



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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, 2024

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:

<u>Test</u>	<u>Test Method(s)</u>
Mechanical:	
Hardness Rockwell (A, C, 15N) 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	ASTM E112
Banding/Orientation of Microstructures	ASTM A247, E1268
Decarburization/Carburization	ASTM E1077; SAE J121 (<i>Withdrawn 2013</i>) ²
Macroetching/Grain Flow	ASTM E340, E381
Microetching	ASTM E407
Light Microscopy	ASTM E883
Inclusion Content	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

<u>Test</u>	<u>Test Method(s)</u>
Mechanical (cont'd):	
Case Depth	SAE J423
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² This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

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2221 Arbor Blvd.
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<u>Test</u>	<u>Test Method(s)</u>
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 17025:2017 *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 30th day of November 2022.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0302.02
Valid to August 31, 2024

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