
Role Specification

Job title: Senior Process Engineer

Department: Engineering

Location: Houston, Texas

Date: July 2023

The role within the Company

The role of Senior Process Engineer is an integral member of the engineering team and is responsible for supporting the Company's Process Engineering function and delivery and commercialisation of Velocys technology. The successful candidate will join the Company at a pivotal stage of project development and will bring their enthusiasm and energy to deliver key milestones associated to the implementation of new technology and commercial applications for efficiency, environmental and economic benefits.

The role involves technology development and project delivery of Company technology and projects. This role requires someone who can combine their extensive engineering experience with effective influencing skills to thrive in a fast-paced environment, in which change and innovation are required each day to ensure the delivery of net zero aviation travel by 2050.

The successful candidate will be able to provide demonstrable experience of managing a Process team to include the management of external engineering contractors. Accountable for planning, directing, organising, executing and controlling Process engineering activities for specific projects, they will be able to make fact based and sound engineering decisions and be capable of creating innovative solutions to engineering challenges. This is a hands-on role requiring a 'team player' who is able to manage competing demands upon their time. They will be an effective communicator with the ability to apply their enthusiasm and passion for maintaining a first-class engineering capability for our clients.

Responsibilities

- Support company PDP and technology development.
- Support Company business development activities.
- Perform broad range of process engineering technology assignments.
- Plan and conduct work in evaluation, selection and application of standard process engineering techniques, procedures and criteria.
- Periodically review work of others to assure overall quality of process designs.
- Design of several process areas or units to develop drawings and specifications for study, feasibility, Front End Engineering Development (FEED), or Engineering, Procurement, Fabrication, and Construction (EPFC) for these units/systems.
- Routinely work on multiple projects simultaneously.
- Plan and conduct work in evaluation, selection and application of standard process engineering techniques, procedures and criteria.
- Develop process simulation.
- Design process equipment such as pumps, tanks, vessels, etc.
- Conduct hydraulic studies.
- Create new and updated PFDs and P&IDs.
- Review work of others to assure overall quality of process designs.

- Contact and consult with other engineering disciplines within the Company and Contractors in addition to process engineers and supervisors.
- Develop, understand, control and follow the effort-hours budget and process schedule.
- Interact closely with client and contractor process engineers and project managers to meet design objectives, project deadlines, and budgets.
- Work with instrument controls group to write control narratives.
- Interact with vendors to select the most economical option for equipment.
- Apply knowledge of engineering principles and practices in all areas of assignments.
- Contribute to planning and coordinating work.
- Other duties as assigned.

Organisational interactions

- Immediate supervisor: Vice President Engineering
- Next level supervisor: Senior Vice President, Business Development & Technology Delivery
- Other interactions:
 - Internal
 - Project Development Team
 - Catalysis team
 - Design and Manufacturing team
 - External
 - Engineering partners
 - Technology partners
 - Clients
 - Vendors

Education and experience

- A bachelor's degree in Chemical Engineering or equivalent demonstrable work based experience is essential.
- Extensive industrial experience, with demonstrable global scale chemical processing industry experience either in petroleum refining/production, and or an energy related sector.
- Proven experience in delivering large capital projects on time, within budget and to specification, with a bias of applying sound knowledge of engineering principles to complex and integrated plant designs and operations, ideally with emerging technologies experience.
- Experience across ranging from early engineering definition and technology development through to detailed engineering, construction, commissioning and start-up.
- Experience of working across multiple project sites, on a global scale.
- Previous engineering roles held at an EPC (Engineering Procurement and Construction) contractor is desirable, but not essential.
- Experience with XTL technologies, particularly Fischer-Tropsch, and/or renewable fuels is a distinct advantage.
- Proficient knowledge of MS Office to an advanced level is required.
- Prior experience of applying pragmatic problem solving and innovative thinking, working independently, but equally comfortable with operating in a team, delegating and providing motivation when appropriate.
- Willingness to take ownership and responsibility with ability to accept input from other individuals as appropriate.
- Ability to communicate effectively with audiences that include but are not limited to management, colleagues, clients, vendors, contractors, and visitors.
- Job related technical knowledge necessary to complete the job.



- Ability to learn and apply knowledge of applicable local, state/province, and federal/national statutes and guidelines
- Ability to attend to detail and work in a time-conscious and time-effective manner

Contact

Please send your CV and any additional information to support your application to:

careers@velocys.com.

