

JOB DESCRIPTION

Job Title: Mechanical Designer – ON

Department: Engineering

Reports To: Engineering Manager

Status: Varies by location

Date Issued: March 2022

SUMMARY:

Responsible for taking the proposed equipment design and generating a 3D system layout, layout drawings, fabrication drawings, and a bill of materials. The Mechanical Designer is also responsible for maintaining the design tools, templates, and processes for design efficiency.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Provide 3D mechanical designs and construction documentation for water and wastewater systems, designs using CAD software, ERP system, Excel, Word, and various other design systems as required.
2. Run FEA simulations on parts when required.
3. Work with Production, Testing, Purchasing and Field Startup to resolve questions/issues that arise.
4. Ensure the system is being constructed as per the documentation through on-site visits during production.
5. Assist Applications Engineering in the generation of proposals.
6. Support preparation of systems operating manual.
7. Ensure system design follows required customer and Newterra specifications, budget, and timelines.
8. Provide regular status communication to management and team members.
9. Work with Project team to coordinate Engineering documentation and to implement Engineering changes.
10. Participate in technical discussions and decisions with project teams.
11. Other duties as assigned.

OTHER DUTIES AND RESPONSIBILITIES:

- Attend meetings as required for projects and other organizational requirements.
- Coordinate with other engineering functions for system integration.
- Continue to improve tools to increase efficiency in job function.
- Develop designs to ensure serviceability, manufacturability, and design efficiency.
- Responsible for performing duties in a safe manner and promoting safety to others in accordance with Newterra's safety policies and procedures. This includes reporting all safety concerns, near-misses.
- Adheres to the company processes as detailed in Newterra's Business Management System (BMS) and bring forward ideas for continuous improvement.

The information listed above is not comprehensive of all duties/responsibilities performed. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of the position. This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.

- Responsible for completing all assigned training applicable in the appropriate timeframe.
- Completes all responsibilities while ensuring adherence to Newterra's Delegation of Authority.

MINIMUM QUALIFICATIONS:

- Technologist diploma or related certification required.
- Minimum 2 years' experience using SolidWorks, Inventor or other 3D CAD software required
- Minimum 3 years of experience, preferably in a water treatment or manufacturing environment.
- Excellent working knowledge of 3D Assemblies, 3D models, BOM generation, Mechanical assembly techniques, Fabrication Techniques.
- Competent in Microsoft office to include Word, Excel, PowerPoint, and Outlook.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Ability to work collaboratively with others to achieve a common goal.
- Self-motivated with a positive attitude.
- Ability to work independently.
- Good written and oral communication skills.
- Excellent problem-solving skills.

PHYSICAL DEMANDS:

Regularly required to sit for prolonged periods; frequently required to stand, walk, and use business equipment daily such as a computer, copier, telephone, etc.; occasionally required to reach overhead, bend, and lift objects of up to 15 lbs. Complex thinking and analysis required with the ability to convey complex information clearly and concisely.

WORK ENVIRONMENT

Generally, works in office environment, however, may occasionally be required to visit production sites and/or exposed to outdoor elements.

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