

## JOB DESCRIPTION

<b>Job Title:</b>	<b>Mechanical Design Engineer</b>
<b>Department:</b>	SCION R&D centre
<b>Location:</b>	Livingston, Scotland
<b>Reporting:</b>	Senior Mechanical Design Engineer

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### SUMMARY

SCION Instruments is part of Techcomp Europe Ltd, based in the UK. Techcomp comprises of a group of European companies engaged in the design, development, manufacture and distribution of analytical systems, life science equipment and laboratory instruments with operations dating back to 1920.

SCION Instruments designs, develops, supplies, and supports GC, GC-MS, LC, and Compass CDS (chromatography data system) product lines for a range of markets including forensics, food quality, environmental, pharma and life sciences.

The company prides itself for manufacturing in Europe at facilities in Goes, The Netherlands, with its headquarters based in Livingston, Scotland. SCION Instruments maintains a global infrastructure to support sales around the world.

Mechanical Design Engineer is part of the highly ambitious and skilled R&D team. You will be responsible for the mechanical design, development, and support of the company products, from initial concept through to production. You will work as a part of our multi-disciplinary team based in Livingston, Scotland, but with strong ties in several locations across the UK and globally. Occasional travel within the UK and abroad may be required.

### KEY RESPONSIBILITIES

- Present mechanical design solutions.
- Undertake product designs, detailed component drawings and assembly drawings, using 3D and 2D CAD tools.
- Undertake improvements to existing products.
- Provide support to the Production department.
- Build and test prototypes and pre-production products.
- Maintain records and files order of all data.
- Work alone and within interdisciplinary teams.
- Undertake travel or other support activities to the Business.
- Other tasks, as required.

## EDUCATION / EXPERIENCE

### Essential:

- Degree or higher in Mechanical Engineering.
- 3 years+ industrial experience.
- Experience using Solidworks to produce 3D models, detail component drawings, assembly drawings and BOMs
- Experience designing and developing sheet metal, welded fabrications, precision machined components, injection moulding, aluminium extrusion and CNC machining.
- Able to judge and set geometrical dimensions and tolerances on parts and on assemblies.
- Knowledge of DFM/DFA techniques, methodologies, and machine shop practices.
- Excellent verbal and written communication skills, with all levels of internal business stakeholders, external customers, and suppliers.
- Development of alignment procedures, tooling, and fixtures to aid in volume assembly.
- Experience of testing and characterising mechanical assemblies to identify root causes of issues and implement permanent corrective actions.
- Must have excellent practical mechanical engineering skills, including modification and assembly of prototype components.
- Experience developing and delivering mechanical solutions through whole product development cycle.

### Desirable:

- Experience using FEA tools.
- Experience using Solidworks PDM.
- Work experience in an R&D environment is highly desirable.
- Experience of low to medium volume product development with a proven track record of delivering cost effective design work to agreed timescales.
- Experience of 3D printing is highly desirable.
- A sound understanding of engineering principles, incl. heat transfer, thermodynamics and fluid flow.
- Experience of mechanical compliance and regulatory testing standards and processes.
- Experience in organising sub-contractors ensuring timely delivery of manufactured components and assemblies.
- Understanding of new product development processes, including experience of transfer to manufacture and writing assembly instructions.

## COMPETENCIES

- Ability to work well in a project-based environment.
- Be a flexible self-starter; able to react to unexpected situations.
- Able to establish priorities and plan work activities effectively.
- Analytically tackle challenges in a timely manner.
- Ensure information is organised and accessible.
- Take pride in work and strive to see projects through to completion.

#### **HEALTH & SAFETY**

- Ensure you and others around you work in a safe manner and maintain safe workspace.
- Reporting any health and safety hazards or accidents to the QHSE Manager.

#### **EMPLOYMENT CONDITIONS AND BENEFITS**

Hours of work 37.5 hours per week. The Company operates a flexible working week.

After an initial qualifying period, and subject to the company's terms and conditions of employment, the Company offers paid sickness, death in service, private medical insurance, pension scheme, paid holidays and relevant statutory days as taken by the company and a performance related bonus scheme.