

IMR TEST LABS - call 888.464.8422

MEDICAL DEVICE TESTING & EVALUATION



ANALYTICAL SERVICES

Metallography - Our team employs many advanced mounting, polishing and examination techniques to thoroughly evaluate the most advanced coatings and microstructures.

Tensile and Coating Adhesion Testing - IMR provides testing of samples, both as coupons or on part geometries.

Fatigue Testing - We provide evaluation of materials, devices and coatings through tension and shear fatigue testing of samples from test bars to actual coated parts.

Rotating Beam Fatigue Testing - A valuable tool for evaluating coatings and materials under reverse bending conditions.

Corrosion - Evaluation of corrosion susceptibility of materials and devices.

Cleanliness and Biocompatibility - IMR offers a wide range of cleanliness and cytotoxicity tests of materials and composites.

Failure Analysis - Our experienced team of metallurgists and material scientists possesses the specialized knowledge to determine why devices fail.

Quality is a priority at IMR Test Labs and we've instituted strict quality control systems to ensure testing is completed with the utmost integrity. See our website for a full list of accreditations.



NOT JUST DATA, KNOWLEDGE

Our reports and analyses are clear, concise and complete. We are prepared to discuss the results at any time. If you require expedited testing, we're willing and able to deliver high-quality test reports on a timeline.

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IMR TEST LABS

www.imrtest.com

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MEDICAL DEVICE TESTING & ANALYSIS

Metallurgical Evaluations

- Alpha Case
- Beta Transus
- Carbide Rating
- Case Depth
- Coatings Metallography
- EDS Analysis
- Failure analysis
- Grain Size
- Inclusion Rating
- Intergranular attack/oxidation (IGA/IGO)
- Machined surface evaluation
- Microhardness (Vickers, Knoop)
- Microstructure Evaluation
- Plating Thickness
- Root cause analysis
- SEM Analysis
- Stress Corrosion Cracking Susceptibility (SCC)
- Thermal Spray Analysis
- Weld evaluation

Materials Tested

- Beta-Tricalcium Phosphate
- Cobalt Alloys
- Hydroxyapatite
- Plating/Anodizing
- Polymers
- Porous Materials
- Stainless Steel
- Thermal Spray Coatings
- Titanium

XRD Analysis

- Beta-Tricalcium Phosphate
- Hydroxyapatite

Chemical Analysis

- Alloy Chemistry/Verification
- Chemical Resistance
- Contaminant Analysis
- Hazardous Substances
- Heavy Metal Impurities
- ICP-AES Analysis
- ICP-MS Analysis for Trace Elements
- Ionic Contamination
- Particle Size Analysis
- Phthalates
- Polymer Additives via GC/MS with Thermal Desorption
- Polymer Identification (FTIR)
- RoHS Testing
- Surface Cleanliness
- Thermal Analysis
- Total Extractables
- SEM-EDX

Mechanical Testing

- Bond Strength/Coating Adhesion
- Coating Shear
- Compression Testing
- Fatigue Testing
- Flexural Testing
- Hardness
- Passivation Testing
- Rotating Beam
- Tensile, Yield Elongation
- TMA
- Wear Testing

Cleanliness/Biocompatibility and Cytotoxicity

- Polar and Non-Polar
- Debris
- TOC
- Contaminant ID
- Mass



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