



## Technical Specialist, Production Engineering – Job Description

(Job Code and Level: EPRE004)

### Definition:

Production Engineering defines and works out how the product will be assembled on the production line including the design packaging enabling the right quantity of components/product are delivered to support the speed of the production line. Review efficiencies and eliminate waste within the manufacturing process. Deliver high quality products/components to clearly defined standards.

### Overall Purpose of the Role:

Responsible for implementation of production processes and procedures, leading productivity improvements with project based activities, including new product introduction and manufacturing cell design to reduce waste, improve quality and safety, and reduce operating costs. Manage KPIs and ensure preventative actions are taken to maximise success. Support the team with strongly developed technical ability and expertise. Work and act independently, being self-supervising within the expectations of Senior Management with outcomes reviewed at a senior level. Work on multiple major projects requiring innovative solutions at the cutting edge of the technical field of expertise. Decisions and results have a prolonged impact on the direction of the project and its success. Performance affects the function's technical image.

### Key Responsibilities:

#### General and Task Management

- Provide technical expertise to multiple projects and budgets and team members
- Design new systems and processes for the introduction of new products or for the improvement of existing ones
- Ensure all product and system requirements are taken into account from the initial product conception to the finished result
- Ensure product and process quality to meet specifications required
- Tender for equipment to ensure the best quality for best price

- Oversee installation of machinery and equipment
- Maintain statistical and financial records
- Improve manufacturing efficiency by analysing and planning work flow, space requirements and equipment layout
- Remove waste from the processes
- Organise plant start-up and shut-down schedules to ensure minimum loss of production time
- Plan and organise maintenance
- Respond to breakdowns
- Analyse down time and identify trends
- Support and lead continuous improvement, problem solving and process improvement activities
- Carry out FMEAs (Failure Mode Effects Analysis), process documentation and implement improvements
- Poka Yoke (error proofing) where possible to prevent errors
- Investigate production and process issues
- Keep up with current and developing manufacturing and engineering trends
- Long range planning
- Advance engineering principles, theories and concepts
- Manage activities of a complex nature where there may be no precedents available
- Keep up with current and developing manufacturing and engineering trends regarding maintenance / tool making
- Undertake special projects as required
- Contribute to continuous improvement activities
- Quality control of work by appropriate reviews
- Support and lead process improvement activities
- Write reports and present progress at project meetings and to clients
- Conduct benchmarking studies to determine best practices/designs and future trends
- Plan projects or subtasks so they may be tracked and presented
- Manage the Key Performance Indicators (KPIs)
- Attend various meetings and action/communicate instructions
- Produce written reports and make presentations
- Undertake continuous training and development
- Perform root cause analysis and resolve problems
- Independently determine approach and assigned tasks

### **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 manufacturing strategy
- Communicate with stakeholders the impact of market change and potential effects on manufacturing 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 manufacturing design and development and advise others of any impact
- Contribute to new business initiatives and projects and review and communicate the impact on manufacturing activities
- Liaise and communicate with other departments, customers, suppliers and other service providers
- Develop technical relationships with key suppliers and business partners
- Liaise and communicate with other departments, customers, suppliers and other service providers

### **Self Management**

- Comply with the Health, Safety and Environmental Policies
- Support encourages and develops the team
- Proactively contribute to creating a good team atmosphere and has a collaborative approach to working with others
- Anticipates challenges and overcomes obstacles
- Makes useful links to arrive at insightful plans and solutions
- Embraces personal challenge
- Confident, rounded thinking
- Is self aware
- Is resilient, optimistic and open to change

### **Skills and Attributes:**

- Self-supervising within the expectations of Senior Management with outcomes reviewed at Senior level
- Widely recognised as a technical expert
- Understanding manufacturing processes
- Understanding engineering, scientific and other technical information
- Understand lean manufacturing
- Ability to work in a diverse and dynamic environment
- Planning and prioritising activities
- Good communication and interpersonal skills
- Ability to present data effectively
- Problem-solving skills
- Understanding of Health and Safety practices
- Team working and leading skills
- Analytical skills
- Ability to effectively train people inside and outside their work group
- Distinguished record of creativity and innovation
- Develops and applies advanced technologies, engineering principles, theories and concepts
- Accomplishments contribute to state of the art field delivery
- Exercises comprehensive discretion in judgement and initiative in setting and implementing goals
- Ability to negotiate the most complex arrangements with groups and stakeholders

## **Qualifications and Experience Levels:**

- Relevant manufacturing/engineering degree is preferred, or HND, BTec Professional Level 5 Award or equivalent NVQ Level 5 qualifications.
- Membership of an Industry related Professional Body would be advantageous
- Ability to use CAD
- Ability to design processes and layouts
- Experience of FMEA (Failure Mode Effects Analysis), Kaizen/A3 (continuous improvement and problem solving) process improvement and Poka Yoke (error proofing) techniques
- Considerable experience in a high volume manufacturing environment, preferably automotive
- Technical expert
- Distinguished record of creativity and innovation

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

- Industrial Engineer
- Process Engineer
- Manufacturing Engineering