



Automation Engineer

Department: Engineering	Reports To: Engineering Manager
Location: Lakeland	Revised: April 2023

JOB SUMMARY:

Working the Engineering Department, this position provides high-end design, execution, and technical support for SCADA and PLC-based control systems with an emphasis on the water and wastewater industries. This position includes working with Unitron Controls®, a division of Barney's Pumps, as well as Sales personnel.

ESSENTIAL FUNCTIONS:

General

- Advanced level programming of Supervisory Control and Data Acquisition systems (SCADA), Programmable Logic Controllers (PLC), Human Machine Interfaces (HMI), and Variable Frequency Drives (VFD).
- Requires excellent analytical and problem-solving skills to be applied in design, installation, commissioning, and troubleshooting of software systems and plant processes.
- Self-motivated and directed with the ability to work well in a team environment.
- Serve as technical expert on control systems within Engineering Department.
- Requires the ability to successfully execute multiple project responsibilities with minimal supervision.
- Technical writing for various projects including control narratives, IO point testing, and factory acceptance testing, and end-user training.
- Sales and customer technical support over telephone, remote VPN access, and on-site.
- Develop remote access standard procedures, managing of customer accounts, and programming logs.
- Develop internal training program for electrical and control system programming, calibration, testing and troubleshooting.
- Maintain training and certifications of software packages and third parties such as International Society of Automation (ISA).

Project Management

- Manage and execute integration projects within budget and schedule
- System design, coordination, and engineering including electrical and control system specification.
- Job/Project management as specifically assigned by management including estimating, I&C design (instrumentation and controls), costing, and internal drawing approval.
- Engineering and Sales Department liaison in Shop, Customer Service, and Unitron Controls®.
- Maintain and develop I&C standards related to packaged pumping systems as well as water and waste water industries.
- Overall responsibility for the software development and maintenance of BPI packaged pumping systems software and SCADA applications.

Sales Support

- Control system estimating, costing, and proposal generation.
- Budgetary quotations of small control system packages, including Hydroflo programming, and budget estimates on spec-and-bid projects.
- Technical research, application, and costing on non-standard software packages and instrumentation
- Travel with Sales as needed to provide engineering input with possible overseas travel (requires passport).
- Develop internal and external sales training.
- Maintenance of engineering data, forms, and procedures.



Automation Engineer

Software Experience

- Knowledge of automation systems including instrumentation, PLC's, HMI's, and SCADA applications.
- PLC/HMI/SCADA programming software (previous work experience with any or all is preferred)
 - VTScada, Wonderware, FactoryTalk View Site Edition or equivalent SCADA software
 - Rockwell RSLogix 500/5000/Studio/IAB
 - Maple Systems EBPro
 - Schneider Electric Unity Pro
 - Siemens Step 7 / WinCC
 - Unitronics VisiLogic and Unilogic
- Knowledge of industrial communication networks, network security, and proprietary communication protocols

EDUCATION:

- Bachelor's degree in Engineering or Engineering Technology

WORK EXPERIENCE:

- 3+ years of relevant work experience.

LICENSES AND CERTIFICATIONS:

- Valid driver's license.
- SCADA program training certifications / credit is a plus
- PLC training certifications / credit is a plus

SKILLS AND ABILITIES:

- Must be highly motivated and a self-starter.
- Able to carry out a series of work instructions without constant supervision.
- Ability to communicate effectively.
- Excellent verbal and written communication skills.
- Ability to organize and prioritize.
- Be able to communicate with multiple departments which include production, purchasing, accounting, and warehouse.
- Must be aware of and adhere to electrical, shop, and jobsite safety protocols
- Knowledge of basic electrical circuits and troubleshooting
- Proficient in Microsoft Office.

INFORMATION ON BARNEY'S PUMPS:

- Visit our website – www.barneypumps.com
- Barney's Pumps "About Us" and "Who We Are" videos - www.barneypumps.com/about
- Barney's Pumps Company Culture - <https://www.barneypumps.com/ourculture.html>
- Barney's Pumps packaged systems - www.barneypumps.com/pumppackagingcapabilities
- Unitron Controls® - www.barneypumps.com/unitroncontrols