

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Accurate Calibration, LLC

565 Washington Ave. Suite 6, North Haven, CT 06473

(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):

Calibration of Dimensional, Electrical, Mechanical, Mass and Time & Frequency Devices (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:

Initial Accreditation Date:

Issue Date:

Expiration Date:

March 2, 2016

March 11, 2022

May 31, 2024

Accreditation No:

Certificate No:

75000

L22-197

Perry Johnson Lab

Tracv Szerszen

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.pjlabs.com





Accurate Calibration, LLC

565 Washington Ave. Suite 6, North Haven, CT 06473 Contact Name: Salvatore La Monaca III Phone: 203-787-6682

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 (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Ca lipers ^{FO}	0.05 in to 6 in	(290 + 4.5L) μin	Grade 0 Gage Blocks T.O.33-K6-4-15-1
Outside Micrometer ^{FO}	0.05 in to 1 in	$(58 \mu in + 0.6L) \mu in$	Grade 0 Gage Blocks T.O.33-K6-4-15-1
Cylindrical Outside ^{FO}	0.01 in to 1 in	54 μin	Laser Micrometer, Class Y, Z, ZZ ACL-CP-Pingage

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	0 μA to 329.999 μA	0.015 % of reading + 20 nA	Fluke 5502A
DC Current ^{FO}	0 mA to 3.299 99 mA	0.01 % of reading + 50 nA	Calibrator OEM and Euramet
	0 mA to 32.999 mA	0.01 % of reading + 250 nA	CG-15
	0 mA to 329.999 mA	0.01 % of reading + 2.5 μA	
	0 A to 1.099 99 A	0.038 % of reading + 44 μA	
	1.1 A to 2.999 99 A	0.038 % of reading + 44 μ A	
	0 A to 10.999 9 A	0.06 % of reading + 500 µ A	
	11 A to 20.5 A	0.1 % of reading + 750 µ A	
Equipment to Output AC Vo At the listed frequencies ^{FO}	oltage	0	
10 Hz to 45 Hz	0.33 mV to 33 mV	0.15 % of reading + 20 µV	
45 Hz to 10 kHz	0.33 mV to 33 mV	0.1 % of reading + 20 μV	
10 kHz to 20 kHz	0.33 mV to 33 mV	0.1 % of reading + 20 μV	
20 kHz to 50 kHz	0.33 mV to 33 mV	0.2 % of reading + 20 μV	
50 kHz to 100 kHz	0.33 mV to 33 mV	0.35 % of reading + 33 μV	
100 kHz to 500 kHz	0.33 mV to 33 mV	1 % of reading + 60 μV	
Equipment to Output AC Vo At the listed frequencies ^{FO}	bltage		
10 Hz to 45 Hz	3.3 mV to 330 mV	0.05 % of reading + 20 µV	
45 Hz to 10 kHz	3.3 mV to 330 mV	0.03 % of reading + 20 µV	
10 kHz to 20 kHz	3.3 mV to 330 mV	0.07 % of reading + 20 μV	
20 kHz to 50 kHz	3.3 mV to 330 mV	0.1 % of reading + 40 µV	
50 kHz to 100 kHz	3.3 mV to 330 mV	0.23 % of reading + 170 μV	
100 kHz to 500 kHz	3.3 mV to 330 mV	0.5 % of reading + 330 µV	





