

## **Job Description – Principal Mechanical Engineer**

**Location:** Harwell Campus, Didcot

### **Role Summary:**

We are seeking to appoint a full time Principal Mechanical Engineer to lead and take ownership of the development of mechanical designs in Oxsensis products. Being the main contributor, you will lead and provide guidance to your peers and junior colleagues to ensure continuous improvement of and adherence to high-quality engineering practices.

### **Reporting to:**

Engineering Manager

### **Key Responsibilities:**

- Lead and own the development of mechanical aspects of Oxsensis products, prototypes, and production tooling
- Ensure adequate materials and geometries selection for all product applications, considering environmental aspects, producibility and cost
- Develop or lead external development of tooling and setups for manufacturing, test and production
- Provide leadership and guidance to junior colleagues and direct reports to ensure excellent engineering practices across the team
- Maintain clear communication with other engineering, R&D and production teams to ensure good alignment on goals, objectives and timelines

### **Essential Criteria:**

- Bachelor's degree in Mechanical Engineering, or equivalent education
- Solid understanding of mechanisms, electro-mechanics, pneumatics and thermodynamics
- Strong technical and practical understanding of manufacturing processes, such as machining, welding, brazing, bonding, polishing and etching
- Proficiency in creating complex models and assemblies in SolidWorks CAD
- Proficiency in engineering drawings, and Design for Manufacture (DFM)
- Proficiency in geometric dimensioning and tolerancing (GD&T)
- Experience in development and production stage procedures ensuring equipment safety
- Ability to use simulation tools for design purposes, including finite-element analysis (SolidWorks Simulation)
- Control design skills, including control for linear motion, ball screws, linear stages and motors
- Ability to develop simple programmes and control codes (Arduino, C+, R, etc.)
- Familiarity with enterprise resource planning (ERP) systems
- Solid understanding of pressure system safety and gas handling
- Experience in implementing and following essential engineering practices, including change management, configuration control and risk management
- Ability to write and work with technical reports and documentation

### **Desirable Criteria:**

- Experience in working in a startup/SME
- Experience in working with optical fibre products and prototypes and understanding of common processes (e.g. splicing, joining)
- Experience in working with low TRL technologies and innovation

Please send your application with a cover letter to Oxsensis Ltd [contact@oxsensis.com](mailto:contact@oxsensis.com)