



Problem Solving for the Materials Industry

FAILURE ANALYSIS • FORENSIC ENGINEERING • MATERIALS CONSULTING



DIVERSE GROUP OF EXPERTS, ENGINEERS, & SCIENTISTS

When you need help determining why something has failed, corroded, or worn out prematurely, our failure analysis and materials consulting services can provide the answers through the practical application of materials testing, nondestructive testing and materials engineering. We offer solutions that will enhance the safety, reliability, and performance of your systems and products.

INDUSTRIES SERVED

- Aerospace
- Nuclear Power
- Defense
- Transportation
- Pulp & Paper
- Manufacturing & Fabrication
- Utility & Gas Companies, Municipalities
- Insurance & Litigation

Dedicated Professionals With Proven Industry Experience

AREAS OF EXPERTISE

- Metallurgy
- Materials Science & Engineering
- Chemical Analysis
- Electron Microscopy
- Physical Property Analysis
- Materials & Mechanical Engineering
- Manufacturing Issues
- Component Failures
- Structural Failures
- Property Damage
- Product Liability Failures
- Root Cause & Origin Analysis
- Abuse
- Neglect
- Premature Failure
- Design Deficiencies
- Improper Fabrication
- Material Selection



**A HIGHER LEVEL
OF RELIABILITY®**

WHY ACUREN?

- Our materials engineering services cover a broad spectrum of customer requirements and specifications
- A group of professionals that have the same exacting standards you do
 - ◊ Expertise in a wide range of technical disciplines
 - ◊ Knowledgeable and experienced with the background to guide you through all aspects of a failure analysis project
 - ◊ Mature company with a proven record of success
 - ◊ Systematic protocol development and analysis
 - ◊ Experts versed in a wide variety of materials and manufacturing processes
 - ◊ Product liability and litigation support

ADDITIONAL TESTING & CONSULTING SERVICES

- Metallurgical Analysis
 - ◊ General Microstructural Analysis
 - ◊ Grain Size Determination
 - ◊ Surface Condition Evaluation
 - ◊ EDM and LBMR Evaluation
 - ◊ Weld/Braze Evaluation
 - ◊ Heat Treatment Verification
 - ◊ Corrosion Testing
- Mechanical/Physical Testing
 - ◊ Hardness Testing
 - ◊ Tension Testing
 - ◊ Compression Testing
 - ◊ Charpy Impact Testing
 - ◊ Stress/Creep Rupture Testing
 - ◊ Bend Testing
 - ◊ Simulated Fatigue
 - ◊ Service Testing
- Chemical Analysis/Materials Identification
 - ◊ Polymers and Composites
 - ◊ Metals and Alloys
 - ◊ Ceramics
 - ◊ Contamination
- Scanning Electron Microscopy/EDS
 - ◊ Fractography
 - ◊ Microchemical Analysis
- Nondestructive Testing
 - ◊ Dye Penetrant
 - ◊ Magnetic Particle
 - ◊ Radiography/X-ray
- Welder Qualification Testing
- Forensic Engineering
- Machine Shop Services
- Process Safety Management

AFFILIATE LABORATORIES OWNED & OPERATED BY ACUREN INSPECTION INC.



sales@massmaterials.com
(508) 835-6262
www.massmaterials.com

MASSACHUSETTS MATERIALS RESEARCH



sales@connmet.com
(860) 289-7481
www.connmet.com

CONNECTICUT METALLURGICAL



sales@lehightesting.com
(302) 328-0500
www.lehightesting.com

LEHIGH TESTING LABORATORIES

www.acuren.com



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