



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

MASSACHUSETTS MATERIALS RESEARCH, AN ACUREN COMPANY
1500 Century Drive
West Boylston, MA 01583
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MECHANICAL

Valid To: July 31, 2020

Certificate Number: 3333.01

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 to perform the following tests on metals:

<u>Test:</u>	<u>Test Method(s):</u>
Bend Testing	ASTM A370, E290; ASME Section IX; AWS B4.0, D1.1, D1.2, D1.5
Charpy Impact (-320 °F to Room Temperature)	ASTM E23; EN 10045-1
Tensile (Room Temperature, ≤ 60 klbs)	ASTM A48, A370, B557, E8/E8M, F606/F606M (except sect. 3.5); EN 10002-1; SAE J429
Shear Testing	AWS D17.2
Brinell Hardness (500, 1000, and 3000) kg	ASTM E10
Microhardness, Vickers and Knoop (100 to 500) g	ASTM E384, E92
Macrohardness, Vickers (5 and 10) kg	ASTM E92
Rockwell (A, B, C, E)	ASTM A370, E18
Rockwell Superficial (15N, 30N, 15T, 30T)	ASTM A370, E18
Durometer Hardness (Shore A and D)	MMR TP-13*
<u>Metallographic Evaluations:</u>	
Alpha Case	GE P3TF19; PWA E142
Case Depth/Carburization	ASTM E1077
Density	ASTM D792
Grain Size	ASTM E112, E930, E1181; GE E50TF133

Test:

Test Method(s):

Metallographic Evaluations (Continued):

Inclusion Content

ASTM E45; SAE J422

Intergranular Attack

ASTM A262 Practices A and E, A923 Practice A;
PWA-MCL-E50; AMS H6088

Pitting / Crevice Corrosion

ASTM G48 Method A&B

EDM & Laser Evaluation (Recast / Remelt)

PWA E54, PWA 97;
GE P29TF73, P29TF25, P3D-AG1, P1TF10

Macroetch

ASTM A604, E381, E340

Microetch

ASTM E407

Metallurgical Preparation / Microphotography

ASTM E3, E883

Oxide Coating by Cross Section

ASTM B487

Percent Ferrite Determination

ASTM A923, E562; AMS 2315

Weld and Braze Procedure Qualification

ASME Section IX; GE P8TF3, P9TF1; PWA 16;
AWS D1.1, D1.5, D1.2, D17.1, D17.2, B4.0;
NAVSEA 39074-AQ-GIB-101/248

*In-House Procedure





Accredited Laboratory

A2LA has accredited

MASSACHUSETTS MATERIALS RESEARCH, AN ACUREN COMPANY

West Boylston, MA

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 laboratory also meets the requirements of R223 – Specific Requirements – GE Aviation S-400 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 26th day of July 2018.



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

President and CEO
For the Accreditation Council
Certificate Number 3333.01
Valid to July 31, 2020
Revised December 05, 2018

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