



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Applied Technical Services, LLC

3205 Clairmont Ct., Ste. B
Fort Wayne, IN 46808

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.

Jason Stine, Vice President

Expiry Date: 09 January 2028

Certificate Number: L2167



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

Applied Technical Services, LLC

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Fort Wayne, IN 46808
Peter R. Sinn psinn@astlab.com
260 489 1444

TESTING

ISO/IEC 17025 Accreditation Granted: **05 January 2026**

Certificate Number: **L2167**

Certificate Expiry Date: **09 January 2028**

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Tension & Compression Monotonic Testing (-250 000 to 250 000) N (0 to 150) mm	Customer supplied specifications Customized Specifications of Test Methods Identified in Annex 1	Mechanical components: medical, automotive, aerospace, heavy vehicle, agricultural, defense, and consumer products and All Metal Alloys	Load Frames Controllers LVDTs Load Cells
Force Controlled Cyclic Testing (-250 000 to 250 000) N (0 to 150) mm (0 to 30) Hz	Customer supplied specifications Customized Specifications of Test Methods Identified in Annex 1	Mechanical components: medical, automotive, aerospace, heavy vehicle, agricultural, defense, and consumer products	Load Frames Controllers LVDTs Load Cells
Displacement Controlled Cyclic Testing (-250 000 to 250 000) N (0 to 150) mm (0 to 30) Hz	Customer supplied specifications Customized Specifications of Test Methods Identified in Annex 1	Mechanical components: medical, automotive, aerospace, heavy vehicle, agricultural, defense, and consumer products	Load Frames Controllers LVDTs Load Cells
Torsional Monotonic Testing (-225 to 225) Nm (0 to 15) Revolutions	Customer supplied specifications Customized Specifications of Test Methods Identified in Annex 1	Mechanical components: medical, automotive, aerospace, heavy vehicle, agricultural, defense, and consumer products	Load Frames Controllers LVDTs ADTs Load Cells

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Torque Controlled Cyclic Testing (-225 to 225) Nm (0 to 270) degrees (0 to 5) Hz	Customer supplied specifications Customized Specifications of Test Methods Identified in Annex 1	Mechanical components: medical, automotive, aerospace, heavy vehicle, agricultural, defense, and consumer products	Load Frames Controllers LVDTs ADTs Load Cells
Fracture Toughness Testing (-250 000 to 250 000) N (Up to 5) in	ASTM E399 ASTM B645 ASTM E1820	All Metal Alloys	Load Frames Controllers LVDTs COD Gage Load Cells
Axial Fatigue Testing (Strain and Stress) (-250 000 to 250 000) N	ASTM E466 ASTM E606	All Metal Alloys	Load Frames Controllers LVDTs Load Cells Extensometer

Applied Technical Services, LLC has demonstrated technical competency to perform ISO/IEC 17025:2017 accredited testing activities per the test technologies identified in the table above and the test methods identified below per the attached annex 1.

Annex 1 – ISO/IEC 17025 Accredited Test Methods

ASTM Test Methods:

- F382 Standard Specification and Test Method for Metallic Bone Plates
- F543 Standard Specification and Test Methods for Metallic Medical Bone Screws
- F564 Standard Specification and Test Methods for Metallic Bone Staples
- F1044 Standard Test Method for Shear Testing of Calcium Phosphate Coatings and Metallic Coatings
- F1147 Standard Test Method for Tension Testing of Calcium Phosphate and Metal Coatings
- F1160 Standard Test Method for Shear and Bending Fatigue Testing of Calcium Phosphate and Metallic Medical and Composite Calcium Phosphate/Metallic Coatings

