



Apply at [hr@turkmfg.com](mailto:hr@turkmfg.com)

## Position: Manufacturing/Product Engineer

**Position Summary:** You will be responsible for developing manufacturing processes and define critical process parameters to successfully prototype and mass produce customer parts and electromechanical assemblies. You will manage new equipment and fixture designs as needed to validate product design and manufacturing processes. You will create detailed work instructions to document new processes, and train operators and technicians on new equipment. You will create manufacturing recipes during product prototyping phase and guarantee proper transfer of new processes to full production. In addition to your technical skills, you will sustain highly interactive relationships with internal teams and external partners to help realize our customers designs in production.

### Essential Duties and Responsibilities

1. Works closely with Customer Relations/Business Development and Estimating to ensure customer specified quotation requirements are reviewed, quotations are developed in time and include risks and opportunities for greater Gross Margin realization
  - Translates customer requirements into factory activities; creates and documents associated factory support activities needed for product manufacturing and testing.
  - Gathers, understands and converts customer data into usable manufacturing information.
  - Works with customer to provide design and manufacturability suggestions.
  - Provide manufacturing engineering information by answering questions and requests
2. Works to execute Design and manufacturability on NPI and current productions orders
  - Review new designs for manufacturability and make recommendations to design engineering on manufacturability improvements
  - Creates product assembly work instructions and checklists.
  - Create and maintain process drawings (Solidworks, Predator, etc.)
  - Develop, implement and maintain methods, operation sequence, and processes in the manufacturing of sub-assemblies and final assemblies
  - Maintain records and reporting systems for coordination of manufacturing operations
  - Systematically evaluate assembly processes; then, develop and apply improvements
  - Lead the development of assembly processes for new products via systematic and thorough methodology
  - Development of New Product Introduction Organizational processes and procedures.
  - Perform Virtual Builds using 3D CAD models to determine product manufacturability including BOM validation, determine proper build sequence, labor hour estimation, DMFA, tooling, and fixtures assessment
  - Assure product and process quality by determining product and process capabilities
  - Participates in design reviews and prototype builds for manufacturing process development and escalate issues, as necessary. Recommends corrective actions and implements changes for new Product introduction manufacturing support plan. Identifies and mitigates risks; develops and implements risk mitigation plans
  - Drives continuous improvement activities for existing manufacturing lines
  - Build prototypes including machining parts; and provide redesign improvements and value engineering
3. Other Duties include but are not limited to:
  - Work with outside suppliers on outsourcing activities
  - Design and procure manufacturing fixtures
  - Implement Quality protocols through hands-on practice and development of tools, layout, work instructions, and training of assembly personnel
  - Analyze and plan workflow, space requirements, and equipment layout
  - Anticipating capacity needs and developing plans to meet growth projections
  - ISO and OSHA compliance within your scope of work
  - Contribute to team effort by accomplishing related activities as needed

**Required Education and/or Experience:**

- BS in Manufacturing, Mechanical, Industrial, or Electrical Engineering required, MS preferred
- Experience with project planning and budget management.
- Strong, proven experience working in cross-functional teams such as quality, manufacturing, engineering, and sourcing is preferred.

**Required Qualifications:**

- Strong familiarity with the ISO9001 Quality Management Standard. Knowledge of effective techniques and strategies needed to meet requirements of the standard.
- Ability to work in a dynamic environment that may include shifting priorities, demands and resources.
- Strong interpersonal skills and extremely resourceful.
- Strong written and oral communications skills.
- Adept at conducting research into project-related issues and products.
- Ability to work with minimal supervision.

**Mathematical Skills:**

Must have mathematical skills equivalent to those required under degree requirement.

**Physical Demands:**

May require a combination of sitting, standing, and walking. May require lifting up to 50 pounds with assistance.

**Environment/Atmospheric Conditions:** Must be able to work in an office environment as well as a shop environment, including clean room, as job duties require. Exposure to loud operating machinery, cold temperatures, chemicals, and vapors is possible.