



DATE JOB POSTED:

2019 JOB DESCRIPTION

Job Title: MECHANICAL DESIGN ENGINEER
Job Location: US-MO-St. Louis
Department: ENGINEERING
Manager / Supervisor: Director of Engineering & Supply Chain
Employment Status: EXEMPT
Shift Schedule: FULL TIME, DAY SHIFT
Manages Others: NO

JOB PURPOSE

Responsible for the mechanical design of a range of gear motor products. New product development and sustaining activities and also provide technical support to internal cross functional teams and customers. Development and management of BOM and all other engineering support documentation for ERP migration / engineering system support and management.

JOB RESPONSIBILITY SUMMARY

General Responsibilities:

- Provide technical guidance and project coordination of custom gear motor inquiries / orders involving multiple products by working with the Senior Engineer in the department.
- Collaborate as a member of cross-functional project teams in developing products from prototype concept through to production
- Conduct design for manufacturing with manufacturing expertise to ensure that final design will optimize the manufacturing process, yield, cost and performance requirements
- Co-ordinate with test lab for validation of prototypes to confirm feasibility of ideas and concept and document the results for future reference.
- Demonstrate expertise in engineering design tools using CAD (preferably Solidworks). 2D & 3D knowledge is required.
- Learn & develop engineering calculation spreadsheets for stress, strength, deflection, gear ratings, fits & tolerances for new product development activities.
- Highlight all technical risks in the design to the Engineering Manager in a timely manner during the product development cycle.
- Support the sustaining production activities by maintaining part drawings, operation sheets and bills of materials.
- Prepare technical documentation in clear and concise terms in accordance with good engineering practice.
- Prepare and present new mechanical design / assembly ideas for reviews to optimize process flow and reduce cost.
- Maintain a regular update on the working knowledge of the design standards like ANSI, AGMA etc. and propose ideas for new product development as per the latest industry standards.
- Work closely with the Manufacturing, Operations, Quality, Sales and Marketing departments through the product development lifecycle.
- Perform other assigned tasks as directed by the Manager.
- **Comply with all safety policies, practices, and procedures, and report any unsafe situations to supervisor, manager, or human resources**



DATE JOB POSTED:

- **Participate in team efforts to achieve departmental and company goals**
- **Perform other duties as assigned**

NOTE: The proceeding examples are representative of the assignments and responsibilities performed by this position and are not intended to be all-inclusive.



DATE JOB POSTED: _____

REQUIRED KNOWLEDGE, SKILLS, & ABILITIES

(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, skills, and ability required.)

**Education/
Licensure/
Credentials**

Required: Bachelor’s Degree or equivalent in Mechanical Engineering
Preferred:

Experience

Required: 2+ years mechanical design experience
Preferred:

**Special
Knowledge/
Skills**

Required:
Experience with Solidworks or equivalent CAD (2D / 3D modelling software).
Proficient using Microsoft Office Suite and basic office tools and equipment.
Proficient with ERP software for engineering documentation management: (SAGE, Infor Visual, SAP, Microsoft AX, etc.)
Must have good time management skills, be highly motivated to problem solve, detail oriented, and able to establish priorities. Strong organizational skills, interpersonal, written, and verbal communication skills, customer service focus, technical capacity, as well as the ability to work well in a team environment.

Preferred:
Knowledge of gear design, manufacturing and standard CNC related machining practices
Ability to effectively make complex decisions with limited time and information and can determine decision making criteria based on priorities.
Ability to collaborate effectively across multiple disciplines with internal and external resources.
Strong analytical capabilities, with a basic understanding of statistical analysis techniques.
Strong interpersonal skills, independent problem resolution, proven leadership ability, and the ability to manage the requirements of others.
Comfortable leading discussion and debate both within peer group and with matrix business partners, operational partners and leaders.

Physical Demands Required:

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 can be made to enable individuals with disabilities to perform the essential functions.

- Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.
- Working indoors and outdoors in dock area
- **Standing, walking, and sitting for a majority of the time**
- **Use of hands and arms to touch, lift, and reach, etc.**
- **Talking and hearing for a majority of the time**
- **Typing for portion of time**



DATE JOB POSTED:

- **Lifting and/or exerting up to 10 lbs. of weight/force frequently and up to 50 lbs. of weight /force occasionally**
- **Occasionally exposed to production floor elements such as noise, dust, fumes, odors, and heat**
- **Occasionally working on production floor without climate control**

Personal Protective Equipment (PPE):

- **As required in various production work areas including safety eyewear, gloves, safety shoes**