



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Lucideon M+P
1 Marcus Drive, Building 4
Greenville, SC 29615

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 be 'J. Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 21 April 2026

Certificate Number: L2287.01



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
 1 Marcus Drive, Building 4
 Greenville, SC 29615
 Anna Rollings
 864 297 4417

TESTING

Valid to: **April 21, 2026**

Certificate Number: **L2287.01**

Mechanical

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Room Temperature Tensile (Up to 50) kip	ASTM E8 MCH1001	Metals, Alloys Polymers Composites Thermoset Laminates, Additive Manufactured	MTS / Instron Test Frames with Various Load Cells
Elevated Temperature Tensile (Up to 50) kip	ASTM E21 MCH1000	Metals, Alloys Polymers Composites, Additive Manufactured	MTS / Instron Test Frames with Various Load Cells
Flexural Testing (Up to 50) kip	ASTM D790 ASTM C1161, MCH1012 MCH1064	Metals, Alloys Polymers Ceramics, Additive Manufactured	MTS / Instron Test Frames with Various Load Cells
Knee Implant Wear Testing Axial Load: (Up to 1000) lbf Axial Displacement: (+/- 1) in Flexion/Extension: (+/- 100) degrees Flexion/Extension Torque: (Up to 700) in-lbs IE Rotation: (+/- 20) degrees IE Torque: (Up to 350) in-lbs AP Displacement: (+/- 1) in AP Load: (Up to 450) lbf ML Translation: (+/- 6) mm Valgus Rotation: (+/- 7) degrees	BS ISO 14243-1 BS ISO 14243-2 BS ISO 14243-3	Metals, Alloys, Polymers, Ceramics	AMTI ADL Knee Simulators

Mechanical

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
<p>Hip Implant Wear Testing</p> <p>Axial Load: (Up to 1 000) lbf Axial Displacement: (+/- 0.75) in Flexion/Extension: (+/- 50) degrees Flexion/Extension Torque: (Up to 180) in-lbs IE Rotation: (+/- 20) degrees IE Torque: (Up to 70) in-lbs Abduction/Adduction: (+/- 20) degrees Abduction/Adduction Torque: (Up to 180) in-lbs</p>	<p>ISO 14242-1, ISO 14242-2 MCH1099 MCH1081</p>	<p>Metals, Alloys, Polymers, Ceramics</p>	<p>AMTI ADL Hip Simulators</p>
<p>Surface Topography Surface Roughness</p>	<p>ISO 7206-2 ISO 7207-2 ASTM F2791 IA1002</p>	<p>Metals, Alloys, Polymers, Ceramics</p>	<p>White Light Interferometry</p>
<p>Accelerated Aging of Polymers</p>	<p>ASTM F2003 MCH1105</p>	<p>Polymers</p>	<p>Aging Chambers</p>
<p>Digital Image Correlation</p>	<p>MCH1093</p>	<p>Metals, Dissimilar Bonded Structures, Polymers, Gels, Adhesives</p>	<p>DIC Computer, Software, Cameras, Lighting, Speckle Patterning Supplies</p>

Mechanical - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
<p>Microindentation Hardness Knoop, Vickers</p>	<p>ASTM E384 ASTM E92 MLG1008</p>	<p>Metals, Alloys</p>	<p>Mitutoyo Hardness Tester with Calibrated NIST-Traceable Hardness Blocks</p>

Mechanical - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Effective Case Depth Knoop, Vickers	SAE J423 MLG1016		Mitutoyo Hardness Tester Leica DM2500M Metallurgical Microscope (25X to 1000X Magnification)
Alpha Case Depth	P3TF19 P3TF32 MLG1052	Titanium Alloys	Metallurgical Microscope (25X to 1000X Magnification)
Macroetch / Evaluation	ASTM E340 ASTM 381 MLG1025	Metals, Alloys	Leica Trinocular Zoom Stereomicroscope (6X to 150X Magnification) and Various Macroetchants
Metallographic Preparation	ASTM E407 ASTM E3 MLG1003 MLG1049 MLG1033		Various Metallographic Equipment and Microetchants
Microstructural Evaluation	ASTM E407 ASTM E3 SAE J423	Metals, Alloys, Ceramics, Composites, Coatings	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Grain Size Evaluation	ASTM E112 ASTM E930 ASTM E1181 MLG1017		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software) (25X to 1000X Magnification)
Intergranular Attack / Intergranular Oxidation (IGA / IGO)	P3DAG1 P29TF73 MLG1029		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Recrystallized (Rx) Grain Evaluation	P3DAG1 P29TF73 MLG1063 MLG1065	Metals, Alloys	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)



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Mechanical - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Crack Evaluation	P3DAG1 P29TF73 MLG1064	Metals, Alloys	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Recast Evaluation	P3DAG1 P29TF73 MLG1062 MLG1066		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Copper Contamination	P3DAG1 MLG1067		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Weld Evaluation	AWS D17.1 MLG1058		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Failure Analysis	ASM Metal Handbook, 9 th Ed., Vol 11		Metals, Alloys, Ceramics, Polymers; Wide Variety of Components and Applications

Chemical

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
SEM/Electron Microprobe	MIC1000	Metals, Alloys, Coatings, Ceramics	ARL SEMQ Electron Probe Microanalysis (EPMA) System. Seven WDS and Bruker SDD-EDS with Camscan CS3000 Electron Imaging
SEM/EDS/EBSD	ASTM E986 ASTM E1508 SEM1001-GV	Metals, Alloys, Coatings, Ceramics, Polymers	Hitachi SU5000 Field Emission / Variable Pressure SEM with Oxford EDS and EBSD

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2287.01.
2. This laboratory offers commercial testing service.



Jason Stine, Vice President

