



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ST. LOUIS TESTING LABORATORIES, INC.

2810 Clark Avenue

St. Louis, MO 63103

Robin E. Sinn Phone: 314 531 8080

MECHANICAL

Valid To: July 31, 2019

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 metallic and non-metallic materials:

Test Technologies

Test Method(s)

Tension

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

ASTM A370, ASTM B557, ASTM D412,
ASTM D638, ASTM E8/E8M, ASTM E21,
ASTM F606/F606M; ASME SA370

Impact

Charpy

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

Gardner

Izod

ASTM D2794
ASTM D256

Tear Strength

ASTM D624 (Sections 4.2.2, 4.2.3 and 4.2.4)

Flexural Properties

ASTM D790

Metallographic Evaluation

Inclusion Content

Graphite in Cast Iron

Decarburization

ASTM E45 (Method A)

ASTM A247

ASTM E1077 (Sections 7.2, 7.3 and 7.4);

SAE J419 (Sections 4.1 and 4.2)

Grain Size

ASTM E112 (Section 10)

Case Depth

SAE J423 (Sections 5.2 and 6.3)

Plating Thickness

ASTM B487

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Coefficient of Friction	ASTM C1028-07e1 ¹ (withdrawn 2014), ASTM D1894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	ASTM A833, ASTM E10
Rockwell (A, B, C, 15N, 30N, 45N, 15T, 30T, 45T)	ASTM E18
Durometer (Shore A and D)	ASTM D2240
Pencil	ASTM D3363
Microhardness	ASTM E384
Knoop (100, 500g)	
Vickers (100, 500g)	
Macrohardness	ASTM E92
Vickers (10kgf)	
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)

¹ This laboratory's scope contains withdrawn or superseded methods.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



Test Technologies

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





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 17025:2005 *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 16th day of June 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 0397.02
Valid to July 31, 2019

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