



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CARPENTER TECHNOLOGY CORPORATION¹

101 West Bern St.
Reading, PA 19601
Bob Kemmerer Phone: 610 208 2576

MECHANICAL

Valid To: July 31, 2023

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 satellite laboratory location listed below to perform the following tests on metals, metal alloys, and metal fasteners:

Test

Test Methods

Mechanical Testing

Bend
Charpy Impact (-112 °F to RT)
Coefficient of Linear Thermal Expansion (CLTE)
Fracture Toughness
Hardness:
 Brinell (10 mm – 3000 kg; 2.5 mm – 187.5 kg)
 Rockwell (A, B, C, 15N, 30N, 15T, 30T)
 Micro (300, 500 g) Knoop and Vickers
 Macro (10 & 30 kg) Vickers
Stress Rupture / Creep Rupture (400 to 1600 °F)
Tensile:
 Elevated Temperature (400 to 1600 °F)
 Room Temperature

ASTM E290 (Method A, B, C)
ASTM E23
ASTM E228
ASTM E399

ASTM E10; EN ISO 6506-1
ASTM E18; EN ISO 6508-1
ASTM E92, E384
ASTM E92
ASTM E139, E292

Metallographic Evaluation

Decarburization
Delta Ferrite
Grain Size
Inclusion Content / Microcleanliness
Intergranular Attack

Macroetch
Pitting / Crevice Corrosion

ASTM E1077
AMS 2315
ASTM E930, E112, E1181; GE E50TF133
ASTM E45 (Method A, D, E)
ASTM A262 (Practice A, B, E),
G28 (Method A, B); ISO 3651-2 (Method A)
ASTM A604, E340, E381
ASTM A923 (Method C), G48 (Method A)

Shalmet¹
116 Pinedale Industrial Road
Orwigsburg, PA 17961

<u>Test</u>	<u>Test Methods</u>
<u>Mechanical Testing</u>	
Hardness:	
Brinell (3000 kg)	ASTM E10
Rockwell (B, C)	ASTM E18
Tensile:	
Room Temperature	ASTM E8/E8M
Heat Treatment ² (-100 to 2200 °F)	AMS 2750

¹This accreditation covers testing performed at all laboratory locations listed in this scope of accreditation.

²Heat Treatment Performed Only on Samples Prior to Testing. (Heat Treat Capability) including age, anneal, austenitize, bake, heat resistance, normalize, stress relieve, quench & temper.





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 25th day of June 2021.

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, 2023

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