PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020

and hereby declares that the Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

Whereby, technical competence has been confirmed for the associated scope supplement, in the fields of:

Dimensional, Mechanical, Acoustic, Electrical, Thermodynamic, Chemical, Mass, Force and Weighing Devices and Time and Frequency Calibration
(As detailed in the supplement)

Accreditation claims for conformity assessment activities shall only be made from the addresses referenced within this certificate and shall apply solely to those activities identified in the related scope. This Accreditation is granted subject to the Accreditation Body rules governing the Accreditation referred to above, and the Organization hereby commits to observing and complying with those rules in their entirety.

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:*
June 16, 2021	August 18, 2025	September 30, 2027

Accreditation No.:	*Certificate No.:*
107984	L25-682

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

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Dimensional	Caliper	0.127 mm to 1 016 mm	11 µm	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-002-IMNC	F1, F2	F, O
Dimensional	Caliper	0.005 in to 40 in	0.000 4 in	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-002-IMNC	F1, F2	F, O
Dimensional	Outside Micrometer	0.127 mm to 1 016 mm	2 µm	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-099-IMNC	F1, F2	F, O
Dimensional	Outside Micrometer	0.005 in to 40 in	0.000 0 79 in	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-099-IMNC	F1, F2	F, O
Dimensional	Depth Micrometer	0.127 mm to 1 016 mm	2 µm	Block Gages	JIS B 7544	F1, F2	F, O
Dimensional	Depth Micrometer	0.005 in to 40 in	0.000 0 79 in	Block Gages	JIS B 7544	F1, F2	F, O
Dimensional	Height Gauge	1.27 mm to 1 016 mm	11 µm	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-141-IMNC	F1, F2	F, O
Dimensional	Height Gauge	0.005 in to 40 in	0.000 4 in	Gauge Blocks Grade 1 Gauge Blocks Grade 0	NMX-CH-141-IMNC	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Dimensional	Rules	5 mm to 5 000 mm	0.4 mm	Standard Steel Ruler Microscope	NOM-046-SCFI	F1, F2	F, O
Dimensional	Flexometer	5 mm to 5 000 mm	0.4 mm	Standard Steel Ruler Reticule	NOM-046-SCFI	F1, F2	F, O
Dimensional	Pin Gages	0.05 mm to 25.4 mm	1.5 µm	Micrometer	ASME B 89 1.5	F1, F2	F, O
Dimensional	Dial Indicator	0.127 mm to 25.4 mm (Res.= 0.01 mm)	6.3 µm	Gauge Blocks Grade 0 Gauge Blocks Grade 1	NMX-CH-036	F1, F2	F, O
Dimensional	Angle Meter	0° to 90°	0.3°	Angle Blocks	NMX-CH-151-IMNC	F1, F2	F, O
Dimensional	Optical Comparator (X Axis Linearity)	1 mm to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O
Dimensional	Optical Comparator (Y Axis Linearity)	1 mm to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O
Dimensional	Optical Comparator (Angularity)	0° to 90°	0.38º	Angle Block	JIS B 7184	F1, F2	F, O
Dimensional	Microscope (X Axis Linearity)	Up to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O
Dimensional	Microscope (Y Axis Linearity)	Up to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O
Dimensional	Vision System (X Axis Linearity)	Up to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O
Dimensional	Vision System (Y Axis Linearity)	Up to 200 mm	2.5 µm	Standard Glass Scale	JIS B 7184	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Dimensional	Vision System (Angularity)	0° to 90°	0.38°	Angle Block	JIS B 7184	F1, F2	F, O
Dimensional	Feeler Gauges	0.152 mm to 25.4 mm	$(2.26 + 1.6 \times 10^{-2}L)$ µm	Master Micrometer Mitutoyo, Defelsko	JIS B 7524, Management Procedure 2578	F1, F2, F3	F, O
Dimensional	Surface Plates (Repeat Measurement)	250 mm to 4 000 mm Diagonal	2.9 µm	Repeat-O-Meter	JIS B-7513	F1, F2	F, O
Dimensional	Thread Plug Gage	0-40 to 4-12	4.6 µm	Wires and Digital Micrometer	ANSI/ASME B1.2 ASME B1.13M	F1, F2	F, O
Dimensional	Roughness Meter (Ra)	3 µm	0.06 µm	Roughness Master	ISO 4287	F1, F2	F, O
Dimensional	Thickness Measurement Equipment (Coating)	0.052 mm to 0.93 mm	0.15 µm	Thickness Gages Foil Master	ASTM B 499	F1, F2	F, O
Dimensional	Thickness Measurement Equipment (Ultrasonic)	0.127 mm to 100 mm	$(3.5 \times 10^{-5} + 1.6 \times 10^{-6}L)$ mm	Block Gages Grade 0	ASTM E 797	F1, F2	F, O
Mechanical	Pressure Gauge and Transducer	0 psi to 750 psi	0.58 psi	Pressure Gage Omega	NOM-013-SCFI	F1, F2	F, O
Mechanical	Pressure Gauge and Transducer	0 kPa to 5 171.07 kPa	4 kPa	Pressure Gage Omega	NOM-013-SCFI	F1, F2	F, O
Mechanical	Pressure Gauge and Transducer	0 psi to 10 000 psi	5.9 psi	Pressure Gage Omega	NOM-013-SCFI	F1, F2	F, O
Mechanical	Pressure Gauge and Transducer	0 kPa to 68.947.59 kPa	41 kPa	Pressure Gage Omega	NOM-013-SCFI	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Mechanical	Pressure Gauge and Transducer	-11.3 psi to 350.5 psi	0.85 psi	Pressure Vaccum Transducer Module, Digital Manometer	NOM-013-SCFI	F1, F2	F, O
Mechanical	Torque Meter (Clockwise and Counter-Clockwise)	0.5 N•m to 10 N•m	0.023 N•m	Torque Tester Analyzer HIOS	ISO 6789-2	F1, F2	F, O
