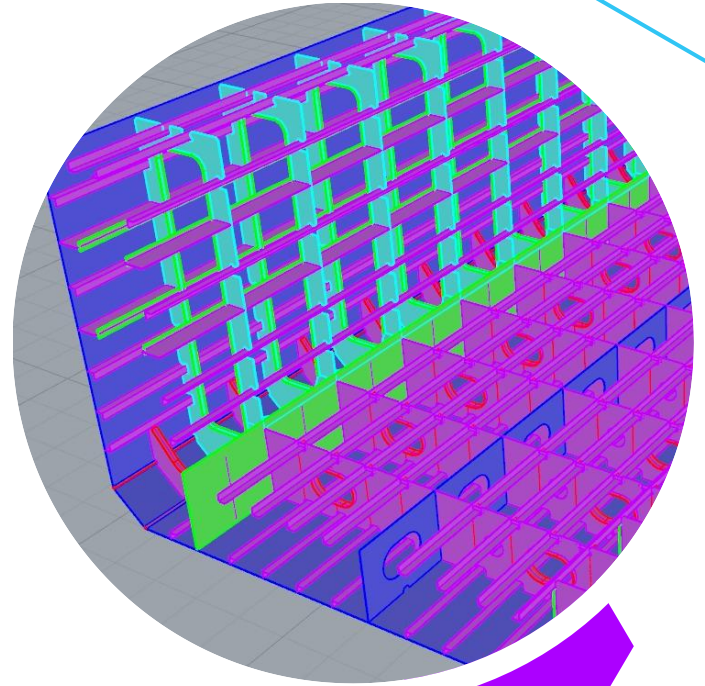




# Mactech

Ship Design & Marine Consultancy



Know more with our  
Company Profile



# Services We Provide



**01**

Marine Design &  
Consultancy

**02**

Indian Flag Conversion &  
IACS CLASS ENTRY

**03**

Technical Management &  
Support

**04**



Ship Valuation &  
Insurance

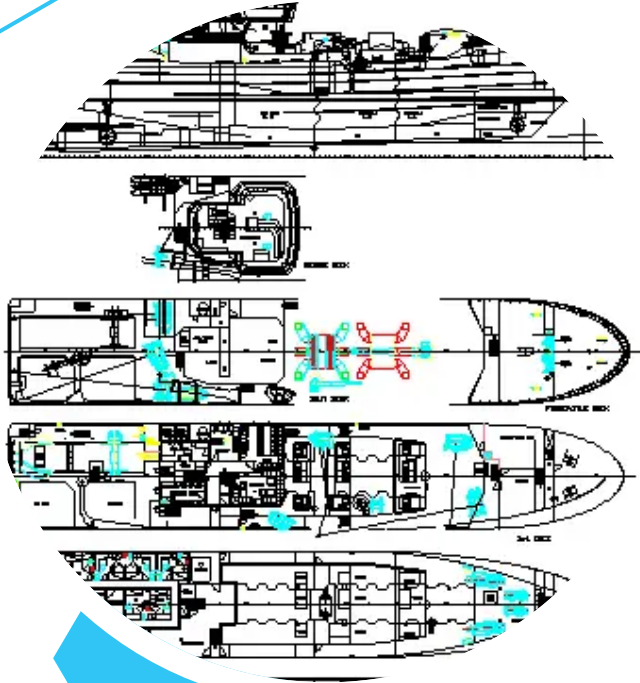
**05**

Inland Water Transport  
Consultancy

**06**

Ship Repair, Spares &  
Service





# Marine Design & Consultancy

At our company, we specialize in cutting-edge ship designing and consultancy services tailored to meet the unique needs of maritime industries worldwide. With a team of experienced naval architects, marine engineers, and industry experts, we offer comprehensive solutions for designing, engineering, and optimizing various types of vessels, from commercial ships to luxury yachts.

