

HARPER INTERNATIONAL

POSITION DESCRIPTION

The Position Description is the tool used by Harper International to communicate and clarify the essential job functions, establish the basis for performance expectations, and identify training needs for each position. Completing the details of the Position Description is a joint effort between the employee and the supervisor.

Part I - Reporting Structure

Date or last revision: March, 2012

Job Title: Electrical Engineer

Reports To: Electrical Engineering Supervisor

Department: Engineering

Status: Exempt

Completed By: HR

Part II – Position Objective

Provide electrical engineering & design support with an emphasis on power (equipment/machine) in an OEM environment.

Part III – Job Responsibilities

Typical Duties

1. Design and implement power circuits with line voltages in the 220-600 VAC Range.
2. Design circuits with SCR's for electrical heating systems.
3. Design and implement electrical instruments, equipment, facilities, components, products, and systems for industrial purposes.
4. PLC programming using AB SLC-500, Compact, Logix, Control Logix, and Siemens PLC's.
5. Work with motor control centers, industrial circuit breakers, and transformers.
6. Utilize Autocad Electrical to generate electric circuit drawings, control logic, various wiring diagrams, power-system schematics, and single line drawings for customer sub-station purposes.
7. Generate HMI's using programs such as panelview, RSView32, WINCC, Wonderware, etc..
8. Analyze system component requirements and prepare specs for purchase of suitable material and equipment.
9. Investigate and test vendors' and competitors' products.
10. Perform various detailed calculations for heating system electrical circuit resistance and component selection including wire sizing, fusing, transformers, power controllers, circuit breakers, proper conduit selection and remote device interconnection and use of thermocouples.
11. Coordinate manufacturing, installation, support, documentation, and testing activities to ensure compliance with specs, codes, and customer requirements.
12. Layout proper control and power cubicle configurations.
13. Interface with other departments and subcontractors to ensure projects are completed according to customer specifications, within budget, and on-time.
14. Must be able to travel for system start-up and troubleshooting, both domestic and abroad.

IV – Knowledge, Skills, Education

1. BS EE
2. Minimum 10 years experience required. High current applications a plus.
3. Ideal candidate has extensive work experience in OEM environments (preferably low volume, industrial equipment)
4. Must possess the ability to read electrical schematic and P & ID's.
5. Must be familiar with NEC & ISA standards and symbology, with knowledge of IEEE & CE standards a plus.
6. Hands on experience (i.e. manufacturing support or field/start up experience) a plus.
7. Up to 15% travel required-both domestic & international

VI - Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to stand, walk, hear and talk. The employee is frequently required to sit and use hands. The employee is occasionally required to reach with hands or arms, climb or balance, stoop, kneel, crouch or crawl.