



Position Title: Product Design Engineer

Immediate Supervisor Title: Director Technical Services

Department: Sales

Location: Neutronics, Inc. – Exton, PA

FLSA Status: Salaried Exempt

Brief Summary of Position Purpose:

Provides technical design and support for the manufacturing and sales departments of the oxygen analyzer and environmental gas detection product lines for new and existing products. Develops new or reconfigures existing designs of electromechanical and pneumatic assemblies to conform to customer order requirements.

Essential Functions:

- Creation of drawings, bills of materials and manufacturing procedures to be used by production personnel during assembly and testing of the oxygen analyzer and sample conditioning systems.
- Produces documentation package for customer use which includes mechanical assembly, piping and electrical installation detail drawings.
- Writes and edits operation and instruction manuals.
- Determines product feasibility and cost estimates for special types of equipment or product modifications from specification documents and engineering requirements.
- Specifies and tests new electrical and pneumatic components, analyzer system designs (selection and configuration of system hardware)
- Answers questions and provides technical support to manufacturing personnel relating to the configuration, testing and operation of the G.A.S. Division product line.
- Communicates with customers via phone and email to answer technical questions related to the design and operation of G.A.S. Division products. Occasional travel to customer sites may be required.
- Reviews development plans for compliance with recognized engineering standards (third party approvals) and Neutronics engineering procedures.
- Reviews Engineering Change Requests (ECR) and documents from manufacturing and sales personnel. Issues change orders to document corrective action.
- Updates all controlled drawings, forms, procedures and associated documents following applicable procedures.
- Other duties as assigned.



Education/Training/Certifications:

- Bachelor's Degree in Electromechanical or Electrical Engineering

Experience:

- Minimum of 3 years' experience in application, design engineering and/or instrumentation experience.
- Experience with AutoCAD or similar software for 2D drawings and SolidWorks for 3D design and modeling.
- Knowledge of organic chemistry is a plus.

Required Skill Sets: (e.g., computer skills, communications, math, etc.)

- Must have a thorough knowledge of PC's and be willing to learn new application software.
- Effective interpersonal and communication skills, both verbal and written.
- Efficient computer skills to include Microsoft Office Products, Outlook, Word, Excel, and Power Point.
- Ability to work independently as well as within in a team.
- Strong planning and organization skills.

Physical Demands: (e.g., lifting, travel, etc.)

- Regularly required to sit; occasionally walk, stand, reach and bend; talk, hear and see; use hands and fingers, handle or feel objects; lift, push and pull less than five (5) pounds; occasionally lift, carry, push, or pull up to 20 pounds
- Requires concentration, accuracy, and focused mental effort with the exceptional ability to present a calm, professional demeanor while multi-tasking in a fast-paced team environment.
- Typical office work environment with occasional exposure to plant.
- May travel (domestic and internationally) as business needs require (5% - 10% yearly)

Pursuant to the Americans with Disabilities Act (ADA), reasonable accommodations may be made to enable qualified individuals to perform the essential functions of this job.

AA/EEO/M/F/D/V