



Position Description : Automation Controls Engineer (ACE)

Section I.

Position Details

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| a. Department | Operation |
| b. Division | Industrial Controls & SCADA |
| c. Position Title | Automation Controls Engineer (ACE) |
| d. Immediate Supervisor | Chief Operations Officer |
| e. Office Location | HRA – Waverly, VA Main Office |
| f. Salary Range | \$88,015-\$140,550 Depending on Experience |

Section II.

Description

We are looking for an experienced Automation Controls Engineer (ACE) to join our team. In this role, you will be responsible for implementing, maintaining, and supporting the automation & process control infrastructure (SCADA). Provide expert assistance and collaboration in creating engineering plans, designing, monitoring and development of automation & process control systems. Understand and apply new technological systems and multiple-vendor products to develop and support innovative system solutions that meet our customers' needs. Assist in the development of SOP's and policies related to the installation, maintenance, and operations of automation & process control systems. Develop, deploy, and maintain standard and custom programming and configuration code for the automation & process control systems. Provide emergency support for maintaining the automation & process control infrastructure. Manage automation & process control system projects as required. Perform quality assurance checks of automation & process control systems as required. Manage system integration partners and relationships. We are looking for an individual who is passionate about technology and automation and is eager to work in a fast-paced, collaborative environment that values integrity, teamwork, and exceeding expectation.

Responsibilities

- Work collaboratively with design engineers, operations personnel with the design, review, information gathering, inspection, and start-up of projects that include process control equipment and/or SCADA systems.
- Develop programming and configuration code for process control systems, make changes to existing programs, review work performed by outside contractors, participate in factory acceptance testing, and coordinate control system issues between project engineering, the instrumentation contractor, and operations.
- Review control logic strategies and implement programming changes to optimize control strategies for treatment and pumping processes and automate where appropriate.
- Perform and/or coordinate maintenance activities on process control equipment or SCADA system. Perform upgrades, add new facilities, and provide replacement of hardware and software.



- Diagnose, troubleshoot, and resolve control system issues.
- Train and support production staff on proper operation and maintenance of Process Control equipment or Systems. Provide Technical instruction as required.
- Participate in continuous improvement initiatives to enhance operational performance.
- Performs other duties as assigned.

Requirements

- Strong knowledge of P&IDs, control elementary drawings, ISA instrument specifications, and loop diagrams.
- Working knowledge of industrial control system platforms including PLC / DCS / HMI programming / design / configuration.
- Strong proficiency in MS Office Suite (Word, Excel, PowerPoint, Outlook).
- Working knowledge of electrical, mechanical, and instrumentation process control equipment and systems.
- Experienced in configuring PLCs and RTUs, including Allen-Bradley/Rockwell, Siemens, and Emerson.
- Experienced in configuring HMI systems, including Allen Bradley, Maple, Redline, and others.
- Proven ability to configure Distributed Control Systems (DCS) and Supervisory Control and Data Acquisition (SCADA) systems, including but not limited to Emerson Ovation, Misson, Dorsett, VTScada, Ignition, GE, and ECT.
- Ability to develop Process Control Functional descriptions.
- Proficient with data communications systems, protocols, wired and wireless network systems, and cellular and radio telemetry.
- Demonstrated ability to solve complex process control problems related to water / wastewater systems.
- Strong safety awareness and understanding of compliance standards in industrial environments.
- Attention to detail and the ability to work independently with minimal supervision.

Section III.

Position Accountabilities and Expectations

- a. Compliance –All electrical code, building code, NEC, HRA policy/procedures, and legal requirements are followed 100% of the time.
- b. Financial – Budgets align with HRA project projections and timelines and are effectively controlled.
- c. Customer Satisfaction – Zero customer complaints; timeliness of response to emergency situations; schedules are provided to customers/partners within a timely manner.
- d. Timeliness – Meets deadlines for reports and procurement orders; provides timely responses to emergency situations, and to customers (internal and external)

Section IV.

Working Conditions

- a. Must be able to work independently and in a team-oriented environment as needed.
- b. Most work is performed in an office environment.



- c. Must be immediately accessible by telephone in order to respond to emergencies for after-hours support as needed.
- d. Some overnight travel may be required.

Section V.

Physical Requirements

- a. Must have the physical dexterity to accomplish the duties defined herein.
- b. Must have the ability to lift, climb, walk and stand for over 50% of time.
- c. Must be able to identify colors.
- d. Must be able to lift loads (20 – 50 pounds).
- e. Must be willing to work in OSHA designated noise environments (> 85 decibels).

Section VI.

Qualifications

Education & Experience

Required

- High-school Diploma or GED
- Minimum four (4) years of experience in design, maintenance, troubleshooting, calibration, repair and installation of Process Control Systems (SCADA and DCS), configuration and programming of PLCs and HMIs control and instrument loops.
- Experience with data communications systems, protocols, wired and wireless network systems.
- Four-year (4) degree or equivalent experience and/or certifications or other education and training.

Technical Competencies

Required

- Demonstrated experience in the maintenance, troubleshooting, calibration, repair and installation of Process Control Systems (SCADA and DCS), configuration and programming of PLCs / RTU.
- Experience with data communications systems, protocols, wired and wireless network systems, and cellular and radio telemetry.
- Ability to read and interpret electrical schematics, piping and instrumentation diagrams (P&IDs), and interconnect loop sheets.
- Working knowledge of all types of analytical instrumentation (flow, pressure, level, temperature, and analytical instrumentation)
- Working knowledge of Programmable Logic Controllers (PLC), Distributed Control Systems (DCS), and Supervisory Control and Data Acquisition systems (SCADA)
- Working knowledge of basic Cisco switching and routing

Special Licenses

Required



- Valid Driver's License from state of residence
- Authorized to work for any U.S. employer.

Desired

- Commonwealth of Virginia Journeyman's License in Electrical and/or Instrumentation
- ISA Certified Automation Professional (ISA-CAP)
- Electrical Engineering PE License in the Commonwealth of Virginia