



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CARPENTER TECHNOLOGY CORPORATION¹

101 West Bern St.
Reading, PA 19601
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MECHANICAL

Valid To: July 31, 2021

Certificate Number: 3155.01

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 as well as the two satellite laboratory locations listed below to perform the following tests on metals, metal alloys, and metal fasteners:

Test

Test Methods

Mechanical Testing

Bend	ASTM E290 (Method A, B, C)
Charpy Impact (-112 °F to RT)	ASTM E23
Coefficient of Linear Thermal Expansion (CLTE)	ASTM E228
Fracture Toughness	ASTM E399
Hardness:	
Brinell (10 mm – 3000 kg; 2.5 mm – 187.5 kg)	ASTM E10; EN ISO 6506-1
Rockwell (A, B, C, 15N, 30N, 15T, 30T)	ASTM E18; EN ISO 6508-1
Micro (300, 500 g) Knoop and Vickers	ASTM E384
Macro (10 kg) Vickers	ASTM E92
Stress Rupture / Creep Rupture (400 to 1600) °F	ASTM E139, E292
Tensile:	
Elevated Temperature (400 to 1600) °F	ASTM E21
Room Temperature	ASTM E8/E8M

Metallographic Evaluation

Decarburization	ASTM E1077
Delta Ferrite	AMS 2315
Grain Size	ASTM E930, E112, E1181; GE E50TF133
Inclusion Content / Microcleanliness	ASTM E45 (Method A, D, E)
Intergranular Attack	ASTM A262 (Practice A, B, E), G28 (Method A, B); ISO 3651-2 (Method A)
Macroetch	ASTM A604, E340, E381
Pitting / Crevice Corrosion	ASTM A923 (Method C), G48 (Method A)

¹ This accreditation covers testing performed at the main laboratory listed above, and the following satellite laboratories listed on page two.

Shalmet
116 Pinedale Industrial Road
Orwigsburg, PA 17961

Test

Test Methods

Mechanical Testing

Hardness:

Brinell (3000 kg)

Rockwell (B, C)

Tensile:

Room Temperature

ASTM E10

ASTM E18

ASTM E8/E8M

Carpenter Focus Facility
22110 Thomas L. Hammons Road
Tanner, AL 35671

Test

Test Methods

Mechanical Testing

Charpy Impact (-112 °F to RT)

Fracture Toughness

Hardness:

Brinell (10 mm – 3000 kg)

Rockwell (B, C)

Stress Rupture / Creep Rupture (400 to 1600) °F

Tensile:

Elevated Temperature (400 to 1600) °F

Room Temperature

ASTM E23

ASTM E399

ASTM E10

ASTM E18

ASTM E139, E292

ASTM E21

ASTM E8/E8M

Metallographic Evaluation

Decarburization

Delta Ferrite

Grain Size

Inclusion Content / Microcleanliness

Intergranular Corrosion

Macroetch

ASTM E1077

AMS 2315

ASTM E930, E112, E1181

ASTM E45 (Methods A, D and E)

ASTM A262 (Practice A)

ASTM A604, E340, E381





Accredited Laboratory

A2LA has accredited

CARPENTER TECHNOLOGY CORPORATION

Reading, 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 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 12th day of July 2019.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3155.01
Valid to July 31, 2021

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