



# Semiconductor QAQC Services

SGS Gas Analysis Services (SGS GAS) has a vast knowledge of the gases industry. SGS GAS expertise in gas analysis testing and instrumentation facilitates our customers on a daily basis. SGS GAS carries out visual and analytical inspection of gas and chemical lines for facility and tool install projects. Upon inspection where we identify failures and issues SGS GAS will issue a report carry out an analysis of failure data and establish corrective actions.



At SGS, our expertise extends to encompass a wide range of services tailored for both Basebuild and Tool Install Semiconductor projects. We provide specialised services aimed at ensuring the integrity and quality of gas and chemical systems installations:

- Weld coupon inspection.
- Review UHP welding procedures.
- Ensure adherence to documented procedures.
- Post-installation line inspections, including pressure testing.
- On-site analysis of H<sub>2</sub>O, O<sub>2</sub>, and particulates.
- Tie-in and Helium leak check.
- Certification of gas/chemical lines.
- Periodic quality reporting.
- Implement corrective actions for improvement.

These specialised services are designed to enhance project execution, ensuring compliance with industry standards and optimizing performance throughout the project lifecycle.

At SGS GAS we also provide a comprehensive range of solutions tailored to the unique requirements of industries such as Semiconductors who depend on precise gas systems and stringent quality assurance measures.

Our offerings encompass:

- Gas Line Assurance, Gas Field Testing, and Lab Analysis.
- On-site Process Qualification of gas systems (production, storage, and purification/ filtration).

- Commissioning and Project Engineers in Gas Systems Construction.
- Design, Manufacturing, and Installation of Gas quality monitoring systems and Mobile Carts.
- Design, Manufacturing, and Installation of fence line monitoring systems.
- On-site and in house repair, maintenance, and calibration of gas analysers.

These core services form the backbone of our commitment to delivering reliable and efficient solutions that optimize performance and ensure compliance with industry standards.

#### RELATED ADDITIONAL SERVICES

In addition to our primary offerings, we offer a suite of related services designed to enhance operational efficiency and effectiveness:

- Non-Destructive Testing and Welding Inspections.
- Technical Staffing Solutions, including Managed Services.
- Source and Vendor Audits and Qualifications Globally (3000+ Inspectors).
- Outsourced Factory Acceptance Testing Services.
- Supply Chain Management Including Hazardous Chemicals.
- Process Qualifications of New Gas Installations (Cryogenic Tanks, UHP Filters, UHP Purifiers, UHP Distribution System).

- Customer Process Analytical Solutions for Industrial and UHP Gases.
- Periodic Testing Services for Gas Supplies.
- Certificate of Analysis of Raw Gaseous Materials.
- Product and Wafer Testing.

#### RESOURCES

Our capabilities are further bolstered by our extensive resources and expertise:

- Centre of Expertise Based in Ireland – Knowledge Built on One of the Largest Semiconductor Plants in Europe.
- Global Resource Management Organization.
- Expert Professionals Available for Expatriation to Facilitate Local Service Development or Short-Term Projects.
- Expert Knowledge in Instrument Design and Maintenance Based in Ireland.

With access to cutting-edge technology, a wealth of industry knowledge, and a global network of experts, SGS GAS analysis services are well-positioned to meet the diverse needs of our clients with precision and excellence.

#### CONTACT US

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[WWW.SGS.COM/GAS](http://WWW.SGS.COM/GAS)

**GAS ANALYSIS SERVICES IS NOW PART OF SGS, THE WORLD'S LEADING TESTING, INSPECTION AND CERTIFICATION COMPANY.**

# GAS

*Member of the SGS Group*