

# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

# Certificate of Accreditation

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

## Made to Measure, LLC

302 East Main Street, East Dundee, IL 60118

(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

Initial Accreditation Date:

Issue Date:

Expiration Date:

July 31, 2014

June 14, 2023

September 30, 2025

Accreditation No:

Certificate No.:

59334

L23-460

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



# Certificate of Accreditation: Supplement

### Made to Measure, LLC

302 East Main Street, East Dundee, IL 60118 Contact Name: Jacek Macias Phone: 847-851-1160

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
Calipers FO	Up to 40 inches	(510 + 10.50L) μin	Gage Blocks
	Up to 101 6 mm	(12.95 + 10.50L) µm	Procedure M2M 6e13
Micrometers FO			Gage Blocks Procedure: M2M 6e7
Outside	Up to 40 inches	(51 + 8.80L) μin	1130044171121112 00,
	Up to 101 6 mm	$(1.30 + 8.8L) \mu m$	7
Depth	Up to 12 inches	(70 + 11.70L) μin)	Gage Blocks Procedure:M2M 6e8
	Up to 304.8 mm	(1.78 + 11.7L) μm	
Blade	Up to 4 inches	(51 + 10L) μin	Gage Blocks Procedure:M2M 6e9
	Up to 101.6 mm	$(1.30 + 10.0L) \mu m$	
Disc	Up to 4 inches	$(56 + 7.75L) \mu in$	Gage Blocks Procedure: M2M 6e10
	Up to 101.6 mm	$(1.42 + 7.75L) \mu m$	
Vee	Up to 1 inch	71 µin/	Pin Gages Procedure: M2M 6e11
	Up to 25.4 mm	1.80 µm	
Point	Up to 4 inches 101.6 mm	$(56 + 6L) \mu in/(1.42 + 6.0L) \mu m$	Gage Blocks Procedure: M2M 6e12
Dial Indicators FO	Up to 1 inch	310 µin	Indicator Tester Procedure: M2M 6e14
	Up to 25.4 mm	7.88 µm	
Digital Indicators FO	Up to 2 inches	45 μin	Gage Blocks Procedure: M2M 6e15
	Up to 50.8 mm	1.2 µm	
Height Gages FO	Up to 40 inches	(510 + 12.25L) µin	Gage Blocks Procedure: M2M 6e16
	Up to 1 016 mm	(12.95 + 12.25L) µm	
Coordinate Measuring	Up to 635 mm	(3.90 + 1.12L) μm	Performance verification
Machine with Optical			per:
Distance Sensor Linear Displacement Error FO			ISO 10360-8 using Ball Gage
Probe Performance FO	(10 to 51) mm	1.5 μm	Juge
Form		•	
Probe Performance FO Size	(10 to 51) mm	1.5 µm	





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Issue: 06/2023

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
Coordinate Measuring Machin	Performance verification		
Linear Displacement Error	Up to 1 510 mm	(0.37 + 1.24L) μm	per: ISO 10360-2 using Step Gage
Linear Displacement Error	Up to 10 m	$(0.75 + 1.13L) \mu m$	ISO 10360-2 using Laser Interferometer
Probe Performance FO	ISO 10360-5 using		
Form	(10 to 51) mm	0.11 μm	Master Sphere
Size	(10 to 51) mm	0.29 μm	
Scanning Probe Performance FO			ISO 10360-5 using
Form	(24.9 to 25.4) mm	0.11 μm	Master Sphere
Size	(24.9 to 25.4) mm	0.29 μm	

- 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 testing of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> would mean that the laboratory performs this testing at its fixed location.
- 4. The presence of a superscript FO means that the laboratory performs testing 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 testing at its fixed location and onsite at customer locations.
- 5. The term L represents length in inches or meters as appropriate to the uncertainty statement.