



Always with you
for Excellence



Green Ship Technologies

www.greenshiptech.com









INTRODUCTION

Green Ship Technologies is a Marine, Offshore & Industrial service provider established in 2009. We are based in Navi Mumbai-India and progressing to various parts of the world.

Our experienced team consists exclusively of Naval Architects, Marine engineers, Master Mariners, Technicians and Electrical / Mechanical Engineers who are well qualified with good experience in major Shipyards, Ship design offices, Marine operations, Offshore Engineering, NDT services and Electrical / Mechanical engineering fields.

Green Ship Technologies' reliable services are as detailed below. We have an extensive list of satisfied clients across the world. Our engineers have successfully co-operated with owners from India as well as Middle east and European countries.

Our team in detail extends to various specialized divisions

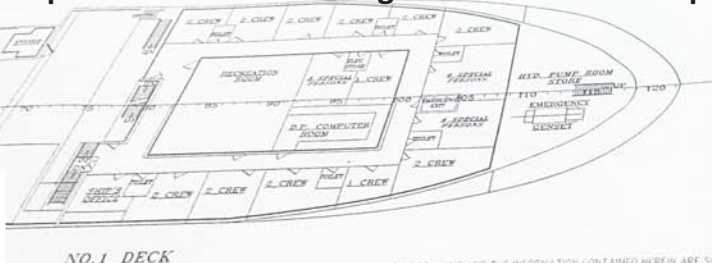
-  **MARINE ENGINEERING CONSULTANCY**
-  **OFFSHORE ENGINEERING CONSULTANCY**
-  **MARINE SURVEY**
-  **PROJECT MANAGEMENT**
-  **FLAG & CLASS CONSULTANCY**
-  **MARINE & INDUSTRIAL NDT INSPECTIONS**
-  **AGENCY OF SHIP REPAIR & SHIP BUILDING SERVICES**
-  **SHIP BROKERING**

Our engineering capabilities include basic design and detailed analysis of ship structures/ jack up rigs/ barges, heli decks and crane foundation etc. Our experienced team in Finite Element Analysis, Stability Analysis and Statutory requirements supports all projects and works closely with other disciplines to offer best quality designs to customers.

Our surveyors are approved by various recognized organization and flag administration. We have agencies of various shipyards for ship repairing and ship building services.

Our NDT team is well experienced in marine, offshore and industrial field. We also offer a Ship brokering division which is connected to world wide for various sale and purchase co-ordinations.

Our aim is to provide services with high measurements on quality & customer satisfaction.



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CLIENT			
BUILDER			
YARD NO.			
CLASS	DET NORSKE VERITAS AND INDIAN REGISTER OF SHIPPING		
			
GREEN SHIP TECHNOLOGIES			
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Green Ship Technologies' offshore engineering division provides various supports for oil & gas industry. Our lead engineers are having good experience in oil & gas industry and were involved in various projects around the globe.

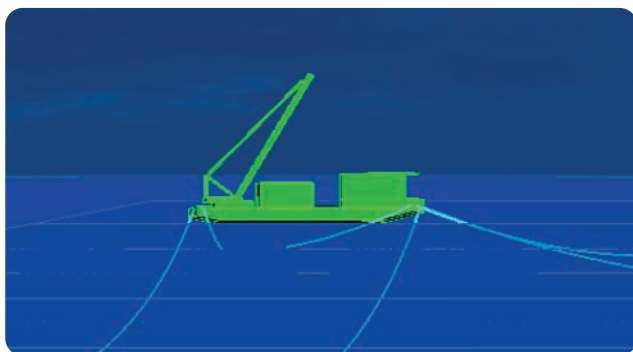


Compliance for SPS/ MODU Codes

- ⚓ Compliance studies and consultation for certification requirements
- ⚓ Modification studies for compliance requirements with commercial and operational optimization

Self-Elevating Mobile Offshore Drilling Unit Services

- ⚓ MODU Stability Analysis
- ⚓ Inclining experiment and report
- ⚓ Dead Weight Survey
- ⚓ Marine Operational Manual
- ⚓ Structural Installation and FEM Analysis
- ⚓ Heli deck Analysis
- ⚓ Piping and Electrical Modification

