Job Description

Manufacturing life safety products

Job Title: Graduate R&D Engineer			
Contract Type & Hours	**Type:** Fixed Term (12 Months) **Hours: 37.5** **Shifts:** Monday – Friday 9 am – 5 pm	**Location**	*Unit 4 Central Blvd, Blythe Valley Park, Solihull B90 8AW*
Reporting to	*R&D Manager*	**Level**	*Junior-Level*

R&D Engineer

Role Purpose

The Graduate R&D Engineer supports the Research & Development team in designing innovative medical transfer solutions, developing new products, and improving existing products through testing, technical documentation, and engineering change management. This role combines

Key Responsibilities

Product Design & Development

- Support the design and development of bespoke solutions in line with customer and clinical requirements.
- Assist experienced engineers with New Product Development projects from initial concepts through to production.
- Contribute to the development, evaluation and improvement of new and existing products.
- Develop CAD models, engineering drawings and other design documentation under guidance.
- Participate in design reviews and contribute ideas to improve product performance, usability and manufacturability.

Engineering Change & Product Improvement

- Support the implementation of Engineering Change Notices (ECNs) and updates to existing products.
- Assist in identifying opportunities to improve product performance, quality, manufacturability and cost.
- Contribute to continuous improvement activities across the product portfolio.
- Work alongside Production and Quality teams to understand and support the implementation of design changes.

Product Testing & Validation

- Build and evaluate prototypes and development samples.
- Assist with planning and carrying out physical testing of products and components.

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- Record, analyse and present test results, with support from experienced engineers.
- Contribute to product verification and validation activities.
- Help identify potential design improvements based on testing and evaluation.

Technical Documentation

- Assist in preparing and maintaining engineering documentation, including:
  - Design specifications
  - Test protocols and reports
  - Engineering drawings
  - Technical files
  - Risk assessment documentation
- Ensure documentation is accurate, clear and maintained in accordance with company procedures.
- Develop an understanding of design control and document management within a medical device environment.

Quality & Regulatory Support

- Support investigations into product quality issues and customer feedback.
- Assist with root cause analysis and corrective actions.
- Contribute to Design FMEA and risk management activities.
- Support compliance with ISO 13485, MDR, and other applicable regulatory requirements.

Cross-Functional Collaboration

- Work collaboratively with Manufacturing, Quality, Purchasing and Sales teams throughout the product development process.
- Provide technical support for bespoke customer solutions and product enquiries, with guidance from experienced team members.
- Assist with the introduction of new and improved products into manufacturing.
- Attend and contribute to project meetings, design reviews and continuous improvement activities.
- Build effective working relationships across the business and develop an understanding of how different functions contribute to successful product development.

Working Relationships

- Managing Director
- Head of Export & Innovation
- R&D Manager
- Design Engineers
- Manufacturing & Assembly Teams
- Purchasing
- Customer Service

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- Business Development Managers

Key Deliverables

Objective	Measurement
Effective prototype support	Effective support of prototype builds, design reviews, and feasibility activities
New Product Introduction (NPI) support	Successful contribution to pilot builds and smooth transition of products into production
Product testing & validation	Accurate completion of physical testing, analysis, and technical reporting
Engineering documentation	Technical documents, test reports, drawings, and design records completed accurately and maintained
Engineering change support	Timely and effective support of ECN implementation and product improvements
Cross-functional collaboration	Positive contribution to resolving technical issues with R&D, Production, Quality, and other teams
Continuous improvement	Identification and support of improvements to product performance, manufacturability, and processes
Technical development	Continued growth of engineering knowledge, product understanding, and contribution to team capability

Core Values Integration

How the role directly contributes to the Core Values and contributes to a positive culture.

Our Core Values	How you will directly contribute
Innovate	• Designing, developing, and testing prototypes to support new product development. • Identifying opportunities to improve product performance, usability, manufacturability, and quality. • Applying engineering principles to develop practical solutions for customer and clinical requirements.
Collaborate	• Working with Production, Quality, and Service teams to support the successful development and introduction of new products. • Providing technical input to support bespoke customer solutions and product improvements.

