CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

TesCom Calibration
3317 El Salido Parkway
Cedar Park, TX 78613
(and satellite location listed on the scope)

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.

Jason Stine, Vice President

Expiry Date: 30 November 2025

Certificate Number: AC-1417

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)

TesCom Calibration
3317 El Salido Parkway
Cedar Park, TX 78613
Rey Feliz (480) 820-0506 rfeliz@accreditedlabs.com

CALIBRATION

Valid to: **November 20, 2025** Certificate Number: **AC-1417**

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Source	Up to 220 mV (0.22 to 2.2) V (2.2 to 11) V (11 to 22) V (22 to 220) V (220 to 1 100) V	7.9 µV/V + 0.4 µV 5.2 µV/V + 0.7 µV 3.6 µV/V + 2.5 µV 3.6 µV/V + 4 µV 5.1 µV/V + 40 µV 6.7 µV/V + 0.4 mV	Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 5725A Amplifier
DC Voltage – Measure	Up to 200 mV 200 mV to 2 V (2 to 20) V (20 to 200) V (200 to 1 000) V	3.1 µV/V + 0.1 µV 2.8 µV/V + 0.4 µV 2.5 µV/V + 4 µV 3.9 µV/V + 40 µV 3.9 µV/V + 1 mV	Comparison to Fluke 8508A Opt. 01 8.5 Digit Multimeter
DC High Voltage – Measure [3]	(1 to 60) kV	1 mV/V	Comparison to Ross Engineering VD 60 High Voltage Divider, Fluke 8508A Opt. 01 8.5 Digit Multimeter
DC Current – Source	Up to 220 µA (0.22 to 2.2) mA (2.2 to 22) mA (22 to 100) mA (100 to 220) mA (0.22 to 1) A (1 to 2.2) A	42 µA/A + 6 nA 36 µA/A + 7 nA 36 µA/A + 40 nA 46 µA/A + 0.7 µA 56 µA/A + 0.7 µA 82 µA/A + 12 µA 0.13 mA/A + 12 µA	Comparison to Fluke 5720A Multiproduct Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current – Source	(2.2 to 2.999 99) A	0.29 mA/A + 40 µA	Comparison to Fluke 5520A/SC1100 Multiproduct Calibrator
DC Current – Source	(3 to 20) A (20 to 100) A	80 µA/A + 0.8 mA 82 µA/A + 4 mA	Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 52120A Amplifier
DC Current – Measure	(0 to 200) µA (0.2 to 2) mA (2 to 20) mA (20 to 200) mA (0.2 to 2) A (2 to 20) A	8 µA/A + 0.4 nA 7.3 µA/A + 4 nA 9.2 µA/A + 40 nA 35 µA/A + 0.8 µA 0.15 mA/A + 16 µA 0.32 mA/A + 0.4 mA	Comparison to Fluke 8508A Opt. 01 8.5 Digit Multimeter
Capacitance – Source [3] 10 Hz to 10 kHz 10 Hz to 3 kHz 10 Hz to 1 kHz 10 Hz to 1 kHz 10 Hz to 1 kHz (10 to 600) Hz (10 to 300) Hz (10 to 150) Hz (10 to 120) Hz (10 to 80) Hz (0 to 50) Hz (0 to 20) Hz (0 to 6) Hz (0 to 2) Hz (0 to 0.6) Hz (0 to 0.2) Hz	 (0.19 to 1.1) nF (1.1 to 3.3) nF (3.3 to 11) nF (11 to 110) nF (110 to 330) nF (0.33 to 1.1) µF (1.1 to 3.3) µF (3.3 to 11) µF (11 to 33) µF (33 to 110) µF (110 to 330) µF (0.33 to 1.1) mF (1.1 to 3.3) mF (3.3 to 11) mF (11 to 33) mF (33 to 110) mF	 1.6 mF/F + 10 pF 3.2 mF/F + 10 pF 1.7 mF/F + 10 pF 1.9 mF/F + 10 pF 1.9 mF/F + 30 pF 1.7 mF/F + 1 nF 1.7 mF/F + 3 nF 1.7 mF/F + 10 nF 2.9 mF/F + 30 nF 3.3 mF/F + 0.1 µF 3.3 mF/F + 0.3 µF 3.3 mF/F + 1 µF 3.3 mF/F + 3 µF 3.3 mF/F + 10 µF 5.6 mF/F + 30 µF 8.3 mF/F + 0.1 mF	Comparison to Fluke 5520A/SC1100 Multiproduct Calibrator
Resistance – Source (Fixed Artifacts)	1 Ω 1.9 Ω 10 Ω 19 Ω 100 Ω 190 Ω 1 kΩ 1.9 kΩ 10 kΩ 19 kΩ 100 kΩ	97 µΩ/Ω 97 µΩ/Ω 23 µΩ/Ω 23 µΩ/Ω 10 µΩ/Ω 10 µΩ/Ω 8.8 µΩ/Ω 8.8 µΩ/Ω 8.8 µΩ/Ω 8.8 µΩ/Ω 11 µΩ/Ω	Comparison to Fluke 5720A Multiproduct Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance – Source (Fixed Artifacts)	190 kΩ 1 MΩ 1.9 MΩ 10 MΩ	11 μΩ/Ω 21 μΩ/Ω 21 μΩ/Ω 41 μΩ/Ω	Comparison to Fluke 5720A Multiproduct Calibrator
Resistance – Source (Fixed Simulation)	19 MΩ 100 MΩ	50 μΩ/Ω 0.1 mΩ/Ω	Comparison to Fluke 5720A Multiproduct Calibrator
Resistance – Source (Simulation)	Up to 11 Ω (11 to 33) Ω (33 to 110) Ω (0.11 to 1.1) kΩ (1.1 to 11) kΩ (11 to 110) kΩ (0.11 to 1.1) MΩ (1.1 to 3.3) MΩ (3.3 to 11) MΩ (11 to 33) MΩ (33 to 110) MΩ (110 to 330) MΩ (0.33 to 1.1) GΩ	11 μΩ/Ω + 1 mΩ 17 μΩ/Ω + 1.5 mΩ 21 μΩ/Ω + 1.4 mΩ 21 μΩ/Ω + 2 mΩ 21 μΩ/Ω + 20 mΩ 21 μΩ/Ω + 0.2 Ω 25 μΩ/Ω + 2 Ω 45 μΩ/Ω + 30 Ω 0.1 mΩ/Ω + 50 Ω 0.18 mΩ/Ω + 2.5 kΩ 0.38 mΩ/Ω + 3 kΩ 2.3 mΩ/Ω + 0.1 MΩ 12 mΩ/Ω + 0.5 MΩ	Comparison to Fluke 5520A Multiproduct Calibrator
Resistance – Measure	Up to 2 Ω (2 to 20) Ω (20 to 200) Ω (0.2 to 2) kΩ (2 to 20) kΩ (20 to 200) kΩ (0.2 to 2) MΩ (2 to 20) MΩ (20 to 200) MΩ (0.2 to 2) GΩ	9.4 μΩ/Ω + 4 μΩ 6.2 μΩ/Ω + 14 μΩ 6.3 μΩ/Ω + 50 μΩ 6.2 μΩ/Ω + 0.5 mΩ 6.1 μΩ/Ω + 5 mΩ 6.4 μΩ/Ω + 50 mΩ 7.1 μΩ/Ω + 1 Ω 9.8 μΩ/Ω + 0.1 kΩ 38 μΩ/Ω + 10 kΩ 1 mΩ/Ω + 1 MΩ	Comparison to Fluke 8508A Opt. 01 8.5 Digit Multimeter

