

# **System Design Engineer (Not currently active: For pipelining purposes only)**

## **JOB SUMMARY:**

This position requires the ability to successfully engineer and design electrical and mechanical control systems relating to; temperature, pressure and flow control of various gases and fluids in the industrial manufacturing industry with an emphasis on combustion systems. Mechanical piping and heated duct sections will also be a large part of the requirement. Safety will be the leading criteria of all designs. This role will evaluate projects with the sales department and possibly review them with the engineering team to design the best solution that meets the customers expectations. AutoCAD electrical & mechanical drawings, panel layout, BOM and a P&ID will be produced for; approvals, quoting, purchasing and fabrication. Panel testing may also be required as needed along with internal and external customer support.

## **PRIMARY FUNCTIONS (Top Three):**

- **Project Design (Electrical) (70%)**
- **Customer, Sales and Service Support, internal & External (20%)**
- **Controls Panel and Valve Train Testing (10%)**

## **ADDITIONAL RESPONSIBILITIES:**

- A strong working knowledge of Auto-Cad.
- Create engineered drawings and specifications for; electrical panel design & layouts, mechanical piping, duct assemblies and all accessories as needed
- Create and review the BOM for the parts procurement
- Design and evaluate flow calculations, velocities and

pressures throughout various systems.

- Knowledge of control valves and various mechanical flow control devices.
- The ability to size appropriate flow control valves and regulators.
- System designs with the implementation of PLC's.
- Supervise projects as needed per approved drawings.
- Attend project line up meetings.
- Assist with implementation and maintenance of UL rated panel shop.
- Ability to interact with vendors, internal and external customers while representing the company in a professional manner

**QUALIFICATIONS/REQUIREMENTS:**

- Minimum of 2 years of College or Technical School
- Minimum of 2 years' experience designing with AutoCAD

**PERSONAL CHARACTERISTICS:**

- Excellent Math Skills
- Problem Solving Skills
- Trainable/Teachable
- Communication skills
- Positive Attitude

**WORKING CONDITIONS:**

- The working conditions are mainly in an office environment with some time in a warehouse environment.
- The physical requirements are to be able to pick up a 40-pound package.

**TRAVEL REQUIREMENTS:**

- 0 to 10%