

Job Role Description

Electrical Engineering Manager



Job Title:	Electrical Engineering Manager (RPEQ)	Date:	1 March 2018
Level:	Department Manager	Department:	Engineering & Project
Reports to:	Operations Director	Position type:	Fulltime & Contact
Direct Reports:	As assigned	Works with:	Project ,Man W'shop & Install Managers

Accountable for engineering design, drawing, construction and delivery of project/s that fulfill our customers' technical specification, delivered through in-house manufacturing & installation capabilities.

Job Profile

Group & Job Purpose

Business To provide market leading turnkey solutions for electrical switch-rooms, PLC boards, machine operating systems and motor control centres for major infrastructure, commercial and industrial customers.

Job's Purpose Accountable for leading engineering design & managing projects to fulfill customers' technical specification.

Undertakes and oversees computer-assisted engineering design team to deliver control switchboard projects, programming software and associated plant and equipment.

Maintains records during project, prepares documentation at completion.

Key Responsibilities

Team Contribution Proactively contribute to weekly and monthly project team meetings.

Creates and executes project work plans and revises as appropriate to meet changing needs and requirements.

Manages day-to-day operational aspects of a project and scope.

Works with Project Managers to define necessary materials (BOM) and other resources to deliver project efficiently.

Ensures technical reviews, quality assurance, manufacturing methodology meets specification. Certifies engineering for construction.

Engineering Design Undertake and/or supervise all RPEQ level electrical engineering design requirements across all projects. Certify (sign off) drawings, specifications as necessary to fulfil legislative and contractual requirements.

Operate computer-assisted engineering design & programming software and equipment to perform engineering tasks.

Study work order requests and specifications to determine all requirements for each customer.

Visit proposed sites to determine customer requirements where possible or when required.

Determine the order of work and the method of construction.

Assist with Software Programming of control systems (Subject to Software Knowledge)

Prepare and interpret specifications, calculating wire sizes, current requirements and equipment fit for use.

Job Role Description – Electrical Design Engineer (RPEQ)

Compile and transmit final documentation to customer including a copy of marked up drawings/As Built, QA Doc's, Manuals / Data Sheets / CD's and software programs.

Drafting Drawings	<p>Prepare master drawings to scale showing relation of proposed components to be used in the fabrication of a switchboard/control panel and exact specifications and dimensions.</p> <p>Measure factors that affect installation and arrangement of equipment, such as distances to be allowed for electronic components such as PLC's and VSD's.</p> <p>Draft working drawings, wiring diagrams, wiring connection specifications as required for instructions to fabrication/installation crew. Maintain a master file with correct revisions of each drawing.</p> <p>Develop good working knowledge of CAD programs & Drawing Standards.</p> <p>Use computer-aided drafting equipment and technical books to meet job requirements.</p> <p>Develop & Maintain Drawing Symbol Libraries, CAD Blocks, Templates & Macros for GA's, Schematics, terminal & cable diagrams.</p> <p>Review completed construction drawings and cost estimates for accuracy and conformity to standards and regulations.</p> <p>Ensure drawings from Drafting are of high quality, accurate and positively reflect company in their presentation.</p>
Project Management	<p>Manage assigned projects through design, procurement, manufacturing, construction, installation, maintenance, support, documentation, and testing activities to ensure compliance with specifications, codes, and customer requirements.</p> <p>Utilise Project Management system to monitor and communicate progress against plan.</p> <p>Develop regularly review and update rolling budgets, estimating labour, material, and construction costs for each accountable project.</p> <p>Ensure 'Production Board' has up to date and relevant information for needs of Manufacturing and Installation team.</p> <p>Explain drawings to production or construction teams and provide adjustments as necessary.</p> <p>Commission Switchboards and Software at customers site when required.</p>
Business Development	<p>Identify and communicate technologies and work practices that improve efficiency of engineering, drafting and production of switchboards.</p> <p>Undertake R&D activities, with others, to create and commercialise new products and services.</p>
Project Safety & Environment	<p>Identify and communicate all relevant safety regulations and environment hazards are identified, communicated and managed with least risk to people and systems affected directly and indirectly by project.</p> <p>Report any safety or environmental hazard issues or non-conformances to procedures with management immediately.</p>
Stakeholder Relationships	<p>Maintain positive relationships with external stakeholders such that they proactively support the business objectives.</p> <p>Ensure the workplace offers a stimulating, productive and respected environment.</p>

Job Role Description – Electrical Design Engineer (RPEQ)

Role in business process	Description of role/responsibility
Results / KPIs	<ol style="list-style-type: none">1. Engineering drawings fulfill technical specification2. RPEQ certified electrical engineering designs3. Designs are practical and efficient to manufacture and install.4. Project drawings are completed in budget and delivered on-time5. Reliable weekly updates of Project to Management team
Decision making	<p>Routine decisions to deliver 'Key Responsibilities' are expected without referral to Engineering & Projects Manager. Some decisions will require input and liaison with other team managers.</p> <p>Any decision that falls outside or impacts agreed operating processes is taken in conjunction with executive team.</p> <p>All WH&S and environment related issues under direct control.</p>
Strategy and Technology	Provide input into new technologies, systems and processes that can be implemented by business to improve customer offering, reduce costs or improve quality.

Employee Profile

Qualification / Attribute	
Education	Tertiary qualifications in Electrical Engineering (degree/diploma), with appropriate (5+yr Experience)
Experience	<p>At least 5 years experience designing and/or installing of electrical engineering in manufacturing or similar industry environment.</p> <p>Trade experience welcomed.</p> <p>At least 2 years experience with CAD drafting software</p>
Training and certification	<p>Certified RPEQ. CPEng</p> <p>Ideally, formal training with computer aided design systems.</p>
Knowledge, Skills, and Abilities	<ul style="list-style-type: none">▪ Sound commercial skills (ie. negotiation, business planning)▪ Solid understanding of project management, and associated revenue, cost control and forecasting processes.▪ Understands price models, billing and project documentation needs.▪ People management skills to solve multi-facet multi-department issues.▪ An ability to prioritise tasks, duties, workload to make decisions quickly.▪ Ability to communicate effectively within team and client relationships.▪ High competency in Office software applications; particularly Excel .▪ High competency with CAD, Project Management, Control software.
Key Attributes	<ul style="list-style-type: none">▪ Good personal presentation, appropriate for industrial representation.▪ Experience with both AutoCAD and MS Visio▪ Experience designing and drafting Rack layouts, Schematics, Single Line Diagrams and Loop Diagrams for LV & MV power and control circuits▪ The ability to merge quickly into a multi-disciplined team and the ability to pick up new concepts quickly▪ Able to work well under direction and communicate effectively with Electrical Engineers and Electrical Trades People.