

## Senior Mechanical Engineer, HVAC Design\_240909

Advantage Point Group (APG) is looking to add a highly experienced Senior Mechanical Engineer PE to join our Facilities Design Team. This role involves engineering and designing HVAC, plumbing, utility piping (compressed air, nitrogen, vacuum, etc.), and other mechanical systems for industrial and commercial environments. You will collaborate within a multi-disciplinary team, including Architectural, Structural, Mechanical, Electrical, Fire Protection, and Fire Alarm-Security Systems experts.

### **Key Responsibilities:**

- Conduct heating & cooling load analysis.
- Review Test & Balance reports and ensure proper air balance and room pressurizations.
- Design spaces and size/select equipment such as AHUs, FCUs, exhaust fans, and exhaust extraction arms.
- Develop plumbing plans with riser diagrams.
- Generate mechanical plans, schedules, equipment specifications, design details, and construction documentation.
- Provide input on the mechanical scope of work and fees for engineering proposals.
- Attend client project site meetings and hybrid meetings.
- Perform fieldwork and site observations to document existing conditions and update drawings.
- Collaborate with contractors to troubleshoot or resolve installation issues.

### **Required Qualifications:**

- Bachelor's Degree in Mechanical Engineering from an accredited college/university.
- Minimum of five years of progressive design experience with mechanical systems (HVAC, plumbing, and piping systems) for commercial and/or industrial facilities.
- Registered Professional Engineer (PE) in one or more states, with the ability to obtain registration through reciprocity in additional states.
- Extensive knowledge of mechanical HVAC systems, including VAV/CAV supply air boxes and exhaust systems with EVAV boxes.
- Experience with industrial hygiene codes and ASHRAE Standards.
- Proven experience in facility or building load calculations and system component analysis.
- Proven experience in sizing ductwork and/or piping systems.
- Experience in designing process chilled water supply/return systems for heat exchanger and chiller systems used in equipment heating/cooling control.
- Proven experience in designing plumbing systems for manufacturing facilities, laboratories, restrooms, shower rooms, etc.
- Proven ability to select equipment and work with preferred vendors/sales reps to provide technical specifications, equipment quotes, and lead times.
- Proven experience in construction administration and inspection activities.

- Experience with design coordination on multi-disciplinary projects, including Architecture, Structural, Electrical, Fire Protection, and Temperature Controls.
- Excellent verbal and written communication skills for explaining design concepts to non-technical individuals.
- Ability to attend team meetings, onsite inspections/visits, field work and perform construction administrative duties.
- Proficiency in AutoCAD, Bluebeam, Microsoft Word, and Excel.

### **Compensation and Benefits**

- Pay Rate: \$50 plus per hour depending upon previous experience and qualifications. A typical work week is 45 hours per week. Some overtime is likely depending on project type, size and completion.
- Benefits: 401(k), 401(k) matching, Health insurance, Health Savings Account (HSA), Dental insurance, Life insurance, Vision insurance, Paid Time Off (PTO), and holidays.

### **Why APG?**

Join a growing company with a reputation for interesting projects, work/life balance, a commitment to professional development, and a supportive work environment. Enjoy the convenience of the location, competitive pay, and a culture that values your contribution.

### **In Our Employees' Own Words:**

*"Opportunity for professional growth is evident."*

*"The company values and invests in its employees."*

*"Challenging projects keep me engaged."*

*"Our team is collaborative and supportive."*

*"APG provides a platform for career advancement."*

### **Yes, we have Career Advancement Opportunities!**

- Senior Mechanical Engineer
- Mechanical Discipline Lead
- Mechanical Department Manager

**Apply now!** Contact Paul Esch, 651-440-4344, [pesch@apgroup.net](mailto:pesch@apgroup.net).

PLEASE: NO RECRUITING OR STAFFING AGENCIES!

APG is an engineering consulting firm that offers engineering solutions with a full comprehension of the planning, development, design and construction processes that need to be present in all projects starting back in 1983. See [www.apgroup.net](http://www.apgroup.net)