



2012

POSITION DESCRIPTION

POSITION TITLE: Designer – Automation & Control System Hardware
REPORTS TO: Senior Lead Application Specialist
BUSINESS: NOREC Automation
LOCATION: Solon, Ohio

SUMMARY OF POSITION:

Performs a variety of Automation & Control System hardware and field installation related engineering/design tasks in support of NOREC Automation's process and machine control system integration projects for local and global customers in diverse industries.

ESSENTIAL JOB FUNCTIONS:

1. Leads/performs co-ordination activities with NOREC Automation OEM customers as required to insure timely and high quality results when incorporating products and equipment provided by OEM sub-vendors and contractors.
2. Performs detailed control system hardware definition/selection activities based upon finalized/as-sold control system architectures.
3. Performs co-ordination activities, with selected control panel manufacturers, as required to insure timely and high quality results for proposal and project related control panel quoting, design and manufacturing activities.
4. Develops system level installation related documentation such as cable schedules; loop diagrams; electrical interconnection diagrams, utilizing multi-vendor/sub-contractor documentation.
5. Leads/performs hardware testing activities in support of hardware/software integration activities, including development of project specific hardware test plans when required.
6. Assists in the development of system control architectures, I/O lists and definition/selection of required control, network communications hardware and when required, field devices for proposals and projects.
7. Assists in the development of written project documentation such as functional specifications, operator manuals and system level test specifications, focusing on hardware related content.
8. May assist in the development of control enclosure layouts, power distribution and electrical schematic drawings using AutoCAD.
9. May participate in hardware testing, I/O checkout & commissioning activities at customer job sites.

QUALIFICATIONS:

Experience with or exposure to most of the following through direct work experience and/or formal coursework:

- Proficient in the use of AutoCAD Electrical & Microsoft Office 2010 products
- Proficient in PLC-based control system design including AC & DC motor control
- Proficient in the selection of multi-vendor PLC hardware, AC & DC Motor Drive Hardware and general control system components
- Experienced in the preparation of control system design documentation such as P&I diagrams, instrument lists, electrical schematic wiring diagrams and control panel layout diagrams
- Experienced in the preparation of field/installation documentation including cable/wire schedules, electrical interconnection & instrument loop diagrams
- Knowledgeable in the use of typical control system field devices such as pressure/flow /temperature transmitters, temperature sensors, control valves/actuators, pressure/temperature/flow switches and position sensing devices



Interpersonal Skills:

- Strong work ethic with a desire to learn
- Willing to make and keep commitments; dependable
- Ability to work collaboratively in a team environment
- Entrepreneurial spirit
- Customer-first mentality
- Good written & verbal communication skills.

Educational Background:

- Associate of Applied Science degree in Engineering Technology or similar degree or certification for full-time positions
- Pursuing Associate of Applied Science degree in Engineering Technology or similar degree or certification for co-op positions.

Travel Requirements:

- Some travel to customer plant sites may be occasionally required.