



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Herdez, S.A. de C.V.

***Ave. Industrias No. 3815, Manzana 29, Zona Industrial Ira. Sección
San Luis Potosí, San Luis Potosí, México. C.P. 78395***

*(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):

***Mechanical, Thermodynamic, Dimensional and Mass, Force and Weighing
Devices 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:

March 04, 2020

Issue Date:

February 08, 2024

Expiration Date:

March 31, 2026

Accreditation No.:

92484

Certificate No.:

L24-129

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*



Certificate of Accreditation: Supplement

Herdez, S.A. de C.V.

Ave. Industrias No. 3815, Manzana 29, Zona Industrial 1ra. Sección
San Luis Potosí, San Luis Potosí, México. C.P. 78395
Contact Name: Laura Cruz Castillo Phone: 444-137- 0070

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

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION OR MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Micropipettes ^F	100 μ L	0.68 μ L	Analytical Balance (Res.= 0.1 mg) Method Gravimetric Standard Practice for Calibration of Laboratory Volumetric Apparatus	ASTM E 542-01
	500 μ L	0.96 μ L		
	1 000 μ L	1.6 μ L		
	2 500 μ L	6.3 μ L		
	5 000 μ L	12 μ L		
Dispensers ^F	1 mL	2.1 μ L		
	2.5 mL	2.9 μ L		
	5 mL	9.6 μ L		
	10 mL	14 μ L		
	12.5 mL	43 μ L		
	25 mL	53 μ L		
	50 mL	60 μ L		
	100 mL	79 μ L		
Glass Cylinder ^F	1 mL	0.64 μ L		
	5 mL	0.89 μ L		
	10 mL	2.1 μ L		
	25 mL	2.4 μ L		
	50 mL	2.6 μ L		
	100 mL	4.3 μ L		
Volumetric Flask ^F	5 mL	3.2 μ L		
	10 mL	2.7 μ L		
	25 mL	3.4 μ L		
	50 mL	19 μ L		
	100 mL	11 μ L		
Bottle-Top Burettes ^F	2.5 mL	1.1 μ L		
	5 mL	5.1 μ L		
	12.5 mL	1.9 μ L		
	25 mL	4.2 μ L		
	50 mL	12 μ L		



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

Thermodynamic

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Thermometer Liquids in Glass ^F	-20 °C to 120 °C (Partial Immersion)	0.68 °C	Temperature Indicator Fluke 51 II with Thermocouple type T (Res.= 0.1 °C) Direct Method	CENAM Technical Guide
	0 °C to 100 °C (Total Immersion)	0.65 °C		
Temperature Indicator ^F Capillary Bulb Thermometer ^F	-40 °C to 40°C	0.82 °C	RTD Pt100 Digital (Res.= 0.001 °C) Direct Method Comparison Ice Bath Temperature Block	Internal Procedure Euramet-cg-8
Temperature Indicators with Thermocouple sensor Type K ^O	-30 °C to 125 °C	0.12 °C		
Temperature Indicators with Thermocouple sensor Type T ^O	-30 °C to 125 °C	0.13 °C		
Direct Temperature Indicator ^O	-30 °C to 125 °C	0.13 °C		

Dimensional

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION OR MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Calipers ^F	0.05 mm to 200 mm	0.011 mm	Steel Metric Gauge Block Set Grade 0 (0.05 mm to 100 mm)	Method Direct NMX-CH-002-IMNC
Outside Micrometer ^F	0.05 mm to 25 mm	0.001 2 mm	Steel Metric Gauge Block Set Grade 0 (0.05 mm to 100 mm) Calipers Micrometer	JIS B 7502
Measuring Tape ^F	1 mm to 8 000 mm	1.2 mm	Steel Standard Scale 1 mm to 1 000 mm (Res.= 1 mm)	NOM-046-SCFI

Mass, Force and Weighing Devices

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION OR MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Balances ^O	0.000 1 g to 220 g (Res.= 0.000 1 g)	$(1.2 \times 10^{-4} + 7 \times 10^{-6}Wt)$ g	Class E2 (OIML)	Euramet-cg18
	0.01 g to 4 200 g (Res.= 0.01 g)	$(1.1 \times 10^{-2} + 1 \times 10^{-6}Wt)$ g		



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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.
4. The presence of a superscript O means that the laboratory performs calibration of the indicated parameter onsite at customer locations.
5. 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.
6. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.