F1440	Standard Practice for Cyclic Fatigue Testing of Metallic Stemmed Hip Arthroplasty Femoral Components without Torsion
F1223	Standard Test Method for Determination of Total Knee Replacement Constraint
F1264	Standard Specification and Test Methods for Intramedullary Fixation Devices
F1612	Standard Practice for Cyclic Fatigue Testing of Metallic Stemmed Hip Arthroplasty Femoral Components with Torsion
F1717	Standard Test Methods for Spinal Implant Constructs in a Vertebrectomy Model
F1798	Standard Guide for Evaluating the Static and Fatigue Properties of Interconnection Mechanisms and Subassemblies Used in Spinal Arthrodesis Implants
F1800	Standard Test Method for Cyclic Fatigue Testing of Metal Tibial Tray Components of Total Knee Joint Replacements
F1820	Standard Test Method for Determining the Axial Disassembly Force of a Modular Acetabular Device
F1829	Test Method for Static Evaluation of Anatomic Glenoid Locking Mechanism in Shear
F1875	Standard Practice for Fretting Corrosion Testing of Modular Implant Interfaces: Hip Femoral Head-Bore and Cone Taper Interface
F2009	Standard Test Method for Determining the Axial Disassembly Force of Taper Connections of Modular Prostheses
F2028	Standard Test Methods for Dynamic Evaluation of Glenoid Loosening or Disassociation
F2077	Test Methods for Intervertebral Body Fusion Devices
F2193	Standard Specifications and Test Methods for Components Used in the Surgical Fixation of the Spinal Skeletal System
F2267	Standard Test Method for Measuring Load Induced Subsidence of an Intervertebral Body Fusion Device under Static Axial Compression
F2345	Standard Test Methods for Determination of Static and Cyclic Fatigue Strength of Ceramic Modular Femoral Heads
F2502	Standard Specification and Test Methods for Bioabsorbable Plates and Screws for Internal Fixation Implants
F2580	Standard Practice for Evaluation of Modular Connection of Proximally Fixed Femoral Hip Prosthesis
F2706	Standard Test Methods for Occipital-Cervical and Occipital-Cervical-Thoracic Spinal Implant Constructs in a Vertebrectomy Model
F2777	Standard Test Method for Evaluating Knee Bearing (Tibial Insert) Endurance and Deformation Under High Flexion
F3090	Test Method for Fatigue Testing of Acetabular Devices for Total Hip Replacement

F3140	Test Method for Cyclic Fatigue Testing of Metal Tibial Tray Components of Unicondylar Knee Joint Replacements
F3210	Standard Test Method for Fatigue Testing of Total Knee Femoral Components Under Closing Conditions
F3437	Standard Test Methods for Metallic Bone Plates Used in Small Bone Fracture Fixation
F3574	Standard Test Methods for Sacroiliac Joint Fusion Devices
E8	Standard Test Methods for Tension Testing of Metallic Materials
E9	Standard Test Methods of Compression Testing of Metallic Materials at Room Temperature
E466	Standard Practice for Conducting Force Controlled Constant Amplitude Axial Fatigue Tests of Metallic Materials
E606	Standard Test Method for Strain-Controlled Fatigue Testing
E1820	Standard Test Method for Measurement of Fracture Toughness J_{Ic}
E399	Standard Test Method for Linear-Elastic Plane-Strain Fracture Toughness K_{Ic} of Metallic Materials
D638	Standard Test Method for Tensile Properties of Plastics
B645	Standard Test Method for Linear-Elastic Plane-Strain Fracture Toughness of Aluminum Alloys
D695	Standard Test Method for Compressive Properties of Rigid Plastics
F384	Standard Specifications and Test Methods for Metallic Angled Orthopedic Fracture Fixation Devices

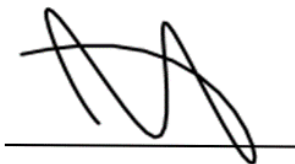
ISO Test Methods:

6892-1	Metallic Materials -- Tensile Testing -- Part 1: Method of Test at Room Temperature
7206-4	Implants for surgery -- Partial and total hip joint prostheses -- Part 4: Determination of endurance properties and performance of stemmed femoral components
7206-6	Implants for surgery -- Partial and total hip joint prostheses -- Part 6: Determination of endurance properties of head and neck region of stemmed femoral components
7206-10	Implants for surgery -- Partial and total hip-joint prostheses -- Part 10: Determination of resistance to static load of modular femoral heads
7206-12	Implants for surgery -- Partial and total hip prostheses -- Part 12: Deformation test method for acetabular shells
7206-13	Implants for surgery -- Partial and total hip prostheses -- Part 13: Determination of resistance torque of head fixation of stemmed femoral components

- 9585 Determination of bending strength and stiffness of bone plates
- 13314 Mechanical testing of metals — Ductility testing — Compression test for porous and cellular metals
- 14801 Dentistry -- Implants -- Dynamic fatigue test for endosseous dental implants

Note:

1. This laboratory offers commercial testing service.



Jason Stine, Vice President

