



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

GLASTONBURY SOUTHERN GAGE TN
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Erin, TN 37061
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CALIBRATION

Valid To: April 30, 2024

Certificate Number: 1553.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,4}:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2,3} (\pm)	Comments
Plain Rings – Internal Diameter	(0.06 to 4) in (4 to 22.5) in	(7.8 + 1.8L) μ in (2.8 + 3.0L) μ in	Federal 136 B-3, gage blocks
Plain Cylindrical Plugs and Discs – External Diameter	(0.01 to 5.5) in (0.01 to 4) in (4 to 20) in	(7.8 + 2.4L) μ in (7.5 + 1.8L) μ in (2.9 + 3.0L) μ in	Heidenhain DiaLectron, gage blocks
External Straight Thread Plugs – Pitch Diameter (0.5 to 120) TPI Major Diameter	(0.047 to 3) in (3 to 20) in (0.047 to 3) in (3 to 20) in	41 μ in (32 + 1.9L) μ in 32 μ in (20 + 2.3L) μ in	Mikrokator or comparator, gage blocks and wires ULM and wires Mikrokator or comparator and gage blocks ULM

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
External Tapered Thread Plug – Pitch Diameter 0.750 TPF, (0.5 to 120) TPI	(0.047 to 3) in	62 μin	Mikrokator or comparator, gage blocks, taper block and wires
	(3 to 12) in	(94 + 0.8L) μin	Comparator, gage blocks, taper block, and wires
Major Diameter	(0.1 to 3.0) in	56 μin	Mikrokator or comparator, blocks and taper block
	(3.0 to 12) in	(91 + 0.8L) μin	Comparator, blocks and taper block
Plain Tapered Plugs – External Diameter			
0.75 TPF	(0.01 to 3) in	56 μin	Mikrokator or comparator, gage blocks and taper block
	(3 to 12) in	(91 + 0.8L) μin	Comparator, gage blocks and taper block
All Tapers	(0.01 to 8) in	(92 + 0.5L) μin	Comparator, gage blocks and sine bar
Length – Between Two Planes	(0.01 to 12) in	(120 + 6.7L) μin	Sylvac
	(0.01 to 26) in	(27 + 2.4L) μin	DiaLectron, gage blocks
External Thread Lead Straight and Tapered	(1/2 to 120) TPI	47 μin	Optical comparator
External Thread Flank Straight and Tapered	(0 to 180)°	4.0'	Optical comparator

Parameter/Equipment	Range	CMC ^{2, 3} (\pm)	Comments
Internal Straight Thread Ring – Pitch Diameter (0.5 to 120) TPI Minor Diameter	(0.06 to 3) in (3 to 12.5) in (0.04 to 0.40) in (0.40 to 12.5) in	41 μ in (32 + 1.9L) μ in 94 μ in (94 + 0.3L) μ in	Certificate states the ring is sized to a plug; w/ the plug's uncertainty given Taper pins and micrometers Bore gages
Internal Tapered Thread Rings – Pitch Diameter 0.75 TPF, (0.5 to 120) TPI Minor Diameter	(0.06 to 3) in (3 to 12) in (0.40 to 3.0) in (3.0 to 12.0) in	130 μ in (150 + 0.7L) μ in 87 μ in (110 + 0.9L) μ in	Tapered plug and indicator Tapered plug and indicator
Plain Tapered Rings – Internal Diameter 0.75 TPF All Tapers	(0.04 to 3) in (3 to 12) in (0.4 to 8) in	87 μ in (110 + 0.9L) μ in (110 + 0.5L) μ in	Tapered plug and indicator
Thread Wires – Inch Metric	(4 to 80) TPI (0.2 to 10) Pitch	16 μ in 16 μ in	Heidenhain and master wire

¹ This laboratory offers commercial calibration service.

² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

³ In the statement of CMC, L is the numerical value of the nominal length of the device measured in inches.

⁴ This scope meets A2LA's *P112 Flexible Scope Policy*.



Accredited Laboratory

A2LA has accredited

GLASTONBURY SOUTHERN GAGE TN

Erin, TN

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. 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).



Presented this 27th day of April 2022

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1553.02
Valid to April 30, 2024

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.