



Wafer Fab MEMS Process Engineer

Based in West Lothian, **Kaiam** is an emerging market leader in the research, development and manufacturing of optoelectronic equipment used within data-communication centres and the telecommunications industry. Founded by leading technologists from the optical networking industry, the team has a track record of delivering breakthrough approaches that change the rules of the marketplace.

To support our continued growth, we are recruiting for a **Wafer Fab MEMS Process Engineer**, reporting to the Optical Device Engineering Manager. The MEMS Product and Process Engineer is responsible for the quality, yield, cost, performance and reliability of MEMS wafer products produced within the Kaiam Wafer Fabrication plant in Livingston, Scotland.

The primary purpose is to manage the MEMS wafer products (Product Engineering) and control and improve the Processing and Manufacturing methods (Process Engineering) used to produce them.

Responsibility for New Product Introduction is also part of this varied and forward-looking role, taking new MEMS and Planar Light Circuit (PLC) products from initial concept through to their transfer to the Production Department. This involves developing the processes, methods and documentation to allow this to happen.

The role serves as a link between the Design team and the Wafer Fab Process Engineering team to facilitate New Product Introduction into the Wafer Fab. As such the Product & Process Engineer shall work closely with both groups to achieve their objectives.

Duties & Responsibilities:

- Control the quality of the MEMS product lines by providing the systems and safeguards that prevent manufacturing out of specification product
- Responsible for overall MEMS products wafer and die yields
- Maintain product specifications and responsible for Product Data Sheets of MEMS product lines, responsible for tracking changes and reflecting these changes in the product control documentation
- Ensure wafer process flows are defined for each product, that the documentation is up to date and correct and that the processes are available and correct on the MES system



- Introduce new products into the Fab, setting up documentation, product flows, tracking systems, inspections and data capture methods
- Pilot processing of new products to test the capability of the manufacturing process to allow the transition of manufacturing responsibility to Production
- Interact with external vendors and service suppliers. Set up new processes and services by evaluating the performance and adopting them as required
- Support and liaise with the PLC Wafer Fab Process Engineers to integrate MEMS products into the existing process modules
- Analyse manufacturing data, report on yields and determine root causes for main yield detractors, driving improvement projects to maximise performance
- Lead improvement projects to develop the process or methods for die yield, quality, throughput, cost reduction or safety gains
- Continuously control the MEMS processes (Plating, Wet Etch, Sputter, PECVD) and associated measurement equipment, to ensure that product is of the highest quality and output efficiently
- Manage out of specification processes and the disposition of non-conforming product through an NCR based system
- Provide guidance and assistance to Operators in their day to day running
- Perform technical tests and experiments for process development, preparing records, charts and graphs of results for presentation
- Liaise with Design, Process, Die Test and Assembly Engineers to achieve objectives

Essential Requirements:

- Being a self-starter is an absolute must for this position as much of the role is to drive projects forward without having to be told what to do next. Any prospective candidate must be able to provide evidence of having worked in such a style
- Experience and knowledge of wafer processing techniques (photolithography, etch, PECVD, Sputter etc.) is essential as is working in a Wafer Fabrication facility
- Education — Degree or equivalent in material science, physics, chemistry, engineering or similar
- Positive can-do attitude a necessity



Desirable:

- Knowledge of MEMS manufacturing techniques is desirable
- Excellent problem-solving ability; working knowledge of problem solving techniques and best practices such as Six Sigma is desired
- Team player, able to provide leadership to others and work under their own initiative
- Strong organisational and project management skills
- Ability to take complex data and distil it down and present findings in a straight forward manner
- Ability to influence others and gain their support to achieve the targets and goals of the role

In exchange, we offer a competitive salary (based on experience), life cover, pension, cycle to work scheme and generous holidays.

Kaiam always strives for excellence so if you can bring us relevant qualifications and experience to help us achieve this then we would like to hear from you. We are looking for employees with talent and potential, so if you're upbeat and motivated why not join us and be part of something exceptional?

If you feel you can successfully fulfil this role, please apply by sending your CV to: recruitment_uk@kaiamcorp.com