



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

METALLURGICAL & ENVIRONMENTAL TESTING LABORATORIES

A Division of Metallurgical Service, Inc.

2671 East River Road

Dayton, OH 45439

Umesh B. Deshpande Phone: 937 293 1621

MECHANICAL

Valid To: August 31, 2020

Certificate Number: 0302.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, as well as the one satellite laboratory location listed below, to perform the following tests on aircraft components, automotive components, fasteners, metals & alloys, and plastics & polymers:

Test

Test Method(s)

Mechanical:

Hardness

Rockwell (A, C, 15N, 30T)

Brinell (500, 3000) kg

ASTM E18, F606/F606M

ASTM E10

Microhardness (HV500, HK500)

ASTM E384, E92

Tensile (Axial & Machined) up to 90,000 kg-force

ASTM A370, E8, F606/F606M; SAE J429

Metallographic

Grain Size

Banding/Orientation of Microstructures

Decarburization/Carburization

Macroetching/Grain Flow

Microetching

Light Microscopy

Inclusion Content

ASTM E112

ASTM A247, E1268

ASTM E1077; SAE J121 (*Withdrawn 2013*)²

ASTM E340, E381

ASTM E407

ASTM E883

ASTM E45 (Method A)

Proof Load

Metlab Work Instruction WI 9

Bend

ASTM A488, E190

Discontinuities

ASTM F788, F812

Salt Spray

ASTM B117; NASM 1312-1

Plating Thickness

ASTM B487

Case Depth

SAE J423

(A2LA Cert. No. 0302.02) 09/04/2018

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Test

Test Method(s)

Mechanical (cont'd):

Plating Adhesion

ASTM B571 (Methods 3, 5, 13), D714

Failure Analysis

Using the Methods Listed Above in Accordance with the ASM Handbook Volume 11; Metlab Work Instruction WI 29

Hydrostatic Testing (≤ 10 ksi)

ASTM E1003; Metlab Work Instructions WI 13, WI 41, WI 42

Chemical:

Optical Emission on Steel, Stainless Steel, Aluminum Alloys, Cast Iron
(Al, B, C, Cb, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, P, Pb, S, Si, Sn, Ta, Ti, V, Zn)

ASTM A751, E415, E1086, E1251

¹ This accreditation covers testing performed at the main laboratory listed above, and the following satellite laboratory listed below:

² This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

METALLURGICAL & ENVIRONMENTAL TESTING LABORATORIES
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2221 Arbor Blvd.
Dayton, OH 45439

Test

Test Method(s)

Charpy Impact (V-notch) (20 ± 5 to -50)°C

ASTM E23





Accredited Laboratory

A2LA has accredited

METALLURGICAL & ENVIRONMENTAL TESTING LABORATORIES

Dayton, OH

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 April 2017).

Presented this 4th day of September 2018



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

President and CEO
For the Accreditation Council
Certificate Number 0302.02
Valid to August 31, 2020

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