



CERTIFICATE OF ACCREDITATION

This is to attest that

APPLUS (JIANGSU) TESTING CO.,LTD.

BUILDING 22, NO.377 WUYI ROAD, WUJIN DISTRICT
CHANGZHOU, JIA 213161, CHINA

Testing Laboratory TL-895

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date January 18, 2024



A handwritten signature in black ink, reading 'Raj Nathan'.

President

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

APPLUS (JIANGSU) TESTING CO.,LTD.

Contact Name Paul Cai

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Accredited to ISO/IEC 17025:2017

Effective Date January 18, 2024

Physical	
ASTM B646	Standard Practice for Fracture Toughness Testing of Aluminum Alloys
ASTM C1239	Standard Practice for Reporting Uniaxial Strength Data and Estimating Weibull Distribution Parameters for Advanced Ceramics
ASTM C1292	Standard Test Method for Shear Strength of Continuous Fiber-Reinforced Advanced Ceramics at Ambient Temperatures
ASTM C1421	Standard Test Methods for Determination of Fracture Toughness of Advanced Ceramics at Ambient Temperature
ASTM C1499	Standard Test Method for Monotonic Equibiaxial Flexural Strength of Advanced Ceramics at Ambient Temperature
ASTM D256	Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics
ASTM D638	Standard Test Method for Tensile Properties of Plastics
ASTM D790	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM E9 (GB/T 7314)	Standard Test Methods of Compression Testing of Metallic Materials at Room Temperature
ASTM E399	Standard Test Method for Linear-Elastic Plane-Strain Fracture Toughness of Metallic Material
ASTM E466 ISO 527-2	Standard Practice for Conducting Force Controlled Constant Amplitude Axial Fatigue Tests of Metallic Materials
ASTM E468/E468M	Standard Practice for Presentation of Constant Amplitude Fatigue Test Results for Metallic Materials
ASTM E561	Standard Test Method for K-R Curve Determination
ASTM E606/E606M (GB/T 26077, GB/T 15248)	Standard Test Method for Strain-Controlled Fatigue Testing
ASTM E647 (GB/T 6398)	Standard Test Method for Measurement of Fatigue Crack Growth Rates

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ASTM E739	Standard Practice for Statistical Analysis of Linear or Linearized Stress-Life (S-N) and Strain-Life (ϵ -N) Fatigue Data
ASTM E740 (GB/T 7732)	Standard Practice for Fracture Testing with Surface-Crack Tension Specimens
ASTM E855 (YB/T 5349)	Standard Test Methods for Bend Testing of Metallic Flat Materials for Spring Applications Involving Static Loading
ASTM E1820 (GB/T 21143, GB/T 28896)	Standard Test Method for Measurement of Fracture Toughness
ASTM F382 (YY/T 1503, YY/T 0017, YY/T 0342)	Standard specification and test method for metallic bone plates
ASTM F384 (YY/T 0856)	Standard specifications and test methods for metallic angled orthopedic fracture fixation devices
ASTM F543 (YY/T 1504, YY/T 1505, YY/T 1506, YY/T 0018, YY/T0662)	Standard specification and test methods for metallic medical bone screws
ASTM F648	Standard Specification for Ultra-High-Molecular-Weight Polyethylene Powder and Fabricated Form for Surgical Implants
ASTM F732	Standard test method for wear testing of polymeric materials used in total joint prostheses
ASTM F897	Standard test method for measuring fretting corrosion of osteosynthesis plates and screws
ASTM F1044 (YY/T 0988.12)	Standard test method for shear testing of calcium phosphate coatings and metallic coatings
ASTM F1147 (YY/T 0988.11)	Standard test method for tension testing of calcium phosphate and metallic coatings
ASTM F1160 (YY/T 0988.13)	Standard test method for shear and bending fatigue testing of calcium phosphate and metallic medical and composite calcium phosphate metallic coatings
ASTM F1223	Standard test method for determination of total knee replacement constraint
ASTM F1264 (YY/T 0591)	Standard specification and test methods for intramedullary fixation devices
ASTM F1378	Standard Specification for Shoulder Prostheses
ASTM F1541	Standard specification and test methods for external skeletal fixation devices
ASTM F1672	Standard Specification for Resurfacing Patellar Prosthesis
ASTM F1717 (YY/T 0857)	Standard test methods for spinal implant constructs in a vertebrectomy model
ASTM F1798 (YY/T 0961)	Standard test methods for evaluating the static and fatigue properties of interconnection mechanisms and subassemblies used in spinal arthrodesis implants