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Source	Up to 2.2 mV		Comparison to Fluke 5720A Multiproduct Calibrator
	(10 to 20) Hz	0.3 mV/V + 4 µV	
	(20 to 40) Hz	0.15 mV/V + 4 µV	
	40 Hz to 20 kHz	0.14 mV/V + 4 µV	
	(20 to 50) kHz	0.27 mV/V + 4 µV	
	(50 to 100) kHz	0.6 mV/V + 5 µV	
	(100 to 300) kHz	1.2 mV/V + 10 µV	
	(300 to 500) kHz	1.6 mV/V + 20 µV	
	(0.5 to 1) MHz	3.2 mV/V + 20 µV	
	(2.2 to 22) mV		
	(10 to 20) Hz	0.25 mV/V + 4 µV	
	(20 to 40) Hz	0.1 mV/V + 4 µV	
	40 Hz to 20 kHz	93 µV/V + 4 µV	
	(20 to 50) kHz	0.21 mV/V + 4 µV	
	(50 to 100) kHz	0.53 mV/V + 5 µV	
	(100 to 300) kHz	1.1 mV/V + 10 µV	
	(300 to 500) kHz	1.5 mV/V + 20 µV	
	(0.5 to 1) MHz	2.8 mV/V + 20 µV	
	(22 to 220) mV		
	(10 to 20) Hz	0.25 mV/V + 12 µV	
	(20 to 40) Hz	94 µV/V + 7 µV	
	40 Hz to 20 kHz	84 µV/V + 7 µV	
	(20 to 50) kHz	0.2 mV/V + 7 µV	
	(50 to 100) kHz	0.47 mV/V + 17 µV	
	(100 to 300) kHz	92 µV/V + 20 µV	
	(300 to 500) kHz	1.4 mV/V + 25 µV	
	(0.5 to 1) MHz	2.8 mV/V + 45 µV	
	(0.22 to 2.2) V		
	(10 to 20) Hz	0.25 mV/V + 40 µV	
	(20 to 40) Hz	94 µV/V + 15 µV	
	40 Hz to 20 kHz	47 µV/V + 8 µV	
	(20 to 50) kHz	77 µV/V + 10 µV	
	(50 to 100) kHz	0.11 mV/V + 30 µV	
	(100 to 300) kHz	0.43 mV/V + 80 µV	
	(300 to 500) kHz	1 mV/V + 0.2 mV	
	(0.5 to 1) MHz	1.7 mV/V + 0.3 V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Source	(2.2 to 22) V		Comparison to Fluke 5720A Multiproduct Calibrator
	(10 to 20) Hz	0.25 mV/V + 0.4 mV	
	(20 to 40) Hz	93 µV/V + 0.15 mV	
	40 Hz to 20 kHz	47 µV/V + 50 µV	
	(20 to 50) kHz	79 µV/V + 0.1 mV	
	(50 to 100) kHz	0.1 mV/V + 0.2 mV	
	(100 to 300) kHz	0.29 mV/V + 0.6 mV	
	(300 to 500) kHz	1.1 mV/V + 2 mV	
	(0.5 to 1) MHz	1.6 mV/V + 3.2 mV	
	(22 to 220) V		
	(10 to 20) Hz	0.25 mV/V + 4 mV	
	(20 to 40) Hz	94 µV/V + 1.5 mV	
	40 Hz to 20 kHz	54 µV/V + 0.6 mV	
	(20 to 50) kHz	87 µV/V + 1 mV	
	(50 to 100) kHz	0.16 mV/V + 2.5 mV	
	(100 to 300) kHz	0.92 mV/V + 16 mV	
	(300 to 500) kHz	4.5 mV/V + 40 mV	
	(0.5 to 1) MHz	8.2 mV/V + 80 mV	
AC Voltage – Source	(220 to 750) V		Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 5725A Amplifier
	(30 to 50) kHz	0.6 mV/V + 11 mV	
	(50 to 100) kHz	2.4 mV/V + 45 mV	
	(220 to 1 100) V		
	(15 to 50) Hz	0.31 mV/V + 16 mV	
	50 Hz to 1 kHz	74 µV/V + 3.5 mV	
	40 Hz to 1 kHz	94 µV/V + 4 mV	
	(1 to 20) kHz	0.17 mV/V + 6 mV	
	(20 to 30) kHz	0.6 mV/V + 11 mV	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Measure	(20 to 200) mV		Comparison to Fluke 8508A Opt. 01 8.5 Digit Multimeter
	(10 to 40) Hz	98 µV/V + 4 µV	
