



Contamination control

Building on fifty years of experience in supporting semiconductor development and manufacturing, Eurofins EAG offers a wide range of contamination control services. Through the application of a large number of analytical technologies, we help our customers with contamination control issues as diverse as analysis of supply gases at the ppq levels to sub-monolayer analysis of wafer surfaces. Our services include research and development of new techniques, solving contamination problems on-site and providing routine analyses for existing products and processes.

Leveraging Science and Engineering to Accelerate Innovation

When it comes to understanding the physical structure, chemical properties



and performance of advanced materials and integrated circuitry, no other scientific services company offers the breadth of experience, diversity of analytical techniques or technical ingenuity of Eurofins EAG. We deliver multi-disciplinary, problem-solving expertise to help our customers accelerate innovation, ensure quality and safety, and protect intellectual property.

Cleanroom		Application	Technique
Cleanroom air		Particle count and size	DPC, SEM
		Airborne molecular contamination	GC-FID/MS/AED, IC, ICP-MS, IMS
Supplies: gases		Total organic contamination (TOC)	TD-GC-FID/MS/AED
		Moisture	CRDS, NIR-TDLS, CMS
		Acids/base	IC
		CO/CO ₂	NDIR
		Hydrogen/oxygen	MS, portable monitors
		Particle count and size	DPC, SEM
Supplies: ultra-pure water		Total organic carbon (TOC)	TOC-analyzer
		Anions and cations	IC, ICP-MS
		Particle count and size	LPC
Equipment & Modules			
Cleanliness validation of products & parts		Total organic contamination (TOC)	TD-GC-FID/MS
		Anions and cations	IC, ICP-MS
		Refractory components (S, Si, P, B containing)	GC-MS/AED
		Particle count and size	DPC, LPC, SEM
Outgassing qualifications of materials		Analysis of evolved gases	TD-GC-FID/MS/AED, TGA-MS, TPR-MS
Trouble shooting		Particles, stains	SEM
		Organics	FT-IR, Raman
		Bulk Impurities	TOF-SIMS, LA-ICP-MS
		Surface contaminants	SEM, XPS, TOF-SIMS, RBS
Wafers & Devices			
Wafers		Particles, stains	SEM, Auger, TEM, AFM
		Organics	FT-IR, Raman, XPS, TOF-SIMS
		Surface contaminants	SEM, XPS, TXRF, TOF-SIMS, VPD-ICP-MS
Devices		Particle etch residue	SEM, XPS, Auger, TEM, AFM
		Organics	FTIR, Raman, XPS, TOF-SIMS