

Selas Fluid Processing Corporation  
Job Specification

Job Title:	Mechanical Engineer
Reports to: (Position):	Chief Mechanical Engineer
Last Updated:	June 2010

Position Summary

The Mechanical Engineer will be part of a multi-discipline project team, responsible for all activities involved in design, fabrication, installation, and troubleshooting of mechanical components and piping systems.

Key Areas of Responsibility

- Develop basic and detailed engineering for all mechanical equipment on assigned projects.
- Generate pipe class specifications for ASME B31.1 and B31.3 piping
- Generate detailed design calculations including pressure part thickness, code calculations, fluid flow, relief valve sizing, and weight calculations
- Generate specifications and purchasing packages for all mechanical equipment including piping, pressure vessels, fans, and waste heat recovery equipment.
- Responsible for completion of project tasks in a quality manner, within budget, and on schedule. Responsible for development of project schedules and drawing lists
- Responsible for the application of relevant industry standards, codes and/or project specific standards.
- Review and approve vendor documentation for mechanical equipment and piping. Conduct inspections of mechanical equipment at vendor fabrication shops.
- Provide guidance for Mechanical Design group.
- Provide troubleshooting expertise for client and vendors, including installation/erection assistance at job sites
- Generate project mechanical documentation including manual valve schedules, line lists, tie-in lists, equipment datasheets, pipe class specifications, equipment specifications, vendor scopes of supply and Bills of Material, installation sequences, and drawing revision records
- Performs other responsibilities associated with this position as may be appropriate

Required Skills

- Knowledge of ASME, ASTM, and API codes and standards.
- Experience with process/power piping and pressure vessels required.
- Experience with piping isometric drawings preferred.
- Experience with welding, paint, and refractory systems preferred.
- Experience with pipe stress analysis (Caesar II) preferred.
- Effective computer skills: Microsoft Office software, Lotus Notes and other Company and discipline-specific software applications.
- Effective communication skills, both verbal and written, with superiors, peers, subordinates and other individuals inside and outside the Company.

Education/Experience

- Bachelor's Degree in Mechanical Engineering
- Minimum 3 years of related work experience with emphasis on piping and pressure vessels.