

October 18, 2022

Job Description

Summary: The Food and Beverage Process Engineer must transform customers' ideas, concepts and needs into cost effective and buildable custom process designs. This is a hands-on position for an experienced engineer who can create custom process designs without engineering oversight

Process Design:

- Create sanitary process designs
- Perform initial job walks to validate customer requirements
- Present concepts, designs, and solutions to customers
- Conduct Q&A discussions with customers
- Define and document process needs including space, adjacencies, and flows
- Create concepts for processing, utilities, and instrumentation
- Specify equipment piping and utility requirements for major components such as control valves, pumps, tanks, thermal process skids and heat exchangers
- Oversee the design of AutoCAD drawings to develop P&IDs, layouts, and assembly and equipment drawings on a project basis
- Perform and oversee internal and external design reviews
- Identify and research process engineering requirements for new and emerging industries

Calculations:

Perform and check 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

- Provides technical support and engineering guidance at all levels of the company including fellow process engineers
- 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
- 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

Preferred Qualifications

- Bachelor's degree in Chemical Engineering, Biochemical Engineering, Food Science, or a related field and a minimum ten years of experience in food/beverage products
- Strong command of food science principles and its application to the manufacturing of food and beverage products from benchtop through manufacturing plant level
- Cell culture, cell therapy and aseptic processing experience a plus