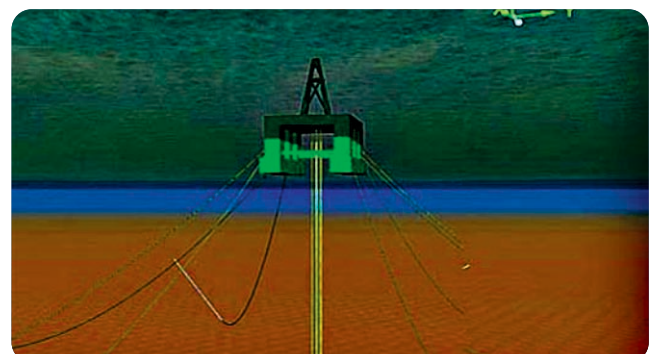


Mooring and Motion Analysis

- ⚓ Analysis for all types of vessels with all kinds of design parameters
- ⚓ Analysis as per applicable codes
- ⚓ User friendly reports for operational requirements

Cable Lay Analysis

- ⚓ Analysis for all types of vessels with all kinds of design parameters
- ⚓ Static and Dynamic Analysis
- ⚓ User friendly reports for Operational Requirements



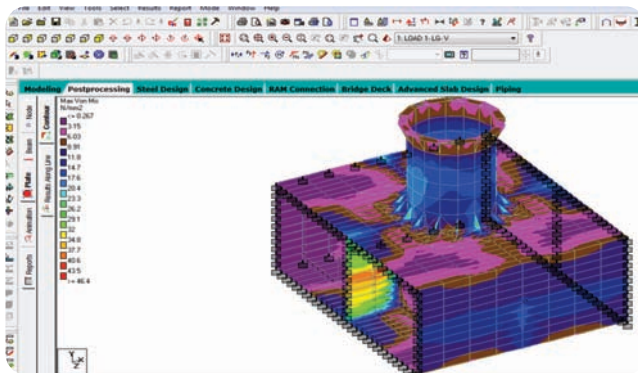
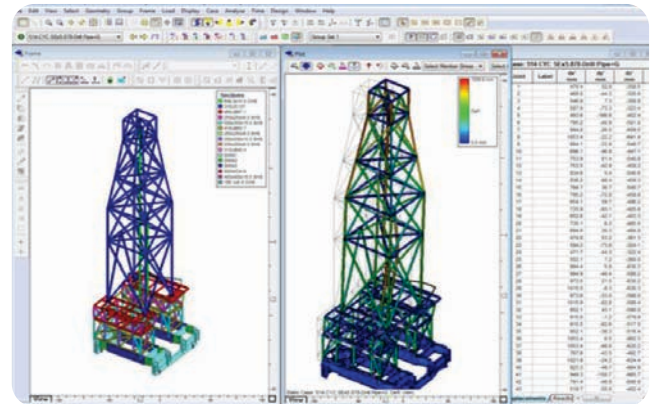


Pipe Lay Analysis

- ➊ Pipe Lay Analysis as per project design requirements
- ➋ Static and Dynamic Analysis
- ➌ User friendly reports for Operational Requirements

Installation and Modification Studies

- ➊ Turnkey studies with support of Structural, Mechanical, Electrical Engineering capabilities
- ➋ Basic design and Detailed Engineering drawing
- ➌ Optimized designs for Commercial and operational feasibilities



Structural & Stability Analysis

- ➊ Structural Analysis of various installations and equipment through FEM Analysis
- ➋ Structural checks for various operational parameters
- ➌ Stability Analysis as per design requirements

Towage, Transportation and Sea fastening studies

- ➊ Detailed analysis for all kinds of marine transportation as per Codes and Practices of marine warranty requirements
- ➋ Towing plans and sea fastening designs
- ➌ Assistance for Warranty surveys



Our main objective is to deliver the best possible design solutions to owners and shipyards on time.



Our design divisions main area of expertise comprises in handling the basic design and generating detail production drawing for shipyard.

We are also experienced in handling conversion works for many offshore vessels and seismic vessels.

Apart from creating ship designs, our design division is also fully prepared to carry out specific naval architectural tasks such as :

- ⊕ FMEA (Failure Modes and Effect Analysis)
- ⊕ Intact and Damage Stability Calculations
- ⊕ Statutory Plans and Manuals etc.



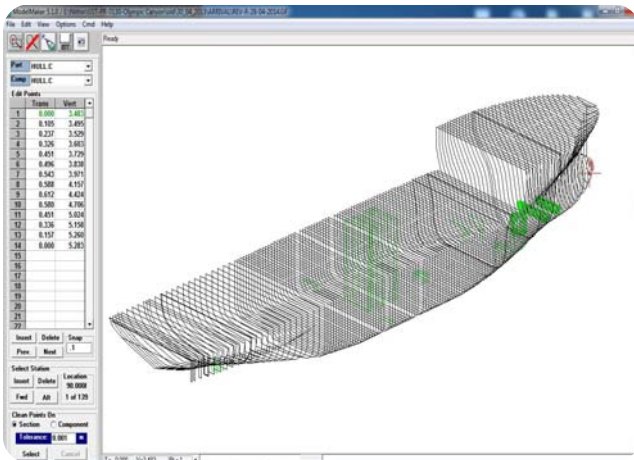
We offer both complex design of vessels as well as individual design stages such as initial, contractual, classification and detailed

Initial and contractual design

The documentation in the initial and contractual stage includes drawings and calculations used for describing general characteristics of the vessel; speed, capacity, fuel consumption, etc.

