



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Tamoxlab, S.A. de C.V.
Miguel Hidalgo #221, Col. Héroe de Nacozari,
Ciudad Madero, Tamaulipas, México. C.P. 89520

(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):

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

May 01, 2010

Issue Date:

May 11, 2023

Expiration Date:

June 30, 2025

Accreditation No.:

57470

Certificate No.:

L23-394

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

Tamoxlab, S.A. de C.V.

Miguel Hidalgo #221, Col. Héroe de Nacozari
 Cd. Madero, Tamaulipas, México. C.P. 89520
 Contact: José Luis Ríos Phone: 833-211-3184

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

Mass, Force and Weighing Devices

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED		
Weighing Device ^o Scales and Balances	1 g to 200 g (Res.= 0.000 01 g)	$(0.02 + 9 \times 10^{-4}Wt)$ mg	OIML Class E2 CENAM Technical Guide		
	1 g to 200 g (Res.= 0.000 1 g)	$(0.08 + 6.6 \times 10^{-4}Wt)$ mg			
	1 g to 500 g (Res.= 0.000 5 g)	$(0.6 + 0.92 \times 10^{-3}Wt)$ mg			
		100 g to 5 000 g (Res.= 0.001 g)	$(0.1 + 9.2 \times 10^{-3}Wt)$ mg	OIML Cass F2 CENAM Technical Guide	
		100 g to 10 000 g (Res.= 0.01 g)	$(6.4 + 18 \times 10^{-3}Wt)$ mg		
		100 g to 20 000 g (Res.= 0.02 g)	$(14.6 + 18 \times 10^{-3}Wt)$ mg		
		5 000 g to 50 000 g (Res.= 2 g)	$(1.6 + 1.2 \times 10^{-5}Wt)$ g	OIML Class M1 CENAM Technical Guide	
		5 000 g to 100 000 g (Res.= 5 g)	$(4.1 + 8.7 \times 10^{-6}Wt)$ g		
			5 000 g to 200 000 g (Res.= 10 g)	$(3.7 + 6.9 \times 10^{-5}Wt)$ g	OIML Class M2 CENAM Technical Guide
			5 000 g to 500 000 g (Res.= 20 g)	$(16 + 6.2 \times 10^{-5}Wt)$ g	
Weight Set Class F2 OIML R111 ^F	5 000 g to 1 000 000 g (Res.= 50 g)	$(41 + 5.6 \times 10^{-5}Wt)$ g	Weight Set Sartorius 1 mg to 1 kg, 5 kg, 10 kg, 20 kg Mass, Troemner OIML Class E2 CENAM Technical Guide M-01		
	1 mg	0.02 mg			
	2 mg	0.02 mg			
	5 mg	0.02 mg			
	10 mg	0.025 mg			
	20 mg	0.03 mg			
	50 mg	0.04 mg			
	100 mg	0.05 mg			
	200 mg	0.06 mg			
500 mg	0.08 mg				
Weight Set Class F1 OIML R111 ^F	1 g	0.03 mg			
	2 g	0.04 mg			
	5 g	0.05 mg			
	10 g	0.06 mg			
	20 g	0.08 mg			



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Weight Set Class F1 OIML R111 ^F	50 g	0.1 mg	Weight Set Sartorius 1 mg to 1 kg, 5 kg, 10 kg, 20 kg Mass, Troemner OIML Class E2 CENAM Technical Guide M-01
	100 g	0.15 mg	
	200 g	0.3 mg	
	500 g	0.75 mg	
	1 kg	1.5 mg	
	2 kg	3 mg	
	5 kg	7.5 mg	
Weight Set Class M1 OIML R111 ^F	10 kg	150 mg	
	20 kg	300 mg	
Weight Set Class 6, 7 ASTM E 617	25 kg	840 mg	

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure/Vacuum Gauges ^F	-10 psi to 0 psi	0.01 psi	Digital Manometer, Fluke CENAM Technical Guide
	0 psi to 36 psi	0.02 psi	
Pressure Manometers ^F	10 psi to 100 psi	0.4 psi	Pressure Gage, Krystal CENAM Technical Guide
	150 psi to 1 500 psi	1.1 psi	
Pressure Recorders ^F	300 psi to 3 000 psi	1.5 psi	Dead Weight Balance, Ametek CENAM Technical Guide
Pressure Transmitters ^F	300 psi to 3 000 psi	1.5 psi	
Digital Gauges ^F	300 psi to 3 000 psi	1.5 psi	
Piston Burette ^{FO}	1 mL to 100 mL	0.2 % of reading	Gravimetric Method Balance Mettler AT201 200 g to 0.01 mg Balance Mettler 0 to 5 kg to 1 mg Mass OIML E2 CENAM Technical Guide
Graduated Cylinder ^F	50 mL to 1 000 mL	0.15 % of reading	



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

Thermodynamic

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Liquid in Glass Thermometer ^F	0 °C to 250 °C	0.08 °C	Precision Thermometer ASL, Model: AF250 -30 °C to 420 °C (Res.= 0.001 °C) Liquid Bath (0 °C to 250 °C) CENAM Technical Guide
Direct Reading Thermometer ^O	100 °C to 200 °C	0.1 °C	Precision Thermometer, ASL, Model: AF250 -30 °C to 420 °C (Res.= 0.001 °C) CENAM Technical Guide
	200 °C to 250 °C	0.2 °C	
Furnaces Muffle ^O	0 °C to 950 °C	0.6 °C	Digital Thermometer, Thermocouple Type S CENAM Technical Guide
Temperature Measurement Thermocouple Type B ^F	0 °C to 250 °C	0.58 °C	Precision Thermometer ASL Mod. AF250 -30 °C to 420 °C CENAM Technical Guide
Temperature Measurement Thermocouple Type J ^F	0 °C to 250 °C	0.58 °C	
Temperature Measurement Thermocouple Type K ^F	0 °C to 250 °C	0.58 °C	
Temperature Measurement Thermocouple Type N ^F	0 °C to 250 °C	0.58 °C	
Temperature Measurement Thermocouple Type S ^F	0 °C to 250 °C	0.58 °C	
Temperature Measurement Thermocouple Type T ^F	0 °C to 250 °C	0.58 °C	
RTD Measure Pt 385, 100 Ω ^F	0 °C to 250 °C	0.75 °C	
RTD Measure Pt 385, 1 000 Ω ^F	0 °C to 250 °C	0.75 °C	Precision Thermometer ASL Mod. AF250 -30 °C to 420 °C, CENAM Technical Guide
Hygrometers and Recorders ^F	33 % RH to 75 % RH	2 % RH	Humidity Temperature Digital Hygrometer UNI-T, UT332, Humidity Chamber CENAM Technical Guide



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

Dimensional

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Calipers ^F	0.1 in to 8 in	(351.6 + 81.8L) μ in	Block Set Standard CENAM Technical Guide
Micrometers ^F	0.1 in to 1 in	(55.7 + 16.6L) μ in	
Indicator ^F	0.1 in to 1 in	(284.22 + 95.79L) μ in	

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.