XY Linearity)	Up to 12 in	100 µin + 7.27 µin/in	Glass Scale	SCD_2022_0004	F1, F3	O
Dimensional	Tool-Makers Microscopes (XY Linearity)	Up to 2 in.	100 µin + 7.27 µin/in	Glass Scale	SCD 2022 0011	F1, F3	O
Dimensional	Vision Systems (X, Y, & Z)	15 in x 15 in	100 µin + 8.47 µin/in	Glass Scales	SCD_2022_0001	F1, F3	O
Dimensional	Surface Plates (Flatness)	Up to 60 in (Diagonal Length)	(31 + 0.2 DL) µin	Wyler Level Systems	SCD_2022_0009 IAW ASME B89-3-7	F1, F2, F3	O
Dimensional	Surface Plates (Flatness)	> 60 in to 120 in (Diagonal Length)	(30 + 0.3 DL) µin	Wyler Level Systems	SCD_2022_0009 IAW ASME B89-3-7	F1, F2, F3	O
Dimensional	Surface Plates (Repeatability)	0.002 in	40 µin	Repeat-o-meter	SCD_2022_0009 IAW ASME B89-3-7	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	60 HRA to 70 HRA	0.27 HRA	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	70 HRA to 80 HRA	0.17 HRA	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	80 HRA to 90 HRA	0.15 HRA	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	40 HRBW to 60 HRBW	0.36 HRBW	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O

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Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	60 HRBW to 80 HRBW	0.26 HRBW	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	80 HRBW to 90 HRBW	0.38 HRBW	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	20 HRC to 40 HRC	0.41 HRC	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	40 HRC to 60 HRC	0.32 HRC	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	60 HRC to 70 HRC	0.31 HRC	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	70 HR15N to 75 HR15N	0.43 HR15N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	75 HR15N to 85 HR15N	0.41 HR15N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O

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Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	85 HR15N to 95 HR15N	0.50 HR15N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	40 HR30N to 60 HR30N	0.35 HR30N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	60 HR30N to 75 HR30N	0.46 HR30N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Indirect Verification of Rockwell and Rockwell Superficial Hardness Testers	75 HR30N to 85 HR30N	0.54 HR30N	Hardness Test Block Masters	Indirect verification per ASTM E18, Willrich Precision WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR45N)	20 HR45N to 40 HR45N	0.31 HR45N	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR45N)	40 HR45N to 60 HR45N	0.33 HR45N	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR45N)	60 HR45N to 80 HR45N	0.22 HR45N	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR15TW)	20 HR15TW to 40 HR15TW	0.25 HR15TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O

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Mechanical	Rockwell Hardness Testers (HR15TW)	40 HR15TW to 60 HR15TW	0.22 HR15TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR15TW)	60 HR15TW to 80 HR15TW	0.20 HR15TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR30TW)	20 HR30TW to 40 HR30TW	0.27 HR30TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR30TW)	40 HR30TW to 60 HR30TW	0.25 HR30TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Rockwell Hardness Testers (HR30TW)	60 HR30TW to 80 HR30TW	0.22 HR30TW	Hardness Test Block Masters	Indirect verification per ASTM E18, WI: WPI_HR13	F1, F2, F3	O
Mechanical	Hardness Testers (Vickers)	100 HV to 240 HV	4.5 HV	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN 6507-2	F1, F2, F3	O
Mechanical	Hardness Testers (Vickers)	240 HV to 600 HV	7.3 HV	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN 6507-2	F1, F2, F3	O
Mechanical	Hardness Testers (Vickers)	>600 HV	15 HV	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN 6507-2	F1, F2, F3	O
Mechanical	Hardness Testers (Knoop)	100 HK to 250 HK	6.5 HK	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN4545-2	F1, F2, F3	O
Mechanical	Hardness Testers (Knoop)	250 HK to 650 HK	10 HK	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN4545-2	F1, F2, F3	O

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Mechanical	Hardness Testers (Knoop)	>650 HK	20 HK	Hardness Test Block Masters	ASTM E92, WI: WPI-13 ISO EN4545-2	F1, F2, F3	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

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.