



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## Certificate of Accreditation

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

### **Qualos Servicio y Asesoría, S.C.**

**Calle La Herrería #194 -9, Colonia La Rosa  
Saltillo, Coahuila, México. C.P. 25297**

*(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, Mass, Force and Weighing Devices and Mechanical 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:*

December 15, 2012

*Issue Date:*

May 23, 2023

*Expiration Date:*

July 31, 2025

*Accreditation No.:*

72783

*Certificate No.:*

L23-398

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: [www.pjlab.com](http://www.pjlab.com)*



## Certificate of Accreditation: Supplement

### Qualos Servicio y Asesoría, S.C.

Calle La Herrería #194 -9, Colonia La Rosa

Saltillo, Coahuila. México. C.P. 25297

Contact Name: Paloma Peña Villareal Phone: 844-114-0723

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 ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Outside Micrometer <sup>F</sup>	1 mm to 150 mm	$(5.87 \times 10^{-1} + 1.69 \times 10^{-3}L) \mu\text{m}$	Gage Blocks Class 0 Mitutoyo JIS B7502
Depth Micrometer <sup>F</sup>	1 mm to 150 mm	$(5.87 \times 10^{-1} + 2.16 \times 10^{-3}L) \mu\text{m}$	
Inside Micrometer <sup>F</sup>	1 mm to 150 mm	$(2.05 + 6.6 \times 10^{-4}L) \mu\text{m}$	
Calipers <sup>F</sup>	1 mm to 600 mm	$(7.39 + 1.34 \times 10^{-4}L) \mu\text{m}$	Gage Blocks Class 0 Mitutoyo JIS B7507
Height Gage <sup>F</sup>	1 mm to 600 mm	$(7.39 + 4.3 \times 10^{-4}L) \mu\text{m}$	Gage Blocks Class 0 Mitutoyo MNX-CH-141-IMNC
Thickness Gauge <sup>F</sup>	1 mm to 120 mm	$(7.97 \times 10^{-1} + 2.09 \times 10^{-1}L) \mu\text{m}$	Gage Blocks Class 0 Mitutoyo Internal Procedure PQSA-027
Indicators <sup>F</sup>	1 mm to 60 mm	$(5.77 + 6.94 \times 10^{-3}L) \mu\text{m}$	Gage Blocks Class 0 Mitutoyo ASME B89.1.1OM
Rules and Measure Tapes <sup>F</sup>	1 mm to 5 000 mm	1.3 mm	Rules Master (1 000 mm) Mitutoyo Internal Procedure PQSA-015
Gage and Fixtures <sup>F</sup>	X: Up to 1 205 mm Y: Up to 2 005 mm Z: Up to 1 005 mm	8.3 $\mu\text{m}$	CMM ASME Y14.43
	X= 3 000 mm Y= 6 000 mm Z= 3 000 mm	85 $\mu\text{m}$	Metra Scan ASME Y14.43
Feeler Gage <sup>F</sup>	0.002 in to 0.035 in	$(393 + 1.3L) \mu\text{in}$	Micrometer Mitutoyo (Res.= 50 $\mu\text{in}$ ) JIS B 7524
Threads Plug Pitch Diameter <sup>F</sup>	0-80 to 4-12	80 $\mu\text{in}$	Three Wire Method and Dial Micrometer ASME B89.1.1

#### 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 ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Balance <sup>O</sup>	1 g to 200 g (Res 0.01 g)	8.2 mg	Weight Set F1 OIML R 76
	200 g to 1 000 g (Res.= 0.05 g)	40 mg	
	1 kg to 20 kg (Res.= 0.1 g)	$(8.2 \times 10^{-2} + 1 \times 10^{-6}Wt) \text{ g}$	
Scale <sup>O</sup>	1 kg to 110 kg (Res.= 1g)	$(8.18 \times 10^{-1} + 1.7 \times 10^{-5}Wt) \text{ g}$	Weight Set F1, M1 OIML R 76



# Certificate of Accreditation: Supplement

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Saltillo, Coahuila. México. C.P. 25297

Contact Name: Paloma Peña Villareal Phone: 844-114-0723

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 ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Weight M2, M3 <sup>FO</sup>	2 000 g	100 mg	Weight set F1 Balance Radwag WLC 20/A2 OIML R 111
	1 000 g	53 mg	
	500 g	27 mg	
Weight M3 <sup>FO</sup>	200 g	33 mg	
	100 g	17 mg	
Weight M1, M2, M3 <sup>FO</sup>	20 000 g	340 mg	
	10 000 g	170 mg	
	5 000 g	83 mg	

### Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Torque Tools <sup>FO</sup>	0.5 N·m to 2 N·m	0.3 % of reading	Torque Transducer CEDAR Mod. DIS-RL10 ASME B113.300
	2 N·m to 10 N·m	0.2 % of reading	Torque Transducer
	10 N·m to 200 N·m	0.6 % of reading	Cedar Mod DIS-IP200 ASME B113.300

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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Contact Name: Paloma Peña Villareal Phone: 844-114-0723

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

3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> 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<sup>O</sup> 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<sup>FO</sup> 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.