

Production Engineer (Process Design)

- **Process Design & Development:** Design and develop manufacturing processes for new product models, ensuring alignment with quality, safety, and production efficiency requirements.
- **Cycle Time & Cost Estimation:** Estimate production processes and cycle times accurately to support cost calculations and sales quotation activities.
- **Production Layout & Line Setup:** Prepare and optimize production layouts and line configurations to maximize throughput and ergonomics.
- **Machinery & Tooling Evaluation:** Assess machinery, tooling, and facility requirements for new and existing processes; evaluate and select the most appropriate equipment to meet production needs.
- **Work Instruction Development:** Create clear, accurate, and up-to-date work instructions and standard operating procedures (SOPs) to ensure consistent process execution on the shop floor.
- **Process Improvement:** Continuously identify opportunities to improve process efficiency, reduce waste, and enhance product quality through systematic analysis and engineering solutions.
- **PFMEA & Control Plan:** Lead and participate in Process Failure Mode and Effects Analysis (PFMEA) and develop control plans to proactively manage process risks.
- **Facility Planning:** Support basic facility planning activities, including space allocation, utility requirements, and equipment placement for new or modified production areas.
- **Cross-Functional Collaboration:** Work closely with R&D, Quality, Maintenance, and Production teams during new model launches and engineering change implementations.
- **Documentation & Reporting:** Maintain accurate process documentation and provide regular progress reports to management on project status and process performance metrics.

QUALIFICATIONS & REQUIREMENTS

- Bachelor's degree in industrial engineering, Mechanical Engineering, Manufacturing Engineering, or a related field.
- 2–3 years of experience in production process design, manufacturing engineering, or a related role.
- Hands-on experience with new model introduction (NMI) or new product introduction (NPI) processes.
- Experience preparing production layouts and setting up manufacturing lines.
- Exposure to process simulation, PFMEA, and control plan development.
- Strong knowledge of manufacturing process design principles and production flow analysis.
- Ability to estimate cycle times and translate them into cost calculations.
- Competent in evaluating and selecting machinery, tooling, and accessories appropriate for specific production processes.
- Basic understanding of facility planning (space, utilities, equipment placement).
- Proficiency in CAD software or process simulation tools is an advantage.