



JOB DESCRIPTION

Marine Engineer

Revised October 2023

POSITION SUMMARY:

The Marine Engineer position is actively involved in all work pertaining to Mechanical, Piping, HVAC, and Machinery disciplines within the Engineering Department. This position includes active responsibility for designing mechanical systems, from concept through deliverable CAD drawings, and full vessel piping systems integration and planning/interference modeling requirements. This requires open minded collaborative skills to work with the other disciplines within engineering as well as project engineers, program management, subcontractors, suppliers, and production.

ESSENTIAL JOB FUNCTIONS:

- Active involvement and working knowledge of all system schematics and machinery arrangements in accordance with contractual and specification requirements while incorporating Burger standards. Individual system architecture responsibility is to be expected along with the need to direct others (Mechanical Engineers/Designers) within the department to ensure functionality of the system is carried through deliverables.
- Basic working knowledge of ship design software used to create the 3D models for all vessels.
- Oversight and thorough working knowledge of CAD platforms including AutoCAD (2D and 3D), Rhino, and Navis for Interference Modeling of Piping/HVAC paths.
- Creation of all structural and resilient mounting for machinery foundations.
- Responsible for working with subcontractors and suppliers for the development and supply of “custom” built equipment or packages in conjunction with Manufacturing/Supply Chain in regards to Make/Buy/Flex/Combination decisions.
- Responsible for incorporating manufacturing preferences and/or limitations as required. Expected to take on a leadership role in this function and to work in collaboration with the Project Engineer for finding efficient methods for understanding and transferring this knowledge base back to the Engineering Design Department.
- Investigate new equipment design concepts by researching components or systems and evaluating applications.
- Oversight and thorough knowledge of specifications for mechanical equipment in accordance with contractual, engineering, and manufacturing requirements.
- Fundamental working knowledge of electrical equipment and installations.
- Familiarity with structural properties (first principal) and its working relationship to the Mechanical/Piping/HVAC discipline.
- Knowledge and understanding of MCA, ABS, Flag State, and USCG regulations and their interpretation as applicable to all projects.



- Work in conjunction with the Project Engineer (primary contact) for all classification documents and submittals.
- Participatory responsibility in the updating of the weight monitoring program for each vessel.
- Willingness to travel (domestic and international) as needed.
- Good working knowledge of Industry trends and design requirements as they relate to this discipline. Requires working directly with the Vice President of Sales and Marketing and the “Yacht Designer” to creatively foster solutions to potential client requests. Expected to take a leadership role in regard to mechanical systems Pre-Contract efforts, from a level of detail and functional diagram generation perspective.

POSITION IN ORGANIZATION:

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

DECISION MAKING:

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

COMMUNICATION:

Strong communication skills, both verbal and written, are important as the position must communicate positively and effectively with co-workers at all levels of the organization, contracted engineering partners, suppliers, and vendors.

EDUCATION:

A Bachelor of Science degree in Mechanical Engineering is required. Equivalent experience and/or training may be considered.

EXPERIENCE:

- Project Management and/or team environment experience.
- Experience in design requirements and industry trends of Motor Yachts and commercial vessels in the range of 75-150 feet, both steel and aluminum.
- Shipyard new construction, repair, and refit experience preferred.
- 2D and 3D CAD experience – AutoCAD, Rhino, and other ship specific design software.
- Marine Mechanical and Piping systems thorough working knowledge.
- Working familiarity with class and flag standards, such as ABS, Lloyd’s, etc.
- Minimum of 3 years’ experience in a marine design and construction environment is preferred.



PHYSICAL REQUIREMENTS:

Generally working in an office environment and at a desk with occasional light lifting required. Frequent visits to both the joiner facility and the shipyard are also required along with the ability to ascend/descend staircases while observing designs onboard projects.

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.