



**S I M S O N
M A X W E L L**

**Title: Sr. Electrical Design Technologist
Job Description & Responsibilities**

Company Info:

Simson Maxwell was established in 1941 and is a leading name in the distribution of industrial engines, and the manufacture, sales and service of standby and prime power generator set systems. Simson Maxwell is internationally recognized in the power generation industry for its expertise in the custom design, engineering, sales and service of quality power generation sets and electrical control equipment under the Simmax brand name. See www.Simson Maxwell.com for additional information.

Position Overview:

This is an excellent entry to mid-level position for a career focused individual who wants to utilize and apply her/his theoretical knowledge and advance his/her career in the field of electrical design. As a Design Technologist, you will work closely with other engineering and production staff in a heavily manufacturing based environment to provide custom designs and solutions which will challenge you to fully develop and apply your design skills.

Effective Date: Immediate opening

Terms:

- Permanent Full Time
- Salary will be based on education and experience
- Monday - Thursday, 7:30am – 4:00pm, Friday 7:30 am – 2:00 pm (1/2 hr lunch break)

Discipline(s): Electrical Engineering

Education Level: Diploma in Electrical Engineering Technology

OR

Electrical Technician with several years of experience as a draftsman in electrical design

Experience Level: 10-15 years of experience in electrical design and control system in power industry.

Supervision: Reports to Director of Engineering and Production

Supervises: Electrical Production Technicians



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Primary Responsibilities:

1. Genset AC/DC electrical design

- Design of electrical single/three-line diagram for power generation system
- Design of schematic diagram for generator control DC wiring
- Produce electrical drawings and kit-lists to ensure selection of components are suitable for the application
- Ensure electrical design meets proper Canadian Electrical Codes for the application – conductor sizing, wiring requirements, circuit protection, and grounding and bonding requirements
- Program mid-advanced level genset ECU and GCU panels
- Program and develop ladder logic for transfer switch, load bank, and engine control
- Create equipment datasheets as required
- Research and development of new designs
- Ensure designs meet customer specifications and all applicable safety code requirements

2. Engineering process

- Receive and prioritize new sales orders
- Maintain engineering drives and folders
- Schedule and participate in design reviews
- Prepare submittal document packages
- Improve engineering processes where necessary
- Create engineering change notices (ECN's) as required

3. Quality control and continuous improvement

- Improve and modify existing designs based on feedback from field/production technicians
- Ensure completed products are built according to required specifications
- Manage quality control documentation as required
- Provide technical support to clients, production team, and service team
- Maintain CSA certifications for industrial control panels and gensets valid
- Ensure all control panels and gensets meet CSA specification. Update CSA certification as necessary by working with CSA engineers



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4. Electrical shop production and testing

- Oversee electrical shop to ensure designs are implemented properly and improve productivity
- Work closely with production team
- Configure and test gensets and ATS control systems including COMAP, Deep Sea electronics, CEM6/CEM7, Woodward, GAC, Marathon, Stamford, TTI, and Basler
- Troubleshoot and test gensets, industrial engines, and ATS
- If required, support commissioning multi-unit generator systems and synchronization
- Estimate labor for electrical panel production
- Demonstrate leadership skills by supervising and scheduling electrical shop work orders and supervision of electricians and technicians conducting electrical work

Skills and Knowledge:

1. Good analysis and problem-solving skills
2. Strong computer background, must be proficient with Microsoft Office applications
3. Must have strong AutoCAD skills
4. Good knowledge of electro-mechanical assemblies used for power generation
5. Good knowledge of standards and codes applicable to power generation in Canada (CSA, building codes, CEC codes and standards, etc)
6. Demonstrated written and oral interpersonal skills
7. Ability to work independently or in groups
8. Must show initiative to learn on their own as many tasks will require independent work with minimal supervision
9. Must be able to adapt to a fast-paced manufacturing environment and be able to think and make decisions quickly