



JOIN OUR TEAM TODAY!

Job Desc ID: AY.JD.016_2025.06.21

Job Title: Ship Propulsion System Design and Integration Lead

Location: Remote

Type: Full-Time

Experience Level: Mid-Level to Senior

About AstraYAN:

AstraYAN is an innovative deep-tech start-up focused on pioneering the future design of marine and naval vessels. We specialize in developing advanced engineering solutions and platform systems for smart and unmanned vessels. As a start-up, we value creativity, collaboration, and adaptability. If you are passionate about shaping the future of marine technology, we would love to have you join our team.

The Role:

We are seeking an experienced and highly motivated professional to serve as the Ship Propulsion System Integration Lead. In this critical role, you will be responsible for the end-to-end design, integration, testing, and validation of propulsion systems in marine vessels, ensuring they meet performance, reliability and compliance standards. You will work closely with cross-functional teams to deliver innovative solutions that address both technical and business requirements.

Key Responsibilities:

- Lead the design and integration of ship propulsion systems, including engines, gearing systems, shafts, propellers, and control systems, into the overall ship design.
- Conduct feasibility studies, trade-off analyses, and risk assessments for propulsion system architectures during the conceptual design phase.
- Supplier Coordination: Develop system and equipment specifications as per defined requirements and working closely with shipbuilders for seamless integration.
- Technical Documentation: Review supplier documentation, including drawings, schematics, and calculations. Identify integration issues and suggest improvements with stakeholders.
- Execute, manage system modelling and analysis to optimize propulsion performance and efficiency.
- Oversee the testing, validation, and commissioning of the propulsion system, ensuring compliance with defined standards and classification rules.
- Resolve technical issues during both the integration and operational phases of propulsion systems.
- Prepare and deliver progress reports, technical documentation, and presentations for stakeholders, ensuring clarity and effective communication across teams.
- Lead and conduct design review meetings, ensuring all integration requirements are met and risks are managed effectively.

What We're Looking For:**Minimum Qualifications:**

- Bachelor's or Master's degree in Marine Engineering, Mechanical Engineering, Naval Architecture, or a related field.
- Proven experience in ship propulsion systems, including design, integration, and testing.
- Extensive experience in the shipbuilding industry.
- Strong understanding of various propulsion architectures (e.g., diesel, gas turbine, electric) and their integration into marine vessels.
- In-depth knowledge of marine classification society rules and naval standards.
- Exceptional project management, problem-solving, and leadership skills.
- Strong communication and collaboration abilities, with experience working effectively with multidisciplinary teams.
- Demonstrated ability to manage complex projects involving statutory bodies, suppliers, and subcontractors.

Preferred Qualifications:

- Experience in ship power systems, including design, integration, and testing.
- Familiarity with Model-Based Systems Engineering (MBSE) and typical simulation/modelling tools used in propulsion system design.
- Practical knowledge of propulsion control systems.
- Proficiency in programming tools and languages such as MATLAB, Simulink, C++, and C#.
- Knowledge of emerging propulsion technologies and trends.
- Certification in project management (e.g., PMP, PRINCE2) or marine engineering (e.g., CEng, PE).
- Previous experience in naval shipbuilding.

Why Join Us?

- **Ownership & Impact:** As an early team member, you will have the opportunity to shape the direction of our technology and processes.
- **Growth Opportunities:** Enjoy a fast-paced environment where you can wear multiple hats and develop new skills.
- **Collaborative Culture:** Work alongside passionate, innovative, and creative team members dedicated to transforming the future of marine vessels.
- **Flexibility:** Take advantage of a remote or hybrid work environment with flexible hours. We believe in achieving results, not just clocking hours.
- **Equity:** Enjoy the potential for equity options or stock grants in the company, allowing you to share in the company's success.
- **Comprehensive Benefits:** Competitive salary, health benefits, and perks to support your well-being.

How to Apply:

Please send your resume to careers@astrayan.com.