CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Element Materials Technology Portland – Milwaukie
4949 SE Johnson Creek Boulevard
Portland, OR 97222

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 26 February 2027

Certificate Number: L2195.02

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Element Materials Technology Portland – Milwaukie

4949 SE Johnson Creek Boulevard
Portland, OR 97222
Bryan Goble, Quality Manager
408 375 4115

TESTING

Valid to: **February 26, 2027** Certificate Number: **L2195.02**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Elemental Analysis (Combustion or Fusion) – Carbon, Hydrogen, Nitrogen, Oxygen, Sulfur	ASTM E1019 ASTM E1941 ASTM E1447	Metallic Materials	Oxygen/Nitrogen/Hydrogen Elemental Analyzer Carbon/Sulfur Determinator
Fusion Method for Oxygen and Nitrogen in Titanium	ASTM E1409	Metallic Materials	Oxygen/Nitrogen/Hydrogen Elemental Analyzer
Inductively Coupled Plasma (ICP) Mass Spectroscopy	ASTM E2823	Metallic Materials	ICP-MS
OES Analysis Stainless Steel, Iron, and Nickel Based Alloys	ASTM E415 ASTM E1086 ASTM E3047	Metallic Materials	Optical Emission Spectrometer
X-Ray Fluorescence Low Alloy Steels	ASTM E1085	Metallic Materials	XRF Spectrometer
X-Ray Fluorescence Stainless Steel and Steel and Nickel/Cobalt Alloys Titanium	ASTM E572 ASTM E2465 ASTM E539	Metallic Materials	XRF Spectrometer

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Charpy Impact	ASTM E23	Metallic Materials	Impact Tester
Tensile Elevated Temperature	ASTM E21	Metallic Materials	Tensile Tester
Hardness Rockwell	ASTM E18	Metallic Materials	Rockwell Hardness Tester
Tensile Room Temperature	ASTM E8 ASTM A370 ASTM B557	Metallic Materials	Tensile Tester
Stress Rupture	ASTM E139	Metallic Materials	Stress Rupture Frames Furnaces
Metallography Alpha Case	ASTM E3 ASTM E407 GE P3TF32 PWA MCL J-36 PWA MCL K-27 PWA MCL E-142 Snecma DMC 0205 VOLS:10066156	Metallic Materials	Microscope
Metallography Decarburization	ASTM E1077	Metallic Materials	Microscope
Metallography Grain Size	ASTM E112	Metallic Materials	Microscope
Metallography IGA/IGO	ASTM A262 GE B50TF16 GE B50TF36 GE B50TF37 GE P29TF34 PWA MCL E-50 PWA MCL E-189	Metallic Materials	Microscope
Metallography Microstructure	ASTM E407	Metallic Materials	Microscope
Metallography Sample Prep	ASTM E3	Metallic Materials	Grinders and Polishers
Metallography Alloy Depletion	GE P29TF34-S7 PWA MCLE-50 Snecma DMF90522	Metallic Materials	Microscope

Note:

1. This laboratory offers commercial testing service.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. L2195.02.

Jason Stine, Vice President