

Service Area

ATS employs approximately 500 personnel in several branch offices throughout the Eastern United States. Although most of the laboratory testing services are housed in our headquarters location in Marietta, GA, we can provide inspection services anywhere in the U.S. or abroad.

Scheduling

ATS is always available to handle your inspection needs and will respond to each request in a prompt and timely manner. Simply contact us at the number below to schedule an inspection project or to set-up a visit by an ATS representative.

Quality Programs & Accreditations

ATS maintains quality through the high standards that are the hallmark of our company.

- ISO 9001
- Accredited to 17025*
- 10CFR50 Appendix B
- ANSI/NCSL Z540-1
- ASNT-TC-1A
- MIL Standard 410
- Over 100 Technology Sector Vendor Approvals



1049 Triad Court - Marietta, GA 30062
Corporate Office: 1-888-287-5227
www.atslab.com



ATS, founded in 1967 and headquartered in Marietta, GA is one of North America's leading consulting engineering firms with extensive testing and inspection capabilities delivering a combination of experience, professionalism and decisive responsiveness for our clients.

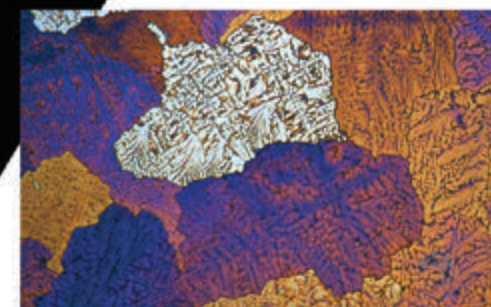
*All accreditations are granted to certain disciplines operating within ATS. Each certification/affiliation or accreditation has a special defined scope. Please visit www.atslab.com or contact the ATS Quality Assurance Department at 1-888-287-5227 for further details.

Partial List of Customers:

- American Boa
- Allied Signal
- Alstom Power
- Blue Bird
- Boeing
- Borg Warner
- Caterpillar
- CIBA Vision
- Delta Airlines
- Eaton Corporation
- Florida Power
- General Electric
- Georgia Pacific
- Georgia Power
- Gulfstream Aerospace
- International Paper
- Kubota
- Lamar Advertising
- Lockheed Martin
- Michelin North America
- Panasonic
- Parker Hannifin
- Roper Pump Company
- Siemens
- Southwire
- South Carolina Electric & Gas
- Tennessee Valley Authority
- United Parcel Service
- Welding Services
- ZF Industries



Failure Analysis & Metallurgical Services



Failure Analysis & Metallurgical Services

Whether you are investigating a single component or dealing with a system failure, you can rely on the ATS Failure Analysis Group's expertise and testing techniques to meet your full failure analysis needs. From fractures to formability problems, corrosion to wear, our analysts will find the root cause of the failure and assist in plans for prevention.

Applied Technical Services' metallurgists and professional engineers routinely conduct failure analyses on a wide variety of materials, including steels, stainless steels, titanium, superalloys, copper alloys, aluminum, plastics, ceramics and glass.

Testing Techniques Include:

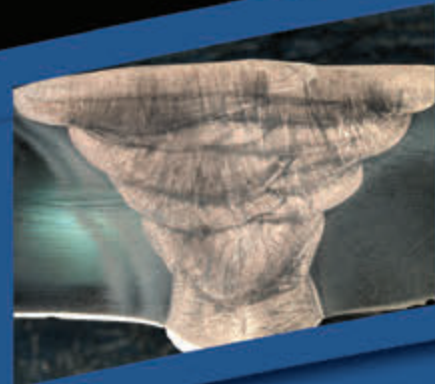
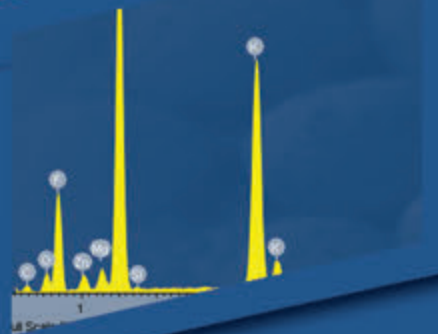
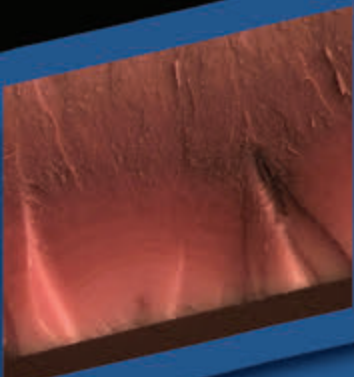
- Scanning Electron Microscopy
- Energy Dispersive Spectroscopy
- Optical Fractography
- Hardness Testing
- Mechanical Testing
- Chemical Analysis
- XRD



www.atslab.com
1-888-287-5227



Failure Analysis & Metallurgical Services

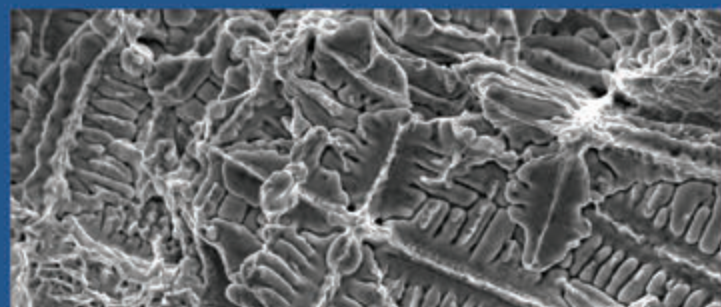


Metallurgical Services

At ATS, we understand that you don't just need testing, you need interpretation. Our engineers and metallurgists consult with you to determine the full scope of every project-factors such as the material of manufacture, the size and shape of the component, and the specification influence the testing decisions.

