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 www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 05 January 2022
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) 580-5744

CALIBRATION

Valid to: **January 5, 2022** Certificate Number: **AC-2543**

Chemical Quantities

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
pH Meters	(4, 7, 10) pH	0.034 pH	Standard PH Solutions

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature Process Controllers[1]	Type J (-210 to 0) °C (0 to 800) °C (800 to 1 200) °C Type K (-200 to 0) °C (0 to 1 000) °C (1 200 to 1 370) °C Type T (-250 to 0) °C (0 to 400) °C Type E (-250 to -100) °C (-100 to 1 000) °C Type R (0 to 1 767) °C Type S (0 to 1 767) °C	 0.72 °C 0.5 °C 0.61 °C 0.94 °C 0.61 °C 0.84 °C 0.95 °C 0.5 °C 0.95 °C 0.5 °C 1.7 °C 2.3 °C	Fluke 726 Process Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature Process Controllers[1]	Ni 120 (672) (-80 to 260) °C PT 100 (385) (-200 to 100) °C (100 to 300) °C (300 to 600) °C (600 to 800) °C PT 100 (3296) (-200 to 100) °C (100 to 300) °C (300 to 630) °C PT 100 (3916) (-200 to 100) °C (100 to 300) °C (300 to 630) °C PT 200 (385) (-200 to 100) °C (100 to 300) °C CU 10 (-10 to 250) °C	 0.22 °C 0.22 °C 0.34 °C 0.44 °C 0.54 °C 0.22 °C 0.33 °C 0.55 °C 0.25 °C 0.34 °C 0.44 °C 0.89 °C 1 °C 2.1 °C	Fluke 726 Process Calibrator

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Calipers[1]	(0 to 6) in	590 µin	Gauge Blocks
Micrometers[1]	(0 to 6) in	130 µin	
Indicators[1]	(0 to 6) in	78 µin	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure[1]	(0 to 300) psi	0.18 psi	Druck DPI611 Pressure Calibrator

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Vacuum[1]	(0 to 28.5) inHg	0.22 inHg	Druck DPI611 Pressure Calibrator
Scales and Balances [1,2]	1mg to 200 mg 500 mg 1 g 2 g (5, 10) g 20g (50, 100) g 200 g 5 000 g 10 000 g	0.1 mg 0.2 mg 0.2 mg 0.4 mg 0.3 mg 0.5 mg 0.6 mg 4 mg 100 mg 800 mg	Class 4 weight set
	10 000 g	500 mg	Class 2 weights
	500 g 1 000 g 5 000 g	2 mg 2 mg 80 mg	Class 1 weights

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Humidity Chambers, Measure, Non Condensing[1]	(0 to 54) %RH (55 to 75) %RH (76 to 95) %RH	1.4 %RH 1.6 %RH 2.2 %RH	Vaisala HMP75 Hygrometer
Temperature Uniformity Survey[1]	Type K (-200 to 0) °C (0 to 1 370) °C Type J (-200 to 0) °C (0 to 1 100) °C	 0.85 °C 0.95 °C 0.69 °C 0.73 °C	Yokogawa GP20 Temperature Recorder

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Stopwatches and Timers[1]	5 s to 24 h	0.61 s	Reference Stopwatch

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.
2. 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.

R. Douglas Leonard Jr., VP, PILR SBU