

Design Engineer – Position Description

Job Title: Design Engineer
Department: Engineering
Reports to: Product Engineering Manager
FLSA Status: Exempt
Prepared by: Human Resources
Rev Date: 04/21/2021

Job Summary:

LDJ Manufacturing is home to the Thunder Creek Equipment brand of premium diesel fuel and service trailers. We are an industry leader known for our uncompromising quality and reliability. LDJ is a family-owned company, with strong Midwest roots and values, and a passion to develop, manufacture, and market innovative solutions that provide value to our customers in the agricultural, construction, and oil industries throughout the United States.

Reporting to the Product Engineering Manager, the Design Engineer invents, designs, tests, documents, and prepares new designs for implementation using CAD tools. In addition to designing mechanical systems, this position will also work with basic electrical systems (including wiring harnesses) and hydraulic systems. This role also provides design support for the manufacturing and service team as required.

Duties/Responsibilities:

- Exhibit LDJ's core values and culture in all aspects of the job.
- Utilize SolidWorks CAD to design and detail parts, weldments, and assemblies for products while considering product performance, reliability, manufacturability, cost, and safety.
- Develop and maintain bill of materials (BOM).
- Analyze design and production issues by using root cause analysis to provide solutions.
- Support technicians and production personnel in the building and testing of prototypes.
- Ensure documentation of test results and analysis of testing.
- Design basic electrical systems for trailers and vehicles, including wiring harnesses.
- Design basic hydraulic power system used for pumping fuel and other fluids.
- Investigate opportunities on current designs to improve performance, reliability, manufacturability, and cost effectiveness and implement design changes as required using the ECO process and other best practices.

Supervisory Responsibilities:

None

Travel

Ability to travel up to 10% of the time with a valid driver's license.

Required Skills/Abilities:

- Ability to think critically to solve problems.
- Ability to communicate engineering requirements.
- Excellent organizational and time-management skills.
- Strong verbal and written communication skills.

- Ability to work with multiple functional groups to coordinate the flow of information.
- Ability to prioritize and multitask to meet deadlines and customer expectations.
- Highly proficient in operating SolidWorks CAD software.
- Highly proficient computer skills using Microsoft Office Suite and business software.

Education and Experience:

- Bachelor's degree in Mechanical, Agricultural, or Industrial Engineering OR
- Associate or bachelor's degree in another field with a minimum of 5 years related experience.

Physical Requirements:

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. While performing the duties of this job, the employee is regularly required to stand, walk, sit, and talk or hear. Air travel for this job is of four to eight hours. The employee is occasionally required to use hands to finger, handle, or feel; reach with hands and arms; climb or balance; and stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 50 pounds without restrictions. Specific vision abilities required by this job include close vision, color vision, and ability to adjust focus.