Mechanical	Torque Meter (Clockwise and Counter-Clockwise)	10 N•m to 33 N•m	0.071 N•m	Torque Tester Analyzer Sturtevant Richmont	ISO 6789-2	F1, F2	F, O
Mechanical	Torque Meter (Clockwise and Counter-Clockwise)	33 N•m to 203 N•m	0.35 N•m	Torque Tester Analyzer Sturtevant Richmont	ISO 6789-2	F1, F2	F, O
Mechanical	Torque Meter (Clockwise and Counter-Clockwise)	203 N•m to 338 N•m	1.4 N•m	Torque Tester Analyzer Mountz,	ISO 6789-2	F1, F2	F, O
Mechanical	Torque Meter (Clockwise and Counter-Clockwise)	338 N•m to 1 355.8 N•m	6.9 N•m	Torque Tester Analyzer Sturtevant Richmont	ISO 6789-2	F1, F2	F, O
Mechanical	Flow Meter (Gas)	0.5 L/min to 50 L/min	0.33 % of reading	Gas Flow Transmitter	CENAM Technical Guide CEM ME-009	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Acoustic	Acoustic Level Meter-Generate (@ 1 000 Hz)	94 dB	0.24 dB	Sound Calibrator	CENAM Technical Guide INACAL Technical Guide IEC 61672-1, IEC 61672-3	F1, F2	F, O
Acoustic	Acoustic Level Meter-Generate (@ 1 000 Hz)	104 dB	0.24 dB	Sound Calibrator	CENAM Technical Guide INACAL Technical Guide IEC 61672-1, IEC 61672-3	F1, F2	F, O
Acoustic	Acoustic Level Meter-Generate (@ 1 000 Hz)	114 dB	0.24 dB	Sound Calibrator	CENAM Technical Guide INACAL Technical Guide IEC 61672-1, IEC 61672-3	F1, F2	F, O
Electrical	Equipment to Measure DC Current	4 mA to 20 mA	0.002 5 mA	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	10 mV to 1 V	0.002 4 V	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	1 V to 13.5 V	0.001 9 V	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Resistance	0.1 Ω to 1 Ω	0.0024 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	1 Ω to 2 Ω	0.002 4 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	2 Ω to 5 Ω	0.002 4 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	5 Ω to 10 Ω	0.002 4 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	10 Ω to 20 Ω	0.004 8 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	20 Ω to 50 Ω	0.007 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	50 Ω to 100 Ω	0.038 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	100 Ω to 200 Ω	0.016 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	200 Ω to 500 Ω	0.016 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Resistance	500 Ω to 1 000 Ω	0.8 Ω	Process Calibrator Fluke 743 B	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Voltage	100 mV to 1 V	0.001 7 V	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Voltage	1 V to 10 V	0.001 9 V	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Voltage	10 V to 100 V	0.002 V	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Voltage	100 V to 1 000 V	0.047 V	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to output AC Voltage (@ 50 Hz to 1 kHz)	0.001 V to 750 V	0.12 V	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output AC Current (@ 10 Hz to 900 Hz)	0.01 A to 3 A	0.001 2 A	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output AC Current (@ 10 Hz to 900 Hz)	3 A to 10 A	0.023 A	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Current	0.000 01 mA to 9.999 9 mA	0.001 9 mA	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Current	10 mA to 99.999 mA	0.006 7 mA	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Current	100 mA to 1 A	0.006 7mA	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Output DC Current	1 A to 3 A	0.000 6 A	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC Current	3 A to 10 A	0.006 7 A	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	100 Ω to 1 k Ω	0.000 59 Ω	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	1 kΩ to 10 kΩ	0.001 4 k Ω	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	10 kΩ to 100 kΩ	0.011 k Ω	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	100 kΩ to 1 MΩ	0.000 59 MΩ	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	1 MΩ to 10 MΩ	0.001 4 MΩ	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output Resistance	10 MΩ to 100 MΩ	0.011 MΩ	Keithley 2110 Multimeter	CENAM Technical Guide	F1, F2	F, O
Electrical	Electrical Current Derivator (Shunt)	10 A to 150 A	0.007 8 A	Keithley 2110 Multimeter with Shunt	CENAM technical Guide	F1, F2	F, O
Electrical	Equipment to Output AC High Voltage (Hy-Pot)	1 kV to 6 kV	0.37 kV	Keithley 2110 Multimeter with High Voltage Probe	CENAM technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC High Voltage (Hy-Pot)	1 kV to 6 kV	0.1 kV	Keithley 2110 Multimeter with High Voltage Probe	CENAM technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measurement Resistance	100 Ω	0.02 Ω	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	500 Ω	0.17 Ω	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	1 kΩ	0.013 kΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	10 kΩ	0.021 kΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	100 kΩ	0.02 kΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	1 MΩ	0.013 MΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	10 MΩ	0.021 MΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	100 MΩ	0.021 MΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measurement Resistance	1 GΩ	0.013 MΩ	Megabox Resistance	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	Up to 103.99 mV	8×10^{-4} mV	