Metallurgical Laboratory & Engineering Services

We're There.



dtb.com

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Your Metallurgical Resource

DTB's Metallurgical Lab is a world-class resource for engineering and failure investigations, metallurgical testing, and analysis.

Our lab is fully equipped with the latest technology and staffed by knowledgeable, highly trained experts. DTB technicians, metallurgists, and materials scientists comprise skilled interdisciplinary teams with the testing expertise to perform root cause failure investigations, reverse engineering studies, and a full spectrum of metallurgical testing and analysis to satisfy any requirements.

In addition to extensive testing capabilities, the Metallurgy Lab is complimented by our on-site Dimensional Lab and Machine Shop.

Our commitment to talent and resources is further assurance you can rely on DTB every time.

Our comprehensive range of Metallurgical Inspections include:

- Failure Analysis
- Fractography
- Corrosion Testing and Evaluation
- Microstructural Examination
- Grain Size
- Inclusion Content
- Decarburization
- Coating and Plating Analysis

- Chemical Analysis
- Weld, Braze and Solder Analysis
- Wear/Abrasion Evaluations
- Hardness
- Microindentation Hardness
- Case Depth
- Grain Flow Evaluation
- Macro-Etch

- Surface Evaluations
- Conductivity
- Passivation Testing
- Scanning Electron Microscopy with Energy Dispersive Spectroscopy (SEM-EDS)
- First Article and Production Lot Testing
- Nondestructive Testing



DTB Support

Metallurgical Inspections are vital to ensuring requirements and functionality are met. Through testing, DTB can provide valuable information regarding materials, components, or assemblies, helping to ensure in-service reliability.

Should an in-service failure occur, DTB has immediate access to in-house expertise in a wide range of technical specialties – EMI/EMC, Shock and Vibration, Environmental Testing, Life Support Systems, Stress Analysis, Engineering Design, and Manufacturing Engineering. This allows DTB to field a highly skilled interdisciplinary team to perform root cause analysis ensuring our customers have limited downtime.

Who We Serve

The Metallurgical Lab at DTB provides inspection services to a wide range of customers across numerous industries including:

- Government Agencies
- Defense
- Aerospace
- Transportation
- Medical
- Construction
- Electronics





Sample Preparation

Our Metallurgical Lab is fully equipped and able to prepare all metallurgical samples.

- Precision Cutting and Sectioning
- Compression Mounting
- Automatic and Manual Grinding and Polishing
- Etching Station
- Belt Sanders
- Access to On-Site Machine Shop

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About DTB

Founded in 1950, Dayton T. Brown, Inc. (DTB) is headquartered on 32 acres in Bohemia, NY. For over 70 years, DTB has been synonymous with the pursuit of excellence and customer service. DTB is a leader in the fields of testing, engineering, logistics, technical publications, and military mission systems.





General: (800) 232-6300 / (631) 589-6300 • Technical Services • Engineering & Test • Mission Systems Dayton T. Brown, Inc. • 1175 Church Street • Bohemia, New York 11716 USA