SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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

MECHANICAL

Valid To: July 31, 2025 Certificate Number: 3155.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, as well as the satellite laboratory location listed below, to perform the following types of tests on metals, metal alloys, and metal fasteners:

Test	**Test Methods**
Mechanical Testing	
Bend	ASTM E290 (Method A, B, C)
Charpy Impact (-112 to RT) °F	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 (B, C, 15N, 30N, 15T, 30T)	ASTM E18; EN ISO 6508-1
Micro Knoop and Vickers (200, 300, 500) g Macro Vickers (10 & 30) kg	ASTM E92, E384 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; ISO 6892-1 (Method A1, A2)
Metallographic Evaluation	
Decarburization	ASTM E1077
Delta Ferrite	AMS 2315
Grain Size	ASTM E930, E112, E1181; GE E50TF133; ISO 643
Inclusion Content / Microcleanliness	ASTM E45 (Method A, D, E); ISO 4967 (Method A and B)
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)
Heat Treatment[1] (-100 to 2200) °F	AMS 2750[2]

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Shalmet
116 Pinedale Industrial Road
Orwigsburg, PA 17961

Test	**Test Methods**
Mechanical Testing	
Hardness:	
Brinell (10 mm – 3000 kg; 2.5 mm – 187. 5 kg)	ASTM E10
Rockwell (B, C)	ASTM E18
Tensile:	
Room Temperature	ASTM E8/E8M

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

[2]Please note that this is not a test method but rather a heat treatment specification covering the pyrometric requirements for sample and specimen preparation

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 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 18th day of July 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3155.01
Valid to July 31, 2025

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