Senior Electrical Engineer

Duties:

- Execute electrical engineering duties on a multi-disciplinary product development team tasked to facilitate the successful development, characterization, production and support of industrial water jet machining systems
- Prepare design requirements, performance specifications, functional descriptions, and validation plans appropriate to support highly reliable electrical circuit designs in electrically noisy environments
- Develop concept designs that meet product design goals
- Design and implement machine control systems involving motion control, stepper/servo drive systems, variable frequency drives, embedded controls, and industrial machinery control panels. Create and maintain product documentation.
- Provide technical expertise and guide efforts to effectively diagnose and solve problems from the customer support and production environments which are escalated to engineering for assistance.
- Perform all other duties as deemed necessary by the department manager or VP

Qualifications:

- Passion for Electrical/Electronic engineering
- BS or MS degree Electrical Engineering and a minimum of 7 years’ work experience in a product development environment
- Expertise with embedded control systems and programming (ARM, Microchip, C/C++, Assembly; USB, I^2C, Ethernet communications)
- Experience with multi-axis machine motion control (stepper/servo drives, automated control loop gain tuning, traction drive positioning systems, lead screw/ball screw positioning systems)
- Familiar with the selection, application, interfacing, and programming of Variable Frequency Drives (VFDs)
- Circuit design capabilities including use of schematic capture and PCB design software (Altium or Eagle preferred, or experience with PADs, OrCAD, etc.)
- Familiarity with regulatory landscape (CE Machine Safety/EMC, NFPA79, UL 508A)
- Demonstrated ability to execute projects with an extraordinary sense for detail
- Excellent oral and written communication skills
- Experience with different Fieldbus systems (CAN, EtherCAT)
• Professional attitude and the ability to communicate and work across many levels of the organization including Management, Technical Support, Applications and Customers