# Marine Design & Consultancy

## Services Offered

- ❖ New shipbuilding supervision
- ❖ Pre-purchase Inspection
- ❖ Damage Repair Plans
- ❖ Trim Optimization
- ❖ Damage analysis
- ❖ Flag conversion
- ❖ CFD analysis
- ❖ Naval Architecture Calculations
- ❖ GA Plan
- ❖ Lines Plan
- ❖ Structural Plans
- ❖ As-Fitted drawings
- ❖ Repair/ Modifications and Conversion of vessels
- ❖ Profile and Deck views
- ❖ Shell Expansion
- ❖ Midship Section
- ❖ Inclining Experiment Report/ Stability Test
- ❖ Trim & Stability Booklet
- ❖ Grain Stability Booklet
- ❖ Damage Control Plan & Booklet
- ❖ Sub Division Calculation / Floodable Length Curve
- ❖ Damage Stability Booklet (Load Line)
- ❖ Statutory documents
- ❖ Outfit and Accommodation drawings
- ❖ Ballast Water Treatment System (BWTS)

# Marine Design & Consultancy

## Services Offered

### ❖ FE Analysis

- Static structural analysis
- Buckling analysis
- Natural frequency (vibration) analysis
- Local Analysis like Equipment foundations, Heliport analysis and local fatigue analysis of major joints as per Classification Rules
- Global Analysis like Cargo Hold Analysis, Deckhouse analysis etc.
- Optimization of the structure as per FE Analysis output

### ❖ Hydrodynamic Analysis

- Seakeeping Analysis
- Mooring Analysis

### ❖ Detail Design/ Production design

- Block division Plan
- Generation of 3D Model
- Working drawings/ Fabrication drawings
- Parts list & Weight COG list
- Nesting Plans
- NC tape generation
- Profile bending data
- 3D Pipe routing and Electrical Cable trays
- Arrangement/ Layout drawings
- Spool drawings & BOM



# Indian Flag Conversion & IACS CLASS ENTRY


At our company, we specialize in Ship Indian Flag Conversion and IACS Class Entry services, catering to shipowners and operators seeking to enhance their vessels' compliance, safety, and operational efficiency.

