



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Angle Calibration

40 South Lane
Troy, OH 45373

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.

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: 23 May 2023
Certificate Number: AC-1170



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

Angle Calibration

40 South Lane
Troy, OH 45373
Amy Fields / Don Fields
937-335-6520

CALIBRATION

Valid to: **May 23, 2023**

Certificate Number: **AC-1170**

Length – Dimensional Metrology


Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Gage Blocks	Up to 1 in 2 in 3 in 4in	4.3 μin 8 μin 8.3 μin 10 μin	Dual Head Comparator
	(4 to 12) in (12 to 20) in	27 μin 43 μin	ULM Horizontal Metroscope (Retrofitted)
Plug Gages ¹	Up to 4 in (4 to 12) in (12 to 20) in	9 μin 27 μin 43 μin	ULM Horizontal Metroscope (Retrofitted)
Thread Wires	Up to 4 in	10.9 μin	ULM Horizontal Metroscope (Retrofitted)
Pin Gage Sets ¹	Up to 4 in	9 μin	ULM Horizontal Metroscope (Retrofitted)
Length Standards ¹	Up to 4 in (4 to 12) in (12 to 20) in	10.6 μin 27.6 μin 43 μin	ULM Horizontal Metroscope (Retrofitted)
Plain Cylindrical Ring Gages Internal Diameter ¹	(0.36 to 5) in (5 to 16) in	13.3 μin 35 μin	ULM Horizontal Metroscope (Retrofitted)
Feeler Gage ¹	Up to 4 in	9 μin	ULM Horizontal Metroscope (Retrofitted)
Micrometers ¹ ID Mics, OD Mics	Up to 12 in (12 to 24) in	64.3 μin 748 μin	Gage Blocks
Depth Micrometers ¹	(Up to 24) in	748 μin	Gage Blocks
Indicator Tester ¹	Up to 4 in	64.3 μin	Gage Blocks

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
TriMics ¹	Up to 12 in	64.3 μin	Master Rings
Dial Bore Gage Tester ¹	Up to 2 in	58.1 μin	Gage Blocks
Groove Gage ¹	Up to 4 in	577.5 μin	Gage Blocks
Calipers ¹ Dial Digital Vernier	Up to 12 in (12 to 40) in	OD = 309 μin ID = 331 μin OD = 583 μin ID = 583 μin	Gage Blocks
Height Gages ¹	(0 to 40) in	315.1 μin	Gage Blocks
Steel Rule ¹ Tape Rule ¹	Up to 12 in (12 to 40) in	309 μin 583 μin	Gage Blocks
Indicators ¹	Travel type – Up to 4 in Lever type – Up to 1 in	79 μin	Indicator Tester
Thread Plug Gages ¹	Up to 4 in Diameter	93.5 μin	ULM Horizontal Metroscope (Retrofitted)
Thread Ring Gage ¹	Up to 4 in Internal diameter	93.5 μin	Thread Set Plug Gage
Surface Plate ¹ Flatness	Width: (12 to 50) in Length: (12 to 72) in	426 μin	Planekator
Dial Bore Gage	Up to 12 in	93.6 μin	Dial Bore Gage Tester/Indicator Tester

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. For on-site calibrations, other length measurement instrumentation is used in place of the ULM Horizontal Metroscope.
 2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1170.



R. Douglas Leonard Jr., VP, PILR SBU