



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LAMBDA RESEARCH INC.  
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MECHANICAL

Valid To: November 30, 2026

Certificate Number: 0138.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metallic, polymeric, and ceramic samples:

**Tests**

**Test Methods**

X-Ray Diffraction (XRD):

Residual Stress Measurement

SAE HS-784<sup>1</sup>; GE 4013195-991<sup>1</sup>; ASTM E915<sup>1</sup>,  
ASTM E2860; BS EN 15305

Elastic Constant

ASTM E1426

Retained Austenite

ASTM E975; SAE SP-453

Hydroxylapatite Content

ASTM F2024

Crystallite Size

3P1080<sup>2</sup>, 3P1105<sup>2</sup>

Texture Analysis, Including Pole Figure  
Determination, Orientation Distribution Function  
(ODF) and Inverse Pole Figure Analysis

ASTM E81

Qualitative Phase Analysis

3P1015<sup>2</sup>

Quantitative Phase Analysis

3P1043<sup>2</sup>

X-Ray Fluorescence (XRF):

Energy Dispersive X-ray Spectroscopy (EDS)

3P1124<sup>2</sup>

Residual Stress:

Ring Core Method

3P1051<sup>1,2</sup>, 3P1129<sup>1,2</sup>

Hole Drilling Method

ASTM E837<sup>1</sup>

Slotting Method

3P1137<sup>1,2</sup>

**Tests**

**Test Methods**

Strain Gage Monitored Stress Relaxation

3P1002<sup>1,2</sup>

**Preparation Techniques:**

Installation of Bonded Resistance Strain Gages  
(Strain Gage Application)

ASTM E1237<sup>1</sup>

Electropolishing for Subsurface Analysis

3P1003<sup>1,2</sup>

**Hardness Testing:**

Rockwell Hardness (HRB & HRC)

ASTM E18

Microhardness (Vickers & Knoop)

ASTM E384/E92

<sup>1</sup> This laboratory performs field testing activities for these tests.

<sup>2</sup> Lambda Research, Inc. in-house method.

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*The laboratory is only accredited for the test methods listed above. The accredited test methods are used in determining compliance with the material specification listed below. The inclusion of the material specification on this Scope does not confer laboratory accreditation to the material specification nor does it confer accreditation for the method(s) embedded within the specification.*

Standard Specification for Composition of Hydroxylapatite  
for Surgical Implants

ASTM F1185, paragraph 4.2





# Accredited Laboratory

A2LA has accredited

## LAMBDA RESEARCH INC.

*Cincinnati, OH*

for technical competence in the field of

### Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. 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*).



Presented this 24<sup>th</sup> day of October 2024.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 0138.01  
Valid to November 30, 2026

*For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*