

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Rochester Scale Works, Inc.

100 Sherer Street, Rochester, NY 14611

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2005

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 January 2009):

Calibration of Industrial Scales, Vehicle Scales, Balances, Test Weights, Dimensional, and Mechanical Devices (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/Operations Manager

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

 Initial Accreditation Date:
 Issue Date:
 Expiration Date:

 June 18, 2010
 September 12, 2014
 December 31, 2016

 Accreditation No.:
 Certificate No.:

 63075
 L14-267

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: <u>www.pjlabs.com</u>



Certificate of Accreditation: Supplement

Rochester Scale Works, Inc.

100 Sherer Street, Rochester, NY 14611 George Eiff Phone: 585-235-5882

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

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 (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED			
Analytical Balance ^{FO}	0.001 g to 200 g	$(1.2 \text{ x } 10^{-3} + 6.81 \text{ x } 10^{-7} \text{Wt}) \text{ g}$	ASTM Class 1			
Precision Balance ^{FO}	0.001 g to 5 000 g	$(1.2 \text{ x } 10^{-3} + 5.55 \text{ x } 10^{-6} \text{Wt}) \text{ g}$	ASTM Class 1			
High Capacity Precision Balance ^{FO}	0.1 g to 75 kg	$(1.16 \text{ x } 10^{-1} + 1.14 \text{ x } 10^{-4} \text{Wt}) \text{ g}$	NIST Class F			
Scales Class ^{FO}	0.001 lb to 20 000 lb	$(1.2 \text{ x } 10^{-3} + 1.15 \text{ x } 10^{-4} \text{Wt}) \text{ lb}$				
Scales Class ^{FO}	0.001 g to 10 000 kg	$(1.2 \text{ x } 10^{-3} + 1.15 \text{ x } 10^{-4} \text{Wt}) \text{ lb}$				
Vehicle Scales ^{FO}	20 lb to 400 000 lb	$(23.1 + 7.14 \text{ x } 10^{-5} \text{Wt}) \text{ lb}$				
Rail Scales ^{FO}	50 lb to 400 000 lb	$(57.73 + 4.05 \times 10^{-5} \text{Wt}) \text{ lb}$				
Mass Class F (lb) Test	1 lb	15 mg	ASTM Class 1			
Weights ^r	2 lb		ASTM Class 4			
	5 lb		NIST HB 143			
	10 lb		NIST IR 6969 SOP NO.8			
	20 lb	0.15 g	NIST HB 105-1			
	25 lb					
	50 lb					
Mass Class F (Metric)	500 g	-15 mg				
Test Weights ¹	1 kg					
	2 kg					
	10 kg	0.15 g				
	20 kg					
	25 kg					

Dimensional

MEASURED INSTRUMENT,	RANGE OR NOMINAL	CALIBRATION AND	CALIBRATION
OUANTITY OR GAUGE	DEVICE SIZE AS	MEASUREMENT	EQUIPMENT
	APPROPRIATE	CAPABILITY EXPRESSED	AND REFERENCE
		AS AN UNCERTAINTY (+)	STANDARDS USED
G II FO	1.1		G 1 DOG 0 G DI 1
Caliper	1 in to 3 in	$(640 + 1 L) \mu m$	Grade B89 0 Gage Blocks
			Length Standards
	4 in to 12 in	(609 + 8 L) µin	GIDEP
			T.O. 33K6-4-15-1
	13 in to 24 in	(652 + 4 L) μin	
Micrometer ^{FO}	1 in to 3 in	(60 + 4 L) μin	
	4 in to 12 in	(119 + 3 L) µin	
	13 in to 24 in	(130 + 2 L) µin	
Indicators	0.25 in to 3 in	(128 + 6 L) µin	Grade B89 0 Gage Blocks
(Digital & Dial) ^{FO}			GIDEP
			T.O. 33K6-4-889-1

This supplement is in conjunction with certificate #L14-267



Certificate of Accreditation: Supplement

Rochester Scale Works, Inc.

100 Sherer Street, Rochester, NY 14611 George Eiff Phone: 585-235-5882

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 (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Height Gage ^{FO}	4 in to 12 in	(610 + 8 L) µin	Grade B89 0 Gage Blocks
	13 in to 24 in	(653 + 4 L) μin	Height Gage Riser Block GIDEP T.O. 33K6-4-673-1
Optical Comparator ^O Axis Linearity	10 in Maximum	160 µin	Length Standards Angle Blocks
Optical Comparator ^O Chart Angularity	0° to 90°	0.1°	Steel Square Mag Checking Scale
Optical Comparator ^O Axial Squareness	3 in of Y Axis Travel or maximum Y axis travel if maximum is less than 3 in	0.02°	Steel Balls OEM
Optical Comparator ^O Magnification	10X	0.02%	
	20X 31.25 X 50X	0.01%	
Length Standard ^{FO}	1 in to 12 in 12 in To 24 in	(75 + 1.5 L) μin (67 + 2 L) μin	Height Master Riser Block GIDEP
Mechanical			1.0. 33K0-4-309-1
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Durometer Spring Type A ^{FO}	200 g to 800 g	$(1.16 \times 10^{-1} + 3.20 \times 10^{-9} \text{ Wt}) \text{ g}$	ASTM Class 1 Grade B89 Gage Blocks GIDEP
Durometer Spring Type D ^{FO}	800 g to 5 000 g	$(1.15 \times 10^{-1} + 1.96 \times 10^{-7} \text{ Wt}) \text{ g}$	
Extension @ Zero ¹⁰	0.097 in to 0.1 in	$710 \mu \text{in}$	
Torque Tool ¹⁰	3 lbf-in to 30 lbf-in	2.5% of Reading	GIDEP
	10 lbf-in to 100 lbf-in	8% of Reading	T.O. 33K6-4-2193-1
Indirect Verification of Rockwell Hardness	10 HRBW to 50 HRBW	0.54 HRBW	Test Block ASTM E18
Testers HRBW & HRC ⁰	>80 HPBW	0.51 HKBW	
	20 HRC to 39 HRC	0.37 HRC	4
	40 HRC to 59 HRC	0.46 HRC	-
	> 60 LIDC	0.10 HPC	1
	>00 HKC	0.19 IIKC	

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Certificate of Accreditation: Supplement

Rochester Scale Works, Inc. 100 Sherer Street, Rochester, NY 14611 George Eiff Phone: 585-235-5882

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

- 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. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this calibration at its fixed location.
- 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. 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.
- 6. 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.
- 7. The term L represents length in inches or millimeters as appropriate to the uncertainty statement.
- 8. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.