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	• Collaborating with cross-functional teams to resolve technical challenges and deliver effective engineering solutions.
Adapt	• Responding positively to changing project requirements, design iterations, and testing outcomes. • Supporting improvements to engineering processes, documentation systems, and product development workflows. • Assisting with investigations and problem-solving activities when technical challenges arise.
Deliver	• Supporting the delivery of projects through effective design, testing, documentation, and communication. • Ensuring engineering outputs meet agreed requirements for quality, safety, and performance. • Contributing to the successful transition of new products from concept and prototype stages into production.

Qualifications, Skills and Experience

Technical Requirements

Essential

- Strong understanding of mechanical production principles
- Ability to interpret technical drawings and CAD outputs
- Understanding of materials, tolerances, and manufacturing techniques
- Experience supporting prototype-to-production transition
- Ability to troubleshoot production or assembly issues

Desirable

- Experience with prototype development, workshop activities, or practical engineering projects.
- Exposure to manufacturing processes such as fabrication, machining, or assembly.
- Experience working within a regulated industry or medical device environment

Systems Requirements

Essential

- MS Office
- SolidWorks

Knowledge

- Mechanical design principles.
- Engineering documentation, drawings, and reporting.

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- Prototype development and testing methods.
- Product development lifecycle.

Qualifications

- Degree in Mechanical Engineering or Product Design Engineering

Role Positioning

This role supports:

- Reliable production delivery
- Effective product launches
- Improved build consistency

It moves beyond purely operational support by contributing to how products are successfully introduced and manufactured.

Behavioural Competencies

The Production Engineer is expected to demonstrate the following core behaviours:

1. Ownership & Accountability

- Takes responsibility for assigned engineering tasks and project activities.
- Completes work accurately and follows actions through to completion.
- Raises risks, challenges, and opportunities in a timely and constructive manner.

Looks like:

- Taking ownership of design tasks and test activities.
- Maintaining accurate engineering documentation.
- Following projects through from concept to completion.

2. Problem Solving

- Applies logical engineering thinking to investigate challenges and develop solutions.
- Uses data, testing, and feedback to support decision-making.
- Learns from failures and applies improvements.

Looks like:

- Investigating test results and design issues.
- Supporting root cause investigations.
- Developing practical solutions to engineering challenges.

3. Collaboration

- Works effectively with R&D, Production, Quality, Service, and Commercial teams.
- Communicates openly and shares technical knowledge.
- Supports alignment between design requirements and practical application.

Looks like:

- Engaging with manufacturing teams during product development.
- Supporting customer and clinical requirements.
- Working collaboratively to resolve technical challenges.

4. Continuous Innovation & Improvement

- Looks for opportunities to improve product performance, usability, and manufacturability.
- Challenges existing approaches through constructive engineering thinking.
- Supports the development of new solutions and product improvements.

Looks like:

- Suggesting design improvements.
- Supporting prototype development.
- Identifying opportunities to improve product reliability and efficiency.

5. Adaptability

- Responds positively to changing project requirements and priorities.
- Adjusts approach based on testing outcomes, customer feedback, and business needs.
- Maintains effectiveness across different stages of product development.

Looks like:

- Communicates technical information clearly and effectively.
- Produces accurate engineering documentation.
- Adjusts communication style for technical and non-technical audiences.

Looks like:

- Writing clear test reports and technical documents.
- Providing effective project updates.
- Sharing technical findings with relevant stakeholders.

7. Learning Orientation

- Actively develops engineering knowledge and technical capability.
- Seeks feedback and applies learning to improve performance.
- Builds understanding of products, processes, and industry requirements.

Looks like:

- Engaging in training and development opportunities.
- Learning from experienced engineers.
- Developing knowledge of medical device design and quality requirements.

8. Quality & Detail Focus

- Maintains high standards in engineering outputs and documentation.
- Understands the importance of safety, quality, and compliance.
- Ensures work is completed accurately and consistently.

Looks like:

- Producing accurate drawings and technical records.
- Supporting verification and validation activities.
- Considering risk, materials, and tolerances during design.

Behavioural Summary

Success in this role requires someone who is:

✓ Curious and innovative
✓ Practical and analytical
✓ Collaborative and supportive
✓ Eager to learn and develop

