



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**ProTemp Mechanical, Inc.**  
**3350 Scott Blvd., Bldg. #3**  
**Santa Clara, CA 95054**

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](http://www.anab.org).

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 19 August 2022  
Certificate Number: AC-2903



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)**

**ProTemp Mechanical, Inc.**  
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Santa Clara, CA 95054  
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**CALIBRATION**

Valid to: **August 19, 2022**

Certificate Number: **AC-2903**

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage <sup>1</sup> – Generate	Up to 15 V	0.2 mV	Fluke 741B Process Calibrator
DC Current <sup>1</sup> – Generate	Up to 22 mA	15 $\mu$ A	Fluke 741B Process Calibrator
Electrical Calibration of Thermocouple Indicators, mV Simulation <sup>1</sup>	Type J (-100 to 800) °C	0.56 °C	Fluke 741B Process Calibrator
	Type K (-100 to 400) °C	0.62 °C	
	Type T (-200 to 400) °C	0.69 °C	
Electrical Calibration of RTD Indicators <sup>1</sup>	Pt 385, 100 $\Omega$ , 200 $\Omega$ (-200 to 400) °C	0.28 °C	Fluke 753 Process Calibrator
	Pt 3926, 100 $\Omega$ (-200 to 630) °C	0.47 °C	
	Pt 3916, 100 $\Omega$ (-190 to 360) °C	0.47 °C	

**Mass and Mass Related**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure <sup>1</sup> – Measure	(0 to 100) psia	0.092 psi	Druck DPI 104 Pressure Gage

**Thermodynamic**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Relative Humidity <sup>1</sup> – Measure	(10 to < 90) % RH (90 to 95) % RH	1.7 % RH 2.3 % RH	Vaisala HMP 77B Temperature/Humidity Probe
Relative Humidity- Measure	(10 to 90) % RH	2.6 % RH	Vaisala DL 2000 Logger
Relative Humidity <sup>1</sup> – Measuring Equipment Fixed Points	10 % RH 35 % RH 50 % RH 80 % RH 95 % RH	0.59 % RH 0.78 % RH 0.82 % RH 0.77 % RH 1 % RH	ASTM E104, Salt Solutions
Temperature – Measure <sup>1</sup> For Uniformity of Ovens, Freezers, Furnaces, and Environmental Test Chambers	(-70 to 150) °C	0.97 °C	ASTM E145, Fluke Hydra 2635A Data Logger with Type T Thermocouple
Temperature – Measure <sup>1</sup> Chamber/Oven Single Point Measure	(-200 to 400) °C	0.20 °C	Hart 5627/5623A PRT with Hart 1522A readout
Temperature – Measure <sup>1</sup> Chamber/Freezer Single Point Measure	(-25 to 70) °C	0.31 °C	Vaisala DL 2000 Logger
Temperature – Measure <sup>1</sup> Chamber/Freezer Single Point Measure	(-90 to 50) °C	0.41 °C	Vaisala DL1416 Logger with external probe

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. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2903.



R. Douglas Leonard Jr., VP, PILR SBU