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ASTM F1800 (YY/T 0810.1)	Standard practice for cyclic fatigue testing of metal tibial tray components of total knee joint replacements
ASTM F1814	Standard Guide for Evaluating Modular Hip and Knee Joint Components
ASTM F1820	Standard test method for determining the forces for disassembly of modular acetabular devices
ASTM F1854 (YY/T 0988.14, GB/T10610)	Standard test method for stereological evaluation of porous coatings on medical implants
ASTM F1875	Standard practice for fretting corrosion testing of modular implant interfaces: hip femoral head-bore and cone taper interface
ASTM F1978 (YY/T 0988.15)	Standard test method for measuring abrasion resistance of metallic thermal spray coatings by using the taber abraser
ASTM F2003	Standard practice for accelerated aging of ultra-high molecular weight polyethylene after gamma irradiation in air
ASTM F2009	Standard Test Method for Determining the Axial Disassembly Force of Taper Connections of Modular Prostheses
ASTM F2077 (YY/T 0959)	Test methods for intervertebral body fusion devices
ASTM F2083	Standard Practice for Evaluation of Modular Connection of Proximally Fixed Femoral Hip Prosthesis
ASTM F2180 (YY/T 0812)	Standard Specification For Metallic Implantable Strands And Cables
ASTM F2193 (YY/T 0119.1-5)	Standard specifications and test methods for components used in the surgical fixation of the spinal skeletal system
ASTM F2267 (YY/T 0960)	Standard test method for measuring load induced subsidence of intervertebral body fusion device under static axial compression
ASTM F2345 (YY/T 1855)	Standard Test Methods for Determination of Cyclic Fatigue Strength of Ceramic Modular Femoral Heads
ASTM F2346 (YY/T 1559)	Standard test methods for static and dynamic characterization of spinal artificial discs
ASTM F2423(YY/T 1563)	Standard guide for functional, kinematic, and wear assessment of total disc prostheses
ASTM F2514 (YY/T 0859)	Standard guide for finite element analysis (FEA) of metallic vascular stents subjected to uniform radial loading
ASTM F2580	Standard Practice for Evaluation of Modular Connection of Proximally Fixed Femoral Hip Prosthesis
ASTM F2582	Standard Test Method For Dynamic Impingement Between Femoral And Acetabular Hip Components

