



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

THE L.S. STARRETT COMPANY,
 TRU-STONE TECHNOLOGIES DIVISION
 1101 Prosper Drive
 P.O. Box 430
 Waite Park, MN 56387
 Eric Perowitz Phone: 320 251 7171

CALIBRATION

Valid To: November 30, 2017

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 calibrations¹:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Granite Surface Plates – Flatness	± 25 µin over 12 in Up to 300 inch diagonal	(8.0√D) µin	Autocollimator
	0.020 in per measurement Up to 480 inch diagonal	(7.2√D) µin	Electronic level
Repeat Reading	Up to 0.002 in	29 µin	Repeat-o-meter with 0.00002 indicator Only valid in connection with a flatness or straightness calibration

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Granite Metrology Accessories – Flatness/Straightness	Up to 0.0008 in	19 μin	Mikrokator and straight edge
	12 inch to 300 inch diagonal	$(8.0\sqrt{D})$ μin	Autocollimator
	12 inch to 480 inch diagonal	$(7.2\sqrt{D})$ μin	Electronic level
	≤ 48 in	3.7 μin/in	Pentaprism and autocollimator
Perpendicularity	Up to 0.001 in	$(12 + 0.023L)$ μin	Electronic amp and gage head
Parallelism	12 inch to 480 inch length	$(7.2\sqrt{D})$ μin	Electronic level

II. Dimensional Testing/Calibration¹

Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Length ⁴ – Granite and Steel	Up to (2 × 4 × 1.5) m	$(5.4 + 8.6L)$ μm	Zeiss MMZ-B CMM

¹ This laboratory offers commercial dimensional testing/calibration service.

² Calibration and Measurement Capability (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. Calibration and Measurement Capabilities 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 and L is the measured length in meters.

⁴ This laboratory meets R205 – *Specific Requirements: Calibration Laboratory Accreditation Program* for the types of dimensional tests listed above and is considered equivalent to that of a calibration.



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 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets any additional program requirements in the field of calibration. 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 8 January 2009).



Presented this 20th day of November, 2015.

A handwritten signature in black ink, reading "Peter Abney".

President & CEO

For the Accreditation Council

Certificate Number 1580.01

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