



# CERTIFICATE OF ACCREDITATION

**The ANSI National Accreditation Board**

Hereby attests that

**Mechanical Calibration Services, Inc.**

**252 North 850 East**

**Lafayette, IN 47905**

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

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 08 February 2024

Certificate Number: L2134-1



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

### Mechanical Calibration Services, Inc.

252 North 850 East  
Lafayette, IN 47905  
Jim Withers  
765-296-5081

### CALIBRATION

Valid to: **February 8, 2024**

Certificate Number: **L2134-1**

#### Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current <sup>1</sup>	(4 to 20) mA	0.031 mA + 0.28 % of reading	Fluke 744 Process Calibrator
RTD Temperature Simulation <sup>1</sup>	RTD 3 & 4 Wire (-200 to 800) °C	1.5 °C	Fluke 744 Process Calibrator
Thermocouple Temperature Simulation <sup>1</sup>	Type J (0 to 750) °C	0.25 °C	Fluke 744 Process Calibrator
	Type K (-200 to 1 250) °C	0.35 °C	
	Type T (-200 to 350) °C	0.37 °C	

#### Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Outside Micrometer <sup>1,2,3</sup>	(0 to 3) in	(17 + 14L) μin	Comparisons made with Gage Blocks
	(3 to 12) in	(62 + 9.6L) μin	
	(12 to 36) in	(540 + 4L) μin	
Inside Micrometer <sup>1,2</sup>	(1.5 to 22) in	(570 + 2.1L) μin	Comparisons made with Gage Blocks and using Surface Plate
Height Gage <sup>1,2</sup>	(0 to 24) in	(580 + 2.2L) μin	
Depth Micrometer <sup>1,2</sup>	(0 to 6) in	(290 + 1.3L) μin	

**Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Caliper <sup>1,2,3</sup>	(0 to 12) in (12 to 36) in (36 to 60) in	(430 + 1.6L) μin (540 + 8.1L) μin (720 + 3.2L) μin	Comparisons made with Gage Blocks and using Surface Plate
Dial / Digital Indicator <sup>1,2</sup>	(0 to 3) in	(290 + 0.7L) μin	

**Mass and Mass Related**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure <sup>1</sup>	(0 to 15) psig (15 to 500) psig (500 to 10 000) psig	0.004 5 psi 0.096 psi 8.2 psi	Fluke 700/750 Series Pressure Module & 744 Process Calibrator
Torque Wrench <sup>1</sup>	(5 to 50) lbf·in (2.5 to 25) lbf·ft (25 to 250) lbf·ft (250 to 1 000) lbf·ft	0.59 lbf·ft + 0.05 % of reading 0.28 lbf·ft + 0.17 % of reading 0.2 lbf·ft + 0.52 % of reading 0.76 lbf·ft + 0.52 % of reading	Torque Transducers

**Time and Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Process Timers <sup>1</sup>	(4.5 to 60) seconds (1 to 60) minutes (1 to 30) hours	1.2 s + 0.000 23 % of reading 1.2 s + 0.000 51 % of reading 1.2 min + 0.001 1 % of reading	Direct Comparison to 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. L = length in inches.
3. Onsite capability limited to 24 inches only.
4. This scope is formatted as part of a single document including Certificate of Accreditation No. L2134-1.



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