

ASTM Volume 13.01, May 2026

Table of Contents

F1223-20 Standard Test Method for Determination of Total Knee Replacement Constraint

F1408-20a Standard Practice for Subcutaneous Screening Test for Implant Materials

F750-20 Standard Practice for Evaluating Acute Systemic Toxicity of Material Extracts by Systemic Injection in the Mouse

F2346-18 Standard Test Methods for Static and Dynamic Characterization of Spinal Artificial Discs

F2381-19 Standard Test Method for Evaluating Trans-Vinylene Yield in Irradiated Ultra-High Molecular Weight Polyethylene Fabricated Forms Intended for Surgical Implants by Infrared Spectroscopy

F2150-19 Standard Guide for Characterization and Testing of Biomaterial Scaffolds Used in Regenerative Medicine and Tissue-Engineered Medical Products

F2315-18 Standard Guide for Immobilization or Encapsulation of Living Cells or Tissue in Alginate Gels

F2229-21 Standard Specification for Wrought, Nitrogen Strengthened 23Manganese-21Chromium-1Molybdenum Low-Nickel Stainless Steel Alloy Bar and Wire for Surgical Implants (UNS S29108)

F2345-21 Standard Test Methods for Determination of Cyclic Fatigue Strength of Ceramic Modular Femoral Heads

F565-21 Standard Practice for Care and Handling of Orthopedic Implants and Instruments

F648-21 Standard Specification for Ultra-High-Molecular-Weight Polyethylene Powder and Fabricated Form for Surgical Implants

F86-21 Standard Practice for Surface Preparation and Marking of Metallic Surgical Implants

F1717-21 Standard Test Methods for Spinal Implant Constructs in a Vertebrectomy Model

F451-21 Standard Specification for Acrylic Bone Cement

F746-04(2021) Standard Test Method for Pitting or Crevice Corrosion of Metallic Surgical Implant Materials

F621-12(2021)e1 Standard Specification for Stainless Steel Forgings for Surgical Implants

F136-13(2021)e1 Standard Specification for Wrought Titanium-6Aluminum-4Vanadium ELI (Extra Low Interstitial) Alloy for Surgical Implant Applications (UNS R56401)

F2211-13(2021) Standard Classification for Tissue-Engineered Medical Products (TEMPs)

F1813-21 Standard Specification for Wrought Titanium-12Molybdenum-6Zirconium-2Iron Alloy for Surgical Implant (UNS R58120)

F1586-21 Standard Specification for Wrought Nitrogen Strengthened 21Chromium—10Nickel—3Manganese—2.5Molybdenum Stainless Steel Alloy Bar for Surgical Implants (UNS S31675)

F1108-21 Standard Specification for Titanium-6Aluminum-4Vanadium Alloy Castings for Surgical Implants (UNS R56406)

F1781-21 Standard Specification for Elastomeric Flexible Hinge Finger Total Joint Implants

F2063-18 Standard Specification for Wrought Nickel-Titanium Shape Memory Alloys for Medical Devices and Surgical Implants

F1580-18 Standard Specification for Titanium and Titanium-6 Aluminum-4 Vanadium Alloy Powders for Coatings of Surgical Implants

F997-18 Standard Specification for Polycarbonate Resin for Medical Applications

F2038-18 Standard Guide for Silicone Elastomers, Gels, and Foams Used in Medical Applications Part I—Formulations and Uncured Materials

F561-19 Standard Practice for Retrieval and Analysis of Medical Devices, and Associated Tissues and Fluids

F2450-18 Standard Guide for Assessing Microstructure of Polymeric Scaffolds for Use in Tissue-Engineered Medical Products

F702-18 Standard Specification for Polysulfone Resin for Medical Applications

F2042-18 Standard Guide for Silicone Elastomers, Gels, and Foams Used in Medical Applications Part II—Crosslinking and Fabrication

F1378-18e1 Standard Specification for Shoulder Prostheses

F1855-00(2019) Standard Specification for Polyoxymethylene (Acetal) for Medical Applications

F897-19 Standard Test Method for Measuring Fretting Corrosion of Osteosynthesis Plates and Screws

F1800-19e1 Standard Practice for Cyclic Fatigue Testing of Metal Tibial Tray Components of Total Knee Joint Replacements

F755-19 Standard Specification for Selection of Porous Polyethylene for Use in Surgical Implants

F138-19 Standard Specification for Wrought 18Chromium-14Nickel-2.5Molybdenum Stainless Steel Bar and Wire for Surgical Implants (UNS S31673)

