



ProTom International Holding Corporation
Job Description: Senior Controls Engineer

Summary:

ProTom International Holding Corporation is seeking a Senior Controls Engineer to join the team in the Boston area office location. This individual will be a skilled and experienced Controls Engineer who will be involved and lead aspects of the design, installation, upgrade, calibration and verification of the ProTom *Radiance 330* Proton Therapy System and will report to the Director of Engineering Electrical Systems & Controls.

Principal Responsibilities:

- Lead efforts in the design, testing, and verification of safety and non-safety control systems which include PLC based control systems, power distribution cabinets (<600V), motion control, and process control for machinery depending on temperature, pressure, flow, and other variables
- Plan, coordinate, and execute critical design reviews and test readiness reviews
- Development of system and subsystem test plans and test protocols
- Specify requirements and layout of the new electrical control panels which are NFPA79/NEC/UL508A compliant
- Responsible for interacting with client and planning and implementing plans for onsite delivery, installation, testing, and commissioning
- Creation and delivery of formal presentations
- Recommend the purchase of capital equipment; assist in the budgeting of spare parts and supplies
- Assist in training ProTom clients and Service and Maintenance technicians on the safe use, handling and operation of therapy equipment as it relates to electronics
- Work with outside contractors, manufacturers' installers, and field service personnel to achieve installation and acceptance of the radiation therapy equipment.

Qualifications:

- B.S. in Electrical Engineering; (BSEE); MSEE a plus
- Minimum of 10 years of experience in specification, design, fabrication, test, integration, and documentation of complex electromechanical system
- Experience working within a modern controlled engineering development process such as required by the DOD, FAA, and/or FDA
- Knowledge of computer based control of these systems including Safety PLCs, HMI, amplifiers, motion control, and higher level computer based systems including networking and communication protocols (TCP/IP, Modbus, RS-232/422/485, CANopen, EtherCAT and EtherNet/IP).
- Ability to prepare electrical engineering documentation such as schematic, interconnect diagrams, wiring diagrams, BOMs, FMEA, working instructions and operation procedures
- Skill in the use of ECAD (OrCAD, Altium Designer)
- Knowledge of Domestic and International Building Code Electrical Standards is a plus