The most important documents prepared at this stage include:

- ⚓ General arrangement plan
- ⚓ Technical specification
- ⚓ Tank plan
- ⚓ Light ship calculation



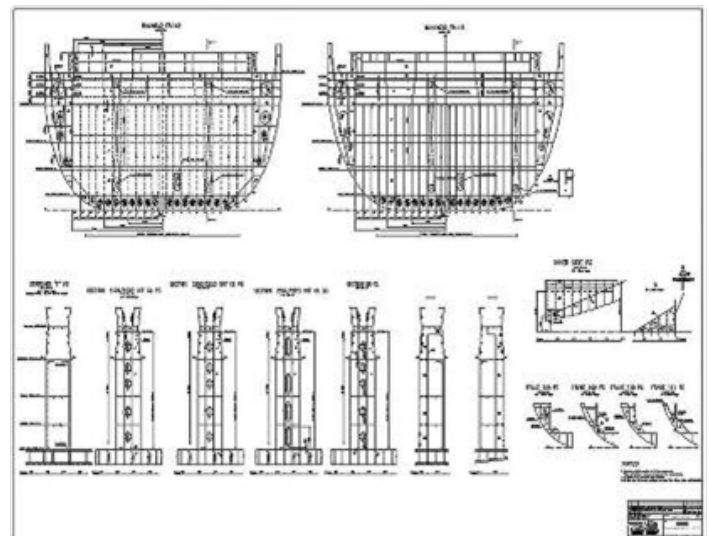
Preparation of booklets and manuals

The documentation includes drawings and calculations used to gain the approval of the Classification Society.

Documents prepared at this stage includes:

- ⚓ Intact and damage stability booklets
- ⚓ Inclining Experiment report
- ⚓ P&A manuals
- ⚓ Longitudinal strength calculation
- ⚓ Sea fastening calculation etc.

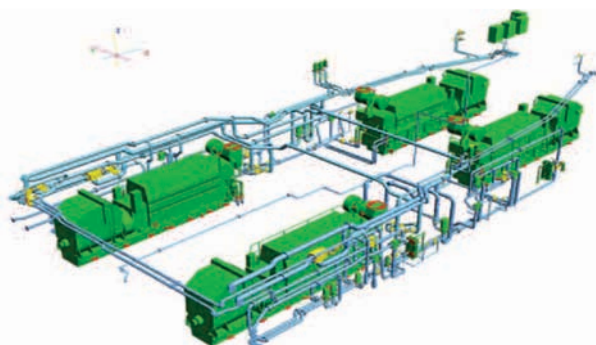
We closely cooperate with major class societies such as DNV, GL, ABS, BV, IRS and others.



Detailed Design

Detailed documentation includes drawings and other documents indispensable for prefabricating and assembling the vessel (lifting documentation of hull, isometric drawings of piping installations, etc.).

Usually at the detailed design stage the 3D model of the vessel is prepared.





Green Ship Technologies' Marine & Industrial NDT inspection division is having highly skilled engineers and technicians and our unparalleled range of facilities offer complete solutions to meet all industrial needs.

Non Destruction Testing

Noise Level Survey

Light Measurement Survey

Thickness Measurement Inspection

Thermography Survey

NDT Techniques

We offer optimised NDT inspections system to meet industrial needs and our field services are in constant demand worldwide.

Applications

Our NDT services include inspection of both metallic and non-metallic (polymer and composite) components and structures. According to requirements, NDT can be undertaken during production, post-production, in-service and following repair. Our NDT inspection facilities and expertise are also a key component of our failure investigation service and can provide key test data as part of a fitness for service or risk-based inspection procedure.

Third Party Inspection

Green Ship Technologies can provide highly experienced and qualified personnel to undertake third party oversight in all NDT inspections areas.



Our expertise includes:

- ⚓ Magnetic Particle Inspection
- ⚓ Liquid Penetrant Test
- ⚓ Visual Inspection
- ⚓ Anchor Chain Calibration

Noise Level Survey

We offer Noise level measurement surveys as per IMO Res. A.468(XII).

