**Job Title:** Principal Structural Engineer, Offshore Projects & Engineering (OPE)  
**Location:** Aberdeen

**Purpose of Role/Job Summary:**

This will be the lead role for the Structural Engineering capability of the OPE business stream, acting as technical authority on the subject within the growing team. Responsibilities include: undertake project work and oversee technical performance, including engineering, design and analysis in support of the company’s Structural Engineering contracts.

**Reporting and Key Relationships:**

**Reports To:** Engineering Director who will oversee technical performance and all professional matters including continuous professional development.  
**Supervises:** Structural Engineers, Interns & Graduates  
**Key Relationships:** With Structural Engineering peers in Houlder’s other business streams, to ensure continuity of technical service level and resource balancing.

**Key Responsibilities:**

**Structural Engineering**

- Calculate and give advice/assistance in calculating ship and semi-submersible global and local strength.  
- Support offshore oil and gas field development projects with specialist knowledge.  
- Undertake structural design calculations to class requirements in support of vessel upgrades and modifications.  
- Review and approve structural design calculations and proposal for temporary equipment installations and sea-fastenings prepared by project teams and 3rd party design consultants.  
- Be able to prepare specifications for vessels for varying types and also for modifications and conversion work that are robust and not open to significant price variation due to lack of preciseness.  
- Act as a Mentor to junior Structural Engineers, Graduate Trainees and Internship Students, assisting them with CPD and reaching chartered status.

**On-Site**

- To ensure that all proposed works to be carried out onboard vessels are carried out to best industry and statutory standards in a safe and cost effective manner.  
- Leader of team for site surveys, including modification surveys, as-built surveys, equipment tests and other site activities.

**Project Administration**

- Ability to understand, supervise, distribute and oversee analysis of project information.  
- Participate in design review meetings to assure that technical objectives are being achieved.  
- Ensure that all design work under own control is performed, reviewed, checked
and approved in accordance with Houlder’s engineering procedures.

- Ensure that all work is carried out in accordance with Houlder’s Business Quality Management System.
- Ensure the maintenance of a filing system directly related to the work undertaken by Engineers.
- Ensure Structural analysis projects and scopes are carried out in accordance with pre-agreed client requirements on or under budget for hours and cost.

**Business Development**

- Be able to meet with and approach new and existing clients and interpret their needs into describable tasks that can be carried out and subsequently deliver and fulfil the client’s requirements while at all times promoting the company’s capability to leverage more work from the client.
- Be able to carry out marketing activities to promote the company’s capabilities and secure new work as a result of these marketing activities.
- Assist the Business Development team in preparing any bid documents and proposals that require technical input and cost estimates.

Any other duties as may be required from time to time by Houlder management.

**Experience (minimum required):**

**Essential**

- Expert knowledge of specialist software for structural and FEM analysis such as ANSYS, STAAD and MatLab.
- Proficient in use of Microsoft Office applications including Excel, Project, Word and other software such as AutoCAD.
- Operational experience (sub sea or drilling) and the ability to provide technical support on projects from enquiry stage to completion.
- A solid Engineering background, with demonstrable knowledge of vessels’ structure, machinery and systems enabling effective technical solutions for Houlder’s clients’ problems to be developed and the ability to formulate the methods to be used in the engineering analysis.
- Knowledge of Classification Society and IMO rules and regulations.

**Desirable**

- Responsible for being familiar with and up to date with design developments, statutory regulations, code of practice and offshore industry standards.
- Able to produce sound, cost-effective designs.
- Able to grow and develop business opportunities from previous business clients and network contacts for Houlder Ltd.
- Ability to develop personal career portfolio to progress to a more senior role within Houlder Ltd.

**Other requirements**

Must be willing and able to travel at short notice on company business in the UK and overseas as may be required.
**Knowledge/Qualifications:**

- Essential: BEng (Hons), MEng or MSc (or equivalent) in Naval Architecture, Ship Science or other relevant subject (minimum Class 2:1/Distinction (or equivalent).
- Essential: CEng
- Preferred: 10 years of experience in the offshore industry.

**Houlder Key Competencies:**

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<tr>
<th>Competency</th>
<th>Description</th>
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<tr>
<td><strong>Analytical Problem Solving</strong></td>
<td>Able to produce logical, clear and possibly innovative solutions to problems. Able to understand and analyse information. Finds new and creative ways of doing things. Resilient and tenacious but flexible in the face of challenges and obstacles.</td>
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<td><strong>Clear Communication</strong></td>
<td>The ability to exchange and present thoughts, messages or information in a fluent, logical and concise manner by speech, signals, writing or behaviour.</td>
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<td><strong>Drive for Excellent Results</strong></td>
<td>Continuously improves Houlder’s business by generating new and practical ways of doing things in a more timely and cost effective manner to solve problems and gain competitive advantage. Focuses attention and resources on meeting agreed business targets, priorities and objectives to achieve a high standard in all areas of work.</td>
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<td><strong>Health and Safety</strong></td>
<td>Has demonstrated that he/she is aware of the statutory and regulatory Health &amp; Safety requirements applicable to their role. Also demonstrates that they work safely at all times to ensure that Houlder safety policies and best practices are adhered to. Promotes a positive safety culture by assisting others and by highlighting potential issues in an efficient and timely manner.</td>
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<td><strong>Leadership/Management of Others</strong></td>
<td>Builds highly successful and motivated teams who consistently excel in the achievement of business goals. Maximises others’ effectiveness by setting high standards of personal performance and motivating, coaching and effective planning, delegation and control of team members.</td>
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<td><strong>Managing Commercial Relationships</strong></td>
<td>Manages the client relationship in a way which enables Houlder to gain maximum value from that relationship. Driven by a desire to understand and satisfy their clients' needs, exceeding the clients' expectations wherever possible. Creates and sustains mutually beneficial relationships and discovers the needs of a client to leverage business in additional areas to the original client requirement. Considers the flow of money and resources through the company and the need to get maximum value at each stage. They seek to achieve commercial objectives, such as profitability, so that the business can be as competitive and successful as possible.</td>
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<td>Project Management, Planning and Control</td>
<td>Able to effectively manage all aspects of an assigned project. Achieves business deadlines by establishing priorities, actions, milestones and constraints in a logical sequence. Checks project progress against these plans and takes corrective action as required.</td>
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<td>Team Working</td>
<td>Works co-operatively and productively with others, openly exchanges information and supports colleagues and subordinates from around Houlder to achieve business goals. Is able to fit readily into any project or working group.</td>
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<tr>
<td>Technical Skills</td>
<td>Achieves a proficient level of technical and professional skills/knowledge in structural engineering and other job related areas; acquires and refines current developments in areas of expertise. Is able to produce completed work using key principles relevant to the specialist function within Houlder in line with job description. Familiar with best practice and able to apply it to Houlder processes and procedures while at the same time ensuring compliance with relevant internal/external rules, procedures and regulatory requirements. Will display technical competencies in line with Houlder’s quality system definitions.</td>
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January 2017