# Indian Flag Conversion & IACS CLASS ENTRY



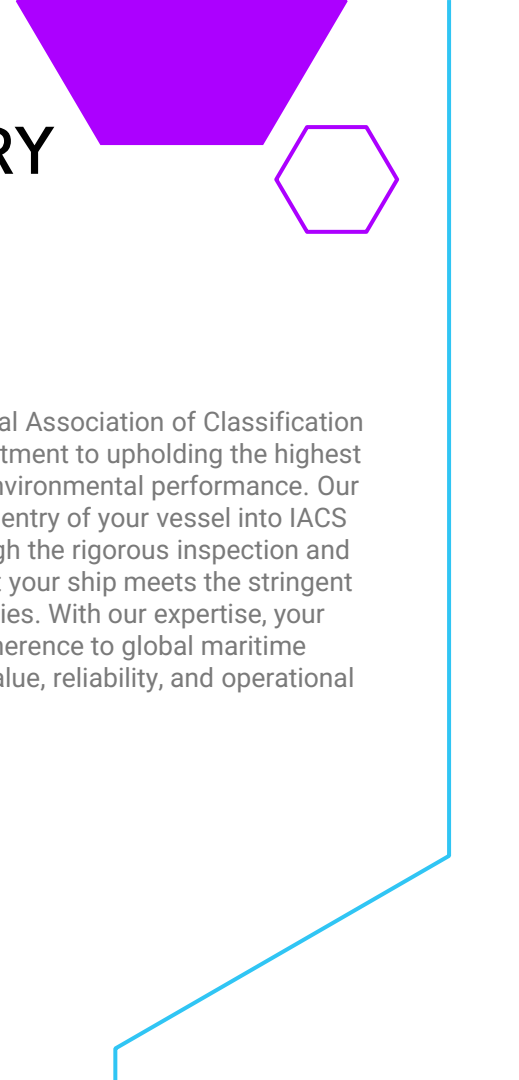
## Ship Indian Flag Conversion

Navigating the intricate process of converting a vessel to fly the Indian flag can be complex. Our experts streamline this process, ensuring a smooth transition for your ship. We provide comprehensive guidance on the necessary documentation, regulatory requirements, safety standards, and inspections mandated by the Indian maritime authorities. With our assistance, your vessel can seamlessly integrate into the Indian maritime landscape, complying with all national regulations and flying the Indian flag proudly.



## IACS Class Entry

Entering a ship into the International Association of Classification Societies (IACS) signifies a commitment to upholding the highest standards of safety, quality, and environmental performance. Our team specializes in facilitating the entry of your vessel into IACS classification. We guide you through the rigorous inspection and certification process, ensuring that your ship meets the stringent criteria set by IACS member societies. With our expertise, your vessel gains recognition for its adherence to global maritime standards, enhancing its market value, reliability, and operational integrity.





# Shipyard Supervision and Training

At our company, we offer unparalleled Shipyard Supervision and Training services, providing comprehensive solutions to shipowners and operators across the maritime industry. With a dedicated team of experienced marine engineers, technicians, and industry specialists, we ensure the seamless shipyard operation for optimizing performance, safety, and compliance.

# Shipyard Supervision and Training

## Shipyard Supervision

Our shipyard supervision team comprises seasoned marine engineers, naval architects, and project managers who bring decades of field experience to the table. We provide continuous, on-site supervision to monitor every aspect of shipbuilding and repair activities, including:

- **Hull fabrication and structural assembly**
- **Machinery installation and alignment**
- **Electrical, piping, and HVAC system integration**
- **Painting, coating, and insulation**
- **Outfitting and interior finishing**
- **Dock and sea trials supervision**

We ensure that all work is executed in strict compliance with class regulations (e.g., IRS, DNV, ABS), international safety standards (IMO, SOLAS), and client specifications. Our role includes progress tracking, quality control, risk management, and coordination between stakeholders, ultimately ensuring timely delivery and cost efficiency without compromising quality.

## Training and Skill Development

In parallel with our supervision services, we offer **customized training programs** designed to enhance the competency and safety awareness of shipyard personnel. Training modules include:

- **Welding and fabrication best practices**
- **Electrical and mechanical systems**
- **Workplace safety (fire prevention, PPE usage, hazard recognition)**
- **Interpretation of ship drawings and blueprints**
- **Class society rules and maritime regulations**
- **Emergency response and first aid training**

Training is delivered through classroom sessions, hands-on workshops, and on-the-job mentoring to ensure immediate application of learned skills. By bridging the gap between theoretical knowledge and real-world execution, we help shipyards develop a capable, confident, and compliant workforce.



# Ship Valuation & Insurance


At our company, we specialize in Ship Valuation & Insurance services, providing comprehensive and accurate assessments for shipowners, maritime businesses, and insurance providers. Our expert team combines industry knowledge with analytical expertise to deliver reliable ship valuations and tailored insurance solutions.

