



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LABORATORY TESTING, INC.
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MECHANICAL

Valid To: March 31, 2023

Certificate Number: 0117.02

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 to perform the following metal and fastener tests:

<u>Test:</u>	<u>Test Method(s):</u>
Mechanical Property:	
Tensile and Proof Load (Up to 600klb, Up to 2100 °F)	ASTM E8/E8M, E9, E21, A370, B557, F606/F606M, F835; NASM-1312-8; EN 2002-1, 10002-1, 1025-02; ISO 6892-1
Impact (Charpy)	ASTM A370, E23; ISO 148
Bend Testing	ASTM E290, E190, A370
Flattening	ASTM A999, A530
Flare Testing	AMS 5557, 5576; ASTM A370, A999, A1016, A530
Jominy Hardenability	ASTM A255
Expansion (Pin Test) of Copper and Copper Alloy Piping and Tubing	ASTM B153
Compressible-Washer-Type Direct Tension Indicators for use with Structural Fasteners	ASTM F959
Conductivity	BAC 5946
Creep Rupture	ASTM E139
Stress Rupture	ASTM E139, E292; NASM-1312-10
Stress Durability (Hydrogen Embrittlement)	NASM-1312-5A
Shear Testing of Aluminium	ASTM B831
Shear Testing of Aluminium (Double Shear)	ASTM B769
Pin-Type Bearing Testing of Metallic Materials	ASTM E238
Double Shear	NASM-1312-13
Drop Weight	ASTM E208
Heat Treatment of Specimens	AMS 2750

Test	Test Method
Hardness:	
Brinell (500, 1000, 1500 & 3000 kg)	ASTM E10
Rockwell (A, B, C, E, F)	ASTM E18; NASM-1312-6
Superficial (15, 30, 45 N & T)	ASTM E18; NASM-1312-6
Vickers (5kg, 10kg, 20kg)	ASTM E92
Microhardness:	
Knoop (25, 50, 100, 200, 500, 1000gf)	ASTM E92/E384; NASM-1312-6
Vickers (10, 25, 50, 100, 200, 300, 500, 1000gf)	ASTM E92/E384; NASM-1312-6
Metallographic Examination:	
Preparation of Specimens	ASTM E3
Grain Size	ASTM E112, E930, E1181, E1382; GE E50TF133
Micro Exam (including Alpha Case)	ASTM E407, GE P3TF19, PWA E142; AMS-T-9046 section 4.4.2
Macro Exam	ASTM E340, E381, A604
Intergranular Corrosion Susceptibility	ASTM A262 (Practices A & E (micro))
Intergranular Attack & End Grain Pitting	BSS 7219
Case Depth	SAE J423
Delta Ferrite Determination	AMS 2315, ASTM E562
Microhardness of Electroplated Coatings	ASTM B578
Inclusion Content	ASTM E45; SAE J422
Plating Thickness Determination	ASTM B487; NASM-1312-12
Depth of Decarburization	ASTM E1077, E384; SAE J121
EDM & Laser Evaluation (Recast / Remelt)	CPW 425; PWA E167
Weld and Braze Evaluation	ASME IX; API 1104; AWS D1.1/1.1M, 1.2/1.2M, D1.3, D1.4, D1.5, D1.6, D9.1/9.1M, D14.1/14.1M, D14.3/14.3M, D14.4, D14.6, D15.1, D17.1; ISO 15614-1; BS EN 287-1, 2872, 910, 288-4; New York State Steel Construction Manual; AMS-STD-1595; ASTM A488; MIL-STD-248D; NAVSEA S9674-AQ-GIB-010; ANSI/AASHTO
Failure Analysis	Using the methods listed on this and other scopes in accordance with the AMS Handbook Volume 11
SEM/EDS	ASTM E1508
Fatigue / Fracture:	
High Cycle/Axial Fatigue (HCF)	ASTM E466; NASM-1312-11; EN6072
Low Cycle Fatigue (LCF)	ASTM E606
Fracture Toughness	ASTM E1820, E399
Fatigue Crack Growth	ASTM E647
Sieve Analysis of Metal Powders	ASTM B214



Accredited Laboratory

A2LA has accredited

LABORATORY TESTING, INC.

Hatfield, PA

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 laboratory also meets the requirements of R223 – Specific Requirements: GE Aviation S400 Accreditation Program. 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 25th day of March 2021.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 117.02
Valid to March 31, 2023

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