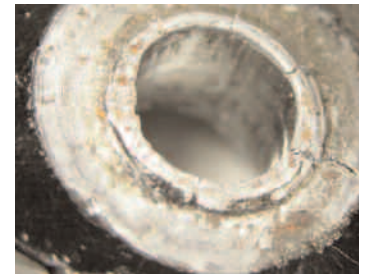
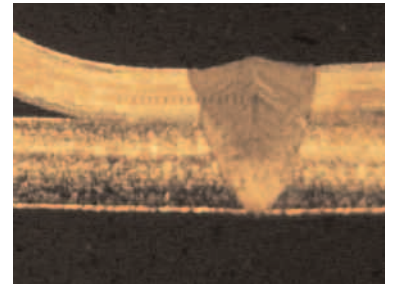


Metallurgy Department

Equipment Additions

Metal Chemistry: A SPECTROMAXx just added! This new spectrometer, along with experienced staff in accurate bulk metal chemistry analysis, will provide our customers with lower costs and faster turnaround times.

Digital Microscope: An Olympus BX51 reflected/transmitted light metallurgical microscope was recently acquired. Excellent image clarity and superb resolution digital images of solder joints and circuit boards, quantitative material image analysis and more are available with this new, advanced microscope system. Offers magnification up to 1000x with digital color photo capture.



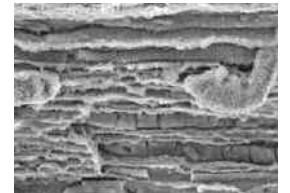
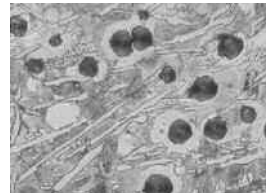
Capabilities Include:

Comprehensive Failure Analysis:

Fracture, Deformation, Welds, Solder, Corrosion, Wear, Fatigue, and FEA Investigations.

Metallurgical Evaluation:

- Microstructure
 - Heat Treatment
 - Grain Size
 - Embrittlement, Stress Corrosion
 - Surface Treatment, Case Depth, Case/Core Hardness,
- Decarburization
- Porosity and Micro-Porosity
- Ferrous and Non-Ferrous metals
- Sample Cutting and Mounting, Micro/Macro Etching



Inclusions/Particles:

Identification, Size, and Distribution.

Plating and Coating Analysis:

Single/multiple Layer Thickness, Chromium Spot Testing, Adhesion, and Pore Count



Hardness and Microhardness:

Rockwell, Knoop, and Vickers.

Material Identification:

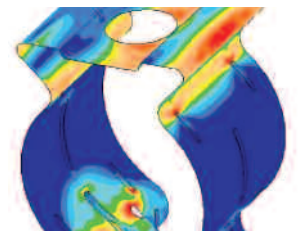
Bulk and Surface Chemical Composition, Hydrogen Embrittlement, and Mechanical Properties.

Weld/Solder Evaluation and Inspection

Weld Defects, Weld Corrosion, Weld Strength

Corrosion and Surface Contamination Analysis, SEM/EDS

Fractography, Macro/Micro/SEM Photography



For more information, or to request a quote, please contact:

Customer Service
icenter@intertek.com