



Production Engineer – Job Description

(Job Code and Level: EPRE003)

Definition:

Production Engineering defines and works out how the product will be manufactured and/or assembled on the production line including design of packaging, ensuring the right quantity of components/products are delivered and aligned to support the speed of the production line. Review efficiencies and eliminate waste within the manufacturing process to 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. Work on many phases or sub-tasks of projects or entire projects of moderate complexity, with results impacting on project completion. Work under general supervision, reviewed at project milestones and/or on completion by Senior Management.

Key Responsibilities:

General and Task Management

- Identify manufacturing needs for new products in development
- Design new systems and processes and provide facilities & methods to ensure the cost effective integration of new products or for the improvement of existing ones into manufacturing operations
- Ensure all product and system requirements are taken into account from the initial product conception to the finished result
- Assist with shop floor layout and cell designs
- Design fixtures and tooling for assembly tasks
- Generating production documentation such as assembly instructions
- Reduce variability in manufacturing by providing standard work methods and work instructions
- Ensure product and process quality meets specifications required

- Support the tender process 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
- Report down time and possible 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 providing technical support and training
- Keep up with current and developing engineering trends
- 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
- Achieve goals within budget
- 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

People Management

- Lead and/or support technicians and trainee engineers
- Train people within own work group
- Supervise sub-contractors

Relationship Management

- Liaise and communicate with other departments, customers, suppliers and other service providers
- Be an effective team member, working with supervisor and colleagues to ensure smooth workflow with maximum output

Self Management

- Comply with the Health, Safety and Environmental Policies

- Assertive, resilient and welcomes change
- Engages interest and participation of others and has a collaborative approach to working together
- Actively committed to teams development
- Is optimistic and self aware
- Shows moral courage, openness and honesty in all dealings
- Self-motivated, flexible, proactive and committed
- Good communication and interpersonal skills
- Excellent Attention to detail

Skills and Attributes:

- Independently determines approach and assigned tasks
- Understanding manufacturing processes
- Understanding engineering, scientific and other technical information
- Strong problem-solving skills and logical approach
- Understand lean manufacturing
- Ability to work in a diverse and dynamic environment
- Planning and prioritising activities
- Excellent negotiation skills
- Ability to present data effectively
- Understanding of Health and Safety practices
- Team working skills
- Analytical skills
- PC skills
- Exercises latitude and technical judgement in deciding work methods
- Ability to train the work group and lead teams within the work group
- Ability to manage group to achieve goals within budget
- Good understanding of customer expectations and deliverables with an awareness of the impact of failure/cost of poor quality

Qualifications and Experience Levels:

- Relevant manufacturing/engineering degree preferred, A Levels, ONC, City & Guilds level 3, BTec National Diploma Level 3, IVQ Technician Diploma, or equivalent NVQ level 3 qualification
- Professional accreditation with an industry related 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
- Significant work experience in a high volume manufacturing environment, preferably automotive
- Experienced with a number of systems, expert in at least one area and working knowledge of a number of other areas of specialisation

- Understanding of design and production costs to include waste, downtime, scrap and re-work

Example roles this job description may cover:

- Industrial Engineer
- Process Engineer
- Manufacturing Engineer