

# JOB DESCRIPTION

Job Title	Senior Design Engineer
Reports To	Principal Engineer
Function	Engineering
Version/Date	May 2023

# **Company / Function**

<u>Pearson Engineering Ltd</u> is a world leading provider of counter-mine and combat engineering equipment. Our product range is wide and varied, including complex attachments for armoured vehicles and remote controlled mine clearance systems.

The Engineering function is a multi-disciplined team that provides technical support to all other functions and is responsible for product design, innovative product development and the delivery of the complete manufacturing and technical data packs associated with our contracts. The team also provides hands-on support for installation, testing and commissioning of new equipment, both internally and at our customers' sites, all over the world.

### Job Purpose

Reporting to one of the Principal Engineers, the primary role is to leverage their technical expertise and experience to contribute to the development of products, technology, capability and reliability across PEL's range of products, whilst ensuring that best practice and the Company's defined engineering processes are followed.

#### **Key Responsibilities**

- Developing prototype designs, from concept through to full manufacturing detail, including manufacturing/assembly drawings, specifications of proprietary components, supporting calculations/FMEA reports, plus operating and maintenance instructions.
- 2. Hosting and participating in design reviews throughput the development of a product/solution.
- 3. Supporting verification and validation of fellow engineers' designs.
- 4. Defining the standards and testing required for both prototype and product manufacture.
- 5. Analysing problems and coming up with ideas/designs to solve them.
- 6. Working within the budget to deliver safe, effective products, on-time and to specification.
- 7. Attending internal and external design reviews providing technical input.
- 8. Maintaining a knowledge of current technical trends and innovation to assist in the development of current and future products.
- 9. Leading both onsite and offsite customer training, commissioning, and testing activities.



- 10. Working cross functionally (Commercial, Sales, Projects teams) within the business to improve efficiency and deliver effective products.
- 11. Coaching team members to improve capabilities and develop their engineering knowledge/expertise.
- 12. Communicating professionally with fellow staff, directors, and clients.
- 13. Other related duties as assigned.

## Skills/Experience

- A minimum of a 2:1 Bachelor's degree in Mechanical Engineering or equivalent.
- Chartered Engineer or working towards chartership with the IMechE (or another engineering institution).
- Working knowledge of hydraulic and control systems with significant experience working in a multi-disciplined engineering team.
- Experience working in the defence, nuclear or aerospace industry is desirable.
- Proven experience leading a design team.
- Proven record of delivering technically challenging projects.
- Able to think laterally when problem solving.
- Ability to investigate and interpret data, issues, and situations, to make sound decisions in high-stress situations.
- Expert user in modern engineering design tools (2D + 3D CAD, Analysis, etc)
- Acts with honesty/integrity to build trust, respect, and commitment in the workplace.
- Self-motivating, proactive and results driven approach.
- Demonstrates strong interpersonal awareness and understands and takes into account the thoughts, feelings, and emotions of others.
- Staff development and career progression is crucial to our business and we are therefore seeking a highly motivated engineer that can help others to develop and achieve their potential. You will therefore have skills in (or an interest in undertaking) the leadership and development/mentoring of staff and to help develop others by sharing your knowledge and experience.
- Communicates effectively, both verbally and in writing.
- Ability to work to deadlines whilst maintaining high quality.
- Excellent knowledge of MS office applications including Excel and Word.

# Personal attributes and other requirements

- As a defence contractor, we have a number of security obligations placed upon the Company, which means that all our staff must be able to successfully achieve the relevant security clearances.
- You will be expected to support in-house training programmes, as required.



# **Working Conditions**

- Mainly office based with visits to external customers (both UK and overseas) from time-to-time.
- Working conditions whilst on customer sites may include working outside of normal business hours and being required to work in inclement/uncomfortable field conditions