F139-19 Standard Specification for Wrought 18Chromium-14Nickel-2.5Molybdenum Stainless Steel Sheet and Strip for Surgical Implants (UNS S31673)

F2182-19e2 Standard Test Method for Measurement of Radio Frequency Induced Heating On or Near Passive Implants During Magnetic Resonance Imaging

F2193-20 Standard Specifications and Test Methods for Components Used in the Surgical Fixation of the Spinal Skeletal System

F620-20 Standard Specification for Titanium Alloy Forgings for Surgical Implants in the Alpha Plus Beta Condition

F1537-20 Standard Specification for Wrought Cobalt-28Chromium-6Molybdenum Alloys for Surgical Implants (UNS R31537, UNS R31538, and UNS R31539)

F2118-14(2020) Standard Test Method for Constant Amplitude of Force Controlled Fatigue Testing of Acrylic Bone Cement Materials

F2224-09(2020) Standard Specification for High Purity Calcium Sulfate Hemihydrate or Dihydrate for Surgical Implants

F2423-11(2020) Standard Guide for Functional, Kinematic, and Wear Assessment of Total Disc Prostheses

F2181-20 Standard Specification for Wrought Seamless Stainless Steel Tubing for Surgical Implants

F813-20 Standard Practice for Direct Contact Cell Culture Evaluation of Materials for Medical Devices

F1801-20 Standard Practice for Corrosion Fatigue Testing of Metallic Implant Materials

F2024-10(2021) Standard Practice for X-ray Diffraction Determination of Phase Content of Plasma-Sprayed Hydroxyapatite Coatings

F116-12(2021) Standard Specification for Medical Screwdriver Bits

F1839-08(2021) Standard Specification for Rigid Polyurethane Foam for Use as a Standard Material for Testing Orthopaedic Devices and Instruments

F2131-21 Standard Test Method for In Vitro Biological Activity of Recombinant Human Bone Morphogenetic Protein-2 (rhBMP-2) Using the W-20 Mouse Stromal Cell Line

F1713-08(2021)e1 Standard Specification for Wrought Titanium-13Niobium-13Zirconium Alloy for Surgical Implant Applications (UNS R58130)

F1377-21 Standard Specification for Cobalt-28Chromium-6Molybdenum Powder for Medical Devices (UNS R30075, UNS R31537, and UNS R31538)

F2052-21 Standard Test Method for Measurement of Magnetically Induced Displacement Force on Medical Devices in the Magnetic Resonance Environment

F562-22 Standard Specification for Wrought 35Cobalt-35Nickel-20Chromium-10Molybdenum Alloy for Surgical Implant Applications (UNS R30035)

F2146-22 Standard Specification for Wrought Titanium-3Aluminum-2.5Vanadium Alloy Seamless Tubing for Surgical Implant Applications (UNS R56320)

F560-22 Standard Specification for Unalloyed Tantalum for Surgical Implant Applications (UNS R05200, UNS R05400)

F1820-22 Standard Test Method for Determining the Forces for Disassembly of Modular Acetabular Devices

F700-93(2022) Standard Practice for Care and Handling of Intracranial Aneurysm Clips and Instruments

F1814-22 Standard Guide for Evaluating Modular Hip and Knee Joint Components

F763-22 Standard Practice for Short-Term Intramuscular Screening of Implantable Medical Device Materials

F1978-22 Standard Test Method for Measuring Abrasion Resistance of Metallic Thermal Spray Coatings by Using the Taber Abraser

F2257-22 Standard Specification for Wrought Seamless or Welded and Drawn 18Chromium-14Nickel-2.5Molybdenum Stainless Steel Small Diameter Tubing for Surgical Implants (UNS S31673)

F703-18(2022) Standard Specification for Implantable Breast Prostheses

F881-94(2022) Standard Specification for Silicone Elastomer Facial Implants

F1441-03(2022) Standard Specification for Soft-Tissue Expander Devices

F1875-98(2022) Standard Practice for Fretting Corrosion Testing of Modular Implant Interfaces: Hip Femoral Head-Bore and Cone Taper Interface

F2079-09(2022) Standard Test Method for Measuring Intrinsic Elastic Recoil of Balloon-Expandable Stents

F2081-06(2022) Standard Guide for Characterization and Presentation of the Dimensional Attributes of Vascular Stents

F2394-07(2022) Standard Guide for Measuring Securement of Balloon-Expandable Vascular Stent Mounted on Delivery System

F647-22 Standard Practice for Evaluating and Specifying Implantable Shunt Assemblies for Neurosurgical Application

F452-76(2022) Standard Specification for Preformed Cranioplasty Plates

F2003-02(2022) Standard Practice for Accelerated Aging of Ultra-High Molecular Weight Polyethylene After Gamma Irradiation in Air

F641-09(2023) Standard Specification for Implantable Epoxy Electronic Encapsulants

F1472-23 Standard Specification for Wrought Titanium-6Aluminum-4Vanadium Alloy for Surgical Implant Applications (UNS R56400)

F1357-23 Standard Specification for Articulating Total Wrist Implants

F640-23 Standard Test Methods for Determining Radiopacity for Medical Use

F1829-23 Standard Test Method for Static Evaluation of Anatomic Glenoid Locking Mechanism in Shear

F2066-23 Standard Specification for Wrought Titanium-15 Molybdenum Alloy for Surgical Implant Applications (UNS R58150)

F1983-23 Standard Practice for Assessment of Selected Tissue Effects of Absorbable Biomaterials for Implant Applications

F1904-23 Standard Guide for Testing the Biological Responses to Medical Device Particulate Debris and Degradation Products in vivo

F1088-23 Standard Specification for Medical-Grade Beta-Tricalcium Phosphate Raw Material for Implantable Medical Devices

F1185-23 Standard Specification for Composition of Medical-Grade Hydroxylapatite for Surgical Implants

F75-23 Standard Specification for Cobalt-28 Chromium-6 Molybdenum Alloy Castings and Casting Alloy for Surgical Implants (UNS R30075)

F543-23 Standard Specification and Test Methods for Metallic Medical Bone Screws

F1609-23 Standard Specification for Calcium Phosphate Coatings for Implantable Materials

F2026-23 Standard Specification for Polyetheretherketone (PEEK) Polymers for Surgical Implant Applications

F601-23 Standard Practice for Fluorescent Penetrant Inspection of Metallic Surgical Implants

F981-23 Standard Practice for Assessment of Muscle and Bone Tissue Responses to Long-Term Implantable Materials Used in Medical Devices

F2214-23 Standard Test Method for In Situ Determination of Network Parameters of Crosslinked Ultra High Molecular Weight Polyethylene (UHMWPE)

F2082/F2082M-23 Standard Test Method for Determination of Transformation Temperature of Nickel-Titanium Shape Memory Alloys by Bend and Free Recovery

F2503-23e1 Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment

F899-23 Standard Specification for Wrought Stainless Steels for Surgical Instruments

F366-24 Standard Specification for Fixation Pins and Wires

F1538-24 Standard Specification for Glass and Glass-Ceramic Biomaterials for Implantation

F1295-24 Standard Specification for Wrought Titanium-6Aluminum-7Niobium Alloy for Surgical Implant Applications (UNS R56700)

F1350-24 Standard Specification for Wrought 18Chromium-14Nickel-2.5Molybdenum Stainless Steel Surgical Fixation Wire (UNS S31673)

F2267-24 Standard Test Method for Measuring Load-Induced Subsidence of Intervertebral Body Fusion Device Under Static Axial Compression

F639-09(2024) Standard Specification for Polyethylene Plastics for Medical Applications

F2384-24 Standard Specification for Wrought Zirconium-2.5Niobium Alloy for Surgical Implant Applications (UNS R60901)

F1147-24 Standard Test Method for Tension Testing of Calcium Phosphate and Metallic Coatings

F1314-24 Standard Specification for Wrought Nitrogen Strengthened 22Chromium-13Nickel-5Manganese-2.5Molybdenum Stainless Steel Alloy Bar and Wire for Surgical Implants (UNS S20910)

F2119-24 Standard Test Method for Evaluation of MR Image Artifacts from Passive Implants

F2004-24 Standard Test Method for Transformation Temperature of Nickel-Titanium Alloys by Thermal Analysis

F2477-24 Standard Test Methods for in vitro Pulsatile Durability Testing of Vascular Stents and Endovascular Prostheses

F2382-24 Standard Test Method for Assessment of Circulating Blood-Contacting Medical Device Materials on Partial Thromboplastin Time (PTT)

F382-24 Standard Specification and Test Method for Metallic Bone Plates

F384-24 Standard Specifications and Test Methods for Metallic Angled Orthopedic Fracture Fixation Devices

F1264-24 Standard Specification and Test Methods for Intramedullary Fixation Devices

F1541-24 Standard Specification and Test Methods for External Skeletal Fixation Devices

