

Job Title: Senior Design Engineer
Department: Operations
Reporting to: Operations Manger
Responsible for: Design of cameras and systems

Introduction

PSEL is a fast-growing specialist imaging equipment manufacturer based in East Sussex. The company has 22 employees and is part of the Tibidabo Scientific Industries group of companies.

Background

The company develops and manufactures a wide range of products, including a range of x-ray, short wave infra-red, cmos and intensified cameras and Laue diffraction systems. The incumbent will have a **background in mechanical engineering and/or design and have experience in supervising other design engineers on daily basis**. An understanding of camera assemblies would be beneficial but not essential. The products produced are custom imaging devices for industry and scientific research.

Dimensions

- This role contributes to the overall achievement of production output, cost and quality KPI targets.
- The role is Monday to Friday working within 'office-type' hours.

Key Results Areas

1. Supervisor Duties

- Supervising a small team of mechanical design engineers
- Setting and adjusting priorities for engineers to meet business needs
- Ensuring that fundamental design rules and principles in the quality design of cameras and systems is applied by all design engineers
- Providing assistance in the design of product to other design engineers

2. Operational duties

- Design new products
- Modify existing design as required
- Design jigs and fixtures
- Set up Bill of Materials

- Maintain current issue number of all parts released for manufacture
- Material specification
- Identify suitable suppliers and obtain quotes for non-standard mechanical parts
- Provide outline drawings for sales enquiries
- Liaise with customers when necessary to suitably define/describe the design requirements

3. Mechanical

- Occasional assistance in assembly of designed units (especially on new product introduction)

4. Human Resource

Leadership

- Promote and uphold company performance standards and ideology (quality, continuous improvement, housekeeping & work ethic).

Staff Training & Development

- Identify, justify and undertake external appropriate training which will be beneficial to PSEL

Performance

- Aim for the following operational excellence.
 - Right first time
 - High productivity
 - High efficiency
 - High effectiveness

5. Health & Safety

- Promote & maintain awareness and compliance of H&S in accordance with best practice and legal requirement.

6. Ad hoc

- The role may include other reasonable duties/tasks from time to time.

Key Interfaces

- Other engineers (software, process, test and hardware) to share opinions and problems
- Production staff (to understand design for manufacture inputs)
- Sales (to understand if customer spec has been met)

Person Specification

Factor	Essential	Desirable
<u>Qualifications</u>		
Degree or higher diploma in mechanical engineering or related field	Y	
<u>Experience</u>		
Experience in design software	Y	
Worked in a manufacturing environment on detailed mechanical assemblies	Y	
Has interfaced with electrical design as part of overall product solution	Y	
<u>Knowledge</u>		
Solidworks	Y	
FEA and/or CFD		Y
Design for manufacture		Y
Optical sensors, fibre optic materials, camera design		Y
Setting up Boms and routings on MRP/ERP systems		Y
<u>Skills & Abilities</u>		
Excellent verbal and written communication skills	Y	
Hands-on working with high attention to detail	Y	
Managing, coaching and training staff	Y	
<u>Personal Qualities</u>		
Strong Problem Solving skills	Y	
Excellent personal organisation	Y	
Dynamic, positive, enthusiastic and possesses the ability to think laterally and act through reasoned decision making	Y	
Ability to work productively, efficiently and effectively with initiative and drive under tight timescales and pressure whilst maintaining attention to detail and quality	Y	
Willingness to learn, improve and adapt	Y	

I have read, understood and accept my job description as detailed;

Signed:

Name in Capitals:

Dated: