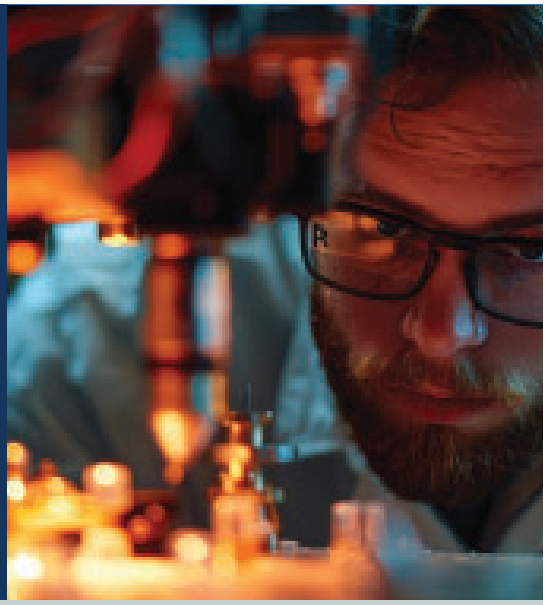
CURTISS-WRIGHT



Materials Testing and Analytical Services

Metals | Composites & Plastics | Coatings | Products

As your full-service materials testing partner, Curtiss-Wright Materials Testing & Analytical Services delivers precise results on metals, polymers, and composites—whether you're validating raw materials, qualifying suppliers, or resolving production issues. Our experts combine deep industry knowledge with advanced instrumentation to give you clarity when it matters most.

Accredited Analytical Services

We maintain the accreditations and approvals that leading manufacturers rely on—ISO 17025, Nadcap, A2LA, SAC, GE S-400, Pratt & Whitney MCL, and others—ensuring every report meets the highest standards of accuracy and compliance. From medical devices and aerospace to power generation and automotive, organizations across critical industries trust Curtiss-Wright to safeguard quality and performance.

Curtiss-Wright Materials Testing & Analytical Services provides the data and analysis needed to evaluate material performance, verify specifications, and support critical decision-making. Our role is to deliver accurate, timely test results that help you maintain product integrity and meet operational requirements.

We approach each project with the same rigor you apply to your own work, ensuring consistent methods, clear reporting, and dependable support throughout the testing process. Below is a partial listing of our testing and analytical capabilities.

Materials Testing Methods

Mechanical Testing

Bend Testing (3 Point, 4 Point)
Bond Strength Testing
Charpy Impact Testing (-320°F to 450°F)
Composite Testing (FRC, CMC)
Compressive Properties of Nonmetallics
Creep & Stress Rupture
Fatigue Testing (Axial, Low Cycle, High Cycle, Rotating Beam, Coating Shear)
Cryogenic Fatigue Testing from -340°F
High Temperature Fatigue Testing up to 1800°F
Flexural Properties (Modulus, Strength, Stress-Strain)
Fracture Mechanics
Hardness (Rockwell, Brinell)
Heat Treat Capabilities
Hydrogen Embrittlement (Static Load)
Lap Shear Testing
Peel Properties (Climbing Drum, Floating Roller)
Residual Strength of Composites After Impact
Shear Properties
Taber Abrasion
Tensile Testing - Metals (to 2000°F)
Tensile Testing - Nonmetallics (-240°F to 660°F) Flatwise, Cruciform, Hoop, Standard
Torsional/Axial Fatigue (200 lb)
Weld/Welder Process Qualification

Corrosion Testing

Cyclic Corrosion
Electrical Resistivity Testing
Passivation
Salt Spray Testing
SO_2 and SO_2/CO_2 Exposure Wear Resistance
Temperature & Humidity Testing

Chemical Analysis

Alloy Chemistry
Ash Content
Combustion Methods for C, S, O, H, N
Chemical Resistance
Cleanliness Testing
Coating Weight
Conductivity/Resistivity (D1125)
Contaminant/Corrodent Analysis
Contaminant/Corrodent Identification
FTIR Analysis
Halogen Analysis
ICP-AES Analysis
ICP-MS Trace Element Analysis
Ion Chromatography (IC)
Metallic Material Verification/ID
OES Analysis
Particle Size Analysis
Percent Crystallinity
Phase Identification
Positive Material ID (On-site PMI available)
Powder Diffraction
SEM Analysis

Metallurgical Analysis

Aggressive Machining Evaluations
Certified Weld Inspections
Coatings Analysis
EDM Evaluation
Failure Analysis
Fractography / Fracture Mechanics
Grain Size Evaluation
Macroetch / Micoretch
Metallography / Materialography
Microhardnss (Knoop, Vickers, Macrovickers)
Microstructure
Particle Analysis
Positive Material ID (On-site PMI available)

LOCATIONS

Ithaca- 131 Woodsedge Dr. Lansing, NY
Louisville- 4510 Robards Ln. Louisville, KY
Portland- 5867-A SE Int'l Way, Portland, OR
Singapore- 30 Loyong Way 03-16, SGP
Suzhou- Suzhou Industr. Park, Jiangsu, CN

ISO 17025

Ithaca (1140.01 / 1140.02)
Louisville (1140.03 / 1140.04)
Portland (1140.07)
Singapore (1140.10)
Suzhou (1140.09)

Nadcap Accreditation

Ithaca: Materials Testing Laboratories
Non-Metallic Materials Testing
Louisville: Materials Testing Laboratories
Portland: Materials Testing Laboratories
Singapore: Materials Testing Laboratories
Suzhou: Materials Testing Laboratories