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Equipment to Output AC Vo	oltage		Fluke 5502A
at the listed frequencies ^{FO}	2274 227	0.050/ 6 12 60 14	Calibrator
10 Hz to 45 Hz	3.3 V to 33 V	0.05 % of reading + 60 μV	OEM
45 Hz to 10 kHz	3.3 V to 33 V	0.03 % of reading + 60 μV	
10 kHz to 20 kHz	3.3 V to 33 V	0.07 % of reading + 60 μV	
20 kHz to 50 kHz	3.3 V to 33 V	0.1 % of reading + 60 μV	
50 kHz to 100 kHz	3.3 V to 33 V	0.23 % of reading + 200 μV	
Equipment to Output AC Vo	oltage		
45 kHz to 1 kHz	33 V to 330 V	0.05 % of reading + 3 mV	
1 kHz to 10 kHz	33 V to 330 V	0.08 % of reading + 9 mV	
10 kHz to 20 kHz	33 V to 330 V	0.09 % of reading + 9 mV	
20 kHz to 50 kHz	33 V to 330 V	0.12 % of reading + 9 mV	
50 kHz to 100 kHz	33 V to 330 V	0.24 % of reading + 80 mV	
Equipment to Output AC Vo	blta ge		
45 kHz to 1 kHz	330 V to 1 020 V	0.05 % of reading + 20 mV	
1 kHz to 5 kHz	330 V to 1 020 V	0.08 % of reading + 20 mV	
5 kHz to 10 kHz	330 V to 1 020 V	0.09 % of reading + 20 mV	
Equipment to Output AC Cu at the listed frequencies ^{FO}	nrent		
10 Hz to 20 Hz	29 μA to 330 μA	0.2 % of reading + 0.1 μA	
20 Hz to 45 Hz	29 μA to 330 μA	0.15 % of reading + 0.1 μA	
45 Hz to 1 kHz	29 μA to 330 μA	0.125 % of reading + 0.1 μA	
1 kHz to 5 kHz	29 μA to 330 μA	0.3 % of reading + 0.15 μA	
5 kHz to 10 kHz	29 μA to 330 μA	0.8 % of reading + 0.2 μA	
10 kHz to 30 kHz	29 μA to 330 μA	1.6 % of reading + 0.4 μA	
Equipment to Output AC Cu at the listed frequencies ^{FO}	nrrent		
10 Hz to 20 Hz	0.33 mA to 3.3 mA	0.2 % of reading + 0.15 μA	
20 Hz to 45 Hz	0.33 mA to 3.3 mA	0.125 % of reading + 0.15 μA	1
45 Hz to 1 kHz	0.33 mA to 3.3 mA	0.1 % of reading + 0.15 μA	
1 kHz to 5 kHz	0.33 mA to 3.3 mA	0.2 % of reading + 0.2 μA	
5 kHz to 10 kHz	0.33 mA to 3.3 mA	0.5 % of reading + 0.3 μA	
10 kHz to 30 kHz	0.33 mA to 3.3 mA	1 % of reading + 0.6 μA	



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Equipment to Output AC Cu	ırrent		Fluke 5502A
at the listed frequencies ^{FO}			Calibrator
10 Hz to 20 Hz	3.3 mA to 33 mA	0.18 % of reading + 2 μA	OEM
20 Hz to 45 Hz	3.3 mA to 33 mA	0.09 % of reading + 2 μA	
45 Hz to 1 kHz	3.3 mA to 33 mA	0.04 % of reading + $2 \mu A$	
1 kHz to 5 kHz	3.3 mA to 33 mA	0.08 % of reading + 2 μA	
5 kHz to 10 kHz	3.3 mA to 33 mA	0.2 % of reading + 3 μA	
10 kHz to 30 kHz	3.3 mA to 33 mA	0.4 % of reading + 4 μA	<u>-</u>
Equipment to Output AC Cu at the listed frequencies ^{FO}	urrent		
10 Hz to 20 Hz	33 mA to 330 mA	0.18 % of reading + 20 μA	<u>-</u>
20 Hz to 45 Hz	33 mA to 330 mA	0.09 % of reading + 20 μA	-
45 Hz to 1 kHz	33 mA to 330 mA	0.04 % of reading + 20 μA	
1 kHz to 5 kHz	33 mA to 330 mA	0.1 % of reading + 50 μA	
5 kHz to 10 kHz	33 mA to 330 mA	0.2 % of reading + 100 μA	
10 kHz to 30 kHz	33 mA to 330 mA	0.4 % of reading + 200 μA	
Equipment to Output AC Cu at the listed frequencies ^{FO}	urrent	N A	
10 Hz to 45 Hz	0.33 A to 1.1 A	0.18 % of reading + 100 µ A	
45 Hz to 1 kHz	0.33 A to 1.1 A	0.05 % of reading + 100 µ A	-
1 kHz to 5 kHz	0.33 A to 1.1 A	0.6 % of reading + 1 mA	<u>-</u>
5 kHz to 10 kHz	0.33 A to 1.1 A	2.5 % of reading + 5 mA	
Equipment to Output AC Coat the listed frequencies FO	urrent		
10 Hz to 45 Hz	1.1 A to 3 A	0.18 % of reading + 100 µA	
45 Hz to 1 kHz	1.1 A to 3 A	0.06 % of reading + 100 μA	
1 kHz to 5 kHz	1.1 A to 3 A	0.6 % of reading + 1 mA	
5 kHz to 10 kHz	1.1 A to 3 A	2.5 % of reading + 5 mA	
Equipment to Output AC Cu at the listed frequencies ^{FO}	urrent		
10 Hz to 45 Hz	3 A to 11 A	0.06 % of reading + 2 mA	
45 Hz to 1 kHz	3 A to 11 A	0.1 % of reading + 2 mA	1
1 kHz to 5 kHz	3 A to 11 A	3 % of reading + 2 mA	1
Equipment to Output AC Cu at the listed frequencies ^{FO}	urrent		
10 Hz to 45 Hz	11 A to 20.5 A	0.12 % of reading + 5 mA	1
45 Hz to 1 kHz	11 A to 20.5 A	0.15 % of reading + 5 mA	1
1 kHz to 5 kHz	11 A to 20.5 A	3 % of reading + 5 mA	1