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ASTM F2606 (YY/T 0858)	Standard guide for three-point bending of balloon expandable vascular stents and stent systems
ASTM F2706 (YY/T 1560)	Standard test methods for occipital-cervical and occipital-cervical-thoracic spinal implant constructs in a vertebrectomy model
ASTM F2722	Standard practice for evaluating mobile bearing knee tibial baseplate rotational stops
ASTM F2723	Standard test method for evaluating mobile bearing knee tibial baseplate/bearing resistance to dynamic disassociation
ASTM F2724	Standard test method for evaluating mobile bearing knee dislocation
ASTM F2777	Standard Test Method for Evaluating Knee Bearing (Tibial Insert) Endurance and Deformation Under High Flexion
ASTM F2887	Standard Specification for Total Elbow Prostheses
ASTM F2996	Standard practice for finite element analysis (FEA) of non-modular metallic orthopedic hip femoral stems
ASTM F3090	Standard Test Method for Fatigue Testing of Acetabular Devices for Total Hip Replacement
ASTM F3161	Standard Test Method for Wind Resistance of Steep Slope Roofing Products (Fan-Induced Method)
ASTM F3210	Standard Test Method for Fatigue Testing of Total Knee Femoral Components Under Closing Conditions
ASTM G99	Standard test method for wear testing with a pin-on-disk apparatus
GB/T 6400	Metallic materials – Shear test method for wires and rivets
GB/T 33613	Test method for tensile properties of 3D braided fabric and its polymer matrix composites
GB/T 33614	Test method for compression properties of 3D braided fabric and its polymer matrix composites
GB/T 33616	Textiles – Evaluation for biodegradability of nonwovens – Method by analysis of evolved carbon dioxide
ISO 148-1 (GB/T 229)	Metallic materials – Charpy pendulum impact test – Part 1: Test method
ISO 527-2 (GB/T 1040.2)	Plastics – Determination of tensile properties – Part 2: Test conditions for moulding and extrusion plastics
ISO 527-3 (GB/T 1040.3)	Plastics – Determination of tensile properties – Part 3: Test conditions for films and sheets
ISO 527-4 (GB/T 1447)	Plastics – Determination Of Tensile Properties – Part 4: Test Conditions For Isotropic And Orthotropic Fibre-Reinforced Plastic Composites

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ISO 527-5	Test conditions for unidirectional fibre-reinforced plastic composites
ISO 1099 (GB/T 3075)	Metallic Materials – Fatigue Testing – Axial Force-Controlled Method
ISO 1143 (GB/T 4337)	Metallic Materials – Rotating Bar Bending Fatigue Testing
ISO 1352 (GB/T 12443)	Metallic Materials – Torque-Controlled Fatigue Testing
ISO 1797	Dentistry – Shanks for rotary and oscillating instruments
ISO 3630-1	Dentistry Root-canal instruments – Part 1: General requirements and test methods
ISO 3630-5	Dentistry – Endodontic instruments – Part 5: Shaping and cleaning instruments
ISO 3800 (GB/T 13682)	Threaded Fasteners – Axial Load Fatigue Testing – Test Methods And Evaluation Of Results
ISO 3823-1	Dental rotary instruments - Burs - Part 1: Steel and carbide burs
ISO 3823-2	Dentistry - Rotary bur instruments - Part 2: Finishing burs
ISO 3964	Dental handpieces; Coupling dimensions
ISO 5834-3 (YY/T 0772.3)	Implants for surgery – Ultra-high-molecular-weight polyethylene – Part 2: Moulded forms
ISO 5838-2 (YY/T 0345.2)	Implants For Surgery – Skeletal Pins And Wires – Part 2: Steinmann Skeletal Pins – Dimensions
ISO 5838-3 (YY/T 0345.3)	Implants For Surgery – Skeletal Pins And Wires – Part 3: Kirschner Skeletal Wires
ISO 6474-1	Implants for surgery, Ceramic materials, Part 1: Ceramic materials based on high purity alumina
ISO 6474-2 (YY/T 1294)	Implants for surgery, Ceramic materials, Part 2: Composite materials based on a high-purity alumina matrix with zirconia reinforcement
ISO 6475 (YY/T 0662)	Implants for surgery – Metal bone screws with asymmetrical thread and spherical under-surface – Mechanical requirements and test methods
ISO 6507-1 (ISO/CD 6507-1, GB/T 4340.1)	Metallic materials v Vickers hardness test – Part 1: Test method
ISO 6508-1 (GB/T 230.1)	Metallic materials – Rockwell hardness test – Part 1: Test method
ISO 6877 (YY/T 0495)	Dentistry-Endodontic obturating materials
ISO 7206-4 (YY/T 0809.4)	Implants for surgery – partial and total hip joint prostheses – part 4: determination of endurance properties and performance of stemmed femoral components

