

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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MECHANICAL

Valid To: July 31, 2021

Certificate Number: 0397.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on <u>metallic and non-metallic materials</u>:

Test Technologies

Tension (Elevated Temperature to 1000 °C) (Up to 120,000 lbs)

Impact

Charpy

Gardner Izod

Tear Strength

Flexural Properties

Metallographic Evaluation Inclusion Content Graphite in Cast Iron Decarburization

> Grain Size Case Depth Plating Thickness

ASTM A370, ASTM B557, ASTM D412,

Test Method(s)

ASTM D638, ASTM E8/E8M, ASTM E21, ASTM F606/F606M; ASME SA370

ASTM E23, ASTM A370; API 5L 1104; ASME (Section IX QW-140); AWS B2.1/B2.1M (Section 4.7.7), AWS D1.1/D1.1M (Section 4.27), AWS D1.5/D1.5M (Section 5.16.4); EN 10045-1 ASTM D2794 ASTM D256

ASTM D624 (Sections 4.2.2, 4.2.3 and 4.2.4)

ASTM D790

ASTM E45 (Method A) ASTM A247 ASTM E1077 (Sections 7.2, 7.3 and 7.4); SAE J419 (Sections 4.1 and 4.2) ASTM E112 (Section 10) SAE J423 (Sections 5.2 and 6.3) ASTM B487

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Test Technologies	Test Method(s)
Corrosion Testing	ASTM A262 (Practices A and E), ASTM G28, ASTM G31, ASTM G34, ASTM G36, ASTM G48 (Method A)
Coating Weight	ASTM A90/A90M, ASTM A309, ASTM A428/A428M
Salt Water Spray	ASTM B117, ASTM D1654
Humidity Testing	ASTM D2247
Exposure of Nonmetallic Materials (QUV)	ASTM G154, ASTM G151
Coefficient of Friction	ASTM C1028-07e1 ¹ (withdrawn 2014), ASTM D1894
Compression Testing	ASTM E9, ASTM D695
Shear Testing	ASTM D1002
Hardenability	ASTM A255
Macroetch	ASTM E340; API 5L 1104; ASME (Section IX QW-140); AWS B2.1/B2.1M (Annex G), AWS D1.1/D1.1M (Sections 4.9.4 & 4.22.2), AWS D1.2 (Annex H), AWS D1.5/D1.5M (Section 5.18.2)
Hardness	
Brinell (500-3000) kg Rockwell (A, B, C, 15N, 30N, 45N, 15T, 30T, 45T)	ASTM A833, ASTM E10 ASTM E18
Durometer (Shore A and D) Pencil Microhardness Vickers (100, 500g)	ASTM D2240 ASTM D3363 ASTM E384/E92
Macrohardness Vickers (10kgf)	ASTM E92
Leeb Rebound Method	ASTM A956
Bend	API 5L (Section 10.2.4), API 5L 1104 (Sections 5 & 6); ASME (Section IX QW-140); AWS B2.1/2.1M (Annex A), AWS D1.1/D1.1M (Section 4.9.3.1), AWS D1.2/D1.2M (Section 3.8), AWS D1.5/D1.5M (Section 5.18.3)

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¹ This laboratory's scope contains withdrawn or superseded methods.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.

<u>Test Technologies</u>	Test Method(s)
Taber Abrasion	ASTM D4060
Olsen Cup	ASTM E643
Weld Operator & Procedure Qualification	API 5L 1104 (Sections 5 & 6); ASME (Section IX Articles II & III); AWS B2.1/2.1M, AWS D1.1/1.1M (Section 4 Parts B & C), AWS D1.2/D1.2M (Section 2 Parts C&D), AWS D1.3/D1.3M (Section 4 Parts B & C), AWS D1.5/D1.5M (Section 5 Parts A & B), AWS D1.6/D1.6M (Section 4 Parts A & B), AWS D1.8/D1.8M, D17.1/D17.1M (Section 5)
Failure Analysis	Using the methods listed above (and on Scope of Accreditation 0397.01) in accordance with the ASM Handbook Volume 11

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Accredited Laboratory

A2LA has accredited

ST. LOUIS TESTING LABORATORIES, INC.

St. Louis, MO

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 13th day of September 2019.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 0397.02 Valid to July 31, 2021

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