

## Mechanical Design Engineer

### JOB DESCRIPTION

JOB TITLE	Mechanical Design Engineer	LOCATION	Derby
REPORTING TO	Mechanical Design Manager	VERSION #	1.4
COMPANY	Rotadata Limited	DATE	25/02/2020

### ROLE OBJECTIVES

- The main function of the role will be to contribute to the detail design, development and support of new and existing products within the design team.

### DUTIES & RESPONSIBILITIES

- Produce design studies and associated documentation.
- Provide technical support to ongoing projects.
- Produce solid models with supporting calculations to verify the design.
- Produce detail and assembly drawings to BS standards.
- Checking engineering drawings and design solutions.
- Support project managers with technical design and time management questions.
- Liaise with manufacturing to ensure designs can be manufactured in the most effective way.
- Liaise with subcontractors & suppliers to ensure project deliverables are met.
- Support production with manufacturing issues.
- Formulate conceptual design of products or systems to meet customer requirements.
- When required liaise directly with customers to resolve design issues and be involved in design discussions on or off site.
- Develop design criteria for products/systems, including testing methods, production costs, quality standards and completion dates.
- Plan and conduct experimental, environmental, operational and stress tests on models and prototypes.
- Evaluate product data and design from inspections and reports for conformance to engineering principles, customer requirements and quality standards.
- Write technical reports and other documentation, such as handbooks and bulletins, for use by engineering staff, management and customers.
- Analyse project requests, proposals and engineering data to determine feasibility, producibility, cost and production times.
- Review documentation from customers and field engineers and inspect malfunctioning or damaged products to help resolve problem.
- Integrate work with Engineering, Production, Quality and Purchasing Departments to ensure a smooth flow of quality products through the company.
- Adhere to company Health and Safety standards.
- Prepared to work additional hours as required to meet the needs of both the business and our

customers.

- Willing to travel to visit customers as necessary to ensure full understanding of their requirements.
- To carry out any reasonable additional duties as requested by management.

#### QUALIFICATION/EDUCATION QUALIFICATION/EDUCATION

- A completed Degree or HNC/HND qualification in Mechanical Engineering.
- Background in Aerospace or Precision Engineering.

#### KNOWLEDGE & SKILLS

- Competent in the use of Solidworks.
- Strong understanding of mechanical engineering design principles and analysis techniques.
- Ability to produce complete design packages including concept modelling, detail drawings and supporting documentation.
- Capable of checking engineering drawings and design solutions.
- Knowledge of electro/mechanical systems is advantageous.
- Strong planning and organisational skills.
- Excellent communication skills, with previous experience of customer facing activities.
- Strong time management skills with the ability to effectively co-ordinate multiple projects.
- Ability to employ critical thinking, logic and reasoning to troubleshoot and solve problems.
- Excellent skills in attention to detail and working to quality standards.
- Ability to cope in a highly dynamic production environment where changes in customer requirements are considered normal.
- Keen to learn new skills and develop new processes.
- Knowledge & ability to perform thermodynamics & gas dynamic analysis is advantageous.