

Job Title: Mechanical Engineer

FLSA Status: Exempt

**Reports To:** Engineering Manager

Supervises: None

Date: November 2020

### **Essential Functions**

1. Applies knowledge of conventional and computerized drafting techniques and procedures, design, manufacturing processes and limitations using computerized work aids.

- 2. Reviews and analyzes specifications, sketches, engineering drawings, ideas, and related design data to determine factors affecting component designs.
- 3. Lays out major or minor components, assemblies, or systems into working layouts.
- 4. Performs the design of mechanical components and coordinates the generation of necessary detail and tooling drawings.
- 5. Recommends mechanical components and manufacturing materials.
- 6. Assists purchasing in the selecting and approving component, material, tooling and process vendors.
- 7. Assists in the evaluation of finished parts and assists in the establishment of quality criteria.
- 8. Assists in problem solving and design improvements when required.
- 9. Reads, analyzes and interprets technical documents to define problems and establish facts.
- 10. Comply with all safety policies, practices and procedures. Report all unsafe activities to supervisor and/or Human Resources.

## Required Education and Experience

- 1. Bachelor's Degree (Mechanical Engineering) or two-year associates degree or other postsecondary training in engineering technology.
- 2. Minimum of eight years in product design using 3D drafting and layout

## Special Skills & Qualifications:

- 1. Experience in designing esthetically pleasing consumer and commercial products.
- 2. Proficiency with AutoCAD and AutoCAD Inventor, engineering drafting principles, geometric layout and dimensioning. Experience with 3D modeling, and designs for injection molding, and metal fabrication required.

- 3. Creative ability to develop functional and aesthetically pleasing designs.
- 4. Ability to solve problems, develop creative solutions and perform work with a high level of accuracy and attention to detail. Ability to team with senior engineering staff to develop and document mechanical designs.
- 5. Exceptional mechanical design capabilities, including extensive product development and design for manufacturing experience.
- 6. Track record of solid technical leadership with preference given for experience designing products for manufacture.
- 7. Strong work ethic and leadership and capabilities as a team leader/participant for assigned projects from inception to completion.
- 8. Understands the functional requirements of the company's products.
- 9. Ability to team with engineering staff to develop and document mechanical designs.

### **Work Environment**

- 1. Well-lighted, heated and/or air-conditioned indoor production setting with adequate ventilation and moderate noise.
- 2. May work with or near moving mechanical equipment.

# **Physical Demands**

Light physical activity performing non-strenuous daily activities of a productive/technical nature to work from a sitting or standing position.

- 1. Manual dexterity sufficient to reach/handle items and work with the fingers.
- 2. Must be able to bend, stoop, squat, crouch.
- 3. Must be able to stand for long periods of time.
- 4. Must be able to lift up to 10 pounds, with or without assistance.
- 5. Must be able to sit for long periods of time.