



JOB DESCRIPTION

Marine Structural Engineer

Revised April 2022

POSITION SUMMARY:

The Marine-Structural Engineer positions primary responsibility for all structural calculations and design, including construction drawings, class submittal documentation, material specification, and yard support beginning with the proposal phase through launch. Reporting directly to the Director of Engineering, position brief includes active responsibility for designing structural foundations, lifts, blocking plans (specifications and deliverable CAD drawings), validate structural models, build strategy, and conduct checks. Position also requires open minded collaborative skills to work with other engineering disciplines Project Engineers/Lead Designers in a professional environment.

ESSENTIAL JOB FUNCTIONS:

1. Create and develop 2D deliverables
2. Develop 3D model of systems and components within core competency
3. Solve technical issues under the guidance of the department supervision
4. Plan, estimate, schedule and monitor assigned work
5. Track and report progress to commitments
6. Oversee the work status of assigned resources
7. Facilitate communications of issues and solutions within assigned department
8. Prepare, check, and issue professional quality deliverables
9. Interpret contract requirements
10. Develop contract change documents to support the project needs
11. Abide by and enforce all organizational policies and procedures
12. May be required to lead or participate in product improvement projects
13. Working knowledge of CAD platforms including AutoCAD (2-D and 3-D) and Rhinoceros. Basic working knowledge of ShipConstructor software used to create the 3-D structural model for all vessels
14. Creation of all structural and resilient mounting for machinery foundations
15. Responsible for working with sub-contractors/suppliers for the development and supply of "custom" built equipment or packages in conjunction with Manufacturing/Supply Chain in regard to Make/Buy/Flex/Combination decisions
16. Responsible for incorporating manufacturing preferences and/or limitations as required
17. Investigate new manufacturing methods and design concepts by researching components or systems and evaluating applications
18. Knowledge and understanding of MCA, ABS, Flag State and USCG regulations and their interpretation as applicable to all projects



19. Work in conjunction with the Project Engineer (primary contact) for all classification documents and submittals
20. Good working knowledge of Industry trends and design requirements as they relate to this discipline

POSITION IN ORGANIZATION:

This position reports directly to the Vice President of Engineering. This position has no direct reports.

LEADERSHIP:

1. Excellent ability to work in a “team” environment and share knowledge of discipline specific work in both a vertical (up and down the org chart) and horizontal (across disciplines and departments) orientation.
2. Ability to make well-formed, rational decisions and demonstrate problem-solving skill within organizational policies and procedures.
3. Excellent communication, organizational, and written skills.

DECISION MAKING:

Exercise administrative judgment on a regular and continuous basis and assumes responsibility for decisions, consequences and results having an impact on people and quality of service within the department.

COMMUNICATION:

Possess the ability to communicate verbally and in writing positively and effectively with employees, co-workers, suppliers, and vendors.

EDUCATION:

1. Required: Bachelor of Science in Marine Engineering, Mechanical Engineering, Marine Systems Engineering, Civil Engineering, or Naval Architecture.
2. 3-5 years’ experience in structural analysis or design. Preferably in yacht, shipbuilding, or marine industry.

EXPERIENCE:

1. Project Management and/or team environment experience
2. Experience in design in Marine Industry is preferred, with yacht design experience a plus, and industry trends of Motor Yachts in the 75 - 150-foot range
3. Shipyard new construction, repair and refit experience preferred
4. 2D and 3D CAD experience – AutoCAD, Rhinoceros, and ShipConstructor
5. Marine structure and outfitting thorough working knowledge
6. ABS, MCA, Flag State, and USCG working knowledge beneficial



PHYSICAL REQUIREMENTS:

Sitting in a normal seated position for extended periods of time while operating a computer with occasional light lifting. Position also required regular visits to the Shipyard with climbing of stairs and inspection of items in tight spaces.

GENERAL STATEMENT:

This description is a general statement of required major duties and responsibilities performed on a regular and continuous basis. It does not exclude other duties as assigned.