

Position

Title:

CONTROL SYSTEMS ENGINEER

Report To:

BRANCH MANAGER

1 PRIMARY FUNCTION

The Control Systems Engineer is responsible for control system design, configuration, documentation, testing and commissioning at the standard of professional expertise commensurate with experience of a minimum of three years.

2 CORPORATE RESPONSIBILITIES

- Represent/Embrace the Company's Vision and Values.
- Understand and describe the full range of services offered by the Company.
- Assist in the positive promotion of the Company and its Values at all points of contact with Clients, Suppliers and the Community.
- Recognise the key Values of the Company and participate in building a positive team culture of high quality staff.
- Act professionally and in accordance with the Company's Policies and Procedures at all times.

3 ACCOUNTABLE DUTIES

3.1 General

- Undertake control system engineering, design, documentation, programming, configuration, trouble-shooting, testing and commissioning to achieve the objectives of quality, schedule and budget man-hours, whilst working under the technical supervision of a Senior Engineer.
- Accept responsibility for the accuracy, quality and timeliness of engineering design performed directly and by assigned engineering and drafting staff.
- Carry out site visits to liaise with clients, inspect installations or manufacturing progress, undertake trouble-shooting and perform commissioning.
- Assist in the preparation of detailed proposals, fee estimates and quotations that fully meet client expectations, as well as minimise risk to the company.
- Maintain and develop the company's client base by winning clients' satisfaction and trust during the performance of assigned projects.
- Develop technical skills while attending selected training courses and/or completing postgraduate studies.



3.2 Environmental, Health & Safety

- Identification of Environmental, Health & Safety hazards when commencing any project tasks or activities.
- Actively participate in Environmental, Health & Safety (EH&S) systems as required and understand the concepts of Welcon's EH&S systems.
- Follow all Environmental, Health & Safety relevant procedures.

4 SKILLS REQUIREMENT

4.1 Technical

- Proven PLC/SCADA design and configuration/programming capability.
- Oral communication skills, especially with clients.
- Written communication skills.
- Technical/practical skills in at least some of the following areas:
 - Low voltage and medium voltage motor control
 - PLC Control systems design and programming, esp Allen-Bradley Control Logix, CompactLogix, Schneider and Siemens systems.
 - Supervisory/SCADA systems design and configuration, esp. Citect, ClearScada, Rockwell FTView
 - o HMI Systems PanelView, Magellis, Red Lion
 - Telemetry Systems ScadaPack, Kingfisher, Miri, Trio
 - o Industrial Networks Ethernet, Ethernet/IP, Modbus, DeviceNet, Profibus
 - Computer networking hardware and software (Windows Server, Windows Desktop, VMWare)
 - On-site commissioning
 - Fault finding and troubleshooting
- Computer literate (eg. Spreadsheets, scheduling, word processing, e-mail).
- Estimating (system hardware/software costs and engineering man-hours).

4.2 Communication & Literacy

Individuals must be able to demonstrate proven hands-on experience in the following:

- Ability to read technical documentation and client briefs and interpret implications and actions required for successful implementation.
- Ability to effectively and proficiently respond to questions from groups of clients, managers, customers and internal staff.
- Ability to develop and write operational procedures and work instructions.
- Ability to read, analyse and interpret general business periodicals, professional journals, technical procedures, or governmental regulations.



4.3 Reasoning & Analytical

- Solve practical problems and deal with a variety of concrete variables in situations where only limited standardisation exists.
- Break a complex task into its components and assign their relevant priorities.
- Utilise all available research methods and resources available for technical support.

5 EXPERIENCE

A minimum of three (3) years relevant control system experience, predominately in an industrial and consulting environment is preferred.

6 QUALIFICATIONS & EDUCATION

To perform this job successfully, the individual must be able to perform each essential duty satisfactorily.

This requires a Degree in Electrical Engineering from a recognised Australian institution.

7 CERTIFICATES, LICENSES, REGISTRATIONS

The following are the minimum requirements:

• Standard Queensland Open-class Motor Vehicle License is an essential requirement for this position.

8 WORK ENVIRONMENT

- The position is based primarily in a professional office environment. However, the
 employee will be required to attend client sites in both utility, government and
 industrial environments. This may include locations such as factories, coalmines,
 smelters, chemical plants, power stations and refineries.
- The hazards in the work environment are usually moderate, although most industrial sites will require the use of Personal Protective Equipment, including respirators and mono-goggles. While performing the site duties of this job, the employee is occasionally exposed to risk of electrical shock.
- Medical examinations may be required to ascertain suitability to work on some sites.
 In particular, lung function tests may be required for some sites.
- Travel away from home for up to two weeks at a time will be expected.