	(40 to 100) Hz	78 µV/V + 4 µV	
	100 Hz to 2 kHz	83 µV/V + 2 µV	
	(2 to 10) kHz	96 µV/V + 4 µV	
	(10 to 30) kHz	0.24 mV/V + 8 µV	
	(30 to 100) kHz	0.55 mV/V + 20 µV	
	200 mV to 2 V		
	(10 to 40) Hz	87 µV/V + 20 µV	
	(40 to 100) Hz	64 µV/V + 20 µV	
	100 Hz to 2 kHz	50 µV/V + 20 µV	
	(2 to 10) kHz	77 µV/V + 20 µV	
	(10 to 30) kHz	0.16 mV/V + 40 µV	
	(30 to 100) kHz	0.4 mV/V + 0.2 mV	
	(100 to 300) kHz	1.9 mV/V + 2 mV	
	300 kHz to 1 MHz	3.3 mV/V + 20 mV	
	(2 to 20) V		
	(10 to 40) Hz	87 µV/V + 0.2 mV	
	(40 to 100) Hz	65 µV/V + 0.2 mV	
	100 Hz to 2 kHz	51 µV/V + 0.2 mV	
	(2 to 10) kHz	77 µV/V + 0.2 mV	
	(10 to 30) kHz	0.16 mV/V + 0.4 mV	
	(30 to 100) kHz	0.39 mV/V + 2 mV	
	(2 to 20) V		
	(100 to 300) kHz	1.9 mV/V + 20 mV	
	(0.3 to 1) MHz	3.3 mV/V + 0.2 V	
	(20 to 200) V		
	(10 to 40) Hz	88 µV/V + 2 mV	
	(40 to 100) Hz	65 µV/V + 2 mV	
	100 Hz to 2 kHz	52 µV/V + 2 mV	
	(2 to 10) kHz	78 µV/V + 2 mV	
	(10 to 30) kHz	0.16 mV/V + 4 mV	
	(30 to 100) kHz	0.39 mV/V + 20 mV	
	(100 to 300) kHz	1.9 mV/V + 0.2 V	
	(200 to 1 050) V		
	40 Hz to 10 kHz	76 µV/V + 20 mV	
	(10 to 30) kHz	0.16 mV/V + 40 mV	
	(30 to 100) kHz	0.4 mV/V + 0.2 V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC High Voltage – Measure [3]	(1 to 60) kV 60 Hz	5 mV/V	Comparison to Ross Engineering VD 60 High Voltage Divider, Fluke 8508A Opt. 01 8.5 Digit Multimeter
AC Current – Source	Up to 220 µA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz 220 µA to 2.2 mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (2.2 to 22) mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	 0.26 mA/A + 16 nA 0.17 mA/A + 10 nA 0.13 mA/A + 8 nA 0.3 mA/A + 12 nA 1.1 mA/A + 65 nA 0.26 mA/A + 40 nA 0.17 mA/A + 35 nA 0.13 mA/A + 35 nA 0.21 mA/A + 0.11 µA 1.1 mA/A + 0.65 µA 0.26 mA/A + 0.4 µA 0.17 mA/A + 0.35 µA 0.13 mA/A + 0.35 µA 0.22 mA/A + 0.55 µA 1.2 mA/A + 5 µA	Comparison to Fluke 5720A Multiproduct Calibrator
AC Current – Source	(22 to 220) mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz 220 mA to 2.2 A 10 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	 0.26 mA/A + 4 µA 0.17 mA/A + 3.5 µA 0.13 mA/A + 2.5 µA 0.22 mA/A + 3.5 µA 1.2 mA/A + 10 µA 0.27 mA/A + 35 µA 0.46 mA/A + 80 µA 7.2 mA/A + 0.16 mA	Comparison to Fluke 5720A Multiproduct Calibrator
AC Current – Source	(2.2 to 11) A 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	 0.48 mA/A + 0.17 µA 97 µA/A + 0.38 µA 3.7 mA/A + 0.75 µA	Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 5725A Amplifier

