

SERVICES



MATERIALS TESTING:

- Additive Manufacturing Testing
- Chemical Analysis
- Corrosion Testing
- Fatigue & Fracture Testing
- Mechanical Testing
- Metallurgical Testing
- Non-Destructive Testing

Solutions for Your
[**MISSION CRITICAL**]
Materials Testing

Mechanical Testing

- Yield Strength
- Tensile / Ductility
- Flaring / Expansion
- Stress Rupture
- Fracture Toughness
- Fatigue Crack Growth
- Magnetic Permiability
- Wedge & Axial Tensile
- Elevated Temperature Tensile
- Charpy V-Notch Impact
- Hydrogen Embrittlement / Stress Durability
- Hardness: Rockwell, Brinell, Superficial
- Welder & Procedure Qualifications (per ASME, ASTM, EN, AWS, MIL, API)
- Bend
- Flattening
- Cone Strip
- Proof Load
- Conductivity
- Drop Weight
- High & Low Cycle Fatigue
- Dynamic Tear
- Sub-Ambient Tensile

Nondestructive Testing

- Ultrasonic: high-speed immersion, contact
- Magnetic Particle: fluorescent wet
- Liquid Penetrant: fluorescent, visible dye
- X-Ray / Radiography: film, computed radiography
- Hydrostatic Pressure: tubing, pipe, coils
- Visual Examination - SNT-TC-1A certified

Chemical Analysis

- ICP-AES & ICP-MS
- Soxhlet Extraction
- Plating Identification
- Classical Wet Chemistry
- Density, Porosity, & Oil Content
- Positive Material Identification
- RoHS
- AES Analysis
- FTIR Analysis
- RoHS
- Moisture Content Analysis
- Carbon & Sulfur Analysis
- Inert Gas Fusion (Nitrogen, Oxygen, Hydrogen)

Powder Characterization

- PSD - Laser Diffraction (Microtrac)
- PSD - Sieve Analysis
- Flow Rate
- Apparent Density
- Morphology via SEM
- Moisture Content
- Cross Contamination
- Tap Density

Metallurgical Testing

- Microstructure
- Grain Size (ASTM E112)
- Case Depth
- Coating Thickness
- Inclusion Rating (ASTM E45)
- Carburization / Decarburization
- Carbide Precipitation
- Ferrite by Point Count (ASTM E562)
- Alpha Case
- Micro/Macro-hardness (Knoop & Vickers 25g to 50kg)
- SEM / EDS Analysis
- Digital Imaging
- Sample Preparation
- Weld Qualification
- Sigma and/or Chi Phase
- Macro-etch (ASTM E340)
- Grain Flow
- Surface Condition
- Surface Contamination
- Intergranular Attack
- Eutectic Melting
- Nodularity, Nodule Count

Machining

SPECIMEN MACHINING

- Test Specimens to ASTM & MIL Specifications
 - Jominy
 - Tensile
 - Fatigue
 - Izod Impact
 - Stress Rupture
 - Stress Corrosion
 - Compact Tension
 - Fracture Toughness
 - Round Compression
 - Charpy V-Notch Impact
 - Hydrogen Embrittlement
 - Face, Root, Side Bend, & more
- EDM & Specialty Machining

Corrosion Testing

- Salt Spray / Salt Fog (ASTM B117)
- ASTM A262, A923, & A1084, G28, G48, G66, & G67
- Passivation (ASTM A380, A967; MIL-STD-753)
- Intergranular Attack
- Coating Evaluation
- Sensitization

Metrology

CALIBRATION

- Force
- Torque
- Pressure
- Electrical
- Dimensional
- Mass
- Volume
- Temperature
- Humidity

FIELD SERVICE

- Surface Plates
- Hardness Testers
- Optical Comparators
- Pyrometry
- Scales & Tools
- Hand Tools
- Microscopes
- Supermicrometers®
- Laser Micrometers

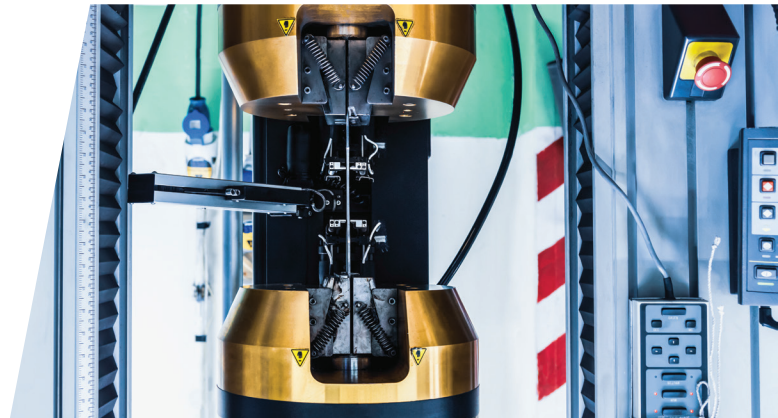
NEW INSTRUMENTS / PARTS & REPAIRS

Dimensional Inspection / CMM

- Fasteners including Threads
- Surface Finish
- Third-Party Inspections
- Gage Blocks
- Thread Plugs & Rings
- Thread Wires
- Indicators
- Pin Gages
- Plain Plugs & Rings
- Reticles
- Steel Rules
- Stopwatches



Scan to learn more!



Quality & Compliance



Materials Testing Laboratory
Nondestructive Testing



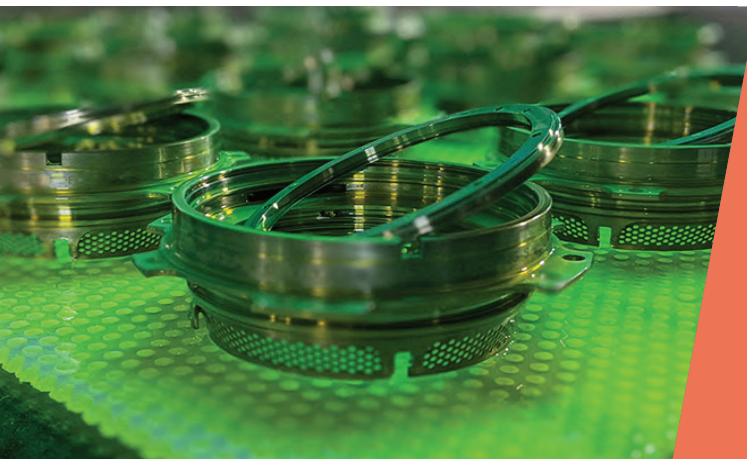
Cert. #0117-02, 04, 05
ISO/IEC 17025



DDTC Registered
ITAR Compliant

ISO 9001 and ISO 13485 compliant
GE Aviation S-400 approved lab
Pratt & Whitney approved lab

**ISO/IEC 17025
CERTIFIED**



**LABORATORY
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Solutions for Your
[MISSION CRITICAL]
Materials Testing

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