Metallurgical Services Include:

- Microstructural Assessment
- Grain Size Measurement
- Graphite Evaluation
- Inclusion Rating
- Rockwell Hardness Testing
- Brinell Hardness Testing
- Vickers Hardness Testing
- Case Depth Measurement
- Knoop Microhardness Testing
- Vickers Microhardness Testing



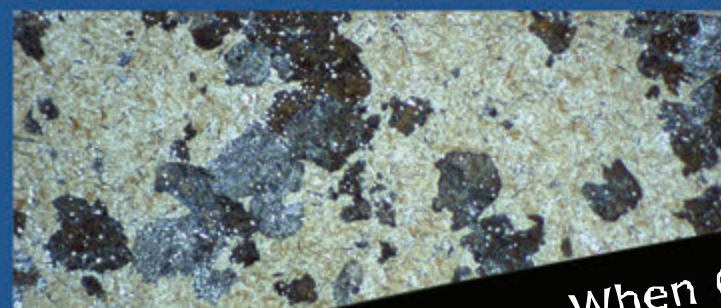
- Plating Thickness & Type
- Plating Hardness
- Field Microstructural Evaluation and Replication
- On Site Hardness Testing

Litigation Support

Our professional engineers and PhDs will help both you and the jury understand the scientific aspects of the case. ATS provides a variety of services relating to analysis and opinion on legal evidence, including:

- Expert witness opinion and testimony in the field of Metallurgy and Fracture Analysis
- Expert witness opinion and testimony in the field of Mechanical Engineering
- Hosting of laboratory testing, as a neutral party, for other Expert's scopes of work involving Mechanical, Metallurgical, NDT, Chemical, and Dimensional Analyses
- Subrogation failure analysis

Testing is performed per industry and international standards.

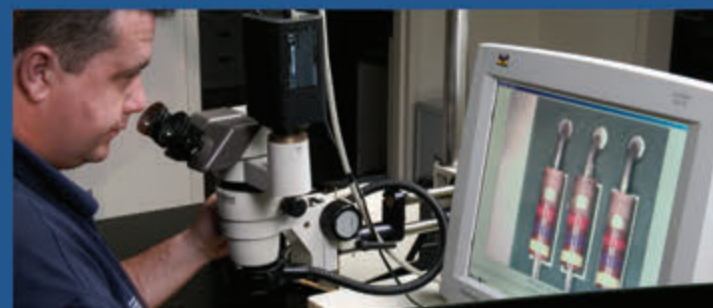


Reverse Engineering Services

You know what you want to make. We can help you make it. Applied Technical Services' extensive experience with metallurgical testing, mechanical component failure analysis, and material selection makes our engineers valuable resources for your reverse engineering projects. Whether you need the full design or just a portion, ATS will analyze the existing components to assist you with completing your engineering drawings. This may include base metal identification and heat treatment condition, manufacturing processes, plating or paint analyses, and full dimensional inspection.

First Article Testing

When you require first article testing before bringing your product to market, ATS can help. Our extensive experience with metallurgical testing, mechanical testing, chemical analysis and dimensional inspection makes Applied Technical Services' engineers valuable partners during first article testing of your products.



Material Identification

Energy Dispersive Spectroscopy (EDS)

A complementary technique to our full chemical analysis capabilities, Energy Dispersive Spectroscopy (EDS) enables Applied Technical Services' engineers to identify and analyze small contaminant particles, metal chips, corrosion products, and platings.

X-Ray Diffraction (XRD)

Enhanced material identification is made possible by our x-ray diffractometer. XRD is able to identify the crystal structure (the physical arrangement of the element atoms) of a material. In this way, the actual compounds present can be identified, as opposed to just the elements identified by EDS.

The XRD technique is extremely useful in corrosion failure analysis, verification of metallurgical phases, reverse engineering of coatings, and contaminant identification.

X-Ray Fluorescence Coating Analysis

The x-ray fluorescence (XRF) technique is a convenient, non-destructive method to simultaneously confirm a metal plating material system as well as measure the individual layer thicknesses. The technique is faster and more cost effective than destructive cross-sectional methods. Coating systems involving copper, nickel, silver, zinc, cadmium, chromium, gold, tin/lead, and others can be analyzed on various base metals. Analysis can be done non-destructively as long as it can fit in our 6 x 10 x 18 inch chamber.

When Quality is Non-Negotiable!

Applied Technical Services
www.atslab.com
 1-888-287-5227