



**--Custom Fabrication Division--**

**-POSITION DESCRIPTION-**

**Job Title:** CAD Designer  
**Reports To:** Division Manager  
**FLSA Status:** Exempt  
**Revision Date:** January 1, 2015  
**Revision No:** 3

**POSITION OVERVIEW**

Analyzes specifications and documentation to generate CAD drawings to convey concepts to customers and communicate manufacturability internally; specifies or approves activities concerned with development, application, and maintenance of manufacturing processes, quality standards, and safe work methods.

**ESSENTIAL RESPONSIBILITIES**

- 1.) Lead project management activities as directed; communicate with customers concerning project details.
- 2.) Maintain standards by insuring timely and accurate processing of engineering documentation that is compliant with appropriate practices; maintain system of engineering records retention.
- 3.) Utilize SolidWorks as the primary design software to perform applicable drafting work in the department; improve skills through training.
- 4.) Prepare 3D concept drawings, prototype drawings, and production drawings for projects.
- 5.) Provide bills of materials, routed process information, and other related manufacturing requirements to effectively communicate expectations to shop personnel and purchasing.
- 6.) Lead and reinforce quality expectations within documented procedures; establish and convey inspection criteria for projects to shop personnel per prescribed methods.

- 7.) Review designs and make recommendations to best satisfy the customer's function and company's manufacturability, while maximizing the company's competitive position.
- 8.) Assist others in determining disposition for non-conforming product.
- 9.) Actively represent the company to customers on issues concerning functionality or design; prepare quality documents when required (i.e. first article reports, control plans, process flow diagrams, etc.)
- 10.) Authorize release of project documentation (shop packet) to shop.
- 11.) Approve design change requests and update engineering documentation as needed; solicit customer input appropriately.
- 12.) Provide engineering counsel to others as necessary to evaluate processes, interpret drawings and build requirements, support quality standards, direct tool/jig requirements, maintain safety, etc.
- 13.) Assist in the creation of cost estimates to prescribed methods and procedure for Division products and services.
- 14.) Participate in project cost reviews.
- 15.) Participate in new product development.
- 16.) Research equipment, methods, systems etc. and make recommendations to improve productivity, engineering, quality, and safety.
- 17.) Maintain a clean, orderly, and safe work area.
- 18.) Perform all other duties as assigned.

### **QUALIFICATIONS**

Associates degree or equivalent from two-year college or technical school; or minimum 5 years mechanical design or related experience; or equivalent combination of education and experience as determined by the Division Manager; ability to read and interpret documents, manuals, drawings, procedures, or other instruction furnished in written, oral, diagram or schedule form; can calculate figures and amounts with ease; able to apply concepts of basic algebra and geometry; solve practical problems and deal with a variety of concrete variables in situations where limited standardization exists; presents written and oral communication skills; ability to operate a computer, calculator, and a variety of other general office equipment; proficient in Microsoft Word, Excel, and Outlook.

### **PHYSICAL REQUIREMENTS**

The physical demands described here are representative of the essential functions of this position that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to stand, walk, sit, use hands to finger, handle, or feel objects, tools, or controls. This job requires that the employee occasionally bend, twist, reach and lift of up to 25 lbs. The employee must be able to hear and communicate verbally. Specific vision abilities required by this job include close vision, color vision, depth perception, and the ability to adjust focus. While performing the duties of this job, the employee occasionally works near moving mechanical parts and is occasionally exposed to fumes or airborne particles. The noise level in the work environment is usually low to occasionally moderate.