



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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MECHANICAL

Valid To: January 31, 2025

Certificate Number: 0603.01

In recognition of the successful completion of the A2LA evaluation process (including compliance to R223—Specific Requirements—GE Aviation S-400 Accreditation program), accreditation is granted to this laboratory at the location listed above to perform the following tests on composites, adhesives, metals and metal fasteners:

Test:

Test Method:

Mechanical Testing

Knoop and Vickers Hardness
(HV0.5, HV1, HV5, HV10; HK200, HK500,
HK1000)

ASTM E384, ASTM E92

Brinell Hardness (500 and 3000) kgf

ASTM E10, ASTM E110

Rockwell Hardness

ASTM E18, ASTM F3125

(A, B, C, E, 15N, 30N, 45N, 15T, 30T, 45T)

Leeb Portable Hardness²

ASTM A956

Fatigue Testing (+58 to +350) °F, (1 to 50) Hz
Bend

ASTM E466; NASM 1312-11

ASTM E190; ASME Section IX; AWS D1.1,
17.1; BPS 4431

Magnetic Permeability

ASTM A342

Weld Operator and Weld Procedure Qualification

API 1104; ASME Sect. IX;

AWS B2.1/B2.1M, B4.0, D1.1/D1.1M,
D1.2/D1.2M, D1.3/D1.3M, D17.1,
D17.2/D17.2M, D1.5, ISO 15614

Hydrogen Embrittlement (Notch Tension)

ASTM E292, ASTM F519; NASM 1312-5, -14

Weld Hardness Profile

SP0472;

RP0472¹ (Superseded by SP0472, 2005)

Jominy End-Quench

ASTM A255

Tensile Properties

ASTM A370, ASTM B557, ASTM E8/E8M;

ISO 6892-1, 898-1; AWS D1.1, 1.2, 1.3, 1.6,

B4.0; ASME Section IX; BPS-4431; ISO 3506-2

Impact Properties (Charpy) (-320 °F to RT)

ASTM A370, ASTM E23

(A2LA Cert. No. 0603.01) 01/09/2023

Page 1 of 4

Test:

Nick Break Testing

Fillet Break

Compression Testing

Test Method:API 1104, ASP 1107¹ (Superseded by 1104)

AWS B4.0

ASTM E9

Chemical Properties

Carbon/Sulfur Determination

Oxygen/Nitrogen/Hydrogen Determination

Spectroscopy, OES (Al, Fe, Cu, Ti, Mg, Ni base)

ASTM E1019

ASTM E1019, ASTM E1409, ASTM E1447

ASTM B954, ASTM E415, ASTM E1086,

ASTM E1251, ASTM E1999, ASTM E2994,

ASTM E3047; DIN EN 15079

- Aluminum Base:Ag, Al, B, Be, Cr, Cu, Fe, Li, Mg, Mn, Ni, Pb, Sb, Si,
Sn, Sr, Ti, V, Zn, Zr- Iron Base:As, Al, B, C, Co, Cr, Cu, Fe, Mg, Mn, Mo, N, Nb, Ni,
P, Pb, S, Si, Sn, Ta, Ti, V, W- Copper Base:Ag, Al, As, Be, Co, Cr, Cu, Fe, Mn, Ni, P, Pb, S, Sb,
Si, Sn, Zn- Titanium Base:

Al, B, C, Cr, Cu, Fe, Mo, Ni, Si, Sn, Ti, V, Zr

- Nickel Based:Al, B, C, Co, Cr, Cu, Fe, Mn, Mo, N, Nb, Ni, P, Pb,
S, Si, Ta, Ti, V, W, Zr- Magnesium Base:

Al, Be, Cu, Fe, Mg, Mn, Ni, Pb, Si, Sn, Zn

EDS in SEM (Semi-Quantitative)

ASTM E1508

Metallographic EvaluationMetallographic Preparation/Microetch
Grain Size (Comparison)

ASTM E3, ASTM E407

ASTM E112

Inclusion Rating

Carburization/Decarburization

ASTM E45 (Method A)

ASTM E1077; ARP 1820;

AMS-H-6875

Microstructure Evaluation

ASTM E1268; AMS 2380, AMS 4911;

