Mechanical Design Engineer

Smart Fibres is a small, fast growing, Technology Company pre-eminent in the field of fibre-optic sensing, specialising in Fibre Bragg Grating systems. Application for Smart Fibres products has already been found in many markets including Aerospace, Civil Engineering, Offshore Engineering, Marine and Wind Power. The Company already has a strong international customer base spanning these markets and now wishes to further expand its activities in key fields.

We are currently looking for a mechanical design engineer who will support the company growth by strengthening our current mechanical team especially towards the pressure sensors range targeting the O&G market.

Primary responsibilities:

The mechanical design engineer will be responsible for applying sound engineering principles in the development and documentation of Smart Fibres' products. The mechanical engineer will be responsible for maintaining the highest standard in any mechanical design. He/she will provide direct instructions and guidelines for other mechanical engineers.

- Designing and developing opto-mechanical sensor design:
  - Generation or review of new opto-mechanical sensor design concepts from First Principles.
  - Enhancing and maintaining current mechanical designs in order to improve the manufacturability and/or the cost.
  - 3D CAD and FEA stress and strain and thermal modelling of candidate designs.
  - Performing NPI and support production volume roll-out:
    - Generation of manufacturing drawings, bills of materials, route cards.
    - Writing SOP/Work Instructions and testing instructions
    - Integrating mechanical design information on the company ERP system.

Essential requirements:

- Formal technical qualification in a Mechanical Engineering discipline.
- A minimum of 2/3 years' mechanical engineering experience in a small to medium volume environment, ideally within the Oil&Gas market.
- Mechanical CAD experience (CREO 3.0 preferred).
- Capable of processing a large amount of information from a multidisciplinary environment.
- An innovative mind and a capacity for thinking differently.
- Acute attention to detail and extremely rigorous.
- Highly numerate, computer literate (especially MSOffice).
- Self-motivated, pro-active, capable of convincing others.
- Hands-on, willing to stand up on the shop-floor.
- Excellent interpersonal skills for liaising between the Engineering, Production and Operation teams. Effective team player.
- Fluent English speaker.

Desirable skills and experience, one or more of these would be advantageous:

- Design for Manufacturing (DFM).
- Value Engineering product development.
- Any manufacturing processes experience (welding, machining, brazing, etc.)
- Any transducer design experience.
- Material science, especially metallurgy and nickel alloys.

The ideal candidate:

- The ideal candidate will have a strong mechanical engineering background ideally in Oil&Gas with the design of pressure vessel.
- He/she will be creative and have the capacity to propose original solution.
- He/she will possess excellent manual and technical problem solving skills and have excellent attention to detail.
- He/she will have excellent interpersonal skills and the capacity to convince others.

For the right candidate a challenging role within an exciting and rewarding environment awaits. Opportunity exists for career advancement within the Company.