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Equipment to Output DC	0.01 mV to 330 mV	0.006% of reading $+3 \mu V$	Fluke 5502A
Volta ge ^{FO}	330 mV to 3.3 V	0.005% of reading $+5 \mu V$	Calibrator OEM
	3.3 V to 33 V	0.005% of reading $+50\mu\text{V}$	OEM
	30 V to 330 V	0.005 5 % of reading + 500 μV	
	100 V to 1 020 V	0.005 5 % of reading + 1.5 mV	
Equipment to Output	Up to 399.9 pF	0.5 % of reading + 0.01 nF	
Capacitance ^{FO}	0.4 nF to 1.099 9 nF	0.5 % of reading + 0.01 nF	
	1.1 nF to 3.299 9 nF	0.5 % of reading + 0.01 nF	
	3.3 nF to 10.999 nF	0.25 % of reading + 0.01 nF	
	11 nF to 32.999 nF	0.25 % of reading + 0.1 nF	
	33 nF to 109.99 nF	0.25 % of reading + 0.1 nF	
	110 nF to 329.99 nF	0.25 % of reading + 0.3 nF	
	0.33 μF to 1.099 9 μF	0.25 % of reading + 1 nF	
	1.1 μF to 3.299 9 μF	0.25 % of reading + 3 nF	
	3.3 μF to 10.999 μF	0.25 % of reading + 10 nF	
	11 μF to 32.999 μF	0.4 % of reading + 30 nF	
	33 μF to 109.99 μF	0.45 % of reading + 100 nF	
	110 μF to 329.99 μF	0.45 % of reading + 300 nF	
	0.33 to 1.099 9 mF	0.45 % of reading + 1 μF	
	1.1 mF to 3.299 9 mF	0.45 % of reading + 3 μF	
	3.3 mF to 10.999 mF	0.45 % of reading + 10 μF	
	11 mF to 32.999 mF	0.75 % of reading + 30 μF	
	33 mF to 110 mF	1.1 % of reading + 100 μF	





