

Position:Mechanical Design EngineerReports To:Engineering Manager

## **Basic Function:**

This Engineering position is responsible for developing complex designs in conformance with Ingersoll Production Systems' design standards and customer or Marketing specifications. Responsibilities include participation in the development of engineering standards, design specifications for marketing activities and complex project design assignments. Communication with customers and functional organizations within the company is an important aspect of this position. Engineers in this position must have strong design capabilities coupled with an ability to achieve schedule, budget and quality objective.

# **Core Competencies:**

- Must be a self-starter who can perform assigned tasks with minimal supervision.
- Must have good communication skills, both written and verbal.
- Must have demonstrated ability to develop complex mechanical designs.
- An ability to work well with others in a team environment is required.
- A general knowledge of machine tool types, their function and typical machining processes is required.
- An ability to work to a schedule and budget is required.
- Should have strong mathematical skills including algebra, geometry, trigonometry, calculus/analytical geometry.
- Knowledge of common US and International Codes are required.

## Preferred Competencies:

- Must have strong mechanical drawing skills with the ability to read and layout mechanical drawings.
- Experience with Autocad and/or Solidworks is required.
- Must be knowledgeable of geometric dimensioning and tolerancing per ANSI Y14.5.
- A good understanding of Finite Element Analysis, Failure Mode Effects Analysis and Reliability/Maintainability techniques is desirable.

#### Education/Experience:

• A Bachelor's Degree in the required technical field is desired. In the absence of a Bachelor's Degree, an Associate's Degree in the field and 3 or more years of experience is required. Extensive experience and demonstrative performance in the required area will also be considered.

#### **Duties and Responsibilities:**

- Develops new designs to meet customer or marketing specifications.
- Works with supervision to maintain project schedules and budgets.
- Supports the development and maintenance of department standards.
- Documents designs using AutoCAD to IPS and/or customer standards as required by the project.
- Provides assistance to other functional groups (Manufacturing, Assembly, Customer Service, etc.) throughout the life of the project.
- Develop specifications for purchased equipment.
- Prepare Bill of Materials and ENOC's.
- Maintains technical competency and works to expand technical skills and knowledge.
- Some travel is required for this position.

Approval Signatures:

General Manager – Ingersoll Production Systems

Date

Human Resources

Date

The above description covers the most significant duties performed but does not exclude other occasional work assignments, requirements, or working procedures inherent in this job.