

DFT Job Description

Job Title: Mechanical Engineer
Design/Manufacturing 1
Entry Level
FLSA Status: Non-Exempt

Department: Engineering
Reports To: Engineering Manager
Date: June 2023

SUMMARY

Responsible for the design of DFT check valve and control valve products as well as engineering support of manufacturing operations including preparing routings, designing fixturing, improving workflow, and establishing standard work for manufacturing processes.

ESSENTIAL DUTIES AND RESPONSIBILITIES Work is accomplished under close supervision of the Engineering Manager. May include but not limited to the following:

- Design check valves and control valves to product line, customer, and industry specifications.
- Produce design drawings of component parts, subassemblies, and final assemblies, bills-of-material, routings, and product maintenance manuals. Manage documents through check, approval, release, and revision processes.
- Work with manufacturing to review and optimize designs for manufacturability.
- Design fixtures, inspection equipment, and other tools to ease manufacturing and inspection processes and ensure quality requirements are met.
- Develop standard work for manufacturing processes including machining, welding, assembly, and test.
- Assist with workplace organization in manufacturing work areas.
- Support 3D printing operations through optimization of printing parameters, maintenance of existing print machines, and evaluation of current processes for improved efficiency and yield.
- Resolve manufacturing issues that arise in daily production. Correct or modify valve design drawings, bills-of-material, and routings to improve manufacturability and correct errors.
- Through the direction of the Engineering Manager, develop cost estimates of products, and develop quotations for check valves and control valves.
- Develop specifications and material requisitions as needed for raw materials or purchased components used in production and for tooling, fixturing, and other materials in support of manufacturing processes.
- Must be able to fulfill essential job functions in a consistent state of alertness and safe manner.
- Other duties may be assigned.

QUALIFICATIONS: To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

- BSME or other relevant BS level engineering degree
- Entry level engineering and valve design experience.
- Experience with manufacturing workflow and process optimization
- AutoCad or SolidWorks design experience
- Expertise with Microsoft Office products including Word and Excel
- Knowledge of Lean Manufacturing concepts and processes.

LANGUAGE SKILLS

- Must be able to speak, read, and write in English.

COMPUTER SKILLS

- Demonstrated ability/experience with CAD software.
- CNC programming experience
- Proficiency with Microsoft Word and Excel software.
- Proficiency with Microsoft Windows operating system.

MATHEMATICAL SKILLS

Must be capable of performing advanced level mathematics.

WORK ENVIRONMENT: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Computer work in an office environment will encompass up to 75% of this job's tasks.
- Presence on the DFT production shop floor will be required.
- Physical presence is a critical part of this position- no remote work.
- Travel to vendor or customer locations may be required.
- Working at a customer's site during valve repair processes may be required.

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

- Safety glasses and steel toe safety shoes will be required when on the production floor.
- Must be able to navigate the facility including all manufacturing areas
- Limited lifting required – no lifting of objects over 25 pounds.