



Aliya Analytical, Inc

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Materials Engineering, Failure Analysis and Failure Prevention Services

Investigation Planning, Failure Analysis
 Failure Prevention Planning: materials characterization, design philosophy, etc.
 Failure Analysis Training: Custom programs
 Contamination Troubleshooting

Characterization of Structural Components

Full Metallurgical / Metallographic Lab

Laboratory and Miscellaneous Services

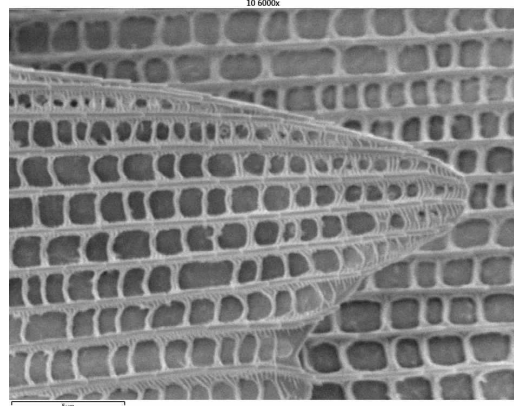
Scanning Electron Microscopy and EDS Microchemical Analysis
 Macro and Micro Fractography / Optical Microscopy
 Identification of Unknowns and Contaminants
 Semi-automated NIST Traceable Knoop Testing
 Quality Audit Team Support/ P and DFMEA Team Support
 Laboratory Personnel Training (failure analysis and metallography)
 NEW: Leco AP200 METALLOGRAPHIC POLISHER-
 FOR LARGE MOUNTS- 2 x 3 inches

NEW Zeiss Optical Metallograph: 25-1000x

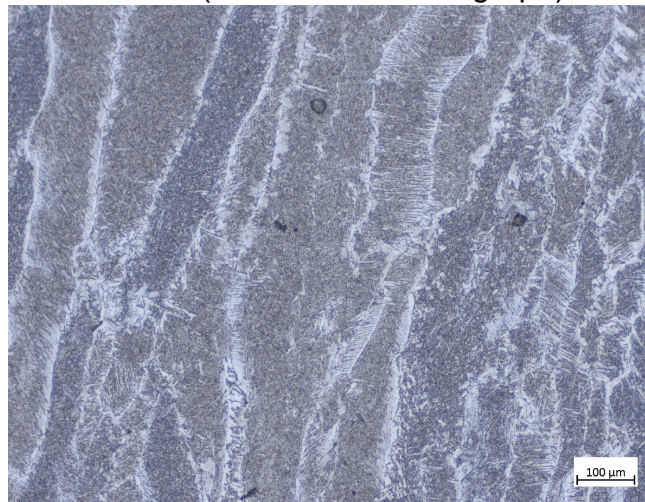
JEOL JSM
 5800LV
**Scanning
 Electron
 Microscope &
 Oxford AZtec
 low element
**EDS
 microchemical
 analyzer****