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current – Source	(11 to 20) A (10 to 65) Hz (65 to 300) Hz 300 Hz to 1 kHz (1 to 3) kHz (3 to 6) kHz (6 to 10) kHz (20 to 120) A (10 to 65) Hz (65 to 300) Hz 300 Hz to 1 kHz (1 to 3) kHz (3 to 6) kHz (6 to 10) kHz	 0.13 mA/A + 9.4 mA 0.24 mA/A + 9.4 mA 0.8 mA/A + 9.4 mA 2.4 mA/A + 31 mA 7.9 mA/A + 62 mA 24 mA/A + 94 mA 0.14 mA/A + 19 mA 0.24 mA/A + 28 mA 0.8 mA/A + 94 mA 2.4 mA/A + 0.23 A 7.9 mA/A + 0.42 A 32 mA/A + 0.7 A	Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 52120A Amplifier
AC Current – Measure	Up to 200 µA 10 Hz to 10 kHz (0.2 to 2) mA 10 Hz to 10 kHz (2 to 20) mA 10 Hz to 10 kHz (20 to 200) mA 10 Hz to 10 kHz (0.2 to 2) A 10 Hz to 2 kHz (2 to 10) kHz (2 to 20) A 10 Hz to 2 kHz (2 to 10) kHz	 0.2 mA/A + 20 nA 0.18 mA/A + 0.2 µA 0.19 mA/A + 2 µA 0.21 mA/A + 20 µA 0.47 mA/A + 0.2 mA 0.56 mA/A + 0.2 mA 0.62 mA/A + 2 mA 2 mA/A + 2 mA	Comparison to Fluke 8508A Opt. 01 8.5 Digit Multimeter
AC Current Clamp-on Meters	(1.65 to 16.5) A (45 to 65) Hz (65 to 440) Hz (16.5 to 20) A (45 to 65) Hz (65 to 440) Hz	 40 mA 90 mA 80 mA 0.17 A	Comparison to Fluke 5520A/SC 1100 Multiproduct Calibrator, Fluke 5500A/COIL 50-turn Coil

