PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Quality Comparator Service

1626 S. Arlington Drive, Seneca, SC 29672

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

ISO/IEC 17025:2017

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 April 2017):

Dimensional Calibration

(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

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

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
July 11, 2001	June 05, 2024	June 05, 2026

Accreditation No.:	*Certificate No.:*
59166	L24-415

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

Quality Comparator Service

1626 S. Arlington Drive, Seneca, SC 29672
Contact Name: Mr. Andrew Winsch Phone: 803-517-0602

Accreditation is granted to the facility to the following calibrations:

Dimensional

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
Optical Comparator Linear X & Y [O]	1.27 mm to 304.88 mm (0.05 in to 12 in)	13 µm (494 µin)	Glass Master Acu-Rite	WI: OCS-0013
Squareness of X axis to Y axis [O]	Horizontal displacement in µin at 3 in Y axis travel	51 µin		
Magnification [O]	5X	0.02X		
	10X	0.02X		
	20X	0.02X		
	25X	0.01X		
	31.25X	0.01X		
	50X	0.01X		
	62.5X	0.01X		
	100X	0.01X		
	200X	0.01X		
Vision Measuring System Linear X & Y [O]	1.27 mm to 304.88 mm (0.05 in to 12 in)	13 µm (494 µin)		
Squareness of X axis to Y axis [O]	Horizontal displacement in µin at 3 in Y axis travel	51 µin		
Linear Z [O]	25.4 mm to 177 mm (1 in to 7 in)	13 µm (510 µin)	Gage Blocks Mitutoyo	WI: QCS-0013
Microscope Linear X & Y [O]	1.27 mm to 304.88 mm (0.05 in to 12 in)	12 µm (462 µin)	Glass Stage Jones & Lamson	WI: QCS-0013

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.

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Accreditation is granted to the facility to the following calibrations:

3. The presence of a superscript O means that the laboratory performs calibration of the indicated parameter onsite at customer locations.

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 “X” proceeded by a number represents the number of times a lense system magnifies an image relative to its actual size. CMC stated as “% of magnification” represents the CMC of magnification expressed as a percentage of the total magnification.