PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

QCS Calibration Services S.R.L

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs, Republica Dominican

(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):

Acoustic, Chemical, Dimensional, Mechanical, Electrical, Mass, Force and Weighing Devices, Time &Frequency and Thermodynamic 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/Operations Manager

Perry Johnson Laboratory Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
May 9, 2011	May 14, 2017	June 30, 2019
Revision Date.:	*Accreditation No.:*	*Certificate No.:*
April 25, 2018	70268	L17-198-1-R1

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

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Acoustic

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
Sound Level Meter[FO]	1.6 dB to 125 dB	4 dB	Quest Electronics

Chemical

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
pH Meters, fixed points[FO]	4 pH	0.03 pH	pH Buffers Fluke 5500
	7 pH	0.04 pH	
	10 pH	0.03 pH	
Conductivity Meters[FO]	10 µS/cm @ 25 °C	0.69 µS/cm	Conductivity Solutions
	100 µS/cm @ 25 °C	2.7 µS/cm	
	1 000 µS/cm @ 25 °C	6.6 µS/cm	
	10 000 µS/cm @ 25 °C	15 µS/cm	

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
Micrometers [FO]	Up to 12 in	(33.4 + 4.4L) µin	Gage Blocks, Parallels
Calipers [FO]	Up to 12 in	(341 + 4.3L) µin	Gage Blocks
Indicators [FO]	Up to 2 in	(67 + 19L) µin	Micrometer Head Cal Unit, Blocks
Height Gages [FO]	Up to 12 in	(281 + 10L) µin	Gage Blocks
Gage Blocks [F]	Up to 4 in	20 µin	Comparator/Master Blocks
Pin Gage [FO]	0.011 in to 2 in	(342 + 22L) µin	Mahr Micrometer
Rulers & Tapes [FO]	Up to 48 in	(290 + 4.6L) µin	Ceramic Gage Blocks
Laser Micrometer [F]	0.01 in to 1 in	34 µin	Class xx pin gages
Microscopes Linear Measurement[F]	1 mm to 25 mm	1.2 µm	Stage Micrometer Calibration Slide KR-812

Electrical

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
Equipment to Output DC Voltage [FO]	5.3 mV to 20 mV	5.36 µV + 11.56 µV/mV	DMM HP 8842A
	20 mV to 200 mV	8.1 µV + 99.9 µ V/mV	
	200 mV to 2 V	18 µV + 68.5 µV/mV	
	2 V to 20 V	419 µV + 67 µV/ mV	

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Electrical

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
Equipment to Output DC Voltage [FO]	20 V to 200 V	1.6 µV + 0.06 mV/ V	DMM HP 8842A
	200 V to 1 000 V	35 µV + 0.09 mV/ V	
Equipment to Measure DC Current [FO]	15 µA to 200 µA	5.1 µA	Fluke 5100
	0.2 mA to 2 mA	0.041 mA	
	2 mA to 20 mA	0.41 mA	
	20 mA to 200 mA	4.1 mA	
	0.2 A to 2 A	41 mA	
Equipment to Output DC Current [FO]	1 mA to 10 mA	47 µA + 840 µA/A	DMM Fluke 8842A
	10 mA to 200 mA	48 µA + 909 µA/A	
	200 mA to 2 A	41 µA + 1.1 mA/A	
	2 A to 10 A	0.42 mA + 16 mA/A	
Equipment to Output DC Resistance [FO]	5 Ω to 200 Ω	0.048 mΩ + 0.17 mΩ/Ω	DMM Fluke 8842A
	200 Ω to 2 kΩ	0.049 mΩ + 0.137 mΩ/Ω	
	2 kΩ to 20 kΩ	376 mΩ + 0.115 mΩ/Ω	
	20 kΩ to 200 kΩ	3.7 Ω + 14 µΩ/Ω	
	200 kΩ to 2 MΩ	39.7 Ω + 0.345 mΩ/Ω	
	2 MΩ to 20 MΩ	160 Ω + 1 mΩ/Ω	
Equipment to Measure AC Voltage At the listed frequencies [FO]			Fluke 5100
50 Hz to 10 kHz	1 mV to 20 mV	0.07 % of reading + 0.120 5 mV	
	20 mV to 200 mV	0.07 % of reading + 1.205 mV	
	0.2 V to 2 V	0.07 % of reading + 0.012 05 V	
Equipment to Measure AC Voltage At the listed frequencies[FO]			
50 Hz to 10 kHz	2 V to 20 V	0.05 % of reading + 0.100 5 V	
	20 V to 200 V	0.05 % of reading + 1.005 V	
	200 V to 1 100 V	0.05 % of reading + 5.500 5 V	
Equipment to Measure AC Current At the listed frequencies[FO]			
50 Hz to 1 kHz	20 µA to 200 µA	0.25 % of reading + 0.5 µA	
	0.2 mA to 2 mA	0.25 % of reading + 0.005 mA	
	2 mA to 20 mA	0.25 % of reading + 0.05 mA	
	20 mA to 200 mA	0.25 % of reading + 0.5 mA	
	0.2 A to 2 A	0.25 % of reading + 0.005 A	

