



## Process Engineer - Senior

### General Description

The process engineer is extremely involved in the front-end of projects and then shifts to a support role during the detailed design phase. The process engineer interfaces with the client to understand the goals of the project. Based on the client's needs and desired outcome, the process engineer develops the conceptual design of the project. This requires creativity, good fundamental engineering skills and knowledge of available process technologies.

At the Senior Process Engineer level, work is performed independently. The assigned projects are large in nature and the scope may be undefined. The Senior Process Engineer is part of the Process Engineering Group and reports to the Chief Operations Officer. This position has no official supervisory responsibility; however, this position may give direction and guidance to less experienced process engineers within the group and/or direct the efforts of contract resources and consultants.

### Duties & Responsibilities

- Work with client to develop the scope of work for a project.
- Develop the process flow diagram for a complex process system.
- Model a complex process system utilizing simulation software.
- Develop the heat and material balance for a complex process system.
- Run hydraulic calculations to determine pipe sizes.
- Run calculations to size all the pieces of equipment for a project.
- Input process data into equipment data sheets.
- Develop a Piping & Instrument Diagram for a complex process system.
- Gather plant process data (for example: flow rate, temperature, pressure). Analyzes the data for process design development.
- Prepares technical reports summarizing process design requirements.
- Works on multiple projects at one time.
- Participates in plant startup and/or commissioning activities.
- Assists in the preparation of process unit operational manuals and startup/shutdown procedures.

### Minimum Qualifications

- BS degree in Chemical Engineering, Process Engineering, or equivalent.
- Five to ten years of work experience in Process/Design Engineering or related experience.
- Passed the Fundamentals of Engineer exam (FE), or do so within one year of employment.
- Excellent oral and written communication skills.
- Proficient computer skills including word processing and creating spreadsheets.
- Strong working knowledge of HYSIS, STX, Sulsim or another commercially available simulation program.
- Be able to take short trips (generally less than a week) to client sites on an infrequent basis – sometimes on relatively short notice.
- Can maintain a valid driver's license.

### Preferred Qualifications



## Position Description

- Experience in an industrial setting (manufacturing facility, oil refinery, chemical processing, mine or mill).
- Process analysis/design engineering experience in one or more of the following areas:
  - Petroleum refining
  - Gas processing and compressor stations
  - Power generation
  - Materials handling
  - Mineral processing
- Advanced understanding of economic analysis.
- Membership in a professional association that indicates a commitment to continuing professional development.
- Holds a license as a Professional Engineer (PE)

### **Classification**

Exempt

[Click here to email resume](#)