# Indian Flag Conversion & IACS CLASS ENTRY



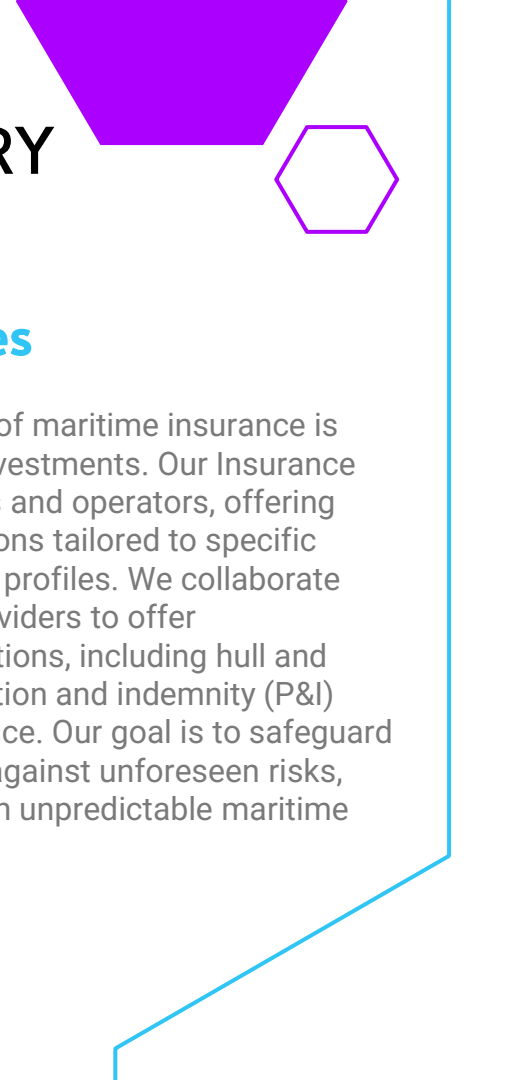
## Ship Valuation

Our Ship Valuation services offer precise assessments of vessel worth, considering various factors such as market trends, vessel specifications, condition, and historical performance. Whether you're buying, selling, financing, or insuring a vessel, our valuations provide a solid foundation for informed decision-making. We ensure that our assessments are meticulous, transparent, and comply with international valuation standards, enabling our clients to navigate transactions with confidence.



## Insurance Services

Navigating the complexities of maritime insurance is crucial for protecting your investments. Our Insurance Services cater to shipowners and operators, offering customized insurance solutions tailored to specific vessel types, usage, and risk profiles. We collaborate with reputable insurance providers to offer comprehensive coverage options, including hull and machinery insurance, protection and indemnity (P&I) insurance, and cargo insurance. Our goal is to safeguard your assets and operations against unforeseen risks, providing peace of mind in an unpredictable maritime environment.





# Inland Water Transport Consultancy

At our company, we specialize in Inland Water Transport Consultancy services, offering expertise to businesses and organizations seeking efficient, sustainable, and reliable solutions for their inland waterway transportation needs. With a dedicated team of experienced consultants, engineers, and specialists, we provide comprehensive guidance to enhance the performance and profitability of inland water transport operations.

# Inland Water Transport Consultancy

## Services Offered

- **Route Optimization:** We analyze existing transport routes and design optimized pathways to maximize efficiency, minimize costs, and reduce transit times. Our consultancy services aim to enhance logistics, ensuring timely deliveries and streamlined operations.
- **Infrastructure Development:** We provide expert guidance on the development of inland water transport infrastructure, including terminals, jetties, and loading/unloading facilities. Our team assesses project feasibility, offers design solutions, and supports implementation to create modern, efficient transport hubs.
- **Vessel Selection and Optimization:** We assist in selecting the right vessels for specific cargo types, routes, and operational requirements. Our experts optimize vessel designs, ensuring they meet safety regulations, environmental standards, and operational efficiency benchmarks.
- **Environmental Sustainability:** Our consultancy emphasizes eco-friendly practices. We devise strategies to minimize the environmental impact of inland water transport, focusing on fuel efficiency, emission reduction, and sustainable vessel designs.
- **Regulatory Compliance:** Navigating complex regulations is vital in inland water transport. We keep abreast of legal requirements and assist clients in adhering to safety, environmental, and regulatory standards, ensuring compliance with local and international laws.
- **Market Analysis and Feasibility Studies:** We conduct in-depth market analysis and feasibility studies, providing valuable insights into potential routes, cargo demands, and market trends. Our studies empower clients to make informed investment decisions.