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Electrical

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
Equipment to Output AC Current At the listed frequencies [FO]			DMM HP 8842A
3 Hz to 5 Hz	0.07 A to 1 A	3.2 µA + 0.03 mA/A	
5 Hz to 10 Hz	0.07 A to 1 A	3.6 µA + 0.008 mA/A	
10 Hz to 5 kHz	0.07 A to 1 A	3.7 µA + 0.007 mA/A	
Equipment to Output AC Current At the listed frequencies [FO]			
3 Hz to 5 Hz	1 A to 3 A	27 µA + 0.007 mA/A	
5 Hz to 10 Hz	1 A to 3 A	7.1 mA + 2.3 mA/A	
10 Hz to 5 kHz	1 A to 3 A	6.7 mA + 1.9 mA/A	
Equipment to Measure AC Voltage At the listed frequencies [FO]			Fluke 5500A
10 Hz to 45 Hz	1 mV to 33 mV	0.35 % of reading + 20 µV	
45 Hz to 10 kHz	1 mV to 33 mV	0.15 % of reading + 20 µV	
10 kHz to 20 kHz	1 mV to 33 mV	0.2 % of reading + 20 µV	
20 kHz to 50 kHz	1 mV to 33 mV	0.25 % of reading + 20 µV	
50 kHz to 100 kHz	1 mV to 33 mV	0.35 % of reading + 33 µV	
100 kHz to 500 kHz	1 mV to 33 mV	1 % of reading + 60 µV	
Equipment to Measure AC Voltage At the listed frequencies [FO]			
10 Hz to 45 Hz	33 mV to 330 mV	0.25 % of reading + 50 µV	
45 Hz to 10 kHz	33 mV to 330 mV	0.05 % of reading + 20 µV	
10 kHz to 20 kHz	33 mV to 330 mV	0.1 % of reading + 20 µV	
20 kHz to 50 kHz	33 mV to 330 mV	0.16 % of reading + 40 µV	
50 kHz to 100 kHz	33 mV to 330 mV	0.24 % of reading + 170 µV	
100 kHz to 500 kHz	33 mV to 330 mV	0.7 % of reading + 330 µV	
Equipment to Measure AC Voltage At the listed frequencies [FO]			
10 Hz to 45 Hz	330 mV to 3.3 V	0.15 % of reading + 250 µV	
45 Hz to 10 kHz	330 mV to 3.3 V	0.03 % of reading + 60 µV	
10 kHz to 20 kHz	330 mV to 3.3 V	0.08 % of reading + 60 µV	
20 kHz to 50 kHz	330 mV to 3.3 V	0.14 % of reading + 300 µV	
50 kHz to 100 kHz	330 mV to 3.3 V	0.24 % of reading + 1 700 µV	
100 kHz to 500 kHz	330 mV to 3.3 V	0.5 % of reading + 3 300 µV	

