



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

THE L.S. STARRETT COMPANY,
TRU-STONE TECHNOLOGIES DIVISION
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Waite Park, MN 56387
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CALIBRATION

Valid To: November 30, 2023

Certificate Number: 1580.01

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} (±)	Comments
Granite Surface Plates – Flatness	± 24 µin over 12 in Up to 300 in (diagonal)	(7.0√D) µin	Autocollimator
	0.020 in per measurement Up to 480 in (diagonal)	(8.5√D) µin	Electronic level
Repeat Reading (Flatness of Local Area)	Up to 0.002 in	42 µin	Repeat-o-meter with 0.000 02 in indicator. Only valid in connection with a flatness calibration

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Granite Metrology Accessories –			
Flatness/Straightness	Up to +/- 0.0004 in	28 µin	Mikrokator
	(12 to 300) in (diagonal)	(7.0√D) µin	Autocollimator
	(12 to 480) in (diagonal)	(8.5√D) µin	Electronic level
	≤ 48 in	3.5 µin/in	Pentaprism and autocollimator
Perpendicularity/Parallelism	Up to 0.001 in	120 µin	Electronic amp and gage head
Parallelism	(12 to 480) in (length)	(8.5√D) µin	Electronic level
Repeat Reading (Flatness of Local Area)	Up to 0.002 in	42 µin	Repeat-o-meter with 0.000 02 in indicator

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, D is the length of the diagonal in inches.

⁴ This scope meets the *PI12 Flexible Scope Policy*.



Accredited Laboratory

A2LA has accredited

THE L.S. STARRETT COMPANY, TRU-STONE TECHNOLOGIES DIVISION

Waite Park, MN

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/NCSL Z540-1-1994 and the requirements of ANSI/NCSL Z540.3-2006 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 6th day of December 2021.

A blue ink signature of a person, likely the Vice President of Accreditation Services, written over a horizontal line.

Vice President Accreditation Services
For the Accreditation Council
Certificate Number 1580.01
Valid to November 30, 2023

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