

JOB SUMMARY:

The Electrical Engineer/Systems Engineer is 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. The Electrical Engineer will be responsible for 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. Must be proficient in Auto Cad (or other Electrical CAD software).

ESSENTIAL DUTIES AND RESPONSIBILITIES:

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

MINIMUM EDUCATION/WORK EXPERIENCE:

1. A minimum of a BSEE or BSET (or other relevant degree)
2. Must be proficient in Auto-Cad (or other Cad software) developing electrical schematics.
3. Familiarity with Safety Code compliance (NFPA79, UL508)