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| **Organisational setup and Job Information** |
| - Location:- Department:- Reporting line: | Briggs of Burton Plc - based in Burton-On-TrentSenior Mechanical Design EngineerUK Production Engineering Manager |
| **Job Focus**  |
| Briggs of Burton PLC is part of CIMC Enric Tank & Process BV (CETP), a subsidiary of CIMC ENRIC Holdings Limited. Briggs is a Process Engineering Company, with over 280 years of experience originating in the brewing, pharmaceutical and distilling sectors and is well known for their Lauter Tuns and vessel manufacturing / design.We are growing our Manufacturing Design team in the UK and are looking to recruit a Senior Mechanical Design Engineer to provide technical expertise in the safe design of pressure vessels and other machinery to design codes.The Senior Mechanical Design Engineer MUST be Chartered/Professionally registered, with Minimum 4 Years of Pressure Vessel Design Experience along with 2 yr or more experience performing fatigue assessments to fulfil **ASME Section VIII, Division 1 Appendix 47 Requirements.**The Senior Mechanical Design Engineer role carries full accountability for the verification integrity of Briggs pressure vessels and other manufactured items by producing calculations and Technical files for the submission to the Notified Bodies. Briggs recognized design and manufacture codes such as ASME VIII Division 1 *[Design by Rule]*, PD5500 and BS EN 13445-1:2021 etc. The Senior Mechanical Design Engineer shall identify vessel falling under the scope of the Pressure Equipment Directive 2014/68/EU (PED) and have understanding of PED requirements for different modules. Evaluation of Hazard analysis, Essential Safety Requirements (ESR) and Particular Material Appraisal (PMA). Preparation of PED documentation. Senior Mechanical Design Engineer shall provide Technical advice to customers based worldwide and to other departments within Briggs along with Fault finding, resolution and problem solving of issues arising during design, build and use. Training and development of Mechanical and other engineersTo contribute directly and indirectly to the success of Briggs of Burton as a whole. Adhering to the Terms and Conditions of Employment and Company Rules |
| **The role & Responsibilities** |
| **Management Responsibility*** Follow product design & development process guidelines to ensure delivery of safe quality product
* Compliance & maintenance of current work to Standards (ASME, PD5500, Standardised Documentation Requirement)
* Compilation of calculations to current design standards - Ensure Standards held are to current issue (ASME, PD5500)
* Provide input into the preparation of training plans for future engineers within the department.
* Act as a positive role model and provide leadership within the department ensuring professional standards are maintained.
* Ensure both Briggs, Client and National Health & Safety standards are upheld across all project designs, liaising with the Health, Safety & Quality department.
* Provide input to the Sales & Pre-Engineering team as and when required.
* Attend Manufacturing office team meetings as required.

 **Duties and Responsibilities*** **Scantlings -** Review of initial information to formulate basic design parameters and dimensions/thicknesses.
* **Calculation packages** **-** Creation of calculation packages (including Essential Safety Requirements ESRs) for pressure vessels before submission to Notified Body.
* Responding to Notified Body questions on calculations. Ensuring Designers Risk Assessment has been conducted for pressure vessels before submission to Notified Body.
* Calculations for pressure vessels that do not require a submission to Notified Body to ensure they are fit for purpose. A Calculation package should be capable of being pulled together from this info.
* Monthly verification of one aspect/calculation sheet of the design calculations
* **Working with Pressure vessel standards –** procurement, maintenance, and request of relevant updated standards, including BSi, ASME and other National standards as required.
* **Pressure vessel standards-** Review of any new revisions or addendums to the pressure vessel standards and implications of these changes. Transfer of handwritten notes as appropriate. Update of impacted excel calculation sheets.
* **PV Elite Software-** Effective use latest PV Elite Addition to complete calculations for design, analysis and evaluation. Ensure the revision of PVElite is updated to reference the correct standard.
* Approval / Checking of detail production drawings.
* ASME signature on orders and drawings
* Assisting Pre-Engineering with questions on thickness and design.
* Working with the other engineers, Production Manager, Project Managers, Engineering Manager and UK Production Engineering Manager to reach the best practical solution for timelines, costs, and quality.
* Assisting engineers when required with material selection for pressure purposes, vessel design, CAD drawing and procurement of materials, working closely with the Operations Manager to ensure deliverables are met
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| **Desired Knowledge & Experience** |
| **Education:*** Mechanical Engineering degree with Chartered Engineer Status or equivalent Licensure
* Language – English (any foreign language skills could be considered beneficial)
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| **Professional experience:*** Minimum of 4 years’ experience in Engineering with Pressure systems and equipment preferably producing calculations packages and supporting submissions to Notified Bodies
* 2 yr or more experience performing fatigue assessments to fulfil ASME Section VIII, Division 1 Appendix 47 Requirements.
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| **Technical skills:*** MS Office including, Excel, Access, Project, also working knowledge of AutoCAD, Inventor, and/or other bespoke engineering software packages an advantage.
* Working with PV Elite to produce calculation packages where required.
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| **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.
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| **Remarks:** |
| * International and national travel [if requested] 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
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