

## **JOB DESCRIPTION**

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|---------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Job Description Number:</b>                                                  | <b>TBC</b>                                             |
| <b>Job Title:</b>                                                               | Lead Mechanical Design Engineer                        |
| <b>Reports To:</b>                                                              | Team Leader Mechanical (Functional) & Project Engineer |
| <b>Based:</b>                                                                   | Swindon                                                |
| <b>Responsible For<br/>(Appointments under<br/>Direct Control of this Job):</b> | allocated Senior and Mechanical Design Engineers       |
| <b>External Contacts</b>                                                        | Suppliers, Clients                                     |

### **Purpose:**

To be the Lead Mechanical Design Engineer to produce optimised engineering solutions on allocated projects and provide wider support to the Mechanical Team Leader.

### **Key Responsibilities and Accountabilities**

- Interpretation of customer requirements, including Validation and Verification activities.
- Pre-FEED tasks, including design plant layout and schematic drawings, to support sales and projects.
- Conduct FEED studies for projects to create optimal technical solution.
- Development of project Basis of Design.
- Provide input into project planning and execution.
- Identification and management interfaces, both customer and internal.
- Approval of Functional Design Specifications for System, Sub-system and Components for procurement.
- Produce and approve detailed engineering and manufacturing drawings.
- Ownership and management of allocated Work Packages, including time-management and budget control.
- Participate and present material at formal design reviews.
- Participate in Hazard Studies, including HAZOP and carry out design FMEAs.
- Writing / contributing to Installation, Operation & Maintenance Manuals.
- Ensuring conformance to applicable engineering codes and standards as well as company QA system, policies and procedures.
- Continuously develop, improve and implement design procedures.

### **Role Requirements:**

#### **Qualifications/Education**

- Degree-qualified or equivalent in Mechanical Engineering or a related discipline
- Chartered Engineer or working towards chartership.

**Experience:**

- Demonstrable experience of special purpose machinery design.
- Proven ability to support designs with appropriate calculations.
- Experience of high temperature industrial processes and associated equipment is desirable but not essential.
- Industrial experience in Mechanical Engineering.

**Skills:**

- Working knowledge of 2D and 3D CAD software essential, Autodesk Inventor preferred.
- Good working knowledge of MS Software (Word, Excel, Outlook).
- Excellent interpersonal and communication skills (written and oral).
- Some electrical and controls knowledge would be preferable.
- Strong leader with good communications skill and management skills.

**Attributes:**

- Ability to work both independently and as part of a multi-disciplinary team.
- Must be self-motivated and driven to achieve set goals when working under pressure and with limited resources.
- Demonstrate creativity and experience across the design lifecycle including undertaking requirements capture, concept generation, development and down selection.
- Travelling and working at customers' and suppliers' sites is an integral part of the role and the ideal candidate would will have willingness and ability for worldwide travel.
- Team working, communication skills, technical support to other departments, ability to work independently if necessary.
- Deal effectively with ambiguity and multiple problems whilst working to tight timescales.
- Ability to achieve set goals when working under pressure and with limited resources.
- Ability to work on own initiative.
- Enthusiastic team contributor.

**Name:****Signed:** \_\_\_\_\_**Date:** \_\_\_\_\_

*As the needs of the business change this role will change accordingly, therefore this document should be viewed as guidelines which are subject to change. You will, from time to time, be required to undertake other activities of a similar nature that fall within your capabilities as directed by management.*