Job Title	Hydraulics Design Engineer
Location	Charlotte, NC
Division/Dept.	L&H Manufacturing Services / Engineering Department
Reports to	Engineering Manager

Type of position:	Hours 40 hrs./ week	Notes: Occasional overtime may be required as the work load demands.
☒ Full-time w/benefits ☐ Temp Full-time w/o benefits ☐ Part-time w/o benefits ☐ Temp Part-time w/o benefits	☒ Exempt ☐ Nonexempt	

GENERAL DESCRIPTION

As a member of the Engineering Team, the focus of the Hydraulics Design Engineer is to help increase profitability of the standard product line through efficient design and accurate project cost estimation.

Primary responsibilities include but are not limited to:

- Ability to design, concept, and design advanced systems incorporating hydraulic, lubrication and pneumatic/gas systems including pump systems and controls, proportional/servo solutions, DIN and cartridge circuits/manifolds, accumulators, and fluid conditioning circuits, actuators, and controls/ logic.
- Apply math using engineering data and formulae to analyze and calculate fluid requirements and component application for systems.
- Ability to develop, read and understand mechanical CAD drawings, Schematics and BOM's
- Ability to learn and use the project management tools of Apogee (L&H) to create itemized Bill of Materials for quotes.
- Create 3D CAD based models of mechanical parts and assemblies and corresponding 2D drawings and presentations.
- Store and retrieve technical documents within Autodesk Vault.
- Create bill of materials to be used for quotes.
- Interacts with Project Manager for jobs in Production.
- Act as a technical resource for Manufacturing and Sales.
- Communicate with sales team to clarify and implement customer estimation requirements.
- Knowledge of mechanical and manufacturing costing and labor requirements of systems.
- Maintain professional working relations with Associates, Vendors, and Customers.
- Follow company technical standards for design and engineering.

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

- Associate's degree (A.A.) or equivalent from two-year college or technical school; or 15 years+ related experience in Hydraulic System Design; or equivalent combination of education and experience.
- Bachelor's degree (B. S.) in Engineering preferred.
- Demonstration of ongoing education in related field.

Skills/Competencies

- Working experience in industrial hydraulic, lubrication, and pneumatics
- A keen attention to detail with strong organizational skills
- Ability to work independently and manage multiple tasks
- Excellent written and verbal communication skills
- Committed team player with caring attitude
- Management and leadership skills

Language Ability

• Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

Math Ability:

• Ability to apply advanced mathematical concepts such as exponents, logarithms, quadratic equations, and permutations. Ability to apply mathematical operations to such tasks as frequency distribution, determination of test reliability and validity, analysis of variance, correlation techniques, sampling theory, and factor analysis.

Reasoning Ability:

• Ability to apply principles of logical or scientific thinking to a wide range of intellectual and practical problems. Ability to deal with nonverbal symbolism (formulas, scientific equations, graphs, musical notes, etc.,) in its most difficult phases. Ability to deal with a variety of abstract and concrete variables.

Computer Skills:

• To perform this job successfully, an individual should have knowledge of and be proficient in Microsoft Office, Excel, and Adobe Acrobat. Needs to have a basic knowledge of AutoDesk Vault as well as a proficiency in AutoCAD and AutoDesk Inventor.

Supervisory Responsibilities:

To develop and educate self and others for future leadership roles. This role would have supervisory responsibilities for those in the Hydraulic Engineering department.

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.

• The noise level in the work environment is usually moderate and there is some time spent near moving mechanical parts.

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.

• While performing the duty of this Job, the employee is regularly required to sit; use hands to finger, handle, or feel and reach with hands and arms. The employee is occasionally required to stand and walk as well as be able to speak and hear. An employee would need to be able to have the ability to have clear vision at 20 inches or less, be able to see colors, as well as the ability to recognize depth perception.