



# BRIGGS

## Job Profile: Mechanical Design Engineer

### Organisational setup and Job Information

- Location:	Briggs of Burton Plc - based in <b>Burton on Trent</b>
- Department:	Engineering
- Reporting line:	Senior / Lead Engineer

### Job Focus

To provide proactive Mechanical Design Engineering services to the Briggs Group of companies in all aspects of the business. Majority of this being through exceptional delivery of large-scale capital projects and also providing support to sales & proposals, business development, process / project engineering and general project execution across a wide range of industries in the hygienic processing sectors including Brewing, Distilling, Pharmaceutical and Food in a hygienic processing environment To contribute directly and indirectly to the success of the business.

### The role & Responsibilities

#### **Management responsibilities**

- Ensure both Briggs and Client Health & Safety standards are upheld across all project engineering liaising with the Health, Safety & Quality department.
- Assist the [Senior/Lead Mechanical Design Engineer or Mechanical Design Manager] in delivery of allocated client proposals and projects within contract scope, with due respect to safety, cost, time and quality.
- Management of the day to day activities of an allocated Graduate Mechanical Design Engineer or placement engineer, and ensuring they are used effectively and efficiently.
- Management of quality, completeness, consistency and accuracy of allocated deliverables in conjunction with the Senior/Lead Mechanical Design Engineer.
- Provide technical expertise and guidance, training and mentoring of a Graduate Mechanical Design Engineer or placement engineer.
- Line Management of Graduate Mechanical Design Engineers and placement engineers when required.

#### **Tasks and Duties**

Performs tasks in a range of contexts. Supervision only required in more complex circumstances. Individual responsibility or autonomy, assisting with:

**P&ID / CADWORX P&ID, ISOGEN** - or similar future packages.

**BFDs Block Flow Diagrams** - Showing overall high-level process in simplistic form.

**PFDs Process Flow Diagrams** - Showing the main process flows and processes required in simplified flow charts, with capacity, flow etc.

**P&IDs Process and Instrumentation Diagrams** - Showing in schematic detail plant, pumps, heat exchangers, valves, instruments, and pipework, with tag numbers and sizes/duties.

**Layout drawings** – Prepare 2D layout drawings of plant equipment and pipework, incorporating drawings from third party suppliers.

**3D Models** – Prepare 3D Models of plant, equipment and pipework incorporating drawings from third party suppliers.

**Pipework Isometric drawings** – Prepare pipework isometric drawings.

**Drawing control and management** – Control document revision and issuing of document to clients and sub-contractors.

**P&ID Database** - Ensure correct procedures are followed when updating P&IDs/Database to support project procurement activities. Includes data entry into the P&ID equipment database.

**Site Surveys** - Gather information to allow the production of site layouts or P&IDs of existing equipment or for 'As built' drawings. Information to be collected either manually or using 3D scanning equipment.

**Plant Design / Specification** - Design, sizing and specification of tanks and process equipment, including confirmation of orientation of fittings. Concept stage drawings of platforms, stairs handrailing.

**Design Reviews** – Attend / lead design reviews internally and externally with customers to confirm/agree design and ensure the plant layout suits the process objectives and ergonomic requirements.

**Progress Tracking** – Track or assist with tracking, progress against project deliverables.

**Programme and Cost** - Liaison with Project Manager & other Engineers To ensure scope, programme (schedule), and costs / budget are maintained and controlled. This includes consideration of cost, schedule, and operation / safety before making changes, and communication of these changes, especially once purchasing & implementation commences.

### Desired Knowledge & Experience

#### Education:

- Mechanical Engineering or similar Degree, HND or HNC or other relevant experience/qualifications.
- Master's Degree Preferable
- Chartered Engineer or prepared to work towards IEng/CEng status.
- Language – English (any foreign language skills could be considered beneficial)

#### Professional experience:

- Preferably a minimum of 3-years' experience in Engineering as part of degree course or other.
- Preferably knowledge of engineering within hygienic process industries
- Understanding of Briggs products and engineering services

#### Technical skills:

- MS office also proficient in Excel, Access, Microsoft Project.

### Required competencies & behaviour

- Result driven, confident and dynamic personality.
- Self-motivated with ability to gel and proactively support existing and future teams.
- Communicate problems / issues.
- Strong focus on quality, completeness, consistency, and accuracy engineering deliverables.
- Work to deadlines.
- High level of integrity, open mindedness, and flexibility.
- Work as a team to increase efficiency and communication.
- Excellent communication skills, sociability and social know-how.

### Remarks:

- International and national travel will be an essential part of the role, this would be both regular travel for business meetings, also extended periods of time associated with project work as and when required to meet the Business, Client and Project needs
- This job description is issued as a guideline to assist you in your duties, it is not exhaustive.
- Due to the evolving nature and changing demands of our business this job description may be subject to change.
- You may, on occasions, be required to undertake additional or other duties within the context of this job description, and according to the needs of the Company