



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Heat Treating Services Unlimited, Inc.
210 LaDean Court
Simpsonville, SC 29681

Fulfills the requirements of

ISO/IEC 17025:2017

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.

Jason Stine, Vice President

Expiry Date: 03 August 2028
Certificate Number: L2138



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

Heat Treating Services Unlimited, Inc.

210 LaDean Court
Simpsonville, SC 29681
Neil Revis 864-289-0644

CALIBRATION

ISO/IEC 17025 Accreditation Granted: **27 May 2026**

Certificate Number: **L2138** Certificate Expiry Date: **03 August 2028**

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current – Source/Measure	(0 to 4) mA (4 to 20) mA	1.5 μ A 4.4 μ A	Comparison to Martel 3001 Calibrator with Agilent 3458A 8.5 Digit Multimeter
DC Voltage – Source/Measure	(0 to 110) mV (0.11 to 1.1) V (1.1 to 11) V	21 μ V 57 μ V 0.71 mV	Comparison to Martel 3001 Calibrator with Agilent 3458A 8.5 Digit Multimeter
Resistance Simulation of RTD Indicators – Source/Measure	Pt 385, 100 Ω (0 to 400) $^{\circ}$ C (400 to 800) $^{\circ}$ C Pt 385, 1 000 Ω (0 to 195) $^{\circ}$ C	0.11 $^{\circ}$ C 0.062 $^{\circ}$ C 0.22 $^{\circ}$ C	Comparison to Martel 3001 Calibrator with Agilent 3458A 8.5 Digit Multimeter
Electrical Simulation of Thermocouple Indicators – Source/Measure ¹	Type B (100 to 593) $^{\circ}$ C (593 to 849) $^{\circ}$ C (849 to 1 301) $^{\circ}$ C Type E (-200 to 0) $^{\circ}$ C (0 to 982) $^{\circ}$ C Type J (-100 to 800) $^{\circ}$ C (800 to 1 200) $^{\circ}$ C	0.64 $^{\circ}$ C 0.63 $^{\circ}$ C 0.74 $^{\circ}$ C 0.15 $^{\circ}$ C 0.19 $^{\circ}$ C 0.12 $^{\circ}$ C 0.17 $^{\circ}$ C	Comparison to Thermocouple Half Junction with Agilent 3458A 8.5 Digit Multimeter, Ice Point

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Indicators – Source/Measure ¹	Type K (0 to 400) °C	0.1 °C	Comparison to Thermocouple Half Junction with Agilent 3458A 8.5 Digit Multimeter, Ice Point
	(400 to 1 372) °C	0.14 °C	
	Type N (-100 to 900) °C	0.16 °C	
	(900 to 1 300) °C	0.14 °C	
	Type R (-20 to 0) °C	0.19 °C	
	(0 to 100) °C	0.17 °C	
	(100 to 1 750) °C	0.19 °C	
	Type S (0 to 200) °C	0.21 °C	
	(200 to 1 400) °C	0.18 °C	
	(1 400 to 1 752) °C	0.2 °C	
	Type T (-200 to 0) °C	0.13 °C	
	(0 to 400) °C	0.17 °C	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure Devices – Hydraulic ¹	Up to 500 psig (500 to 1 000) psig (1 000 to 5 000) psig (5 000 to 10 000) psig	1 psi 1.2 psi 3.5 psi 7.6 psi	Comparison to Fluke 700G Pressure Gage
Differential Pressure Devices ¹	(6 to 50) inH ₂ O (50 to 100) inH ₂ O	0.23 inH ₂ O 0.24 inH ₂ O	Comparison to Meriam M2000 Smart Manometer

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Uniformity Survey of Furnaces & Ovens ¹	(0 to 1 093) °C (1 093 to 1 250) °C	1 °C 2.7 °C	In accordance with AMS 2750 using a Datalogger and Type K Thermocouples.

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Uniformity Survey of Furnaces & Ovens ¹	(0 to 1 093) °C (1 093 to 1 300) °C	1 °C 2.4 °C	In accordance with AMS 2750 using a Datalogger and Type N Thermocouples.
Temperature – System Accuracy Tests ¹	Type K (0 to 1 093) °C (1 093 to 1 250) °C Type N (0 to 1 093) °C (1 093 to 1 250) °C	1.1 °C 2.1 °C 1.2 °C 2.1 °C	In accordance with AMS 2750 using a Thermocouple Calibrator with Reference Thermocouple Wire.

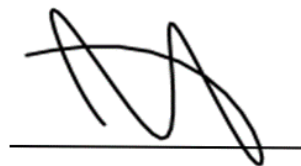
Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Timers ¹	Up to 60 min	0.51 s	Comparison to 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. Unless otherwise specified in the far-right column above, the laboratory utilizes internally written calibration procedures in the process of calibrating the parameters listed in this document.



Jason Stine, Vice President