

Electrical Engineer

Job Summary: Responsible for all electrical control systems for new machines as well as upgrading controls for existing machines. The equipment designs are for single wafer /batch silicon wafer surface preparation. Responsibilities include control systems, schematics, panel layout, motion control set-up and bill of material. The Electrical Engineer will write design specifications, generate required electrical prints and schematics, develop work layouts, and write theory of operation/controls. **This position is on-site in Allentown, PA.**

Essential Duties and Responsibilities:

- Design and develop control system per Project requirements.
- Use AutoCAD drafting software to create detailed Electro-Mechanical Schematics (Electric & Pneumatic) and layout components for panel building.
- The Electrical Engineer is required to define complete electrical systems:
- 208V -3ph, 110VAC, 24VDC, 5VDC, 4-20ma, 0-10V, RTD, Thermocouple, Smart devices, Simple devices, Servo Motor, Stepper Motor, Distributed IO
- Specify electrical hardware and generate Bills of Material
- Maintaining and modifying existing systems.
- Working collaboratively with engineering peers (mechanical, electrical, & software), manufacturing shop leads, and field service engineers.
- Understanding and ensuring compliance with the health and safety regulations and quality standards of the country in which work is undertaken.
- Identify both electrical and mechanical safety hazards and designs and direct the installation of machine guards and or interlocked electrical controls.
- Document and publish operations manuals.
- Support and/or assist electrical assembly technicians and field personnel as needed.
- Works with OEM suppliers and or component vendors to specify, develop and debug new products, production equipment and complete production lines as required to build products that meet or exceed our customer's performance requirements.

Requirements:

- A minimum of BS in Electrical Engineering, or BS in Electrical Engineering Technology, or BS in Electro-Mechanical Engineering Technology (BSEMET), or other relevant degree
- 3-7 years of engineering experience in a manufacturing environment
- Must be proficient in AutoCAD (or other Cad software) developing electrical schematics.
- Familiarity with Safety Code compliance (NFPA79, UL508)
- Some travel to vendors, customers, and/or offsite training required.