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ISO 7206-6 (YY/T 0809.6)	Implants for surgery – partial and total hip joint prostheses – part 6: endurance properties testing and performance requirements of neck region of stemmed femoral components
ISO 7206-10 (YY/T 0809.10)	Implants for surgery – partial and total hip-joint prostheses – part 10: determination of resistance to static load of modular femoral heads
ISO 7206-12 (YY/T 0809.12)	Implants for surgery – partial and total hip joint prostheses – part 12: deformation test method for acetabular shells
ISO 7206-13 (YY/T 0809.13)	Implants for surgery – Partial and total hip joint prostheses – Part 13: Determination of resistance to torque of head fixation of stemmed femoral components
ISO 10139-1 (YY 0714.1)	Dentistry – Resilient Lining Materials For Removable Dentures – Part 1: Short-Term Materials – Corrigendum
ISO 10477	Dentistry - Polymer-based crown and veneering materials
ISO 10873 (YY/T 1280)	Dentistry – Denture Adhesives
ISO 11491	Implants For Surgery – Determination Of Impact Resistance Of Ceramic Femoral Heads For Hip Joint Prostheses
ISO 12107 (GB/T 24176)	Metallic Materials – Fatigue Testing – Statistical Planning And Analysis Of Data
ISO 12189	Implants for surgery – mechanical testing of implantable spinal devices – fatigue test method for spinal implant assemblies using an anterior support
ISO 13781 (YY/T 1746)	Implants for surgery – Homopolymers, copolymers and blends on poly(lactide) – In vitro degradation testing
ISO 14233	Dentistry - Polymer-based die materials
ISO 14242-1 (YY/T 0651.1)	Implants for surgery – wear of total hip-joint prostheses – part 1: loading and displacement parameters for wear-testing machines and corresponding environmental conditions for test
ISO 14242-2 (ASTM F1714, YY/T 0651.2)	Implants for surgery – wear of total hip-joint prostheses – part 2: methods of measurement
ISO 14242-3 (YY/T 0651.3)	Implants for surgery – wear of total hip-joint prostheses – part 3: loading and displacement parameters for orbital bearing type wear testing machines and corresponding environmental conditions for test
ISO 14242-4	Implants for surgery – Wear of total hip-joint prostheses – Part 4: Testing hip prostheses under variations in component positioning which results in direct edge loading
ISO 14243-1 (YY/T 1426.1)	Implants for surgery – wear of total knee-joint prostheses – part 1: loading and displacement parameters for wear-testing machines with load control and corresponding environmental conditions for test
ISO 14243-2, (ASTM F1814, YY/T 1426.2)	Implants for surgery – wear of total knee-joint prostheses – part 2: methods of measurement

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ISO 14243-3 (YY/T 1426.3)	Implants for surgery – wear of total knee-joint prostheses – part 3: loading and displacement parameters for wear-testing machines with displacement control and corresponding environmental conditions for test
ISO 14243-5	Implants for surgery – Wear of total knee prostheses – Part 5: Durability performance of the patellofemoral joint
ISO 14704	Fine ceramics (advanced ceramics, advanced technical ceramics) Test method for flexural strength of monolithic ceramics at room temperature
ISO 14801 (YY/T 0521)	Dentistry – implants – dynamic fatigue test for endosseous dental implants
ISO 14879-1 (YY/T 0810.1)	Implants for surgery – total knee-joint prostheses part 1: determination of endurance properties of knee tibial trays
ISO 15087-1	Dental elevators - Part 1: General requirements
ISO 15098	Dentistry - Dental tweezers
ISO 15732	Fine ceramics (advanced ceramics, advanced technical ceramics) Test method for fracture toughness of monolithic ceramics at room temperature by single edge precracked beam (SEPB) method
ISO 15841 (YY/T 0625)	Dentistry – Wires For Use In Orthodontics
ISO 16061 (YY/T 0726)	Instrumentation For Use In Association With Non-Active Surgical Implants – General Requirements
ISO 16402 (YY/T 1429)	Implants For Surgery – Acrylic Resin Cement – Flexural Fatigue Testing Of Acrylic Resin Cements Used In Orthopaedics
ISO 18756	Fine ceramics (advanced ceramics, advanced technical ceramics) Determination of fracture toughness of monolithic ceramics at room temperature by the surface crack in flexure (SCF) method
ISO 20501	Fine ceramics (advanced ceramics, advanced technical ceramics) Weibull statistics for strength data
ISO 20795-1 (YY 0270.1)	Dentistry – Base polymers – Part 1: Denture base polymers
ISO 20795-2	Dentistry – Base polymers – Part 2: Orthodontic base polymers
ISO 21534 (YY 0315, YY 0304, YY/T 0520)	Non-Active Surgical Implants – Joint Replacement Implants – Particular Requirements
ISO 21535 (YY/T 0920)	Non-Active Surgical Implants – Joint Replacement Implants – Specific Requirements For Hip-Joint Replacement Implants
ISO 21920-1	Geometrical product specifications (GPS) — Surface texture: Profile — Part 1: Indication of surface texture
ISO 21920-2	Geometrical product specifications (GPS) — Surface texture: Profile — Part 2: Terms, definitions and surface texture parameters