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current Clamp-on Meters	(20 to 100) A (50 to 65) Hz (65 to 400) Hz (100 to 1 000) A (50 to 65) Hz (65 to 400) Hz (1 000 to 6 000) A (50 to 65) Hz (65 to 400) Hz	 90 mA 90 mA 0.29 A 0.29 A 3.4 A 3.5 A	Comparison to Fluke 5720A Multiproduct Calibrator, Fluke 52120A Amplifier, 6 kA Coil, or Fluke 5520A Multiproduct Calibrator, Fluke 5500A/COIL 50-turn Coil
Oscilloscopes [2] Amplitude – DC into 50 Ω Load into 1 MΩ Load Amplitude – Square Wave 10 Hz to 10 kHz into 50 Ω Load into 1 MΩ Load Amplitude – Leveled Sine Wave Flatness (Relative to 50 kHz) Amplitude – Leveled Sine (Absolute Amplitude) Time Marker into 50 Ω Load (Spike, Square Wave Spike, Square, 20 % Pulse Spike or Square Wave Square or Sine Wave Edge Specs into 50 Ω Load Rise Time	 Up to ± 6.6 V Up to ± 130 V 1 mVp-p to 6.6 Vp-p 1 mVp-p to 130 Vp-p 5 mV to 5.5 V 50 kHz to 100 MHz (100 to 300) MHz (300 to 600) MHz 4 mV to 3.5 V 600 MHz to 1.1 GHz 5 mV to 5.5 V 50 kHz Reference 50 ms to 5 s 100 ns to 20 ms (20 to 50) ns 10 ns (1 to 5) ns < 300 ps	 1.9 mV/V + 40 µV 0.39 mV/V + 40 µV 1.9 mV/V + 40 µV 0.9 mV/V + 40 µV 16 mV/V + 0.1 mV 19 mV/V + 0.1 mV 33 mV/V + 0.1 mV 41 mV/V + 0.1 mV 15 mV/V + 0.3 mV (20 + 1 000*t*) µs/s 2 µs/s 2 µs/s 2 µs/s 2 µs/s 7.5 ps	Comparison to Fluke 5520A/SC1100 Multiproduct Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Indicating Devices – Source/Measure	Type B		Comparison to Fluke 5520A/SC1100 Multiproduct Calibrator
	(600 to 800) °C	0.35 °C	
	(800 to 1 000) °C	0.27 °C	
	(1 000 to 1 550) °C	0.24 °C	
	(1 550 to 1 820) °C	0.26 °C	
	Type C		
	(0 to 150) °C	0.24 °C	
	(150 to 650) °C	0.21 °C	
	(650 to 1 000) °C	0.24 °C	
	(1 000 to 1 800) °C	0.39 °C	
	(1 800 to 2 316) °C	0.65 °C	
	Type E		
	(-250 to -100) °C	0.39 °C	
	(-100 to -25) °C	0.12 °C	
	(-25 to 350) °C	0.11 °C	
	(350 to 650) °C	0.12 °C	
	(650 to 1 000) °C	0.16 °C	
	Type J		
	(-210 to -100) °C	0.21 °C	
	(-100 to -30) °C	0.12 °C	
	(-30 to 150) °C	0.11 °C	
	(150 to 760) °C	0.13 °C	
	(760 to 1 200) °C	0.18 °C	
	Type K		
	(-200 to -100) °C	0.26 °C	
	(-100 to -25) °C	0.14 °C	
	(-25 to 120) °C	0.14 °C	
	(120 to 1 000) °C	0.2 °C	
	(1 000 to 1 372) °C	0.31 °C	
	Type L		
	(-200 to -100) °C	0.29 °C	
	(-100 to 800) °C	0.21 °C	
	(800 to 900) °C	0.13 °C	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Indicating Devices – Source/Measure	Type N (-200 to -100) °C (-100 to -25) °C (-25 to 120) °C (120 to 410) °C (410 to 1 300) °C Type R (0 to 250) °C (250 to 400) °C (400 to 1 000) °C (1 000 to 1 767) °C Type S (0 to 250) °C (250 to 1 000) °C (1 000 to 1 400) °C (1 400 to 1 767) °C Type T (-250 to -150) °C (-150 to 0) °C (0 to 120) °C (120 to 400) °C Type U (-200 to 0) °C (0 to 600) °C	 0.31 °C 0.17 °C 0.15 °C 0.14 °C 0.22 °C 0.44 °C 0.28 °C 0.27 °C 0.32 °C 0.37 °C 0.31 °C 0.29 °C 0.36 °C 0.49 °C 0.19 °C 0.12 °C 0.11 °C 0.43 °C 0.21 °C	Comparison to Fluke 5520A/SC1100 Multiproduct Calibrator

