

Job Description

Senior Mechanical Engineer

2018

PRIMARY PURPOSE OF THE JOB: The Mechanical Engineer is responsible for providing HVAC design support under limited supervision. The ME will work under the direction of an Energy Engineer on assigned projects and will report to the Engineering Manager.

Essential Duties:

1. Inventory existing equipment and evaluate the condition and operation of existing building systems.
2. Survey existing site conditions to determine best possible locations for new equipment, duct routing and pipe routing. Identify problem areas that will affect design of new systems.
3. Working in conjunction with the project EE, develop system design concepts and the scope design, along with the scope documents (drawings and specs). After contract award, finalize the HVAC system design and prepare construction documents (drawings and specs).
4. Perform building load calculations.
5. Select, size, schedule and layout HVAC equipment including chillers, boilers, air handling equipment, exhaust equipment, terminal equipment, etc.
6. Layout and size ductwork and piping systems.
7. Perform energy and operational savings calculations.
8. Review shop drawings.
9. Update construction documents and develop final as-builts.
10. Perform preliminary cost estimates.
11. Provide technical assistance to operations during the project implementation phase.
12. Provide technical assistance to the performance assurance engineering and energy accounting groups.
13. Learn basic design skills for other related building systems as required.

Personal Characteristics:

1. Honest, trustworthy, high integrity; makes and keeps commitments.
2. Self-directed, motivated; works hard with limited supervision.
3. Analytical, detail oriented; someone who likes figuring out how things work.
4. Good communication skills, friendly, likable.
5. Strong work ethic; does what it takes to get the desired results.
6. Interested in continuous personal development.
7. Well organized.

Required Experience:

1. Minimum of 5 years of experience designing traditional plan and specification projects in the HVAC industry.

Required Education:

1. BSME or BSEE from an accredited college or university is preferred.
2. Professional Engineer registration in states where projects are conducted is preferred.

Working Conditions:

1. Office functions will primarily be performed at PSI's main business office.
2. Onsite engineering surveys, meetings and presentations will normally be held at our prospects' offices located throughout Indiana.
3. Work hours vary based on workload, but should average 45-50 hours per week.
4. Long hours may be required prior to proposal submissions.