F2180-24 Standard Specification for Metallic Implantable Strands and Cables

F2502-24 Standard Specification and Test Methods for Absorbable Plates and Screws for Internal Fixation Implants

F665-09(2024) Standard Classification for Vinyl Chloride Plastics Used in Biomedical Application

F2458-05(2024) Standard Test Method for Wound Closure Strength of Tissue Adhesives and Sealants

F2347-24 Standard Guide for Characterization and Testing of Hyaluronan as Starting Materials Intended for Use in Biomedical and Tissue Engineered Medical Product Applications

F629-24 Standard Practice for Radiography of Cast Metallic Surgical Implants

F1611-20(2024) Standard Specification for Intramedullary Reamers

F2385-15(2024) Standard Practice for Determining Femoral Head Penetration into Acetabular Components of Total Hip Replacement Using Clinical Radiographs

F754-24 Standard Specification for Implantable Polytetrafluoroethylene (PTFE) Sheet, Tube, and Rod Shapes Fabricated from Granular Molding Powders

F2255-24 Standard Test Method for Strength Properties of Tissue Adhesives in Lap-Shear by Tension Loading

F2256-24 Standard Test Method for Strength Properties of Tissue Adhesives in T-Peel by Tension Loading

F2392-24 Standard Test Method for Burst Strength of Surgical Sealants

F2258-24 Standard Test Method for Strength Properties of Tissue Adhesives in Tension

F2312-24 Standard Terminology Relating to Tissue Engineered Medical Products

F1877-24 Standard Practice for Characterization of Particles

F90-24 Standard Specification for Wrought Cobalt-20Chromium-15Tungsten-10Nickel Alloy for Surgical Implant Applications (UNS R30605)

F564-24 Standard Specification and Test Methods for Metallic Bone Staples

F983-24 Standard Practice for Permanent Marking of Orthopaedic Implant Components

F1635-24 Standard Test Method for in vitro Degradation Testing of Hydrolytically Degradable Polymer Resins and Fabricated Forms for Surgical Implants

F1830-19(2024) Standard Practice for Collection and Preparation of Blood for Dynamic in vitro Evaluation of Hemolysis in Blood Pumps

F1925-24 Standard Specification for Semi-Crystalline Poly(lactide) Polymer and Copolymer Resins for Surgical Implants

F2313-24 Standard Specification for Poly(glycolide) and Poly(glycolide-co-lactide) Resins for Surgical Implants with Mole Fractions Greater Than or Equal to 70 % Glycolide

F2459-24 Standard Test Method for Extracting Residue from Medical Components and Quantifying via Gravimetric Analysis

E1262-24 Standard Guide for Performance of Chinese Hamster Ovary Cell/Hypoxanthine Guanine Phosphoribosyl Transferase Gene Mutation Assay

F1439-24 Standard Guide for Performance of Lifetime Bioassay for the Tumorigenic Potential of Implant Materials

F2149-24 Standard Test Method for Automated Analyses of Cells—the Electrical Sensing Zone Method of Enumerating and Sizing Single Cell Suspensions

F67-24 Standard Specification for Unalloyed Titanium, for Surgical Implant Applications (UNS R50250, UNS R50400, UNS R50550, UNS R50700)

F1798-24 Standard Test Method for Evaluating the Static and Fatigue Properties of Interconnection Mechanisms and Subassemblies Used in Spinal Arthrodesis Implants

F1831-24 Standard Specification for Cranial Traction Tongs and Halo External Spinal Immobilization Devices

F1089-24 Standard Test Method for Corrosion of Surgical Instruments

F720-24 Standard Test Method for Testing Guinea Pigs for Contact Allergens: Guinea Pig Maximization Test

F2147-01(2025) Standard Practice for Guinea Pig: Split Adjuvant and Closed Patch Testing for Contact Allergens

F895-25 Standard Test Method for Agar Diffusion Cell Culture Screening for Cytotoxicity

F2027-25 Standard Guide for Characterization and Testing of Raw or Starting Materials for Tissue-Engineered Medical Products

F688-25 Standard Specification for Wrought Cobalt-35Nickel-20Chromium-10Molybdenum Alloy Plate, Sheet, and Foil for Surgical Implants (UNS R30035)

F2077-24 Standard Test Methods for Intervertebral Body Fusion Devices

F1581-08(2025) Standard Specification for Composition of Anorganic Bone for Surgical Implants

F748-25 Standard Practice for Selecting Biological Test Methods for Materials and Devices

F1058-25 Standard Specification for Wrought 40Cobalt-20Chromium-16Iron-15Nickel-7Molybdenum Alloy Wire, Strip, and Bar for Surgical Implant Applications (UNS R30003 and UNS R30008)

