

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

# CONTROL COMPANY 12554 Galveston Road Suite B230 Webster, TX 77598

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#### **CALIBRATION**

Valid To: December 31, 2025 Certificate Number: 1750.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's Calibration Program Requirements), accreditation is granted to this laboratory to perform the following calibrations<sup>1, 4</sup>:

#### I. Chemical

Parameter/Equipment	Range	CMC <sup>2, 5</sup> (±)	Comments
Conductivity Cell/Probe – Fixed Points	(1 to 50) μS/cm (> 50 to 100) μS/cm (1000 to 1413) μS/cm (5000 to 10 000) μS/cm (50 000 to 100 000) μS/cm (150 000 to 200 000) μS/cm	0.25 μS/cm 0.30 μS/cm 2.2 μS/cm 21 μS/cm 190 μS/cm 290 μS/cm	Conductivity reference solutions
Conductivity Solutions – Fixed Points	(1 to 10) μS/cm (50 to 100) μS/cm (1000 to 1413) μS/cm (5000 to 10 000) μS/cm (50 000 to 100 000) μS/cm (150 000 to 200 000) μS/cm	0.30 μS/cm 0.84 μS/cm 2.9 μS/cm 31 μS/cm 280 μS/cm 580 μS/cm	Conductivity meter plus 4-wire reference cell
Salinity for Meter <sup>3</sup>	(2 to 10) % (> 10 to 42) %	0.013 % 0.22 %	Conductivity solutions
pH Buffer Solutions – Measure	(0 to 14) pH	0.0092 pH	Buffer solutions
pH Meter – Fixed Points	4 pH 7 pH 10 pH	0.0054 pH 0.0067 pH 0.0060 pH	Buffer solutions

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#### II. Dimensional

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Digital Calipers – Fixed Points Outside & Depth	0.1 in 2 in	290 μin 320 μin	Gage set
	4 in 6 in 8 in	390 μin 490 μin 610 μin	
Inside	1 in	300 μin	

## III. Electrical – DC/Low Frequency

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Electrical Simulation of Thermocouple, Type K	(-195 to -115) °C (> -115 to -55) °C (> -55 to 1000) °C (> 1000 to 1300) °C	0.16 °C 0.13 °C 0.11 °C 0.14 °C	Fluke 7526A precision process calibrator

# IV. Mechanical

Parameter/Equipment	Range	CMC <sup>2, 5</sup> (±)	Comments
Barometric Pressure – Measure	(500 to 1100) hPa or mbar	0.23 hPa or mbar	Digital barometer Class A
Gauge and Differential Pressure	(0 to 15) psi (> 15 to 100) psi (> 100 to 300) psi	0.0086 psi 0.020 psi 0.76 psi	Druck pressure transducer  Cole Parmer pressure transducer
Scales & Balances, Fixed Points	100 g 200 g 300 g	0.30 mg 0.41 mg 0.89 mg	Troemner Ultra Class weights

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# V. Optical Quantities

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Calibration of Light Meters	(0 to 40) lux (> 40 to 400) lux (> 400 to 1000) lux (> 1000 to 4000) lux (> 4000 to 10 000) lux (> 10 000 to 20 000) lux	4.3 lux 8.4 lux 19 lux 99 lux 240 lux 830 lux	Standard light meter

# VI. Thermodynamics

Parameter/Equipment	Range	CMC <sup>2, 5</sup> (±)	Comments
Digital Thermometers & Temperature Probes	-196 °C (-80 to < 0) °C (0 to 100) °C	0.021 °C 0.023 °C 0.0087 °C	PRT thermometer plus calibration bath  Thermistor probe
	(> 100 to 200) °C (> 200 to 300) °C	0.040 °C 0.051 °C	plus water bath PRT thermometer plus oil bath
IR Temperature – Measuring Equipment	0 °C  35 °C (> 35 to 100) °C (> 100 to 200) °C (> 200 to 350) °C (> 350 to 500) °C	0.83 °C 0.49 °C 0.76 °C 1.1 °C 1.7 °C 2.3 °C	Liquid bath Infrared calibrator BB
Relative Humidity – Measuring Equipment	(10 to 80) % RH @ (18 to 28) °C	0.46 % RH	Chilled mirror hygrometer

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#### VII. Time & Frequency

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Digital Stopwatch Timer & Time Base Error	(0 to 10) s/24 hr	0.041 s/24 hr	Non-contact frequency counter
Revolutions Per Minute – Digital Tachometer	(0 to 10) rpm (> 10 to 100) rpm (> 100 to 1000) rpm (> 1000 to 10 000) rpm (> 10 000 to 100 000) rpm	0.000 73 rpm 0.0016 rpm 0.026 rpm 0.24 rpm 3.8 rpm	Pulse generator &frequency counter

<sup>&</sup>lt;sup>1</sup> This laboratory offers commercial calibration service.

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<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Salinity is a measure of the mass of dissolved salts (ionic constituents) in a given mass of solution and expressed as percentage (%).

<sup>&</sup>lt;sup>4</sup> This scope meets A2LA's P112 Flexible Scope Policy.

<sup>&</sup>lt;sup>5</sup> 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.