



## Design & Development Manager – Job Description

(Job Code and Level: EDESDEV005)

### **Definition:**

Design and Development is defined as: Designing systems, processes, methodologies as well as component and vehicle designs to enhance the overall vehicle performance for the customer and environment. Transforming concepts into prototypes for testing, validating and improvement for ultimately mass volume production. This includes designing to meet costs, timing and quality requirements.

### **Overall Purpose of the Role:**

Responsible for leading a design team together with the development team to ensure the delivery of new designs from the concept stage to the development of prototypes through to finished products ready for manufacture. Drive creative thinking, ensure customer needs are considered and collaborate with the operations team to ensure products are designed for efficient manufacture. Deliver the agreed engineering objectives established in the Annual Operating Plan and considering the organisation longer-term strategy road map. Work on multiple major projects requiring innovative solutions that advance the technical field. Long range strategic planning will affect the Company's success.

Overall Ensure that Health, Safety and Environmental requirements are adhered to. Implement and manage continuous improvement principals by highlighting deficiencies and recommending changes in training, working practices and processes.

### **Key Responsibilities:**

#### **Strategy and Development**

- Contribute to the creation and implementation of best practice engineering vision, strategy, policies, processes and procedures to aid and improve operational performance
- Ability to capture and specify the design requirements and the development and validation needed to deliver successful systems, products and components to meet/exceed the customer's specifications

## **General and Task Management**

- Lead the team to create a range of 3D models for a number of proposal/production and development systems, products, and components using CAD
- Responsibility for the management of all Design activities including Request for Quotations (RFQs), Design freeze / release, Design Failure Mode Effect Analysis (DFMEA), Production Part Approval Process (PPAP), Design Verification/Product Validation (DV & PV) testing and Computer-aided engineering (CAE)
- Present design, costs, changes and budgetary information effectively to senior board members and customers and provide regular progress updates
- Liaise closely with all departments to fully understand design requirements
- Respond to Requests for Quotation (RFQs) from the Sales team
- Create initial feasibility studies
- Conceptualise new designs and design revisions
- Create detailed costed design blueprints
- Provide support to production to improve lead times
- Improve reliability performance to reduce or eliminate warrantable issues in the field
- Deal with parts suppliers, involving Purchasing where necessary
- Design in-line with UK/EC/International standards and legislation
- 2D and 3D CAD to produce designs, drawings and models
- Analyse issues to resolve issues, for example stresses, using tools such as Finite Element Analysis (FEA), Failure Mode and Effect Analysis (FMEA)
- Prototyping
- Drive forward product development, innovation and 'think outside the box' to generate engineering advantage for customers, thinking creatively to develop new/improved solutions
- Identify and implement design improvements (functionality, cost, design for manufacture)
- Report on achievement of targets and identify any actions required
- Ensure that the function operates in accordance with any health, safety and environmental policies and procedures to ensure the safety and wellbeing of staff and visitors
- Be customer facing
- Embrace and champion continuous improvement

## **People Management**

- Assign engineering resources to New Product Development (NPD) and technology projects and strategy

- Manage the design and development team to produce a range of concept design schemes for new products as well as updating existing product designs for a number of automotive customers
- Ensure the delivery of the People Strategy within area of accountability
- Motivate and coach the team to operational success
- Monitor the completion of tasks and ensure good performance and record on appropriate systems
- Consistently promote high standards through personal example and roll out through the team so that each member of the team understands the standards and behaviours expected of them
- Lead the team in new product development projects
- Set department objectives/KPIs and review and assess ongoing performance of direct reports
- Communicate KPIs from the strategic annual plan so that each employee is aware
- Ensure that the function operates in accordance with any health safety and environmental policies and procedures to ensure the safety and wellbeing of staff and visitors
- Provide technical expertise to the team

#### **Financial Budget and Control**

- Hold responsibility for departmental budget
- Cost projects and managing projects to agreed budgets

#### **Relationship Management**

- Develop and maintain strong relationships with internal and external stakeholders to ensure optimal performance
- Work collaboratively, negotiate and engage with key stakeholders to facilitate delivery and compliance with the engineering strategy
- Communicate with stakeholders the impact of market change and potential effects on engineering design and development. Recommend solutions without compromising quality or service while optimising cost
- Stay current and up to date on any technology changes that may affect engineering design and development and advise others of any impact
- Contribute to new business initiatives and projects and review and communicate the impact on engineering activities
- Assist Senior Management in ensuring effective relationships with client businesses through maintaining an appropriate technical interface between engineering design and customers

#### **Self Management**

- Comply with the Health, Safety and Environmental Policies
- Support encourages and develop team
- Proactively contribute to creating a good team atmosphere
- Anticipates and overcomes obstacles
- Makes useful links to arrive at insightful plans and solutions
- Embraces personal challenge
- Confident, rounded thinking

- Takes ownership for team cohesion
- Is self aware
- Is resilient, influential, optimistic and open to change
- Has an Adult:Adult, collaborative approach to others
- Driven by success
- Organised and methodical with a can-do/will-do approach
- Exhibit a willingness to do things differently and consistently translate ideas into actions that deliver results

### **Skills and Attributes:**

- Broad experience of working in an automotive environment
- Able to demonstrate experience of working with relevant products
- Process driven
- Comfortable with hands-on engineering and possess strong knowledge of production processes
- Good eye for small details
- A representative of best practice
- Leadership, motivation and man-management skills
- Proven project management skills
- Excellent communication skills
- Integrity and strong commercial capability
- Ability to build strong relationships

### **Qualifications and Experience Levels:**

- Relevant manufacturing/engineering degree is preferred, or HND, BTec Professional Level 5 Award or equivalent NVQ Level 5 qualifications.
- Able to demonstrate experience of working within design and development function
- Strong working knowledge of 2D and 3D CAD
- In depth knowledge and experience of DFMEA, FMEA, APQP, PPAP, and Six Sigma
- Experience of New Product Introduction, reworking design changes and upgrades through to production
- Experience of managing a team
- Experience of testing and prototyping
- Membership of an industry related Professional Body would be advantageous

### **Example roles this job description may cover:**

- Design Manager
- Design Engineering Manager
- Engineering Manager
- Engineering Design Manager