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Equipment to Output	$0.01~\Omega$ to $11~\Omega$	0.012% of reading + 1 m Ω	Fluke 5502A
Resistance ^{FO}	11 Ω to 33 Ω	0.012% of reading + 1.5 m Ω	Calibrator OEM
	33 Ω to 110 Ω	0.009% of reading + 1.5 m Ω	OEM
	110 Ω to 330 Ω	0.009% of reading $+2.0 \text{ m}\Omega$	
	330Ω to $1.1~k\Omega$	0.009% of reading $+2.0 \text{ m}\Omega$	
	$1.1~\mathrm{k}\Omega$ to $3.3~\mathrm{k}\Omega$	0.009% of reading $+20 \text{ m}\Omega$	
	$3.3 \text{ k}\Omega$ to $11 \text{ k}\Omega$	0.009% of reading $+20 \text{ m}\Omega$	
	11 kΩ to 33 kΩ	0.009% of reading $+200 \text{ m}\Omega$	
	33 kΩ to 110 kΩ	0.011% of reading $+200 \text{ m}\Omega$	
	$110\mathrm{k}\Omega$ to $330\mathrm{k}\Omega$	0.012% of reading $+2\Omega$	
	$330\mathrm{k}\Omega$ to 1.1 M Ω	0.015% of reading $+2\Omega$	
	$1.1~\mathrm{M}\Omega$ to $3.3~\mathrm{M}\Omega$	0.015% of reading $+30\ \Omega$	
	$3.3~\mathrm{M}\Omega$ to $11~\mathrm{M}\Omega$	0.06 % of reading + 50Ω	
	11 MΩ to 33 MΩ	0.1 % of reading + 2 500 Ω	
	$33 \text{ M}\Omega$ to $110 \text{ M}\Omega$	0.5% of reading + $3 \text{ k}\Omega$	
	$110\mathrm{M}\Omega$ to $330\mathrm{M}\Omega$	0.5% of reading + $100 \text{ k}\Omega$	
	$330\mathrm{M}\Omega$ to $1100\mathrm{M}\Omega$	1.5% of reading + $500 \text{ k}\Omega$	
Equipment to Measure AC Current at the listed Frequencies FO			Fluke 8846A
10 Hz to 5 kHz	0.1 μA to 100 μA	0.1 % of reading + 0.4 μA	OEM
5 kHz to 10 kHz	0.1 μA to 100 μA	0.2 % of reading + 2.5 μA	
Equipment to Measure AC (Current at the listed Frequencies	FO	
10 Hz to 5 kHz	100 μA to 1 mA	0.15 % of reading + 6 μA	
5 kHz to 10 kHz	100 μA to 1 mA	0.35 % of reading + 70 µA	
Equipment to Measure AC (Current at the listed Frequencies ¹	FO	
10 Hz to 5 kHz	1 mA to 10 mA	0.1 % of reading + 40 μA	
5 kHz to 10 kHz	1 mA to 10 mA	0.2 % of reading + 250 µA	
Equipment to Measure AC (Current at the listed Frequencies ¹	FO	
10 Hz to 5 kHz	10 mA to 100 mA	0.1 % of reading + 0.4 mA	
5 kHz to 10 kHz	10 mA to 100 mA	0.2 % of reading + 2.8 mA	
Equipment to Measure AC (Current at the listed Frequencies ¹	FO	
10 Hz to 1 kHz	100 mA to 400 mA	0.1 % of reading + 0.4 μA	
1 kHz to 10 kHz	100 mA to 400 mA	0.2 % of reading + 2.5 μA	
Equipment to Measure AC (Current at the listed Frequencies ¹	FO	
10 Hz to 5 kHz	0.4 A to 1 A	0.1 % of reading + 0.4 µA	
5 kHz to 10 kHz	0.4 A to 1 A	0.35 % of reading + 7 μA	





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	Current at the listed Frequencies	FO	Fluke 8846A
10 Hz to 5 kHz	1 A to 3 A	0.15 % of reading + 6 mA	OEM
5 kHz to 10 kHz	1 A to 3 A	0.35 % of reading + 70 mA	
Equipment to Measure AC	Current at the listed Frequencies ¹	FO	
10 Hz to 5 kHz	3 A to 10 A	0.15 % of reading + 6 mA	
5 kHz to 10 kHz	3 A to 10 A	0.35 % of reading + 70 mA	
Equipment to Measure	1 μV to 100 mV	0.0037% of reading $+3.5 \mu V$	
DC Voltage ^{FO}	100 mV to 1 V	0.0025 % of reading + 7 μ V	
	1 V to 10 V	0.0024 % of reading + 0.05 mV	
	10 V to 100 V	0.003 8 % of reading + 0.6 mV	
	100 V to 1 000 V	0.004 1 % of reading + 10 mV	
Equipment to Measure	0.1 mV to 100 mV	0.06 % of reading + 0.04 mV	
AC Voltage ^{FO} 10 Hz to 20 kHz	100 mV to 1 V	0.06 % of reading + 0.3 mV	
10 HZ to 20 KHZ	1 V to 10 V	0.06 % of reading + 3 mV	
	10 V to 100 V	0.06 % of reading + 30 mV	
	100 V to 1 000 V	0.06 % of reading + 225 mV	
Equipment to Measure	0.1 nF to 1 nF	2 % of reading + 0.025 nF	
Capacitance ^{FO}	1 nF to 10 nF	1 % of reading + 0.05 nF	
	10 nF to 100 nF	1 % of reading + 0.5 nF	
	0.1 μF to 1 μF	1 % of reading + 5 nF	
	1 μF to 10 μF	1 % of reading + 50 nF	
	10 μF to 100 μF	1 % of reading + 0.5 μF	
	0.01 mF to 1 mF	1 % of reading + 0.005 mF	
	1 mF to 10 mF	1 % of reading + 0.05 mF	
Equipment to Measure	0.1 Ω to 10 Ω	0.01 % of reading + 3 m Ω	
Resistance ^{FO}	$10~\Omega$ to $100~\Omega$	0.01 % of reading + 4 m Ω	
	100Ω to $1~\mathrm{k}\Omega$	0.01% of reading + $10\text{m}\Omega$	
	$1 \text{ k}\Omega$ to $10 \text{ k}\Omega$	0.01% of reading + $100\text{m}\Omega$	
	$10~\mathrm{k}\Omega$ to $100~\mathrm{k}\Omega$	0.01 % of reading + 1 Ω	
	$100\mathrm{k}\Omega$ to $1\mathrm{M}\Omega$	0.01% of reading + 10Ω	
	1 MΩ to 10 MΩ	0.04% of reading + 100Ω	1
	10 MΩ to 100 MΩ	0.8% of reading + $10 \text{ k}\Omega$	