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	0.104 V to 1.039 9 V	1.8×10^{-6} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	1.04 V to 10.399 V	1.8×10^{-5} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Voltage	10.4 V to 103.999 V	2.3×10^{-4} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure DC Voltage	104 V to 1 000 V	2.8×10^{-3} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	Up to 103.99 uA	9.9×10^{-6} uA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	0.104 mA to 1.039 9 mA	6.5×10^{-6} mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	1.04 mA to 10.399 mA	1.1×10^{-6} mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	10.4 mA to 103.99 mA	1.4×10^{-6} mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	104 mA to 1 039.9 mA	4.9×10^{-8} A	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure DC Current	1.04 mA to 10.199 A	3.5×10^{-4} A	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 1.999 kHz)	Up to 103.99 mV	0.011 mV	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 2 kHz to 20 kHz)	Up to 103.99 mV	0.017 mV	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 1.999 kHz)	0.104 V to 1.039 9 V	6.2×10^{-5} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 2 kHz to 20 kHz)	0.104 V to 1.039 9 V	9.1×10^{-5} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure AC Voltage (@ 10 Hz to 1.999 kHz)	1.04 V to 10.399 V	2.2×10^{-4} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@2 kHz to 20 kHz)	1.04 V to 10.399 V	3.1×10^{-4} V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 1 kHz)	10.4 V to 103.99 V	0.047 V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Voltage (@ 40 Hz to 1 kHz)	104 V to 1 020 V	0.04 V	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Current (@ 10 Hz to 2 kHz)	0.4 to 103.99 uA	0.13 uA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Current (@ 10 Hz to 2 kHz)	0.104 mA to 0.999 mA	1.5×10^{-4} mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Current (@ 10 Hz to 2 kHz)	1.04 mA to 10.399 mA	0.000 6 mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Current (@ 10 Hz to 2 kHz)	10.4 mA to 103.99 mA	0.002 7 mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure AC Current 10 Hz to 2 kHz)	104 mA to 1 039.99 mA	1.1×10^{-4} mA	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure AC Current (@ 10 Hz to 2 kHz)	1.04 A to 10.399 A	0.000 3 A	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	0 Ω to 10 Ω	9×10^{-6} Ω	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	10.1 Ω to 100 Ω	6.9×10^{-4} Ω	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	101 Ω to 1 kΩ	6.7×10^{-6} kΩ	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	1.01 kΩ to 10 kΩ	1.1×10^{-5} kΩ	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	10.1 kΩ to 100 kΩ	7×10^{-4} kΩ	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	101 MΩ to 1 MΩ	2.2×10^{-6} MΩ	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Resistance	1.01 MΩ to 10 MΩ	1.5×10^{-4} MΩ	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	10 µF	0.006 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	100 µF	0.06 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	100 pF	0.06 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Capacitance	200 pF	0.06 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	300 pF	0.06 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	400 pF	0.86 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	1 µF	5.9 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	2 µF	6.3 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	3 µF	6.8 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	4 µF	7.5 nF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.1 µF	88 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.2 µF	600 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.3 µF	620 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.4 µF	640 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.01 µF	8.8 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.02 µF	59 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Measure Capacitance	0.03 µF	61 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.04 µF	64 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.001 µF	1.1 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.002 µF	6 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.003 µF	6.1 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Measure Capacitance	0.004 µF	6.4 pF	Capacitance Box	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with RTD 100 Ω	-200 °C to 0 °C	0.062 °C	Transmille1000A Electrical Simulation of RTD Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with RTD 100 Ω	0.1 °C to 800 °C	0.062 °C	Transmille1000A Electrical Simulation of RTD Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type E	-250 °C to -100 °C	0.021 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	temperature Calibration, Indication, and Control Equipment used with Thermocouple Type E	-100 °C to 650 °C	0.013 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type E	650.1 °C to 1 000 °C	0.01 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J	