

# SUN-STAR ELECTRIC, INC.

## JOB DESCRIPTION

Job Title: Engineer Manager

Department: Engineering

Exempt       Non-Exempt

Job Reports To: Engineering Manager

### **Job Summary:**

The engineer plans, organizes and directs engineering to meet company objectives for design, new product development and improvement of existing product lines by performing the following duties personally and through subordinates. This position manages all the employees of the department and is responsible for the performance management within the department.

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

#### **Supervisory:**

- Plans and formulates aspects of research and development proposals such as objective or purpose of project, applications that can be used from findings, costs of project, and equipment.
- Oversees key projects, processes and performance reports, data, and analysis. Plans documentation system.
- Working with manufacturing team to ensure that product launches and product quality standards are maintained.
- Develops, trains, and supervises staff.
- Selects correct design concepts and fundamental technology used for new products or improvement for existing ones.
- Reviews and analyzes proposals submitted to determine if benefits derived and possible applications justify expenditures.
- Submits proposals considered feasible to management for consideration and allocation of funds.
- Develops and implements methods and procedures for monitoring projects such as recording research findings, progress reports, and staff conferences to inform management of status of each project.
- Participates in identifying and analyzes issues through the NCR process from start to resolution.

#### **Engineering:**

- Design mechanical components for submersible motors.
- Assist with competitive teardowns, evaluate strengths and weaknesses of competitive designs
- Generate and modify 2D and 3D drawings for manufacturing of new product design and mechanical parts using CAD systems
- Transition products from product development to production.

- Creates, implements, and monitors appropriate test plans for new products and product improvements.
- Assists in troubleshooting field failures and internal failures to help find root cause and corrective actions
- Performs engineering assignments with clear and specified objectives.
- Performs design calculations and prepares equipment or material specifications.
- Create detailed drawings based on written and verbal descriptions.
  - Translate customer and government drawings and specifications to working shop drawings.
  - Create sketches and layouts, compute angles, weights, surface areas, dimensions, tolerances, and leverages of products.
  - Work closely with all departments to ensure that drawings convey correct information and are error free.
  - Review product design for compliance with engineering principles, company standards, customer contract requirements and related specifications.
- Updates product designs as required to meet quality and cost improvement goals
- Provides guidance and clarifications to Machine shop as required.
- Ability to multi-task and deliver aggressive date driven projects
- Excellent interpersonal and communication skills to be able to work effectively with others
- Logical thinker who is not afraid to dive into difficult issues outside of their area of expertise
- Ability to follow all safety policies and procedures of Sun-Star Electric, Inc.

### **Minimum Requirements**

Education: Bachelor's Degree in mechanical engineering

Experience:

- Five years of related experience and/or training.
- PE status a strong plus
- Working knowledge of AutoCAD, Ansys, Autodesk Inventor, Cad Key, Microsoft Office products, and business systems software, such as Epicor v9.05 or higher.
- Lean manufacturing experience
- Experience with rotating equipment such as motors and pumps is a plus
- Experience with ASME Y 14.5 GD&T (Geometric Dimensioning and Tolerance and stack-ups) is a plus
- Experience assembling prototypes or reverse engineering assembly/components preferred

### **Essential Mental Functions:**

- Ability to read and interpret documents such as safety rules, operating and maintenance instructions and procedure manuals.
- Ability to write routine reports and correspondence.
- Ability to speak effectively before groups of customers or employees of the organization.
- Ability to work with mathematical concepts such as probability and statistical inference, fundamentals of plane and solid geometry and trigonometry.

- Ability to apply concepts such as fractions, percentages, ratios, and proportions to all situations.
- Ability to perform tasks requiring exceptional attention to detail.
- Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standards exist.
- Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.
- Ability to handle the stress of the job: multi-tasking, deadlines, etc.
- Ability to collaborate with others (co-workers, vendors, customers, etc.) and work in a professional manner.

**Essential Physical Functions:**

- Must be able to work at a computer workstation for extended periods of time.
- Regularly required to sit, stand, bend, kneel, stoop, and lift up to 30 pounds.
- Must be able to stoop, kneel, and crouch.
- Combination of plant and office environment.
- Occasional exposure to elements such as odor, noise, dust, heat, cold or chemicals.
- Specific Vision abilities required by this job include close vision, distance vision, color vision, depth perception and ability to adjust focus.
- Exposed in a shop environment subject to noise, moving parts, dust, fumes, hot temperature in the summer and cold temperatures in the winter.

**Equipment Used:**

- General office equipment: phone, fax, copier, computer, calculator, etc.

**Additional Comments:**

- Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice. Nothing in this job description restricts management's rights to assign or reassign duties and responsibilities to this job at any time.
- Willingness to perform other duties as requested, directed, or assigned.

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

Employee signature below constitutes employee's understanding of the requirements, essential functions, and duties of the position.

Employee: \_\_\_\_\_ Date: \_\_\_\_\_

PHYSICAL REQUIREMENTS

JOB TITLE: Engineering Manager

In a normal workday, the employee may:

ACTIVITY	0%	1-3 HRS / 1-33%	3-5HRS / 34-66%	6-10HRS / 67-100%
STAND/WALK			<b>X</b>	
SIT				<b>X</b>
USE OF HANDS				<b>X</b>
HEAR				<b>X</b>
TALK				<b>X</b>
VISION				<b>X</b>
LIFT:		<b>X</b>		
*MINIMUM		<b>1LB</b>		
*MAXIMUM		<b>25LB</b>		
STRESS LEVEL			<b>X</b>	