

JOB DESCRIPTION

Job Title: Senior Design Engineer FLSA Code: E

Function: Instrument Transformer **Date:** 06/01/2011

Note: The statements included in this job description are intended to reflect, in general, the duties and responsibilities of this classification and are not to be interpreted as being all inclusive.

CHARACTER OF THE JOB:

Reports to the Manager of Engineering - High Voltage Instrument Transformers and is responsible for the electrical and mechanical design of transformer products.

MINIMUM EDUCATION REQUIRED:

Four year electrical engineering degree preferred with other engineering degree considered in combination with work experience.

MINIMUM EXPERIENCE REQUIRED:

Four years of transformer electrical and mechanical design experience desired. Acceptable experience may include electric utility experience, quality assurance/test, manufacturing, or other closely related positions.

ACCOUNTABILITY:

- 1. Produce calculations, drawings, sketches, instructions, bills of materials, etc. for drafters and others to follow to satisfy the requirements of the Marketing Shop Orders and customer specifications.
- 2. Work with other members of design team to complete all required drawings and bills of materials.
- 3. Provide technical assistance to other design engineers, drafters and technical staff, and to shop floor personnel as required.
- 4. Must evaluate customer requirements and integrate requirements into the production schedule.
- 5. Implement special engineering projects related to design improvements, cost reductions, new materials, new components, or new design techniques.



KNOW-HOW:

- 1. Must possess a thorough working knowledge of high voltage transformers, including basic design and application. Experience in instrument transformers is preferred.
- 2. Must be able to apply engineering principles to the electrical and mechanical design of transformers.
- 3. Must be able to read and interpret customer specifications, industry standards, and company design standards, and apply to transformer design.
- 4. Must be able to use a personal computer to do engineering calculations using commercial and proprietary programs, and to perform other office functions. Must be proficient in MS Word, Excel, etc. Desired proficiency in SAP or other MIS systems.
- 5. Other desired skills include Finite Element Analysis (FEA), PLC programming, Boolean logic, Root Cause Fault Analysis, AutoCAD.

PROBLEM SOLVING:

- 1. Must be able to reason and think logically.
- 2. Must be able to analyze problems and to develop corrective actions.
- 3. Must be able to work with others to collectively solve problems.
- 4. Must be able to multi-task several projects and prioritize workload to meet deadlines.
- 5. Must be able to systematically maintain engineering records and archives.

DESIRED ABILITIES/EXPERIENCE:

- 1. Quality assurance training experience (ISO).
- 2. Total cost analysis.
- 3. Ability to effectively interface and collaborate with customers, suppliers, etc.
- 4. Willing to travel (Customers, Suppliers, IEEE meetings, other facilities, conferences, expositions).
- 5. Should be a "self-starter" (show initiative) and follow tasks through to completion with little guidance.
- 6. Able to present themselves and their work in a professional manner to management and to customers.

APPROVAL:

Manager, Human Resources Manager of Engineering – High Voltage Instrument Transformers Managing Director – High Voltage Instrument Transformers