

## Job Description

**Job Title:** Process Engineer Level 3  
**Employee Name:**  
**Date:** November 3, 2021  
**Reports to:** President, Engineering Manager

**Summary:** Has a diversified knowledge in all aspects of sanitary process mechanical and process utility engineering and design. Plans and conducts work independently or in teams as required where assignments have unknown or underdeveloped scopes and objectives. Works on large engineering projects, sometimes overseeing the work of other engineering team members, or several smaller projects with complex design requirements. The knowledge and experience required for this level of work usually results from progressive experience.

### Process Design:

- Perform initial job walks to confirm customer's requirements
- Define and document process needs including space, adjacencies, and flows
- Create concepts for processing, utilities, and instrumentation
- Specify equipment for procurement and piping and utility requirements for major components such as control valves, pumps, tanks and heat exchangers
- Oversee the design of AutoCAD drawings to develop P&IDs, layouts, and assembly and equipment drawings on a project basis
- Perform internal and external design reviews
- Identify and research process engineering requirements for new and emerging industries

### Calculations:

Perform calculations for:

- Mass and energy balances
- Material / fluid flow
- Utility loads
- Piping (hydraulic models and equipment sizing)

### Engineering Support

Provide support for the design, fabrication, and installation of custom food and beverage process systems

- Review and assist project management with equipment layout, design and changes for field installed and shop fabricated assemblies
- Assist project manager with equipment procurement and price negotiation

- Participate in meeting with customers, subcontractors, vendors, and peers for process design development, project management, installation and startup
- Support field project manager with equipment layout, pipe routing, pipe supports, project meetings, and design change updates and documentation

**Project Estimation**

- Assist project managers in estimating project costs
- Assist project managers in writing proposals which include the scope of work to be performed and the costs for all project materials and subcontracts

**Documentation**

Convert engineering information and data into project documentation:

- Create process flow diagrams and P&IDs
- Create equipment lists
- Write sequence of operation (SOO) for control of equipment and systems for controls contractor
- Create project transmittals as required
- Work with project managers to ensure engineering change orders are reflected in project documentation

**Oversee Development of AutoCAD:**

- Block flow diagrams for process system development
- P&ID development
- Site drawings and layouts
- Equipment drawings, tank sketches, CIP circuit drawings, etc.
- Ensures BMI CAD standards are being followed on reviewed projects and provides direction and course correction when needed

**Instrumentation**

- Instrument specification and troubleshooting
- Instrument verification (field and shop)
- Calibration equipment maintenance
- Trains others on use of calibration equipment

**Other Duties As Assigned**