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ISO 21920-3	Geometrical product specifications (GPS) — Surface texture: Profile — Part 3: Specification operators
ISO 22112	Dentistry – Artificial teeth for dental prostheses
ISO 22214	Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for cyclic bending fatigue of monolithic ceramics at room temperature
ISO 22309 (GB/T 17359)	Microbeam Analysis - Quantitative Analysis Using Energy-Dispersive Spectrometry (EDS) For Elements With An Atomic Number Of 11 (Na) Or Above
ISO 22622	Implants for surgery – Wear of total ankle-joint prostheses – Loading and displacement parameters for wear-testing machines with load or displacement control and corresponding environmental conditions for test
ISO 22674	Dentistry – Metallic materials for fixed and removable restorations and appliances
ISO 22794	Dentistry - Implantable materials for bone filling and augmentation in oral and maxillofacial surgery - Contents of a technical file
ISO 22889 (GB/T 24522)	Metallic Materials – Method Of Test For The Determination Of Resistance To Stable Crack Extension Using Specimens Of Low Constraint
ISO 23146	Fine ceramics (advanced ceramics, advanced technical ceramics), Test methods for fracture toughness of monolithic ceramics, Single-edge V-notch beam (SEVNB) method
ISO 25539-1 (YY/T 0663.1)	Cardiovascular implants – Endovascular devices – Part 1: Endovascular prostheses
ISO 25539-2 (YY/T 0663.2)	Cardiovascular implants – Endovascular devices – Part 2: Vascular stents
ISO 26443	Fine ceramics (advanced ceramics, advanced technical ceramics) — Rockwell indentation test for evaluation of adhesion of ceramic coatings
ISO/TS 11405 (YY/T 0519)	Dentistry – Testing Of Adhesion To Tooth Structure
ISO/TS 13498	Dentistry – Torsion test of implant body/connecting part joints of endosseous dental implant systems
ISO/TS 14569-2	Dental materials - Guidance on testing of wear - Part 2: Wear by two- and/or three body contact
JY/T 0584	General rules of analytical methods for scanning electron microscope
YY 0167	Non-absorbable surgical suture
YY/T 0113	Dentistry – Test method for the wear resistant of dental composite resin
YY/T 0508	Special requirements for external fixing brackets

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YY/T 0517	Dental prefabricated root post
YY/T 0681.1	Test methods for sterile medical device package – Part 1: Test guide for accelerated aging
YY/T 1705	Implants for surgery—Determination of impact resistance of ceramic femoral heads for hip joint prostheses
YY/T 1720	Standard Test Method For Determining The Forces For Disassembly Of Modular Acetabular Devices
YY/T 1765	Standard Test Method For Determination Of Total Knee Replacement Constraint
YY/T 1782	Test method for mechanical properties of orthopedic external fixators