-210 °C to -100 °C	0.11 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J	-100.1 °C to 150 °C	0.16 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J	150.1 °C to 760 °C	0.16 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J	760.1 °C to 1 200 °C	0.16 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type K	-200 °C to -100 °C	0.11°C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type K	-100.1 °C to 120 °C	0.17 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type K	120.1 °C to 1 370 °C	0.22 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type R	0 °C to 250 °C	0.78 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type R	250.1 °C to 1 750 °C	0.78 °C	Transmille1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type T	-250 °C to -150 °C	0.11 °C	Transmille 1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type T	-150.1 °C to 400 °C	0.11 °C	Transmille 1000A with EA001A Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type E	-130 °C to 800 °C	0.88 °C	Fluke 743 B Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type J	-60 °C to 1 000 °C	0.25 °C	Fluke 743 B Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type K	-40 °C to 1 200 °C	0.76 °C	Fluke 743 B Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O
Electrical	Temperature Calibration Indication and Control Equipment used with Thermocouple Type T	-140 °C to 130 °C	1.1 °C	Fluke 743 B Electrical Simulation of Thermocouple Output	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Electrical	Equipment to Output DC High Voltage	6.1 kV to 35 kV	0.12 kV	Keithley 2110 Multimeter With Fluke 80K-40	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output DC High Voltage	35.1 kV to 40 kV	0.42 kV	Keithley 2110 Multimeter With Fluke 80K-40	CENAM Technical Guide	F1, F2	F, O
Electrical	Equipment to Output AC High Voltage (@ 60 Hz)	6.1 kV to 28 kV	0.12 kV	Keithley 2110 Multimeter with Fluke 80K-40	CENAM Technical Guide Inductance Box	F1, F2	F, O
Electrical	Equipment to Measure Inductance	10 mH to 100 mH	0.2 % of reading	Keithley 2110 Multimeter with Fluke 80K-40	CENAM Technical Guide Inductance Box	F1, F2	F, O
Electrical	Equipment to Measure Inductance	100 mH to 1 000 mH	0.2 % of reading	Keithley 2110 Multimeter with Fluke 80K-40	CENAM Technical Guide Inductance Box	F1, F2	F, O
Thermodynamic	Ovens, Furnaces, and Muffles	50 °C to 1 200 °C	0.91 °C	Thermocouple and Process Calibrator Fluke 743 B Indicator Type K	Euramet cg-11 CENAM Technical Guide	F1, F2	O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Thermodynamic	Coolers, Incubators and Refrigerators	-140 °C to 50 °C	1.6 °C	Thermocouple and Process Calibrator Fluke 743 B Indicator Type T	Euramet cg-11 CENAM Technical Guide	F1, F2	O
Thermodynamic	Thermo-Hygrometer (Humidity)	30 % RH to 90 % RH	1.3 % RH	Humidity Chamber Fluke 971	CENAM Technical Guide	F1, F2	F
Thermodynamic	Thermo-Hygrometer (Temperature)	23 °C to 50 °C	0.29 °C	Humidity Chamber Fluke 971	CENAM Technical Guide	F1, F2	F
Thermodynamic	IR Thermometer	10 °C to 400 °C	$(4.89 \times 10^{-1} + 6.05 \times 10^{-3}T)$ °C	Block Body Source Fluke 561	CENAM Technical Guide CEM TH-002	F1, F2	F, O
Chemical	pH Meter (Fixed Point)	4 pH	0.011 pH	pH Buffer Solutions	CENAM Technical Guide	F1, F2	F, O
Chemical	pH Meter (Fixed Point)	7 pH	0.011 pH	pH Buffer Solutions	CENAM Technical Guide	F1, F2	F, O
Chemical	pH Meter (Fixed Point)	10 pH	0.011 pH	pH Buffer Solutions	CENAM Technical Guide	F1, F2	F, O
Chemical	Conductivity Meter (Fixed Point)	84 uS	0.94 uS	Conductivity Buffer Solutions	CENAM Technical Guide	F1, F2	F, O
Chemical	Conductivity Meter (Fixed Point)	1 413 uS	6.5 uS	Conductivity Buffer Solutions	CENAM Technical Guide	F1, F2	F, O
Chemical	Conductivity Meter (Fixed Point)	12 880 uS	5 uS	Conductivity Buffer Solutions	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	EXPANDED MEASUREMENT UNCERTAINTY (±) [1]	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	FLEX CODE	LOCATION OF ACTIVITY
Mass, Force and Weighing Devices	Scales	5 kg to 20 kg (Res.= 0.000 5 g)	1.1 g	Class F1 Weight Class M1 Weight	NOM-010-SCFI	F1, F2	O
Mass, Force and Weighing Devices	Scales	5 kg to 200 kg (Res.= 0.005 kg)	7.8 g	Class M1 Weight	NOM-010-SCFI	F1, F2	O
Mass, Force and Weighing Devices	Scales	200 kg to 500 kg (Res.= 0.1 kg)	0.17 kg	Class M1 Weight	NOM-010-SCFI	F1, F2	O
Mass, Force and Weighing Devices	Balances	1 g to 2 100 g (Res.= 0.1 g)	0.18 g	Class F1, F2 Weights	NOM-010-SCFI	F1, F2	O
Mass, Force and Weighing Devices	Force Load Cells (Compression and Tension)	29.42 kN to 294.2 kN	0.25 % of reading	Load Cell 30 T	ISO 376	F1, F2	F, O
Mass, Force and Weighing Devices	Force Instruments (Compression and Tension)	29.42 kN to 294.2 kN	0.25 % of reading	Load Cell 30 T	NMX-CH-7500-1-IMNC	F1, F2	F, O
Time and Frequency	Photo Tachometer	60 rpm to 100 000 rpm	0.58 rpm	Transmille 1000A LED´s Series Resistor	CENAM Technical Guide	F1, F2	F, O
Time and Frequency	Timer	86 400 s	1.2 s/day	StopWatch	CENAM Technical Guide	F1, F2	F, O
Time and Frequency	Equipment to Measure Frequency	1 Hz to 100 kHz	2.6 x 10-6 kHz	Transmille 1000A	CENAM Technical Guide	F1, F2	F, O

