



Phone 605-275-2025  
Office 500 W Hanger Street - Sioux Falls, SD 57104  
www.nelsonbaker.com

## Job Description

|                         |                        |                        |                              |
|-------------------------|------------------------|------------------------|------------------------------|
| <b>Job Title</b>        | Mechanical Designer    | <b>Job Category</b>    | Exempt / Non-Exempt          |
| <b>Experience Level</b> | 3-5 years              | <b>Travel Required</b> | Based on needs of business   |
| <b>Location</b>         | Sioux Falls, SD Office | <b>Position Type</b>   | Full Time                    |
| <b>Reports to</b>       | James Groskopf         | <b>Title</b>           | Designer/Drafting Supervisor |

### COMPANY OVERVIEW

Nelson Baker Biotech (NBB) has quickly established a reputation as one of the most innovative renewable industry design builders in the upper Midwest. NBB combines engineering expertise, a solid business background and practical field experience to provide its clients with true, value-added advice and craftsmanship. NBB recognizes the renewable energy and products industry as an exciting new market that includes clients of all sizes with varied needs. NBB's experience and flexible approach allows it to work with all types of clients and project requirements. Our focus in the renewable industry includes Ethanol, Purified Ethanol, BioChemicals, BioFuels, and BioMass. Of course, as this industry continues its rapid transformation, our goal is to guide our clients to the most efficient and cost-effective solutions in these constantly evolving markets.

At Nelson Baker Biotech we offer an excellent benefit package to all our regular full-time employees, including health, dental and vision insurance, 401(k) with company contributions, flexible spending accounts, paid time off and the opportunity for personal and professional growth.

### GENERAL DESCRIPTION

The Mechanical Designer Drafter is responsible for 3D piping and equipment models, drafting, designing, and detailing various projects, coordinating with the engineers. Perform regular and recurring designer/drafter duties independently following established policies/procedures and practices. Prepares detailed drawings of mechanical layouts, plans, equipment and piping according to specifications provided by the engineering team and our customers.

### ESSENTIAL DUTIES/RESPONSIBILITIES

- Perform assigned job tasks within the established schedule.
- Responsibilities include standard detailing and fabrication practices as well as reading and understanding design documents/drawings.
- Makes any changes necessary to drawings due to direction from owners or engineers.
- Draws finished designs from sketches.
- Details and checks simple mechanical piping and equipment layouts with minimum oversight.
- Understands engineering of simple piping systems and produces clear, concise, and complete drawings; and bill of material for shop or field fabrication with all information needed for the contractor.
- Perform solid modeling of plant assemblies and piping system including vessels, tanks, heat exchangers and other equipment utilizing CADWorx Plant 3D.
- Create, modify, organize, and optimize large and complex assemblies using AutoCAD software.
- Create bid drawings, construction drawings, and as-built drawings using AutoCAD and/or Revit software.
- Read, interpret, create, and organize blueprints, piping and instrumentation diagrams (P&IDs), and process flow diagrams (PFD's).
- Follow NBB's drafting standards.
- Qualified candidates may be asked to walk down P&IDs at customers' plants and perform occasional site visits to verify existing plant layouts.



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- Investigate and recommend improvements to existing processes and procedures. Coordinate and consult with project managers, engineers, and designers on multiple projects simultaneously.
- Ideal candidates for this position will have a solid foundation with CAD-based software packages, a strong aptitude for learning, and problem-solving skills.

#### KNOWLEDGE BASED SKILLS

- Microsoft Office Products
- Adobe Acrobat Professional or Bluebeam Revu
- CADWorx Plant 3D experience
- Document Tracking Database
- Excellent verbal, written and computer communication and technical skills
- Superior organizational skills and the ability to multi-task
- Ability to work independently with minimum instruction
- Ability to maintain accurate records