# Ship Repair, Spares & Service

Our company is a leading provider of exceptional Ship Repair services, dedicated to ensuring the seaworthiness, safety, and efficiency of maritime vessels. With a team of highly skilled engineers, technicians, and craftsmen, we offer comprehensive repair solutions for a wide range of ships, from commercial vessels to luxury yachts.

# Ship Repair, Spares & Service

## Services Offered

- **Mechanical and Engine Repairs:** Our experts specialize in diagnosing and repairing a variety of engine and mechanical issues. From routine maintenance to complex engine overhauls, we ensure that your vessel's propulsion systems operate at peak performance.
- **Hull and Structural Repairs:** We conduct thorough inspections to identify structural damages and repair them using advanced techniques. Our welders and fabricators ensure that the hull integrity is restored, enhancing the vessel's durability and safety.
- **Electrical and Electronics Repairs:** Our skilled electricians handle a wide array of electrical and electronic repairs, including wiring, navigation systems, communication devices, and automation systems. We guarantee reliable and efficient electrical solutions.
- **Hydraulic and Pneumatic Repairs:** We provide expertise in repairing hydraulic and pneumatic systems, ensuring smooth operation of equipment like cranes, winches, and steering mechanisms. Our technicians are proficient in diagnosing and resolving issues to maintain optimal functionality.
- **Propeller and Thruster Repairs:** Our specialists are equipped to repair, balance, and align propellers and thrusters. Properly functioning propulsion systems are vital for a vessel's maneuverability and fuel efficiency, and we ensure they are in perfect condition.
- **Painting and Refinishing:** We offer high-quality painting and refinishing services to enhance your vessel's appearance and protect it from corrosion and environmental factors. Our skilled painters ensure a flawless finish, both above and below the waterline.



