

Vacuum Process Technology, located in Plymouth, Massachusetts, is a leader in the development and manufacturing of turnkey thin-film deposition systems, custom designed components and thin-film processes. Our long history in the precision optics industry and our growth in renewable energy creation and storage offer excellent opportunities to strong individuals seeking an exciting work environment. VPT has a culture of teamwork which generates continuous innovations.

Electrical Controls Engineer

Job Summary:

VPT is seeking a full-time Electrical Controls Engineer to join a growing team in a fast paced environment developing electrical control systems for vacuum based thin-film coating machines. The successful candidate will have experience in high and low voltage power design and factory automation controls development. Responsibilities will include electrical schematic design, PLC and HMI programming, hardware troubleshooting and debug.

Job Description:

The Electrical Controls Engineer will perform all or some of the following key tasks:

- Design control systems using vacuum chamber and thin-film process control equipment, develop power distribution designs, and programming of PLCs and HMI software
- Develop schematic diagrams in AutoCAD for electrical wiring, panel and control console layouts, as well as generating bills of material
- Develop software applications in Visual Basic (or other high-level programming languages) to support instrument integration and HMI customization
- Perform functional test and integration of controls for vacuum based coating systems
- Write clear, concise and thorough test procedures, technical specifications and manuals for control systems operation
- Work closely with Mechanical Engineering during product specification and design, and with the Assembly organization during systems integration and site installation
- Support customers both on-site and remotely
- Domestic and International travel is typically 20-40%

Minimum Requirements / Knowledge / Skill for Electrical Controls Engineer Position

- 4-8 years Electrical Design Experience
- Experience as Controls Engineer
- Experience designing/implementing PLC Ladder Logic and HMI/SCADA applications
- Experience with Rockwell Automation platforms preferred
- Hands-on experience with Industrial Control Systems and Instrumentation
- Working Knowledge of AutoCAD required
- Working Knowledge of standard Microsoft Office applications
- Experience developing and troubleshooting high-level software languages preferred (including Java, C/C++, C# and .NET)
- Experience with Microsoft Visual Basic
- Knowledge of PC operating systems and industrial networking
- Experience with communication interfaces including Ethernet TCP/IP, Profibus, Modbus, High-speed (480Mb/S) USB-2, RS-485 and RS-232
- Familiarity with design analysis and simulation tools
- Excellent written and verbal communication skills
- Familiarity with regulatory requirements, such as: NEC, UL, and CE
- Periodic Travel Required

Minimum Education Requirements / Certification / Licensure for Electrical Controls Engineer Position

- BS in Electrical Engineering or Related Discipline
- MS in Engineering Preferred
- Trained or Certified in Electrical Safety Standards a Plus

Human Resources
Vacuum Process Technology
70 Industrial Park Road
Plymouth, MA 02360