SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

G.T. MICHELLI COMPANY, LLC
9663 Mammoth Drive
Baton Rouge, LA 70814
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CALIBRATION

Valid To: November 30, 2024 Certificate Number: 3601.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1, 5]:

I. Chemical

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments	Location[6]
pH – Measuring Equipment[3]	(4, 7, 10) pH	0.016 pH	Buffer solutions	BTR, SCT, SUL
Electrolytic Conductivity – Measuring Equipment[3]	≈1 µS/cm ≈10 µS/cm ≈100 µS/cm ≈1000 µS/cm ≈10 000 µS/cm	0.55 µS/cm 0.55 µS/cm 2.1 µS/cm 4.6 µS/cm 40 µS/cm	Conductivity solutions	BTR, SCT, SUL

II. Dimensional

Parameter/Equipment	Range	CMC[2] (±)	Comments	Location[6]
Micrometers[3]	Up to 12 in (12 to 40) in	62 µin 92 µin	Grade 0 gage blocks	BTR, SCT, SUL

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments	Location[6]
Calipers[3]	Up to 40 in	300 µin	Grade 0 gage blocks	BTR, SCT, SUL
Length & Travel Indicators	Up to 6 in	480 µin	Grade 0 gage blocks & granite surface plate	BTR
Height Gages	Up to 24 in	95 µin	Grade 0 gage blocks & granite surface plate	BTR

III. Fluid Quantities

Parameter/Equipment	Range	CMC[2] (±)	Comments	Location[6]
Fume Hoods – Air Velocity Only[3]	(20 to 200) ft/min	4.5 %	Anemometer	BTR, SCT, SUL

IV. Mechanical

Parameter/Equipment	Range	CMC[2] (±)	Comments	Location[6]
Scales & Balances[3]	(5 to 500) mg	5.8 µg	Class 1 weights (applied load)	BTR, SCT, SUL
	(1 to 100) g	9 µg		
	(1 to 10) kg	0.2 g		
	(10 to 25) kg	0.3 g		
	(25 to 150) kg	0.2 g		
	(1/32 to 8) oz	0.0011 oz	ASTM Class 5 (NIST Class F) weights	BTR, SCT, SUL
	(1 to 5) g	1.1 mg		
	(5 to 20) g	1.2 mg		
	(20 to 50) g	1.3 mg		
	(50 to 100) g	1.8 mg		
	(100 to 200) g	5.3 mg		
	(200 to 500) g	5.9 mg		
	(500 to 1000) g	9.0 mg		
	(1 to 5) kg	3.0 g		
	(1 to 25) lb	0.0011 lb		
	(25 to 50) lb	0.0012 lb		
	(50 to 500) lb	0.0013 lb		
	(500 to 1000) lb	0.06 lb		
	(1000 to 24 000) lb	0.76 lb		
	(6000 to 30 000) lb	0.83 lb	Weight cart & weight blocks	BTR, SCT, SUL
Pressure – Measuring Equipment[3]	(-15 to 30) psig	0.004 psig	Pressure transducers	BTR, SCT, SUL
	(0 to 30) psig	0.007 psig		
	(0 to 100) psig	0.026 psig		
	(0 to 500) psig	0.12 psig		
	(0 to 1000) psig	0.26 psig		
	(0 to 5000) psig	1.2 psig		
	(0 to 10 000) psig	2.6 psig		

Parameter/Equipment	Range	CMC[2, 4] (±)	Comments	Location[6]
Torque – Measuring Equipment	(5 to 50) lbf·in (50 to 500) lbf·in (25 to 250) lbf·ft (100 to 1000) lbf·ft (250 to 2500) lbf·ft (750 to 7500) lbf·ft (2500 to 25 000) lbf·ft	0.018 lbf·in 0.3 lbf·in 0.15 lbf·ft 0.37 lbf·ft 15 lbf·ft 45 lbf·ft 150 lbf·ft	Mountz torque transducers AWS torque transducers	BTR BTR
Accelerometers[3]	(7 to 100) Hz 100 Hz to 2 kHz (2 to 10) kHz	5.4 % 1.6 % 4.0 %	IMI Sensors 699A07 portable vibration calibrator	BTR

V. Thermodynamics

Parameter/Equipment	Range	CMC[2] (±)	Comments	Location[6]
Temperature - Measure[3]	(-197 to 0) °C (0 to 157) °C (157 to 232) °C (232 to 420) °C (420 to 660) °C (-197 to 0) °C (0 to 157) °C (157 to 232) °C (232 to 420) °C (50 to 160) °C (50 to 160) °C	0.027 °C 0.027 °C 0.027 °C 0.029 °C 0.053 °C 0.017 °C 0.017 °C 0.017 °C 0.026 °C 0.058 °C 2.9 °C	Fluke 9144 field metrology well with Fluke 5609 PRT Fluke 1502A, 5615 PRT Mettler Toledo PT1000 Sensor Mettler Toledo HA-TC Kit	BTR, SCT, SUL BTR, SCT, SUL BTR, SCT, SUL BTR, SCT, SUL

Parameter/Equipment	Range	CMC[2] (±)	Comments	Location[6]
Temperature – Measuring Equipment[3]	Up to 50 °C (50 to 200) °C (200 to 420) °C (420 to 550) °C (550 to 660) °C	0.15 °C 0.11 °C 0.14 °C 0.17 °C 0.2 °C	Fluke 9144 field metrology well	BTR, SCT, SUL
	Up to 50 °C (50 to 200) °C (200 to 420) °C (420 to 550) °C (550 to 660) °C	0.027 °C 0.027 °C 0.027 °C 0.029 °C 0.053 °C	Fluke 9144 field metrology well with Fluke 5609 PRT	BTR, SCT, SUL

[1] This laboratory offers commercial calibration service and field calibration service.

[2] Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

[4] The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.

[5] This scope meets A2LA's *P112 Flexible Scope Policy*.

[6] The locations that can perform the calibrations are given by a letter code given in the table below. The field locations below are service locations and all calibrations are performed at customer sites:

Location	Code
(Main Location) 9663 Mammoth Drive, Baton Rouge, LA 70814	BTR
(Field Location) 103 North Pat Street, Suite H, Scott, LA 70583	SCT
(Field Location) 2334 Industrial Drive, Suite D, Sulphur, LA 70665	SUL

Accredited Laboratory

A2LA has accredited

G.T. MICHELLI COMPANY, LLC

Baton Rouge, LA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 18th day of November 2022.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3601.03
Valid to November 30, 2024
Revised January 2, 2024

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.