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Equipment to Measure DC Current ^{FO}	0.01 μA to 100 μA	0.05 % of reading + $0.025 \mu\text{A}$	Fluke 8846A
	100 μA to 1 mA	0.05 % of reading + 0.05 µA	OEM
	1 mA to 10 mA	0.05 % of reading + 2 μA	
	10 mA to 100 mA	0.05 % of reading + 5 μA	
	100 mA to 400 mA	0.05 % of reading + 20 µA	
	0.4 A to 1 A	0.05 % of reading + 0.2 mA	
	1 A to 3 A	0.1 % of reading + 2 mA	
	3 A to 10 A	0.15 % of reading + 0.8 mA	
Temperature Calibration,	600 °C to 800 °C	0.51 °C	Electrical
Indication and Control	800 °C to 1 000 °C	0.39 °C	Simulation of
Equipment used with Thermocouple Type B ^{FO}	1 000 °C to 1 550 °C	0.35 °C	Thermocouple Output Fluke
Thermocoupie Type B	1 550 °C to 1 820 °C	0.38 °C	5502A OEM and Euramet CG-11
Temperature Calibration,	0 °C to 150 °C	0.35 °C	
Indication and Control	150 °C to 650 °C	0.3 °C	
Equipment used with Thermocouple Type C ^{FO}	650 °C to 1 000 °C	0.36 °C	
Thermocoupie Type C	1 000 °C to 1 800 °C	0.58 °C	
	1 800 °C to 2 316 °C	0.97 °C	
Temperature Calibration,	-250 °C to -100 °C	0.58 °C	
Indication and Control	-100 °C to -25 °C	0.2 °C	
Equipment used with Thermocouple Type E ^{FO}	-25 °C to 350 °C	0.18 °C	
Themlocoupic Type E	350 °C to 650 °C	0.20 °C	
	650 °C to 1 000 °C	0.25 °C	
Temperature Calibration,	-210 °C to -100 °C	0.32 °C	
Indication and Control Equipment used with	-100 °C to -30 °C	0.2 °C	
Thermocouple Type J ^{FO}	-30 °C to 150 °C	0.18 °C	
incimocoupio ijpe i	150 °C to 760 °C	0.21 °C	
	760 °C to 1 200 °C	0.27 °C	
Temperature Calibration,	-200 °C to -100 °C	0.39 °C	
Indication and Control	-100 °C to -25 °C	0.22 °C	1
Equipment used with Thermocouple Type K ^{FO}	-25 °C to 120 °C	0.2 °C	1
The interest of the interest o	120 °C to 1 000 °C	0.31 °C]
	1 000 °C to 1 372 °C	0.47 °C	