# 12 Years

Excellence work experience with  
Numerous clients



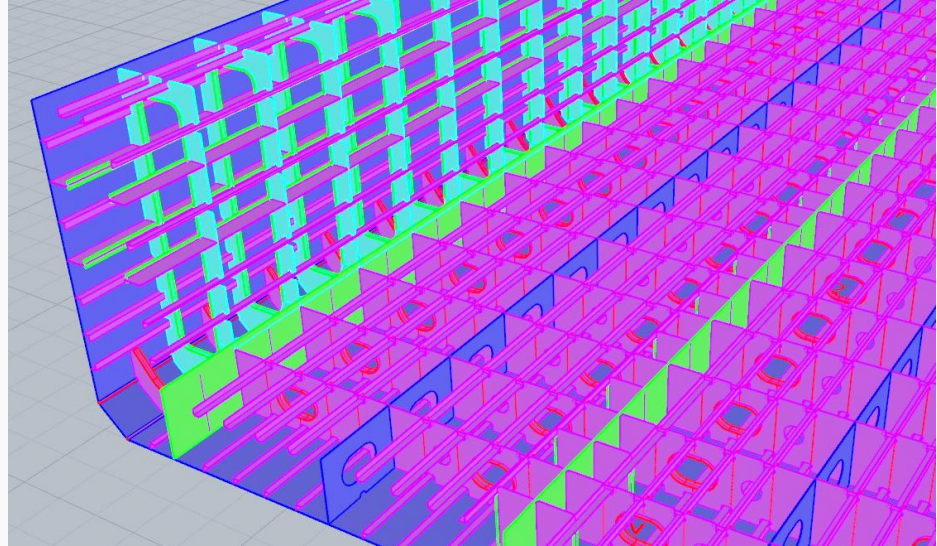


**Some Of Our Best Projects**

# Bulk Carrier Tank Top Re-Design

## Overview

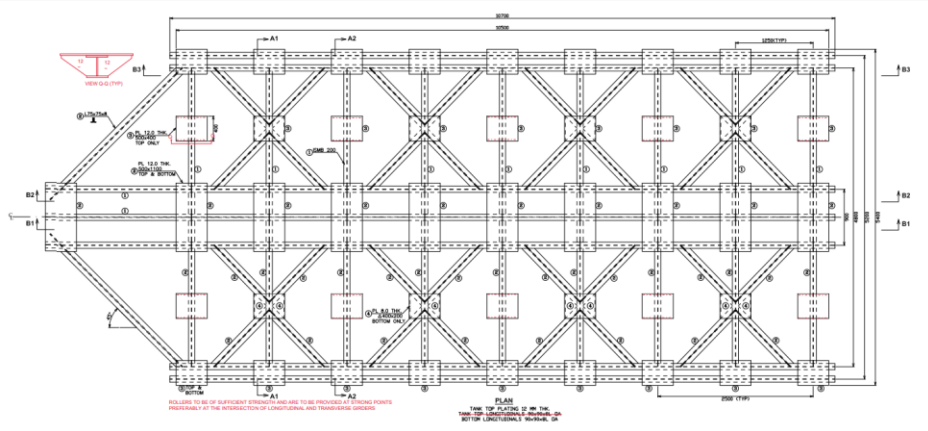
We have designed a cargo hold top for the bulk carrier "M.V. BULKER-1", tailored to meet operational efficiency and structural safety requirements. The design ensures optimal protection of cargo while maintaining the vessel's stability and performance. This addition enhances the ship's functionality and aligns with industry standards for bulk carrier operations.



# Worked for Indian Register of Shipping

## Overview

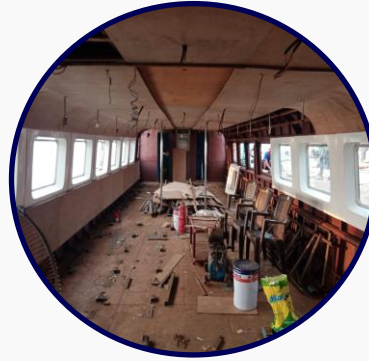
We have successfully designed a cradle at *Junglhat Fish Landing Centre* for the **Indian Register of Shipping (IRS)**. This cradle is specifically engineered to support the safe launching and retrieval of fishing vessels, ensuring compliance with IRS safety and structural standards. It enhances operational efficiency at the landing centre and contributes to the modernization of marine infrastructure in the region.



# Refurbished a Passenger Ferry

## Overview

We have successfully refurbished the passenger ferry "**New Frontier No. 3**" in Kolkata, significantly enhancing both its structural integrity and passenger experience. The entire steel of the superstructure was replaced to ensure long-term durability and safety. In addition, the interior was completely redesigned and upgraded with modern amenities, including an advanced sound system and ambient lighting, offering a more comfortable and engaging journey for passengers.



# Passenger Vessel Modification and Class Entry



## Overview

We are currently in the process of modifying the CCS-class vessel "XIAN ZHOU 5" to comply with the standards of the Indian Register of Shipping (IRClass). The ongoing work includes necessary structural and system upgrades to meet IRClass requirements. Once the modifications are complete, the vessel will be formally registered under IRClass, enabling its smooth transition and continued operation under Indian classification.

# Our Clients

- ❖ IRS
- ❖ IWAI
- ❖ Bharati Defence and Infrastructure Limited
- ❖ ABG Shipyard Limited
- ❖ Precious Shipping Public Company Limited
- ❖ SEA Team Management Private Limited
- ❖ Fuan Shipyard
- ❖ Goa Shipyard
- ❖ Cochin Shipyard
- ❖ Modest Infrastructure Private Limited
- ❖ Shipping Corporation Of India
- ❖ Great Eastern Shipping Company Limited
- ❖ Essar Shipping Limited
- ❖ SESA Goa - Vedanta Limited
- ❖ Hal Offshore Limited
- ❖ SS Offshore Private Limited
- ❖ METS Holding Private Limited
- ❖ Subham Group Of Companies



# Classification Society We Have Worked With



# Thank You

Do you have any questions?

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