



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

METALLURGICAL ASSOCIATES, INC.
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MECHANICAL

Valid To: April 30, 2028

Certificate Number: 1529.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on the following products and materials: aircraft components, automotive components, coatings, fasteners, metals and alloys, plastics, pipes, valves and fittings, pressure vessels, rubber and rubber products, and tools.

Test

Test Methods

Microscopy

Visual Examination
Photomacrography
SEM (Scanning Electron Microscopy)
Energy-Dispersive Spectroscopy

ASM Metals Handbook, Vol. 11, pp. 418-425
ASTM E883
ASM Handbook Volume 12 (p.166-178)
ASTM E1508

Hardness

Rockwell (A, B, C, H, F, 15N, 30N, and 30T)
Brinell (500 kgf and 3000 kgf)
Leeb Hardness
Microhardness
(Vickers, Knoop) (100gf, 200gf and 500gf)

ASTM E18
ASTM E10
ASTM A956
ASTM B578, E384

Metallographic evaluation

Preparation
Light Microscopy
Grain Size

Graphite Microstructures
Depth of Decarburization (Optical, microhardness)
Macroetch

ASTM B665, E3
ASTM E883
ASTM B390 (Withdrawn 2006), E112
(Comparison and intercept procedures)
ASTM A247
ASTM E384, E1077, F2328; SAE J121, J419
ASTM E340;
AWS D1.1/D1.1M (6.4.10 and 6.23.2),
AWS D1.5/D1.5M (7.18.2 and 7.26.3.4)
ASTM E407
ASTM E384; SAE J423
ASTM E45, Methods A and D
ASTM E1351

Microetch
Case Depth (Optical, microhardness)
Inclusion Content
Field Replicas

Test

Discontinuities

Coating Thickness

Volume Fraction

Intergranular Corrosion

Failure Analysis

Copper Sulfate Testing

Surface Roughness

Coating Weight – Aluminum on Steel

Coating Weight – Zinc on Steel

Test Methods

ASTM A574, F788/F788M, F812/F812M;
SAE J122 (Withdrawn 2017),
J123 (Withdrawn 2012),
J1061 (Withdrawn 2012)

ASTM B487

ASTM E562

ASTM A262, Practice A

Using the methods listed above in accordance
with ASM Handbook Volume 11

ASTM A967 Practice D

ASME B46.1; SAE J911

ASTM A428/A428M

ASTM A90/A90M, ASTM A917 (Sect. 8)



Accredited Laboratory

A2LA has accredited

METALLURGICAL ASSOCIATES, INC.

Waukesha, WI

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 19th day of March 2026.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1529.01
Valid to April 30, 2028

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