



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

FASTENAL COMPANY LABORATORY – CZECH REPUBLIC

Evropska 887

Modrice 664 42, Czech Republic

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MECHANICAL

Valid To: September 30, 2022

Certificate Number: 1046.07

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metallic fasteners and machined specimens:

<u>Test</u>	<u>Test Method(s)</u>
Hardness Rockwell (BW, C, 30N, 30TW)	ASTM A370, E18, F606, F606M; ISO 898-1, 898-2, 6508-1
Micro Hardness Vickers Hardness (100, 300, 500) g	ASTM E384; ISO 6507-1
Tensile (Axial, Wedge) Yield Strength Elongation Reduction of Area	ASTM A370, F606, F606M; DIN 267-11 (1980) ⁴ ; ISO 898-1, 3506-1
Proof (Internal/External Threaded) Bolts	ASTM A370, F606, F606M; ISO 898-1
Nuts	ASTM A370, A962, F606, F606M; DIN 267-4 (1983) ⁴ ; ISO 898-2
Case Depth	SAE J78, J423
Case Hardness	DIN 7500-1
Decarburization	ASTM F835, F2328, F2328M; ISO 898-1, 898-5; SAE J419
Stress Durability (Hydrogen Embrittlement)	ASME B18.6.3; SAE J78; ASTM F606 / F606M; ISO 15330 (5.5)
Torsional Strength	SAE J78; SAE J933; ISO 898-7; ASME B18.6.3, B18.6.5M; DIN 7500-1
Prevailing Torque	ASME B18.16.6; IFI 100-107; DIN 267-15 (1983) ⁴

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<u>Test</u>	<u>Test Method(s)</u>
Discontinuities	ASTM F788; ISO 6157-1, 6157-3
PMI (Positive Material Identification) by XRF	ASTM E1916
Drivability test	DIN 7500-1
Torque-Tension	IFI 101
Type TRS Drive Torque test	ASME B18.6.3

I. Dimensional Testing¹:

Parameter	Range	CMC ² (±)	Technique / Method
Threads ³	#5 to 2½ in M2.5 to M27 Up to 2 in Up to M48	N/A N/A 0.0006 in	Rings, plugs / ASME B1.2 Rings, plugs / ISO 1502 Pitch micrometer / ASME B1.2
Linear ³ - 1D	Up to 12 in Up to 6 in Up to 1 in	0.0015 in 0.0016 in 0.00025 in	Length gage / MIL-STD-120 (1963) ⁴ Digital caliper / MIL-STD-120(1963) ⁴ Digital micrometer / MIL-STD-120(1963) ⁴
2D	X axis: Up to 11.8 in Y axis: Up to 7.8 in	0.0068 in 0.0029 in	ACRS machine ARCS CNC Video Measuring System operation manual
Angle ³	0° to 360°	15 ´	ACRS machine ARCS CNC Video Measuring System operation manual
Radii ³	Up to 0.675 in	0.0039 in	ACRS machine ARCS CNC Video Measuring System operation manual
Protrusion Height ³	Up to 1 in	0.0019 in	Protrusion gage/ ASME B18.6.3
Recesses ³	Up to 5/8" (17 mm)	0.0019 in	Penetration gages / ASME B18.6.3

¹ This laboratory offers commercial dimensional testing services.

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 measurements of nearly ideal measurement standards or nearly ideal measuring equipment. CMC's 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 measurement 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 measurement.

³ This test is not equivalent to that of a calibration.

⁴ This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.



Accredited Laboratory

A2LA has accredited

FASTENAL COMPANY LABORATORY-CZECH REPUBLIC

Modrice, Czech Republic

for technical competence in the field of

Mechanical Testing

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 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 7th day of October 2020.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1046.07
Valid to September 30, 2022

For the types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.