



Services for the Aerospace and Defense Industries

EAG scientists have supported Aerospace and Defense customers for over 50 years. We have partnered with Aerospace customers improving fuel efficiency by utilizing composite materials to reduce weight and complied with the stringent requirements for military electronics whilst maintaining IP security and ITAR registration.

Purity certification

Production support for QC/QA of critical trace and ultra-trace levels of elemental impurities and composition in alloys and super-alloys.

Coatings analysis

Depth-specific distribution measurements and chemical survey characterizations of engineering coatings.

Destructive physical analysis

DPA is routinely used to qualify electronic components to Class "S", and has been used in aerospace, commercial, military, and government applications.

Electronic system testing

ATE and System level testing, component and module reliability and Failure Analysis.

Metallurgical failure analysis

Failure Analysis investigations, including fractures, fatigue, corrosion, contamination, wear, heat, and stress related failures.

Ceramic matrix composites

Full structural characterization of CMC materials, including chemical composition, impurities, micro-structure, and interface chemistry.

Residual gas analysis

RGA can determine the moisture content, as well as analyze all gases with molecular weights between 1-140 mass units.

EMC & Environmental

Evaluate components for use in extreme electromagnetic & environmental conditions.

Litigation support services

Providing scientific expertise, data interpretation, expert testimony and analytical support in aerospace litigation.

MIL-STD

We are approved by the Defense Logistics Agency (DLA) to perform testing according to various MIL standards.

Typical Techniques for Aerospace and Defense Testing		
AFM	GDMS	Physical Testing
ATE Test	GPC	Profilometry
ATG (RBS)	HPLC	Raman
Atom Probe	ICP-MS	RBS
Auger	ICP-OES	Reliability
Cathodoluminescence	IGA	RGA
Circuit Edit	Ion Chromatography	SEM
DMA	LA-ICP-MS	SIMS
DPA	LC-MS	TEM
DSA	LIBS	Thermal Analysis
Dual Beam	Litigation Support	TOF-SIMS
EBSD	Metallurgy	TXRF
EMC	Nanoindentation	Warpage Analysis
Environmental	NMR	XPS/ESCA
ESD	Optical Microscopy	XRD
Failure Analysis	Optical Profilometry	XRF
FTIR	Organic FA	XRR
GC-MS	PCB	XSEM

