



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

THE L.S. STARRETT COMPANY
121 Crescent Street
Athol, MA 01331
William C. Gates Phone: 978 249 3551 Ext. 255
Email: wgates@starrett.com

CALIBRATION

Valid To: October 31, 2020

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} (±)	Comments
Length Gages – Flat and Spherical Ends	Up to 80 in	(30 + 5L) μin	ASME B89.1.13-2001
Steel Rules	Up to 6 ft (6 to 12) ft	(170 + 3.8L) μin (190 + 3.8L) μin	GGG-R-791H/MFG
Squareness	Up to 4 in × 4 in	75 μin or 15 arc second	GGG-S-656D, manufacturer's specifications
Straightness	Up to 72 in	(30 + 4L) μin	MIL-S-15769, manufacturer's specifications
Parallelism	Up to 6 in	40 μin	GGG-P-61A, manufacturer's specifications

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Thickness of Material	Up to 0.20 in	32 µin	GGG-G-17C, manufacturer's specifications
Height Gages – Vernier Dial Digital Digi-Chek	Up to 24 in Up to 24 in Up to 24 in (0.1 to 24) in	170 µin 210 µin 320 µin 70 µin	GGG-C-111C, manufacturer's specification
Indicators – Mechanical Digital	0.000 05 in 0.0001 in 0.0005 in 0.001 in 0.005 in 0.010 in 0.000 05 in 0.0001 in 0.000 25 in 0.0005 in 0.001 in	20 µin 26 µin 42 µin 56 µin 150 µin 250 µin 35 µin 65 µin 150 µin 300 µin 600 µin	ANSI B89.1.10M, manufacturer's specifications Range is equal to graduation/resolution
Calipers – Vernier – Outside/Depth Dial – Outside/Depth Digital – Outside/Depth	Up to 72 in Up to 24 in Up to 24 in	75 µin/ft (190 + 3L) µin 310 µin	GGG-C-111C, manufacturer's specifications

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 9 in	75 μin	
Digital	Up to 9 in	90 μin	
Bench Micrometer	Up to 2 in	37 μin	
Electronic/Amp Gage	(0.0002 to 0.02) in	0.32 % of full range	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.



Accredited Laboratory

A2LA has accredited

L.S. STARRETT COMPANY, THE

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 18th day of April 2019.

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, 2020

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