



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Product Evaluation Systems, Inc.
637 Donohoe Rd.
Latrobe, PA 15650

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.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 27 December 2022

Certificate Number: AT-1504



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

Product Evaluation Systems, Inc.

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TESTING

Valid to: **December 27, 2022**

Certificate Number: **AT-1504**

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Tensile	ASTM E8, A370, B557, D638, E111, E132, F606, NASM 1312-8, ISO 6892-1, ISO 6892-2	Various Metals	Test Frame
Elevated Tensile	ASTM E21	Various Metals	Test Frame
Compression Testing	ASTM E9	Various Metals	Test Frame
Hardness Testing	ASTM E10, E18, E92, A370, E384, NASM 1312-6	Various Metals	Hardness Tester
Charpy Impact Testing	ASTM E23, ISO 148-1	Various Metals	Impact Tester
Bend Testing	ASTM E290 and E190	Various Metals	Bend Fixture
Fracture Toughness Testing	ASTM E399, E647, E1820, and B645	Various Metals	Servo-Hydraulic Frame
Double Shear Testing	NASM 1312-13	Various Metals	Test Frame
Fatigue Testing	ASTM E466, E606 and E647	Various Metals	Servo-Hydraulic Frame
Creep / Stress Testing	ASTM E139 and E292	Various Metals	Creep/Stress Machine
Drop Weight Test	ASTM E208	Various Metals	Drop Weight Tester
Jominy	ASTM A255	Various Metals	Jominy Fixture
Heat Treating	AMS 2750	Various Metals	Cress Furnaces, L&L
Weld Qualification	ASME IX, AWS D1.1, 1.2, 1.3, 1.4, 1.5, 1.6, API 1104	Various Metals	Various

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Carbide Microstructure	ASTM B390, B276 and B657	Carbides	Optical Microscopes and Image Analysis Software
Depth of Decarburization and Carburization	ASTM E2, E3, E384, E1077, F2328 and SAE J121	Various Metals	Optical Microscopes and Image Analysis Software
Effective Case Depth	ASTM E384	Various Metals	Optical Microscopes and Image Analysis Software
Metallography (inclusion rating)	ASTM E45, E562, E1245 and ISO 4967	Various Metals	Optical Microscopes and Image Analysis Software
Grain Size	ASTM E112, E1181, E930 and GE E50TF133	Various Metals and Carbides	Optical Microscopes and Image Analysis Software
IGO / Plating Thickness	ASTM B487	Various Metals	Optical Microscopes and Image Analysis Software
Alpha Case	GE P3TF19, GE P3TF32 and PES M-033	Titanium	Optical Microscopes and Image Analysis Software
Macroetching	ASTM E3, E340, A604, E381 AMS 2643, ETTC 3	Various Metals	Acid Baths and Hot Plates
Microetching / Identification of Microstructures	ASTM E3, E407, ISO 20160, ETTC 2, ASM Metals Handbook, Vol. 9	Various Metals and Carbides	Various
Blue Etch Anodize	AMS 2642	Titanium	Power supply and acid bath
Microhardness	ASTM E384	Various Metals	Knoop and Vickers Hardness
Corrosion	ASTM A262, G28, G48, A923, SEP 1877 and DIN 50914, ISO 3651-2 Part 2	Various Metals	Various

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Elements	ASTM A751, ASTM E415, E1086, E1251, E2209, E3047	Various Metals	Arc Spark OES Metal Analyzer
Elements	ASTM E1277, E2371, E2594, E3061	Various Metals and Carbides	ICP
Nitrogen Oxygen	ASTM E1019, E1409, E2575	Various Metals and Carbides	Inert Gas Fusion
Carbon Sulfur	ASTM E1019, E1941	Various Metals and Carbides	Combustion
Hydrogen	ASTM E1447, E2792	Various Metals	Inert Gas Fusion
Density	ASTM B311	Various Metals and Carbides	Various

Chemical

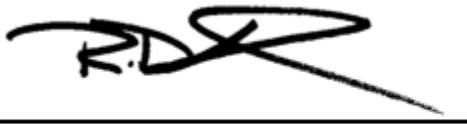
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Coating Weight	ASTM A90, A428	Various Metals	Various
Wet Chemistry	ASTM C114, C1218 and C1152	Concrete	Various

Non-Destructive Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Liquid Penetrant	ASTM E1417	Various Metals	Visible dye and water washable fluorescent
Magnetic Particle	ASTM E1444 and AMS 2300, AMS 2301, AMS 2303, AMS 2304	Various Metals	Yoke and Wet fluorescent

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1504.



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