SUMMERS MANUFACTURING COMPANY, INC.
POSITION DESCRIPTION

POSITION TITLE: Design Engineer
DEPARTMENT: Engineering
IMMEDIATE SUPERVISOR: Director of Operations
FLSA: Exempt
SUPERVISION RESPONSIBILITIES: No

1. GENERAL SUMMARY OF RESPONSIBILITIES:

   Responsible for new product development and maintenance/redesign of existing products. Coordinate projects from initial concept through product release.

2. SPECIFIC JOB RESPONSIBILITIES:

   A. Research and analyze data, such as product requirements briefs, research publications, literature, and manuals to conduct competitive analysis and to determine feasibility of design projects.

   B. Design products applying knowledge of engineering principles that do not infringe on existing patents, meeting the requirements of Summers Manufacturing Company and the customer.

   C. Test for and/or determine magnitude, direction, and point of application of tension, compression, and bending forces, and develop geometric shape of machine parts to accommodate operating loads. Conduct computer simulations using finite element analysis software to ensure structural integrity and optimize designs.

   D. Provide written or CAD documentation to applicable departments to ensure that all projects' standards are maintained.

   E. Test concepts and prototypes. Compile and analyze test data to determine the effect of machine design and provide the customer with state-of-the-art products.

   F. Modify machine design to correct operating deficiencies and improve manufacturability. Ensure all CAD data meets company standards.

   G. Create and maintain bill of materials.

   H. Create and maintain operator's manuals and parts manuals.

   I. Participate in ECO process to ensure changes are properly documented, communicated, and implemented.

   J. Ensure that existing products continue to meet customer and Summers Manufacturing expectations.

   K. Work with Purchasing Department and vendors to develop improvements and cost reductions. Coordinate with Quality Department to complete inspections of vendor products to ensure quality.

L. Apply for and maintain patent(s) to ensure protection of company proprietary designs when deemed appropriate.

3. JOB SPECIFICATIONS:

A. Education/License/Certification Requirements

1. Bachelor’s degree in engineering or equivalent field of study, preferred. Degree in Mechanical or Agricultural Engineering, preferred.
2. Associate's degree in a related field plus ten (10) years of applicable experience in lieu of Bachelor’s degree will be considered.
3. Valid North Dakota driver’s license with a clean driving record, preferred.

B. Experience Requirements

1. Knowledge of and experience with various shop tools, preferred.
2. Experience with CAD programs required. Experience with Inventor, preferred.
3. Experience with Microsoft Office Suite required. Experience with Syspro, or other ERP (Enterprise Resource Planning) software, preferred.
4. Farm background, preferred.
5. Experience with electronics or coursework in Electrical Engineering, preferred.

C. Competencies

1. Innovative
2. Problem Solving
3. Project Management

D. Communication Requirements

1. Excellent communication skills, required.
2. Ability to work as part of a team, required.

E. Physical Requirements

1. Ability to walk and stand for long periods, up to two (2) hours, required.
2. Ability to sit up for long periods of time, up to four (4) hours, required.

F. Lift and Carry Requirements

1. This position requires infrequent lifting and carrying of machine parts, weighing up to 50 lbs. in the following situations:

    a. Lifting parts from machinery while working on a machine.

    b. Carrying parts short distances.

2. This position requires infrequent lifting and carrying of machine parts weighing over 50 lbs. using hand truck, hoist, or forklift.

G. Equipment/Tools Requirements

1. Ability to utilize forklift, hoist, or hand truck, preferred.

2. Ability to utilize computer, printer, and scanner, required.

3. Ability to utilize a variety of hand tools, required.

4. Ability to operate farm equipment, preferred.

H. Environment Requirements

This position involves work inside and outside the plant, where conditions may get dusty, hot, cold, noisy, and may involve exposure to some odors:

1. Ability to work around fumes and chemicals, required.

2. Ability to work around moving parts, required.

3. Ability to work outside, required.

4. Ability to work around loud noises, required.

By accepting a position within Summers Mfg., you will become part of a team that comes with the responsibility of promoting a culture that ALL employees are accountable to. This culture is defined as:

* Ensuring a safe workplace by always being aware of potential hazards and following all safety rules.

* Fostering the company values in communications and decisions made every day by being respectful and promote a team environment.

* Accepting and supporting the challenge to participate in continuous improvement efforts by actively contributing to identifying and eliminating waste within the company; by identifying problems, finding solutions, and being an active participant in sustaining those solutions.

This job description does not list all the duties of the job. Your supervisor may make an assignment of other duties or instructions from time to time.

This assignment of duties or instructions will be within your knowledge and skill base to ensure performance of the assignment in an adequate manner.

Management has the right to revise this job description at any time.

This job description is not a contract for employment, and either you or the firm may terminate employment at any time, for any reason.

JOB DESCRIPTION ACKNOWLEDGMENT

I acknowledge that I have received a copy of the updated job description for my position with Summers Manufacturing. I have read this job description (or had it read to me), and I completely understand all my job duties and responsibilities. I am able to perform the essential functions as outlined, with or without reasonable accommodation. I understand that my job may change on a temporary or regular basis according to the needs of my location or department without it being specifically included in the job description. I understand that it is my responsibility to ask my supervisor or human resources for more clarification should I have any questions about my job duties and responsibilities or require a reasonable accommodation.

I understand and have received a copy of my updated job description.

*Signed:*_____ *Date:*_____

*Employee's Printed Name*_____

_____

Supervisor Signature *Date*

Employee or Supervisor comments:

Return this form to Human Resources.