

Accredited Laboratory

A2LA has accredited

FASTENAL COMPANY LABORATORY

Winona, MN

for technical competence in the field of

Calibration Testing

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 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 28th day of October 2016.

Senior Director of Quality and Communications For the Accreditation Council

Certificate Number 1046.02

Valid to September 30, 2018



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

FASTENAL COMPANY LABORATORY

1801 Theurer Boulevard Winona, MN 55987

Bob Heyer Phone: 507 453 8421

CALIBRATION

Valid To: September 30, 2018 Certificate Number: 1046.02

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
Calipers –			
Dial Digital	Up to 12 in Up to 60 in	(540 + 17 <i>L</i>) μin (310 + 14 <i>L</i>) μin	Gage blocks
Micrometers – Vernier 0.001 in Resolution Vernier 0.0001 in Resolution Digital 0.0001 in Resolution	Up to 18 in Up to 10 in Up to 10 in	(590 + 4 <i>L</i>) μin (89 + 3 <i>L</i>) μin (66 + 5 <i>L</i>) μin	Gage blocks
Indicators – Dial Digital	Up to 1 in Up to 1 in	51 μin (29 + 0.6 <i>R</i>) μin	ULM
Thread Plugs – Pitch Diameter Major Diameter	Up to 5 in Up to 5 in	(90 + 10 <i>D</i>) μin (45 + 2 <i>D</i>) μin	ULM using 3-wire method

(A2LA Cert No. 1046.02) 10/28/2016

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Parameter/Equipment	Range	CMC ^{2,3} (±)	Comments
Threaded Rings –			
Functional Pitch Diameter	Up to 1 in (1 to 4) in	300 μin 400 μin	Set plug gages
Minor Diameter	Up to 1 in	600 μin	Plain cylindrical plugs
Micrometer Standards	Up to 12 in	$(43 + 6L) \mu in$	ULM
Hex Plug / Hex Recess Gages –			
Width Across Flats Width Across Corners	Up to 1 in Up to 1 in	44 μin 47 μin	ULM
Cylindrical Plugs	Up to 1.5 in	(39 + 10 <i>D</i>) μin	ULM
Torque Tools	4 in/lbf to 20 ft /lbf (>20 to 100) ft /lbf (>100 to 1500) ft/lbf	1.7 % full scale 1 % full scale 0.4 % full scale	Torque transducers

¹ Commercial calibration service is sometimes available for this laboratory.

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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, R is the resolution of the unit under test, L is the numerical value of the nominal length of the device expressed in inches, D is the numerical value of the nominal Diameter of the device expressed in inches.