F1841-25 Standard Practice for Assessment of Hemolysis in Blood Pumps

F1984-25 Standard Practice for Testing for Whole Complement Activation in Serum by Solid Materials

F603-12(2025) Standard Specification for High-Purity Dense Aluminum Oxide for Medical Application

F2393-12(2025) Standard Specification for High-Purity Dense Magnesia Partially Stabilized Zirconia (Mg-PSZ) for Surgical Implant Applications

F2005-21(2025) Standard Terminology for Nickel-Titanium Shape Memory Alloys

F2259-25 Standard Test Method for Determining the Chemical Composition and Sequence in Alginate by Proton Nuclear Magnetic Resonance (^1H NMR) Spectroscopy

F624-25 Standard Guide for Evaluation of Thermoplastic Polyurethane Solids and Solutions for Medical Applications

F961-25 Standard Specification for 35Cobalt-35Nickel-20Chromium-10Molybdenum Alloy Forgings for Surgical Implants (UNS R30035)

F1091-25 Standard Specification for Wrought Cobalt-20Chromium-15Tungsten-10Nickel Alloy Surgical Fixation Wire (UNS R30605)

F2212-25 Standard Guide for Characterization of Type I Collagen as Starting Material for Surgical Implants and Substrates for Tissue Engineered Medical Products (TEMPs)

F2129-25 Standard Test Method for Conducting Cyclic Potentiodynamic Polarization Measurements to Determine the Corrosion Susceptibility of Small Implant Devices

F2033-25 Standard Specification for Hip Joint Replacement Bearing Surfaces

F1078-25 Standard Terminology for Surgical Scissors—Inserted and Non-Inserted Blades

F719-20(2025) Standard Practice for Testing Materials in Rabbits for Primary Skin Irritation

F619-20(2025) Standard Practice for Extraction of Materials Used in Medical Devices

F732-17(2025) Standard Test Method for Wear Testing of Polymeric Materials Used in Total Joint Prostheses

F756-17(2025) Standard Practice for Assessment of Hemolytic Properties of Materials

F1714-96(2025) Standard Guide for Gravimetric Wear Assessment of Prosthetic Hip Designs in Simulator Devices

F2025-06(2025) Standard Practice for Gravimetric Measurement of Polymeric Components for Wear Assessment

F2028-25a Standard Test Methods for Dynamic Evaluation of Glenoid Loosening

F1854-25 Standard Test Method for Stereological Evaluation of Porous Coatings on Medical Implants Using Digital Images

F1926/F1926M-25 Standard Test Method for Dissolution Testing of Calcium Phosphate Granules, Fabricated Forms, and Coatings

F2009-25 Standard Test Method for Determining the Axial Disassembly Force of Taper Connections of Modular Prostheses

F2064-25 Standard Guide for Characterization and Testing of Alginates as Starting Materials Intended for Use in Biomedical and Tissue-Engineered Medical Product Applications

F2260-18(2025) Standard Test Method for Determining Degree of Deacetylation in Chitosan Salts by Proton Nuclear Magnetic Resonance (^1H NMR) Spectroscopy

F2103-18(2025) Standard Guide for Characterization and Testing of Chitosan Salts as Starting Materials Intended for Use in Biomedical and Tissue-Engineered Medical Product Applications

F2148-25 Standard Practice for Evaluation of Delayed Contact Hypersensitivity Using the Murine Local Lymph Node Assay (LLNA)

F1160-25 Standard Test Method for Shear and Bending Fatigue Testing of Calcium Phosphate and Metallic Medical and Composite Calcium Phosphate/Metallic Coatings

F1044-25 Standard Test Method for Shear Testing of Calcium Phosphate Coatings and Metallic Coatings

F799-25 Standard Specification for Cobalt-28 Chromium-6 Molybdenum Alloy Forgings for Surgical Implants (UNS R31537, R31538, R31539)

F2213-25 Standard Test Method for Measurement of Magnetically Induced Torque on Medical Devices in the Magnetic Resonance Environment

F2051-25 Standard Specification for Implantable Saline-Filled Breast Prostheses

F749-25 Standard Practice for Evaluating Material Extracts by Intracutaneous Injection in the Rabbit

F1903-25 Standard Practice for Testing for Cellular Responses to Particles in vitro

F2102-17(2026) Standard Guide for Evaluating the Extent of Oxidation in Polyethylene Fabricated Forms Intended for Surgical Implants