



## Job Description

**Local Job Title:** Design Engineer  
**Department:** Drawing Office  
**Reports to:** Engineering Manager

### SUMMARY

Performs engineering work to support sales orders, product improvement projects, technical support and/or engineering analysis.

Completes assigned activities under general direction of the Engineering Manager.

**ESSENTIAL GENERIC DUTIES AND RESPONSIBILITIES** include the following:

1. Reviewing all applicable job data, including POs, project plans and specifications to determine characteristics of order and establishing engineering objectives;
2. Generating design, general arrangement and other submittal drawings within estimated hours and timescales;
3. Provide design calculations and documentation support for project work.
4. Preparing and updating layouts, detailed drawings, calculations, specifications, and documenting instructions necessary for project success
5. Work closely with all functions of the business to ensure that the most economic, safe and suitable design is achieved.
6. Implement improvements to the current range of standard equipment and services and develop ideas for future.
7. Produce CAD drawings for equipment, civil work layouts and mechanical design details to specific requirements.
8. Review of detail drawings and bills of materials during and prior to being issued for manufacture.
9. Apply and supervise the application of safety standards to those products and services.
10. Maintain, update and progress the standard drawings and data for a particular product, for which they are the nominated "Product Engineer"
11. Provide technical support to Marketing by generating sales assistance, drawings, or calculations;
12. Performing basic engineering analysis;
13. Advising Project Management and Project Engineers of project status while adhering to all company and corporate policies;
14. Other duties may be assigned as required.

**LOCAL DUTIES AND RESPONSIBILITIES** include the following;

1. Creating site layouts & equipment general assembly's (3D Inventor).
2. Reviewing and adhering to project specifications & applicable standards.
3. Project planning to adhere to submission requirements.
4. Attend project meetings both internally & with clients.
5. Perform project engineer/management tasks.
6. Input to & maintain design risk register.



7. Assess civilwork requirements to suit equipment.
8. Perform detailed engineering calculations (including utilizing Mathcad).
9. Detailed design for outsourced manufacturing, installation, maintenance & decommissioning of equipment.
10. Creating detailed Parts lists/BOM with applicable software.
11. Liaising with suppliers - obtaining quotations for equipment/services.
12. Provide input to & checking of Technical Manuals to ensure bespoke nature of equipment is captured.
13. Knowledge & application of Hazop, design risk matrix, risk assessments, CDM risk matrix/assessments.
14. Knowledge & application of Machinery Directive, CE marking, Atex requirements & respective collating & filing of all data.
15. Support site services with any build modifications & respective drawing updates.
16. Detailed checking of all drawings, documentation & calculations.
17. Able to work with own initiative and take responsibility/ownership of workload.

#### **LEADERSHIP/SUPERVISORY RESPONSIBILITIES**

None

#### **EDUCATION, TRAINING AND EXPERIENCE**

HNC Level or above in Mechanical or Civil Engineering, plus previous related working experience of equipment/product design or equivalent combination of education and experience.

#### **COMMUNICATION SKILLS**

Ability to read, analyze, and interpret industry related documents.

Ability to understand English, at advanced level via written and verbal communication

#### **INDEPENDENT JUDGMENT, DECISION MAKING & PROBLEM SOLVING:**

Ability to apply principles of logical or scientific thinking to a range of intellectual and practical problems.

Ability to make decisions requiring the use of a variety of variables in standard situations.

#### **OTHER SKILLS AND ABILITIES**

- Computer Skills: Competency in Word, Excel, and other MS Office programs; AutoCAD and 3D Inventor modeling software application
- Mathematical Skills: Ability to apply advanced mathematical equations to a variety of standard situations.
- Travel: Some travel may be required.
- Other:
  - Ability to read and understand specification, fabrication, erection, and standard engineering drawings;
  - Knowledge of machining, fabrication, and assembly techniques;
  - Knowledge of drafting standard for both structural and mechanical design;



**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing 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 occasionally exposed to moving mechanical parts. The noise level in the work environment is usually moderate.

Date Prepared: January 2018

Approved by Line Manager Date

Signed by Employee Date