Certificate of Accreditation: Supplement

Equipos y Servicios Especializados AG, S.A. de C.V.

Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

1. The CMC (Calibration and Measurement Capability) is expressed in terms of measurement instrument/aspect being calibrated, range, expanded measurement uncertainty, equipment, and method/procedure. The expanded measurement uncertainty 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 measurement uncertainty included on this scope 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 laboratory's range of calibration capability for all disciplines for which it is 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. Location of activity:

Location Code	**Location**
F	Conformity assessment activity is performed at the CAB's fixed facility
O	Conformity assessment activity is performed onsite at the CAB's customer location
M	Conformity assessment activity is performed from a mobile facility

4. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratory's 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 laboratory's fixed location.

5. The term L represents length in inches or millimeters as appropriate to the uncertainty statement.

6. The term T represents temperature in ºC or ºF as appropriate to the uncertainty statement.

Equipos y Servicios Especializados AG, S.A. de C.V.
Tlaquepaque No. 140, Col. Mitras Sur
Monterrey, Nuevo Leon, México. C.P. 64020
Contact Name: Jorge Amador Castillo Phone: 812-711-6538

Accreditation is granted to the facility to perform the following conformity assessment activities:

7. Flex Codes

F0: When no flexibility is identified. There are no changes to items calibrated, characteristics identified or versions of methods except for updating to the most recent version of a standard method after verification.
F1: The laboratory has the capability to introduce a new instrument, quantity, or gauge for an accredited calibration method.
F2: The laboratory has the capability to introduce the newest revision of an accredited authoritative standard method (with no modifications) identified on the scope
F3: The laboratory has the capability to introduce a new revision of an accredited non-standard method using the same technology or technique identified on the scope
F4: The laboratory has the capability to introduce a validated method that is equivalent to an accredited method (using the same Calibration Equipment or Reference Standards identified on the scope for the same parameter, component, or analyte identified on the line item of the scope.