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Outside Micrometers [2]	Up to 12 in	$(57 + 9L)$ µin	Comparison to Gage Blocks
Calipers [2]	Up to 40 in	$(520 + 6.9L)$ µin	Comparison to Gage Blocks

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Balances and Scales [3] (0.1 mg resolution) (0.1 mg resolution) (1 mg resolution)	 Up to 120 g (120 to 200) g Up to 300 g	 0.33 mg 0.41 mg 2.1 mg	ASTM E617 Class 1 Weights and internal calibration procedure utilized for the calibration of the weighing system.
Torque Tools	(4 to 50) ozf·in (4 to 50) lbf·in (30 to 1 000) lbf·in (20 to 600) lbf·ft	0.9 % of reading 0.9 % of reading 0.8 % of reading 0.8 % of reading	Comparison to CDI 2000-400-02 Torque Calibration System

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature – Source (Temperature Probes, Thermometers, etc.)	(-95 to -5) °C (-5 to 110) °C (110 to 140) °C (140 to 400) °C	0.007 °C 0.004 °C 0.006 °C 0.005 °C	Comparison to Liquid Bath, Drywells, Rosemount 162N100A Platinum Resistance Thermometer, Fluke 8508A Opt. 01 8.5 Digit Multimeter
Temperature – Measure	(-196 to 400) °C	0.004 °C	Comparison to Rosemount 162N100A Platinum Resistance Thermometer, Fluke 8508A Opt. 01 8.5 Digit Multimeter

Services Performed at Satellite Location

903 East Nakoma, Suite 105
San Antonio, Texas 78216

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Micrometers [2]	Up to 1 in	(70 + 1.8*L*) µin	Comparison to Gage Blocks
Calipers [2]	Up to 6 in	(638 + 15*L*) µin	Comparison to Gage Blocks

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Tools	(4 to 50) ozf·in (4 to 50) lbf·in (30 to 1 000) lbf·in (20 to 600) lbf·ft	0.9 % of reading 0.9 % of reading 0.8 % of reading 0.8 % of reading	Comparison to CDI 2000-400-02 Torque Calibration System

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. L = length in inches, t = time in seconds.
3. Uncertainties do not include possible contributions from a "best available" unit under test, and/or contributions due to repeatability. In these cases, these contributors will be included in reported expanded uncertainties at time of calibration.
4. The legal entity of both locations is Aldinger Company dba TesCom.
5. Unless otherwise specified in the far-right hand column, the calibration method or procedure has been written internally.
6. The legal entity for both locations is Aldinger Holdings, L.P.
7. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1417.

Jason Stine, Vice President