

Job Description

Job Title: Senior Process Engineer

Summary

We are looking for a senior process engineer with a BS or higher in chemical engineering or mechanical engineering. Candidate must be knowledgeable in the design and construction of sanitary process systems for the food and beverage industry. This position requires a 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.

Job Description

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 control valves, pumps, tanks and heat exchangers
- Supervise and organize the design of auto CAD drawings to develop P&IDs, layouts, and assembly and equipment drawings

Calculations

Perform 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, 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, manpower, 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 for automation and controls
- Create project equipment manuals, as required
- Ensure change orders are reflected in project documentation

Direct Development of AutoCAD with:

- 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 troubleshooting
- Calibration equipment maintenance
- Instrument calibration and checkout (field and shop)
- Training others on use of calibration equipment

Travel

Travel as required for client development and project execution.

Education and Experience

- 5 years minimum of design engineering experience in the food, beverage or pharmaceutical industry
- A BS or higher degree in mechanical or chemical engineering is preferred but consideration will be given based on actual work experience
- Expertise in design codes and standards for sanitary processing
- Project management experience is a plus
- Excellent interpersonal, communication, and presentation skills

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