



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

THE L.S. STARRETT COMPANY
121 Crescent Street
Athol, MA 01331
Dexter Carlson Phone: 978 249 3551 Ext. 140
Email: dcarlson@starrett.com

CALIBRATION

Valid To: October 31, 2024

Certificate Number: 0760.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2, 3, 4} (\pm)	Comments
Length Gages – Flat and Spherical Ends Steel Rules	Up to 80 in Up to 6 ft (6 to 12) ft	(30 + 5L) μ in (170 + 3.8L) μ in (190 + 3.8L) μ in	ASME B89.1.13-2001 GGG-R-791H/MFG
Squareness – Measure	Up to 4 in \times 4 in	75 μ in or 15 arc second	GGG-S-656D, manufacturer's specifications
Straightness – Measure	Up to 72 in	(30 + 4L) μ in	MIL-S-15769, manufacturer's specifications
Parallelism – Measure	Up to 6 in	40 μ in	GGG-P-61A, manufacturer's specifications



Parameter/Equipment	Range	CMC ^{2, 3, 4} (±)	Comments
Thickness of Material – Measure	Up to 0.20 in	32 µin	GGG-G-17C, manufacturer's specifications
Height Gages –			
Vernier	Up to 24 in Up to 36 in Up to 48 in Up to 60 in	170 µin 240 µin 300 µin 370 µin	GGG-C-111C, manufacturer's specification
Dial	Up to 24 in	210 µin	
Digital	Up to 24 in	320 µin	
Digi-Chek	(0.1 to 24) in	70 µin	
Indicators –			
Mechanical	0.000 05 in 0.0001 in 0.0005 in 0.001 in 0.005 in 0.010 in	20 µin 26 µin 42 µin 56 µin 150 µin 250 µin	ANSI B89.1.10M, manufacturer's specifications Range is equal to graduation/resolution
Digital	0.000 05 in 0.0001 in 0.000 25 in 0.0005 in 0.001 in	35 µin 65 µin 150 µin 300 µin 600 µin	
Calipers –			
Vernier – Outside	Up to 72 in	75 µin/ft	GGG-C-111C, manufacturer's specifications
Dial – Outside/Depth	Up to 24 in	(190 + 3L) µin	
Digital – Outside	Up to 12 in Up to 48 in Up to 72 in	77 µin 290 µin 420 µin	

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Micrometers –			
Head	Up to 2 in	16 μin	ASME B89.1.13
Outside –			
Mechanical	Up to 12 in (12 to 24) in (24 to 48) in (48 to 60) in	(30 + 3L) μin (90 + 4L) μin (110 + 5L) μin (140 + 4.5L) μin	
Digital	Up to 4 in (4 to 15) in (15 to 24) in	40 μin (45 + 3L) μin (110 + 5L) μin	
Inside	(1.5 to 72) in	130 μin	
Tubular Inside	(32 to 107) in	320 μin	
Depth –			
Mechanical	Up to 12 in	80 μin	
Digital	Up to 12 in	96 μin	
Bench Micrometer	Up to 2 in	37 μin	
Electronic/Amp Gage	(0.0001 to 0.0010) in	10 μin	Manufacturer's specification
Bore Gages –			
Dial, Plunger Type	(2 to 8) in	60 μin	MIL-G-26762B, manufacturer's specification
Internal –			
Mechanical	Up to 12 in	50 μin	
Digital	Up to 12 in	50 μin	

Parameter/Equipment	Range	CMC ² (±)	Comments
Protractors – Stamped Grad Etched Grad	360° 360°	6.6' 1.2'	GGG-S-565 GGG-P-676B
Levels/Vials	5" to 50'	2.8 % of the vial accuracy	GGG-L-211D, manufacturer's specification
Steel Tape Lines – Self-Support Long Lines	Up to 30 ft (25 to 50) ft 100 ft	0.0035 in 0.01 in 0.011 in	NIST handbook 44 GGG-T-106F/ MIL-T-16644D

¹ Commercial calibration service is sometimes available for this laboratory.

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 The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



Accredited Laboratory

A2LA has accredited

THE L.S. STARRETT COMPANY

Athol, MA

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 the requirements of ANSI/NCCL Z540-1-1994 and 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 4th day of November 2022.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0760.01
Valid to October 31, 2024

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