

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Dependable Controls Services, LLC 95 Ledge Road, Unit #8 Seabrook, NH 03874

Fulfills the requirements of

ISO/IEC 17025:2017

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at <u>www.anab.org</u>.





Jason Stine, Vice President

Expiry Date: 05 January 2026 Certificate Number: AC-2543

> This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AND

ANSI/NCSL Z540-1-1994 (R2002)

Dependable Controls Services, LLC

95 Ledge Road, Unit **#8** Seabrook, NH 03874 Dan Snyder (603) 5<mark>80-574</mark>4

CALIBRATION

Valid to: January 5, 2026

Certificate Number: AC-2543

Chemical Quantities

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
pU Motora	4 pH	0.020 pH	Standard nH Solutions
pri Meters	10 pH	0.039 pH	Standard pri Solutions

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouples (Source and Measure) ¹	Type E (-200 to 0) °C (0 to 950) °C Type J (-200 to 0) °C (0 to 1 200) °C Type K (-200 to 0) °C (0 to 1 370) °C	0.99 °C 0.82 °C 1.1 °C 0.88 °C 1.3 °C 1.1 °C	Fluke Process Calibrator





Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouples (Source and Measure) ¹	Type R (-20 to 0) °C (0 to 500) °C (500 to 1750) °C Type S (-20 to 0) °C (0 to 500) °C (500 to 1 750) °C Type T (-200 to 0) °C (0 to 400) °C	2.8 °C 2.2 °C 1.7 °C 2.8 °C 2.2 °C 1.9 °C 1.3 °C 0.83 °C	Fluke Process Calibrator
Electrical Simulation of RTD's (Source and Measure) ¹	Pt $100 - 385$ (-200 to 800) °C Pt $100 - 3926$ (-200 to 630) °C Pt $100 - 3916$ (-200 to 630) °C Pt $200 - 385$ (-200 to 250) °C (250 to 630) °C Pt $500 - 385$ (-200 to 500) °C (500 to 630) °C Pt $1000 - 385$ (-200 to 100) °C (100 to 630) °C Ni 120 (-80 to 260) °C	0.63 °C 0.62 °C 0.60 °C 0.60 °C 0.33 °C 0.94 °C 0.49 °C 0.61 °C 0.29 °C 0.54 °C 0.29 °C	Fluke Process Calibrator

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Calipers ¹	(0.05 to 1) in (1 to 4) in (4 to 6) in	410 μin 630 μin 650 μin	
Micrometers ¹	(0.05 to 0.2) in (0.2 to 1) in	140 μin 110 μin	Gauge Blocks
Indicators ¹	(0.05 to 0.2) in (0.2 to 1) in	320 μin 280 μin	





Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure ¹	(0 to 300) psi	0.14 psi	Ashcroft AM2-2 Pressure Transducer
Vacuum ¹	(0 to 28.5) inHg	0.12 inHg	Ashcroft AM1 Pressure Transducer
Scales and Balances ^{1,2}	$(1 \text{ to } 500) \text{ mg} \\(0.5 \text{ to } 10) \text{ g} \\(10 \text{ to } 1000) \text{ g} \\(100 \text{ to } 1000) \text{ g} \\(100 \text{ to } 1000) \text{ g} \\(100 \text{ to } 5) \text{ kg} \\(500 \text{ to } 100) \text{ kg} \\(20 \text{ to } 30) \text{ kg} \\(20 \text{ to } 30) \text{ kg} \\(30 \text{ to } 40) \text{ kg} \\(40 \text{ to } 50) \text{ kg} \\(50 \text{ to } 70) \text{ kg} \\(70 \text{ to } 100) \text{ kg} \\(70 \text{ to } 100) \text{ lb} \\(100 \text{ to } 200) \text{ lb} \\(200 \text{ to } 300) \text{ lb} \\(300 \text{ to } 400) \text{ lb} \\(300 \text{ to } 400) \text{ lb} \\(500 \text{ to } 500) \text{ lb} \\(500 \text{ to } 600) \text{ lb} \\(500 \text{ to } 600) \text{ lb} \\(70 \text{ to } 800) \text{ lb} \\(800 \text{ to } 900) \text{ lb} \\(900 \text{ to } 1000) \text{ lb} \\(100 \text{ to } 1000) \text{ lb} \\(100 \text{ to } 1000) \text{ lb} \\(100 $	0.40 mg 0.58 mg 2.3 mg 3.4 mg 35 mg 140 mg 210 mg 480 mg 3 100 mg 3 400 mg 6 200 mg 9 200 mg 9 200 mg 0.006 5 lb 0.013 lb 0.026 lb 0.039 lb 0.052 lb 0.065 lb 0.078 lb 0.091 lb 0.10 lb 0.12 lb 0.13 lb	Class 1, 2, 4, and 6 weights





Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Environmental Chambers	(0 to 54) %RH	1. <mark>4 %</mark> RH	
Humidity	(55 to 75) %RH	1. <mark>6 %</mark> RH	Vaisala HMP75
	(76 to 95) %RH	2.2 %RH	Thermohygrometer
Temperature	(-10 to 60) °C	0.14 °C	
	(32 to 500) °F	2 °F	
Temperature Uniformity	(500 to 1 000) °F	3.1 °F	Yokogawa GP20 Temperature
Survey ¹	(1 000 to 1 600) °F	3.4 °F	Recorder
	(1 600 to 2 100) °F	3.8 °F	

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Stopwatches and Timers ¹	5 s t <mark>o 24 h</mark>	0.42 sec	Reference Stopwatch
Optical Rotational Speed - Measure	(10 to 100) rpm (100 to 1 000) rpm (1 000 to 10 000) rpm (10 000 to 50 000) rpm	2.1 rpm 2.1 rpm 1.9 rpm 0.016 % reading + 1.1 rpm	Non-contact Tachometer

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%. Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.

 The CMC for scales and balances are highly dependent upon the resolution of the unit under test. The uncertainty presented here does not include the resolution of the unit under test. The resolution will be included in the reported measurement uncertainty at the time of calibration.

3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2543.

Jason Stine, Vice President



