



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Lucideon M+P
2190 Technology Drive
Schenectady, NY 12308

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.D.L.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 21 April 2023
Certificate Number: L2287



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

Lucideon M+P

2190 Technology Drive
Schenectady, NY 12308
David Behnke
518 382 0082

TESTING

Valid to: **April 21, 2023**

Certificate Number: **L2287**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES)	ASTM E1479 CHM1097; CHM1004 CHM1018 CHM1019; CHM1020 CHM1077; CHM1078	Metals, Alloys	Spectro ARCOS ICP-OES
Carbon/Sulfur Combustion Analysis	ASTM E1019; CHM1029	Metals, Alloys	LECO C/S Analyzer
Fourier Transform Infrared Spectroscopy (FTIR)	ASTM D3677 CHM1060 CHM1092	Organics Polymers Elastomers	Thermo Scientific Nicolet iS-10 and Continuum Microscope
Ion Chromatography	ASTM D4327; CHM1000	Inorganics	Thermo Scientific IC System
Thermo-mechanical Analysis (TMA)	ASTM E831 CHM1081	Organics Polymers Elastomers Metals Composites	TA Instruments Q400 TMA
Differential Scanning Calorimetry (DSC): Glass Transition Melt/Recrystallization Temperatures	ASTM D3418 ASTM E1356 ASTM E794 CHM1084	Organics Polymers Elastomers Composites	TA Instruments Q100 DSC/MDSC

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Thermo-gravimetric Analysis - Differential Scanning Calorimetry (TGA-DSC) Thermo-gravimetric Analysis - Differential Thermal Analysis (TGA-DTA)	ASTM E1356 CHM1093	Organics Polymers Elastomers Metals Composites	TA Instruments Simultaneous Differential Scanning Calorimeter/Thermo Gravimetric Analyzer
Viscosity: Brookfield	ASTM D1824 ASTM D2196 CHM1072	Liquids	Brookfield Digital Viscometer LV and RV
Density - Solids	ASTM D792 CHM1028	Polymers, Composites	Mettler Toledo Scales
pH (0 to 14)	ASTM E70 ASTM D664 CHM1007	Liquids	
Solids (Dissolved, Total, Suspended)	Standard Methods for the Examination of Water and Wastewater, 17th Ed., 1989, Method 2540 CHM1045; CHM1046 CHM1052	Liquids	Mettler Toledo Scales
SEM/EDS	SEM1001 ASTM E986 ASTM E1508	Metals, Alloys, Composites	Zeiss EVO50 VP capable SEM

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Shore Hardness (20 to 90) A, D (0 to 100) M	ASTM D2240 MCH1078	Polymers Elastomers	PTC Ergo Style Durometer Type A and Type D Shore Micro O-ring Tester
Rockwell Hardness (63 to 82) A (50 to 94) B (25 to 63) C (77 to 97) E (61 to 95) F (90 to 118) M	ASTM E18 ASTM D785 MCH1006 MCH1058	Metals, Alloys Polymers	Wilson Rockwell Hardness Tester (Indirectly verified only)
Brinell Hardness (11 to 158) HBW/P 500/10 (67 to 945) HBW/P 3000/10 Full Scale	ASTM E110 MCH1005	Metals, Alloys	Portable Hardness Testers
Microindentation Hardness Knoop, Vickers	ASTM E384 MLG1008 ASTM E92 MLG2000	Metals, Alloys	LECO® LM-248AT with full range of certified hardness standards
Effective Case Depth	SAE J423 MLG1016	Metals, Alloys	Knoop, Vickers
Macroetch / Evaluation	ASTM E340 MLG1025	Metals, Alloys	Various etchants
Metallographic Preparation	ASTM E407 ASTM E3 MLG1003 MLG1049	Metals, Alloys	Various etchants with Struers/Buehler and Allied equipment
Microstructural Evaluation	ASTM E407 ASTM E3 SAE J423 MLG1016	Metals, Alloys	Leitz /Zeiss/Leica/Sony/Nikon image acquisition systems with Bruker Espirit/Clemex PE/Leica LAS Image Analysis Software
Grain Size	ASTM E112; ASTM E930; ASTM E1181; MLG1017	Metals, Alloys	Leitz /Zeiss/Leica/Sony/Nikon image acquisition systems with Bruker Espirit/Clemex PE/Leica LAS Image Analysis Software

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Intergranular Attack / Intergranular Oxide	P3DAG1 P29TF73; MLG1029	Metals, Alloys	Zeiss EVO50 VP capable SEM
Weld Evaluation	AWS D17.1; MLG1058	Metals, Alloys	Microscope with digital camera and calibrated image software
Failure Analysis	ASM Metal Handbook, 9th Ed., Vol 11	Utilizing Test Methods in this Scope of Accreditation	Leitz /Zeiss/Leica/Sony/Nikon image acquisition systems with Bruker Espirit/Clemex PE/Leica LAS Image Analysis Software.

Electrical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Volume + Surface Resistivity < 2 x 10 ¹² ohm	ASTM D257 ELM1024	Plastic Laminates	Tektronix LCR Meter QuadTech Megohmmeter or Equivalent
Permittivity	ASTM D150 ELM1041	Plastic Laminates	
Conductivity	GE A50A503 ELM1084	SiC Powder	High Voltage Supply (10V, 12mA) Digital MultiMeter

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2287.
2. This laboratory offers commercial testing service.



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