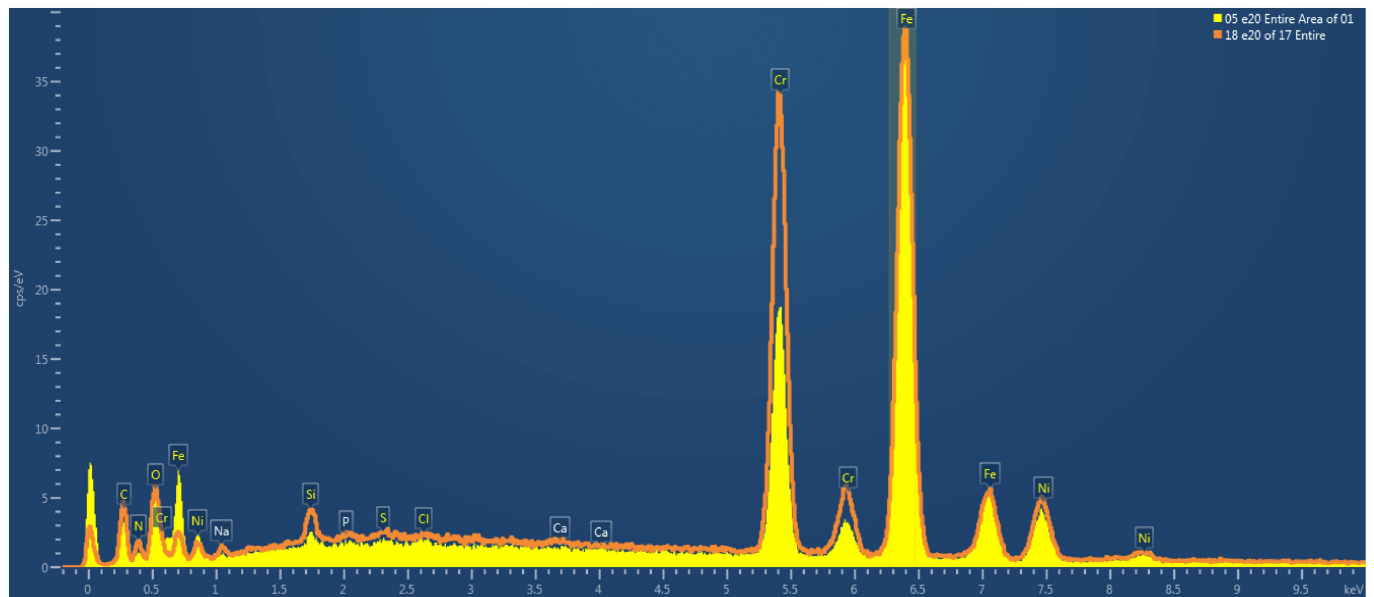


SEM Image of Moth Wing

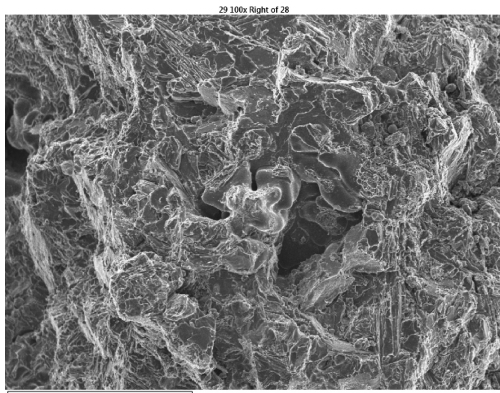


Nital Etched Metallographic Cross Section of a Steel Weld (New Zeiss Metallograph)

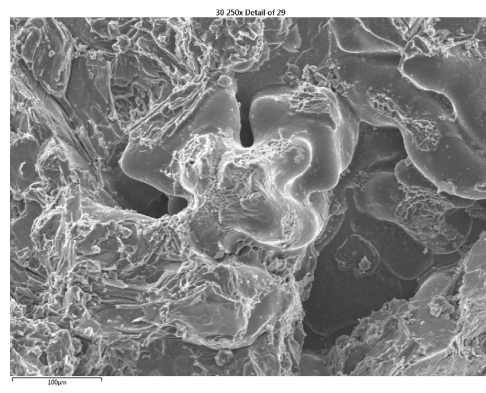




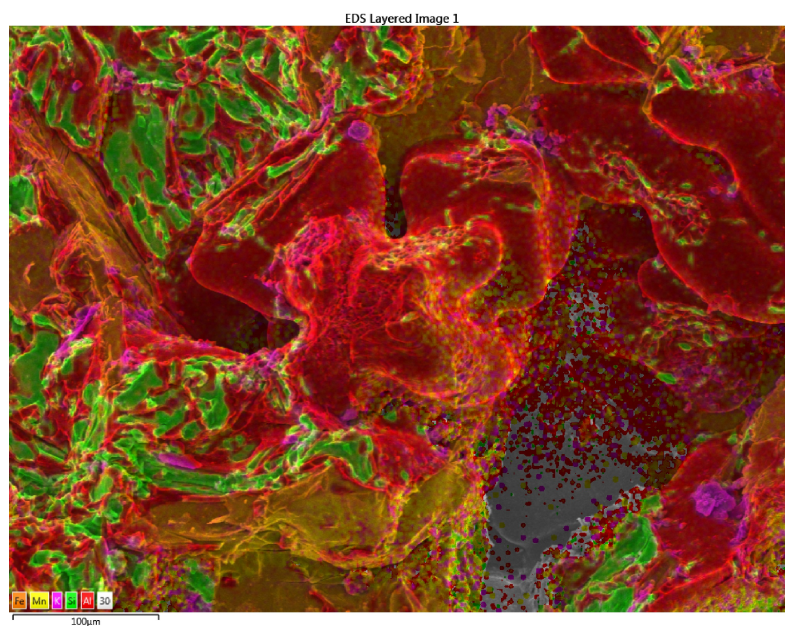
Side by side comparison of a heavy chromium area on some stainless steel. Semi-quantitative data available.



100x View of Shrinkage Void in aluminum casting. (SEM)



250x View of center of image at left.



Element map of same area shown above right. Note iron (Fe) sludge particle lower center. Silicon rich particles are shown in green. Oxford AZtec EDS map.