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Electrical

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
Equipment to Measure AC Voltage At the listed frequencies FO			Fluke 5500A
10 Hz to 45 Hz	3.3 V to 33 V	0.15 % of reading + 2 500 µV	
45 Hz to 10 kHz	3.3 V to 33 V	0.04 % of reading + 600 µV	
10 kHz to 20 kHz	3.3 V to 33 V	0.08 % of reading + 2 600 µV	
20 kHz to 50 kHz	3.3 V to 33 V	0.19 % of reading + 5 000 µV	
20 kHz to 50 kHz	3.3 V to 33 V	0.19 % of reading + 5 000 µV	
50 kHz to 100 kHz	3.3 V to 33 V	0.24 % of reading + 17 000 µV	
Equipment to Measure AC Voltage At the listed frequencies FO			
45 Hz to 1 kHz	33 V to 330 V	0.05 % of reading + 6.6 mV	
1 kHz to 10 kHz	33 V to 330 V	0.08 % of reading + 15 mV	
10 kHz to 20 kHz	33 V to 330 V	0.09 % of reading + 33 mV	
Equipment to Measure AC Voltage At the listed frequencies FO			
45 Hz to 1 kHz	33 V to 330 V	0.05 % of reading + 80 mV	
1 kHz to 5 kHz	33 V to 330 V	0.2 % of reading + 100 mV	
5 kHz to 10 kHz	33 V to 330 V	0.2 % of reading + 500 mV	
Equipment to Measure DC Voltage FO	1 mV to 330 mV	0.006 % of reading + 3 µV	
	330 mV to 3.3 V	0.005 % of reading + 5 µV	
	3.3 V to 33 V	0.005 % of reading + 50 µV	
	50 V to 300 V	0.005 % of reading + 500 µV	
	100 V to 1 000 V	0.005 % of reading + 1 500 µV	
Equipment to Measure Capacitance 50 Hz to 1 000 Hz FO	0.33 nF to 0.5 nF	0.5 % of reading + 0.01 nF	
	0.5 nF to 1.1 nF	0.5 % of reading + 0.01 nF	
	1.1 nF to 3.3 nF	0.5 % of reading + 0.01 nF	
	3.3 nF to 11 nF	0.5 % of reading + 0.01 nF	
	11 nF to 33 nF	0.25 % of reading + 0.1 nF	
	33 nF to 110 nF	0.25 % of reading + 0.1 nF	
	110 nF to 330 nF	0.25 % of reading + 0.3 nF	
	0.33 µF to 1.1 µF	0.25 % of reading + 1 nF	
	1.1 µF to 3.3 µF	0.35 % of reading + 3 nF	
	3.3 µF to 11 µF	0.35 % of reading + 10 nF	
	11 µF to 33 µF	0.4 % of reading + 30 nF	

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Electrical

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
Equipment to Measure Capacitance 50 Hz to 1 000 Hz FO	33 µF to 110 µF	0.5 % of reading + 100 nF	Fluke 5500A
	110 µF to 330 µF	0.7 % of reading + 300 nF	
	330 µF to 1.1 mF	1 % of reading + 300 nF	
Equipment to Measure Resistance FO	1 Ω to 11 Ω	0.012 % of reading + 0.008 Ω	
	11 Ω to 33 Ω	0.012 % of reading + 0.015 Ω	
	33 Ω to 330 Ω	0.009 % of reading + 0.015 Ω	
	330 Ω to 3.3 kΩ	0.009 % of reading + 0.006 Ω	
	3.3 kΩ to 33 kΩ	0.009 % of reading + 0.6 Ω	
	33 kΩ to 110 kΩ	0.011 % of reading + 6 Ω	
	110 kΩ to 330 kΩ	0.012 % of reading + 6 Ω	
	330 kΩ to 3.3 MΩ	0.012 % of reading + 55 Ω	
	3.3 MΩ to 11 MΩ	0.006 % of reading + 550 Ω	
	11 MΩ to 33 MΩ	0.1 % of reading + 550 Ω	
	33 MΩ to 110 MΩ	0.5 % of reading + 5 500 Ω	
	110 MΩ to 330 MΩ	0.5 % of reading + 16 500 Ω	
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type J FO	-210 °C to -100 °C	2.4 °C	Electrical Simulation of Thermocouple Output Using Fluke 5100 to provide mV signals per NIST Monograph 175 revised to ITS-90
	-100 °C to -30 °C	2.3 °C	
	-30 °C to 150 °C	2.5 °C	
	150 °C to 760 °C	2.7 °C	
	760 °C to 1 200 °C	2.9 °C	
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type K FO	-200 °C to -100 °C	2.7 °C	
	-100 °C to -25 °C	2.5 °C	
	-25 °C to 120 °C	2.4 °C	
	120 °C to 1 000 °C	2.5 °C	
	1 000 °C to 1 372 °C	2.5 °C	
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type T FO	-250 °C to -150 °C	2.9 °C	
	-150 °C to 0 °C	2.5 °C	
	0 °C to 120 °C	2.3 °C	
	120 °C to 400 °C	2.2 °C	
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type J FO	-210 °C to -100 °C	0.69 °C	Electrical Simulation of Thermocouple Output Using Fluke 5500
	-100 °C to -30 °C	0.67 °C	
	-30 °C to 150 °C	0.69 °C	
	150 °C to 760 °C	0.91 °C	
	760 °C to 1 200 °C	1.1 °C	

