



Coining Analytical Lab Service

Coining has operated an in house analytical laboratory for many years performing analyses on our alloys as well as metallography and other necessary testing to support manufacturing and to support our customers.

Coining's lab has completed the A2LA accreditation process and now offers analytical lab services as part of our product portfolio.

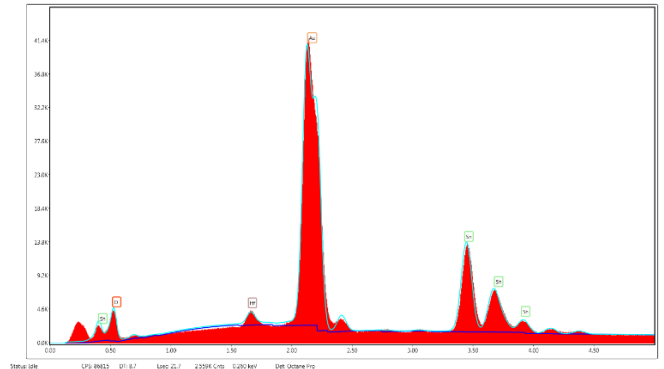
Analytical Capabilities

Coining utilizes the latest generation of analytical tools to measure bulk compositions, trace impurities and bulk material physical characteristics.

All our equipment is maintained and our operating documentation established to meet or exceed ISO-17025 requirements for testing laboratories. This ensures the accuracy and integrity of our test analyses.

Our analytical capabilities include:

- Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) for chemical composition
- Scanning Electron Microscopy/Energy Dispersive Spectroscopy (SEM/EDS) for semi-qualitative surface analysis
- Differential Scanning Calorimetry (DSC) for solidus/liquidus phase transition.
- Interstitial Gas Analysis (IGA)
- Fusion Analysis
- Micro Hardness testing
- Metallurgical Specimen Cross-section, Mounting and Measurement for grain size determination.



EDAX Spectrum Of Metal Surface

Services Offered

Coining offers a comprehensive array of analytical services. These include:

- Bulk composition and trace impurity analysis of pure metals and alloys. Accuracy to ppb levels.
- Carbon and Sulfur weight percent analysis in metals. Minimum detection 0.5ppm.
- Oxygen and Nitrogen weight percent analysis in metals. Minimum detection 0.5ppm.
- Qualitative surface chemistry and analysis.
- Low temperature (<500°C) material melting points with accuracy to 0.5°C.
- Knoop and Vickers hardness testing per ASTM E92.
- Grain determination up to 1000x capability.

Coining will provide a full test report for the analysis requested. Typical turnaround times for our analytical services are 3-10 business days depending upon the test. Expedited analytical services are available.

Contact Us

Contact Coining Engineering to discuss how our analytical lab services can assist you in your product development efforts or failure analysis.

Direct inquiries may be submitted through our website: www.ametek-ecp.com under Ask An Engineer.

