

Selas Fluid Job Specification

Job Title:	Mechanical Engineer- Houston
Reports to:	Manager Revamp Services
Last Updated:	April 2011

Position Summary

The Mechanical Engineer position researches, plans, and designs mechanical components and systems, and coordinates activities involved in design, fabrication, installation, and repair of mechanical components and systems.

Key Areas of Responsibility

- Developing efficient, cost effective and acceptable design of mechanical components as defined by proposal, client purchase order, SFPC standards, and governing codes, standards and recommended practices. Work is performed with minimal supervision provided by a Senior/Chief Mechanical Engineer
- Completion of project tasks in a quality manner, within budget and on schedule
- Develop equipment orientation and location, including sketches as required
- Equipment application including fans, pumps, boilers, steam drums, air heaters, burners, valves, air pollution control equipment
- Detailed design calculations including pressure part thickness, code calculations, fluid flow, relief valve sizing, and weight calculations
- Generates project mechanical documentation including manual valve schedules, line lists, tie-in lists, equipment datasheets, pipe class specifications, equipment specifications, supplier scopes of supply and Bills of Material, installation sequences, and drawing revision records
- Participate in project meetings with clients and suppliers.
- Checking of calculations, drawings and documents
- Checking of supplier calculations and drawings
- Assist with mechanical interface between structural and I&C disciplines
- Assist in the generation of IMS Selas Fluid practices
- Assist in the development and maintaining of Houston's technical reference Library
- Provides direction for the preparation of mechanical drawings which present the design for fabrication and installation
- Directly interface with the client to assist in the development of the project scope, and then provide continued support of the project through mechanical completion.
- Develop a complete understanding of project Mechanical scope and keep management advised of any scope deviations.
- While at the office, a refinery or chemical plant, maintain the highest level of professionalism, adhering to the Linde Code of Ethics.

- While at the office, a refinery or chemical plant, be aware of and promote the highest level of safety possible for yourself and for others.
- Assist in Project related activities (including the collection of existing documentation or data) within client's or supplier's facilities.
- Actively promote the services Selas Fluid and the future needs of the Houston office.
- As a member of a small and flexible team, perform other responsibilities as assigned by Management to benefit the success of the Houston office.

Required Skills

- Proficient in MS Excel and Word
- Familiar with AutoCad software and 3D modeling of equipment
- Familiar with piping stress analysis (Caesar stress analysis software preferred)
- Familiar with piping isometric drawings
- Good communication skills both written and oral

Education/Experience

- Bachelor's Degree in Mechanical Engineering
- Minimum of 1 years experience designing fired heaters and/or furnaces