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Electrical

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Temperature Calibration,	-200 to -100 C	0.43 °C	Electrical
Indication and Control Equipment used with	-100 C to 800 °C	0.31 °C	Simulation of
Thermocouple Type L ^{FO}	800 °C to 900 °C	0.21 °C	- Thermocouple Output Fluke
Temperature Calibration,	-200 to -100 °C	0.47 °C	5502A
Indication and Control	-100 °C to -25 °C	0.26 °C	OEM
Equipment used with Thermocouple Type N ^{FO}	-25 °C to 120 °C	0.23 °C	
Thermocoupie Type Tv	120 °C to 410 °C	0.22 °C	
	410 °C to 1 300 °C	0.32 °C	
Temperature Calibration,	0 °C to 250 °C	0.66 °C	
Indication and Control	250 °C to 400 °C	0.41 °C	
Equipment used with Thermocouple Type R ^{FO}	400 °C to 1 000 °C	0.39 °C	
J1	1 000 °C to 1 767 °C	0.47 °C	
Temperature Calibration,	0 °C to 250 °C	0.55 °C	
Indication and Control Equipment used with	250 °C to 1 000 °C	0.42 °C	
Thermocouple Type S ^{FO}	1 000 °C to 1 400 °C	0.43 °C	
1 71	1 400 °C to 1 767 °C	0.54 °C	
Temperature Calibration,	-250 to -150 °C	0.73 °C	
Indication and Control	-150 °C to 0 °C	0.29 °C	
Equipment used with Thermocouple Type TFO	0 °C to 120 °C	0.2 °C	
1 11	120 °C to 400 °C	0.18 °C	
Temperature Calibration, Indication and Control Equipment used with Thermocouple Type UFO	-200 °C to 0 °C	0.65 °C	

Mass, Force, and Weighing Devices

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MEASURED INSTRUMENT,	RANGE OR NOMINAL DEVICE	CALIBRATION AND	CALIBRATION	
QUANTITY OR GAUGE	SIZE AS APPROPRIATE	MEASUREMENT	EQUIPMENT	
		CAPABILITY EXPRESSED	AND REFERENCE	
		AS AN UNCERTAINTY (±)	STANDARDS USED	
Laboratory BalancesFO	20 mg to 200 g	0.63 mg	Class 1 Weights	
	(Resolution: 0.1 mg)		Euramet CG-18	
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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
	ATTROTALE	AS AN UNCERTAINT! (1)	STANDARDS USED
Pressure Gages FO	-12 psi to 20 psi	0.145% of indicated value + 0.03 psig	Crystal – M1-
	20 psi to 100 psi	0.223 % of indicated value + 0.011 psig	100PSI
			ASME B40.100
	100 psi to 500 psi	0.112 % of indicated value + 0.021 psig	Crystal –
			500PSIXP2I
			ASME B40.100
	200 psi to 1 000 psi	0.103 % of indicated value + 0.17 psig	Crystal –
			1KPSIXP2I
			ASME B40.100
	1 000 psi to 5 000 psi	0.113 % of indicated value + 0.31 psig	Crystal –
			5KPSIXP2I
			ASME B40.100
	-12 psi to 20 psi	0.145% of indicated value + 0.03 psig	Crystal – M1-
	20 psi to 100 psi	0.223 % of indicated value + 0.011 psig	100PSI
			ASME B40.100
	100 psi to 500 psi	0.112 % of indicated value + 0.021 psig	Crystal –
		VI VI	500PSIXP2I
T FO	25 lbf·in to 250 lbf·in	0.51 % of indicated value + 0.17 lbf·in	ASME B40.100
Torque Wrenches FO	23 101 · In to 230 101 · In	0.51 % of indicated value + 0.1 / lbf·in	Mountz – LTT-
			2501 Euramet CG-14
	25 lbf·ft to 250 lbf·ft	0.582 % of indicated value + 0.16 lbf·ft	Mountz –
	23 101 11 10 230 101 11	0.362 % Of fidicated value + 0.10 lb1·1t	BMX250F
			Euramet CG-14
			Daramet CO 14

Time & 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
Stopwatch/Timer FO	1 minute to 24 hr	0.61 s	Agilent 53131A, 5502A NIST Totalize Method/SP960-12 ACL-CP- Stopwatch/timers





Accurate Calibration, LLC

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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 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.
- 4. 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.
- 5. The term L represents length in inches or millimeters as appropriate to the uncertainty statement.
- 6. The term R represents the numerical value of the resolution of the device in micro inches.