



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 2028

Certificate Number: L2287.01



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Lucideon M+P
 1 Marcus Drive, Building 4
 Greenville, SC 29615
 Emily Shulruff
 864 297 4417

TESTING

ISO/IEC 17025 Accreditation Granted: **23 March 2026**

Certificate Number: **L2287.01** Certificate Expiry Date: **21 April 2028**

Mechanical Testing

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 Testing

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Hip Implant Wear Testing 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	ISO 14242-1, ISO 14242-2 MCH1099 MCH1081	Metals, Alloys, Polymers, Ceramics	AMTI ADL Hip Simulators
Surface Topography Surface Roughness	ISO 7206-2 ISO 7207-2 ASTM F2791 IA1002	Metals, Alloys, Polymers, Ceramics	White Light Interferometry
Accelerated Aging of Polymers	ASTM F2003 MCH1105	Polymers	Aging Chambers
Digital Image Correlation	MCH1093	Metals, Dissimilar Bonded Structures, Polymers, Gels, Adhesives	DIC Computer, Software, Cameras, Lighting, Speckle Patterning Supplies

Mechanical Testing - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Microindentation Hardness Knoop, Vickers	ASTM E384 ASTM E92 MLG1008	Metals, Alloys	Mitutoyo Hardness Tester with Calibrated NIST-Traceable Hardness Blocks
Effective Case Depth Knoop, Vickers	SAE J423 MLG1016		Mitutoyo Hardness Tester Leica DM2500M Metallurgical Microscope (25X to 1000X Magnification)

Mechanical Testing - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
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 MLG1000 MLG1001 MLG1002 MLG1003 MLG1049 MLG1033	Metals, Alloys, Ceramics, Composites, Coatings	Various Metallographic Equipment and Microetchants
Microstructural Evaluation	ASTM E407 ASTM E3 SAE J423 MLG1016 IA1044 IA1050		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Grain Size Evaluation	ASTM E112 ASTM E930 ASTM E1181 MLG1017 MLG1069		Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)
Intergranular Attack / Intergranular Oxidation (IGA / IGO)	P3DAG1 P29TF73 MLG1029		Metals, Alloys
Recrystallized (Rx) Grain Evaluation	P3DAG1 P29TF73 MLG1063 MLG1065	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)	
Crack Evaluation	P3DAG1 P29TF73 MLG1064	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)	



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Mechanical Testing - Metallographic

Specific Tests and / or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Recast Evaluation	P3DAG1 P29TF73 MLG1062 MLG1066	Metals, Alloys	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	Leica DM2500M Metallurgical Microscope with Calibrated Image Analysis Software (25X to 1000X Magnification)

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

Jason Stine, Vice President