BAC 5636; AMS 2759; NAS 4002, NAS 4003,

NAS 4004, NAS 4008; ASM Hbk Vol. 9

ASTM A247

Graphite in Cast Iron

Plating/Coating Thickness

ASTM B487, ASTM B748

Case Depth

SAE J423

Macroetching

ASTM A604/A604M, ASTM E340,

ASTM E381; AMS 6400

Corrosion Susceptibility

ASTM A262 (Rapid Screening),

ASTM A923 (Methods A & B)

Test:

Volume Percent
IGA, Eutectic Melting, HTO

IGO/IGA
Alpha Case
Dendrite Arm Spacing
End Grain Pitting

Corrosion

Exfoliation Corrosion
Pitting / Crevice Corrosion Resistance
Salt Spray

Test Method:

ASTM E562
BPS 4139; BHT LTI-1005; BAC 5602;
STP54-101; ASTM G110
ASTM F2111; BSS 7219
P3TF19; BATS 2751
ARP 1947
BSS 7219; ASTM F2111

ASTM G34
ASTM G48
ASTM B117; NASM 1312-1; MIL-STD-1344;
ISO 9227

Physical Properties / NDT

Electrical Contact Resistance
Electrical Conductivity
Surface Roughness
Coating Weight
Coating Adhesion (Bend test)
Adhesion Test (Tape Adhesion)
Liquid Penetrant Inspection (Water Washable
Fluorescent)²
Magnetic Particle Inspection (Bench Fluorescent)
Magnetic Particle Inspection (Yoke)²
Visual Inspection

Nital Etch Inspection

MIL-DTL-5541
ASTM E1004
ASME B46.1
ASTM A90/A90M, A428, B137; MIL-A-8625
ASTM B571
ASTM D3359
ASTM E1417/E1417M; BPS 4089; SS8806;
BSS 7039
ASTM E1444; E709; BPS-4075; SS8805
ASTM E1444; E709; BPS-4075; SS8805
EN 970; AWS D1.1, 1.2; BATS 2333;
ASME Section XI
AMS 2649; NDTs 9111; MIL-STD-867;
STP 53-701

Fastener Testing

Fastener Hardness

Stress Durability
Decarburization

Discontinuities

Rotational Capacity

Wedge and Axial Tensile

Axial Proof Load (Internal & External Threads)

Double Shear

ASTM F606/F606M, ASTM F3125,
ASTM A325, ASTM A490; NASM 1312-6
ASTM B839, F606; NASM 1312-5, -14
ASTM F2328; SAE J419,
SAE J121¹ (Superseded by F2328)
ASTM F788, ASTM F812; SAE J122; NAS 498,
NAS 4002, NAS 4003, NAS 4004, NAS 4008
ASTM A325 Section 6.3, ASTM A490,
ASTM F3125; DOT TEX 452A
ASTM F606/F606M, ASTM F3125,
ASTM A325; NASM 1312-8
ASTM F606/F606M, ASTM F3125; SAE J995;
NASM 1312-32
NASM 1312-13

Test:

Test Method:

Composites and Adhesives Testing

Lap Shear, Single (+58 to +350) °F
Flow, Film Adhesive
Drape, Film Adhesive
Weight, Film Adhesive
T-Peel Strength
Sandwich Beam Flexure (+58 to +350) °F
Climbing Drum Peel

MMM-A-132B; GM 4362A; ASTM D1002
SS8612; MMM-A-132B
SS8612; MMM-A-132B
SS8612; MMM-A-132B
MMM-A-132B
ASTM C393/C393M; C-M605; GM4309A
ASTM D1781

Other Testing

Failure Analysis

Lab Specimen Heat Treatment
SEM

ASM Handbook 11 (Using Other Test Methods
on Scope)
AMS-H-6875; BPS 4017, BPS 4140
OEM Manual

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.

² This laboratory performs field testing activities for these tests.

The laboratory is accredited for the test methods listed above. The accredited test methods are used in determining compliance with the material and general processing specifications listed below; however, the inclusion of these material specifications on this Scope does not confer laboratory accreditation to the material specifications. Inclusion of these material specifications on this Scope also does not confer accreditation for every method embedded within the specification. Only the methods listed above on this Scope are accredited.

AMS: 2759/1, 2759/2, 2759/3, 2759/4, 2759/5, 2759/6, H-6875, H-6088¹ (Superseded by SAE AMS 2770, 2771 & 2772)
ASTM: F3125
NACE: MRO175 / ISO 15156



Accredited Laboratory

A2LA has accredited

AADFW, INC.

Euless, TX

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 9th day of January 2023.

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 0603.01
Valid to January 31, 2025

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