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Electrical

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
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type K [FO]	-200 °C to -100 °C	0.82 °C	Electrical Simulation of Thermocouple Output Using Fluke 5500
	-100 °C to -25 °C	0.82 °C	
	-25 °C to 120 °C	0.92 °C	
	120 °C to 1 000 °C	1.1 °C	
	1 000 °C to 1 372 °C	1.3 °C	
Temperature Calibration, Indication, and Control Equipment use with Thermocouple Type T [FO]	-250 °C to -150 °C	0.84 °C	
	-150 °C to 0 °C	0.82 °C	
	0 °C to 120 °C	0.86 °C	
	120 °C to 400 °C	0.84 °C	
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J[FO]	-210 °C to 1 200 °C	0.32 °C	Electrical Simulation of Thermocouple Output Fluke 5500A
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type K[FO]	-210 °C to 1 372 °C	0.41 °C	
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type T[FO]	-250 °C to 400 °C	0.64 °C	
Humidity[FO]	0 % RH to 85 % RH	1.2 % RH	RELATIVE HUMIDITY METER VAISALA HMC 20 WITH HMP20 B PROBE/ Control Company Model 244-355

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 (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Analytical Balances/Scales [FO]	1 mg to 300 mg	$(1.02 \times 10^{-2} + 1.21 \times 10^{-7} Wt)$ g	Class 1 Standards
Industrial Scales and Balances [FO]	5 lb to 20 000 lb	14 lb	Class F Standards, NIST Handbook 44
Balances [FO]	1 g to 500 g	0.85 g	Class 1 kit
	5 g to 300 g	12 mg	
	1 kg to 20 kg	32 mg	Class F standards

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Mechanical

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
Pressure Gauges FO	10 psig to 600 psig	0.72 % of reading + 3 psi	Hiess PTE/Ashcroft
Vacuum Gauges FO	-12 psi to 1 psi	1 % of reading + 0.56 psi	Heis PTE-1 33k6-4-430-1
Torque Wrenches FO	5 lbf·in to 600 lbf·in	1.5 % of reading	Acratork L1,
Indirect Verification of Rockwell Hardness Testers HRC FO	20 HRC to 30 HRC	0.57 HRC	ASTM E 18 and calibrated Rockwell Hardness Test Blocks
	30 HRC to 60 HRC	0.57 HRC	
	60 HRC to 65 HRC	0.58 HRC	
Pipettes FO	100 µL to 200 µL	0.11 µL	Sartorius Micro Balance. Gravimetric record reference to mass balances
	200 µL to 2 000 µL	1.5 µL	
	2 000 µL to 10 000 µL	4.9 µL	
Pressure Gauges FO	10 psig to 15 000 psig	0.72 % of reading + 2.5 psi	Heis PTE-1/Ashcroft
Vacuum Gauges FO	-12 psi to 1 psi	1 % of reading + 0.56 psi	Heis PTE-1

Thermodynamic

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
Thermometers-Infrared/Pyrometers FO	35 °C to 550 °C	3 °C	ISOTech Gemini I Model 976
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type J FO	-210 °C to 1 200 °C	0.32 °C	Electrical Simulation of Thermocouple Output Fluke 5500A
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type K FO	-210 °C to 1 372 °C	0.41 °C	
Temperature Calibration, Indication, and Control Equipment used with Thermocouple Type T FO	-250 °C to 400 °C	0.64 °C	
Humidity FO	0 % RH to 85 % RH	1.2 % RH	RELATIVE HUMIDITY METER VAISALA HMC 20 WITH HMP20 B PROBE/ Control Company Model 244-355

Certificate of Accreditation: Supplement

QCS Calibration Services S.R.L.

Avenida Luis Amiama Tio, Plaza Rem, Local 1-C, San Pedro de Macorìs
Republic Dominicana
Contact Name: Mark Rudek Phone: 829-333-5860

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

Time and Frequency

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
Stop Watch[FO]	2.8 s to 24 hrs	0.24 s	Control Company Model 1051

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represent the smallest measurement uncertainties attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is 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 MicrometerF would mean that the laboratory performs this calibration at its fixed location.
4. 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.
5. When calibrations are performed at customer locations the resulting measurement uncertainty associated with the calibration will typically be larger than the CMC stated on this scope of accreditation. This is due in large part to variation of environmental conditions at customer facilities, the effects of transport on any standards or equipment taken to customer sites and the resolution and repeatability unique to the device being calibrated.
6. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.
7. The term L represents length in inches or millimeters appropriate to the uncertainty statement.