

Job Description

Job Title: **Process Engineer Level 3**

Summary: We are looking for a process engineer who is knowledgeable in the design and construction of sanitary process systems for the food and beverage industry. This position requires working knowledge of process flow diagrams, P&IDs, mass and heat balances, piping design, functional and installation specifications, as well as a practical understanding of construction methods, process utilities, and automation and controls integration. This is a hands-on position for an experienced engineer who can create custom process designs without engineering oversight

Process Design:

- Perform initial job walks to confirm customer's requirements
- Define and document process needs including space, adjacencies, and flows
- Design process systems. Create concepts and functional specifications for processing, utilities, and automation
- Size and create specifications for equipment procurement and piping and utility requirements for major components such as controls valves, pumps, tanks and heat exchangers
- Supervise and organize the design of AutoCAD drawing to develop P&IDs, layouts, and assembly and equipment drawings

Calculations:

Perform and check calculations for:

- Hydraulic and heat transfer
- Mass and energy balances
- Material / fluid flow
- Utility loads

Engineering Support

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

- Assist project management with equipment layout, design and changes for field installed and shop fabricated assemblies
- Organize and conduct meetings with customers, subcontractors, vendors, and peers for process design development, project management, installation, and startup
- Support site project manager on equipment location, pipe routing, pipe supports, project meetings, and design changes
- Assist project manager with equipment procurement and price negotiation

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 description narratives, process flow diagrams, and P&IDs
- Create equipment lists of system components
- Document equipment specifications for vendor bids – tanks, pumps, water systems, heat exchangers, boilers, etc.
- Write sequence of operation (SOO) for control of equipment and systems
- Create project transmittals as required
- Ensure change orders are reflected in project documentation

Direct Development of AutoCAD:

- P&ID development
- Site drawings
- Block diagram for process system development
- Equipment drawings, tank sketches, CIP circuit drawings, etc.

Project Estimation / Budgeting

- Assist project management with creating the project budget
- Track approved change orders and ensure budget is updated as required

Instrumentation

- Instrument specification and troubleshooting
- Instrument calibration and checkout (field and shop)
- Calibration equipment maintenance

Travel

Travel as required for client development and project execution

Preferred Qualifications

- Bachelor of Science in Chemical Engineering, Mechanical Engineering, 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



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