

## JOB DESCRIPTION

<b>Job Title</b>	<b>Mechanical Engineer</b>
<b>Location:</b>	<b>London</b>
<b>Reports to:</b>	<b>Principal Mechanical Engineer</b>
<b>Overview of Role:</b> To support the inception, design, planning and delivery of mechanical products for the offshore energy sector and wider marine industry. Providing mechanical engineering technical solutions in line with client and other requirements. Ensuring the required quality standards are maintained and projects are delivered on time and on budget.	
<b>Key Responsibilities and duties:</b> Responsible for the following categories of work as directed: <ul style="list-style-type: none"><li>• Design from first principals' bespoke solutions to client challenges</li><li>• Define functionality ensuring the mechanical engineering aspects meet the requirements set by the client, international standards and appropriate authorities</li><li>• Generate 3D model of engineered solution</li><li>• Prepare model for analysis software</li><li>• Analyse or work closely with analysis engineer through design evolution till complete</li><li>• Write operations and maintenance manuals and acceptance test procedures</li><li>• Develop the purchase specification and assist in the selection and management of suppliers</li><li>• To carry out technical investigations and analyses to provide data for problem solving and design improvements</li><li>• To comply with Houlder BQMS and QHSE procedures and provide feedback for improvement</li><li>• Perform duties required by DRA, FMEA, HAZID, HAZOP processes</li><li>• Ensuring that own work is complete on time within budgeted hours</li><li>• To contribute to process within the engineering/project team to deliver continuous improvements in quality, cycle time, asset and/or spares utilisation etc.</li></ul> The role should achieve the following objectives: <ul style="list-style-type: none"><li>• To work efficiently within the budget provided for the work</li><li>• Development of quality designs which are well received by the client</li></ul> Other Skills & Requirements: <ul style="list-style-type: none"><li>• Hold or willing to gain offshore survival certificate and work offshore</li><li>• Willing to work on site as required</li></ul>	

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### Qualifications & Accreditations:

- Essential: BEng (Hons), MEng or MSc (or equivalent) in Mechanical Engineering, or other relevant subject (minimum Class 2:1/Distinction or equivalent foreign awarding academic body)
- Preferred: Member of IMechE or a keen interest in achieving chartership

### Experience:

#### Essential

- Over 2 years of relevant experience in mechanical design engineering
- Experience of complex projects of up to 1 years' duration
- Applicant should have a solid engineering background, with demonstrable knowledge of structures, machinery and systems enabling effective technical solutions for our clients' problems to be developed and the ability to formulate the methods to be used in the engineering analysis
- Ability to use 3D modelling software (SOLIDWORKS)
- Ability to use FEA software (ANSYS)
- Proficient in use of Microsoft Office applications including Excel, Word, Project etc. and other software such as Mathcad, AutoCAD, Solidworks, and ANSYS.

#### Desirable

- Experience on site, at manufacturer or fabrication workshop
- Experienced in a similar role possibly previously with an equipment manufacturer or relevant part of the marine sector such as offshore energy
- Proficient in knowledge of hydraulic systems and electrical systems i.e. inverter drive, motor and electronic control for design and fault finding activities

May 2023