Level of noise is measured in following areas:

- ⚓ Control rooms
- ⚓ Workshops
- ⚓ Propulsion machinery
- ⚓ Turbocharger
- ⚓ Top propulsion machinery
- ⚓ Reduction gear
- ⚓ Non-specified workspaces
- ⚓ Serveries & Pantries
- ⚓ Accommodation & Other spaces
- ⚓ Mess room & Cabins
- ⚓ Recreation room
- ⚓ Offices & Galleys
- ⚓ Navigating bridge wings
- ⚓ Radar & room
- ⚓ Non-specified workspaces
- ⚓ Auxiliary diesel engines & Turbo generators

Light Measurement Survey

Light measurement survey is conducted to investigate the illuminance levels of general lighting & task lighting on vessels and work places. The main objective of the assessment is to determine whether the various lighting systems comply with minimum standards to accommodate personnel visual task performance and facilitate personnel movements, well-being, and safety onboard vessels and work places.



The potential hazards arising from the work activity under the current lighting condition in the workplace, such as insufficient illumination, excessive contrast, glare or flicker.

Evaluate the risks and decide whether improvement measures are needed to protect the employees, including but not limited to the lighting provision.

Thickness Measurement

We undertake thickness measurements of vessels as per classification requirements.

Constant monitoring of corrosion levels is vital to maintain the safety of the ship and her crew. Vessels often suffer the most severe cases of metal wastage due to the corrosiveness of salt water.



Thermography Survey

Green Ship Technologies offer Quantitative and Qualitative thermography survey in marine & industrial sector.

Quantitative Thermography

Quantitative thermography relies on analysis of thermal pattern to reveal the existence and locate the position of anomalies, and evaluate them.

Qualitative Thermography

Qualitative thermography uses temperature measurement as a criterion to determine the seriousness of an anomaly, in order to establish repair priorities.

Details of inspection help to detect

- ⊕ Overloaded electrical wiring and connections
- ⊕ Failing rotor or stator motor windings
- ⊕ Detect thermal pattern of boiler tubes
- ⊕ Mechanical bearing inspections

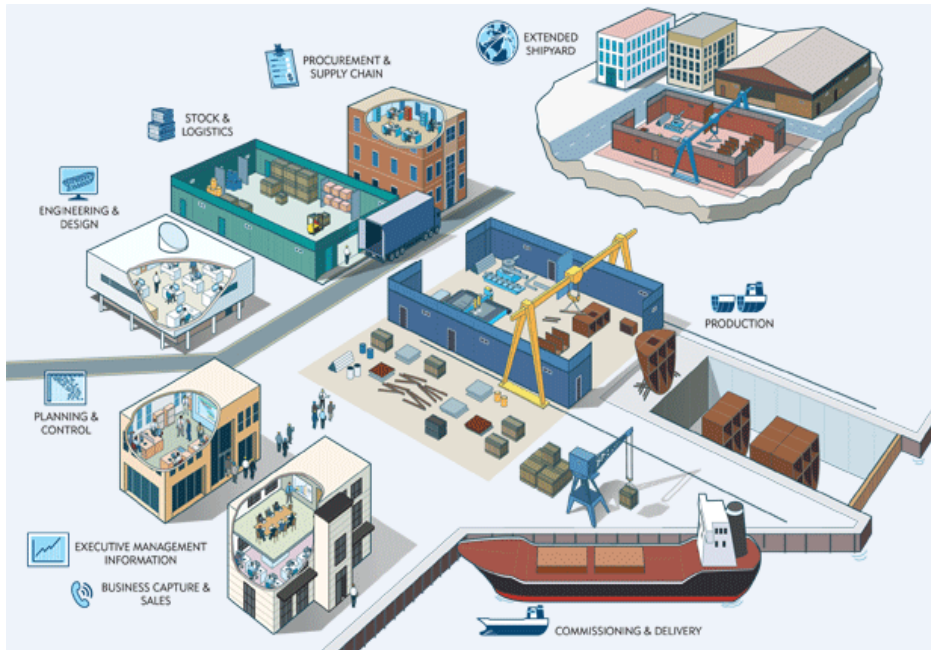


Benefits

Our comprehensive range of methods and equipment enables us to develop the optimum solution in any practical industrial situation, and our commercial independence allows us to offer impartial, expert advice.

We undertake key assignments of marine related organizations of the world.

Shipbuilding is a Process!



Project management in Ship Buildings and major conversions

Project management is carried out with detailed and continuous reporting.

Shipyard evaluation and selection for building /conversion projects

Shipyard evaluations are conducted by experts from shipbuilding industry

Owners' representation and supervision at new buildings and Conversions

Verification of projects to the interest of owners and detailed reporting with photographs and evidences

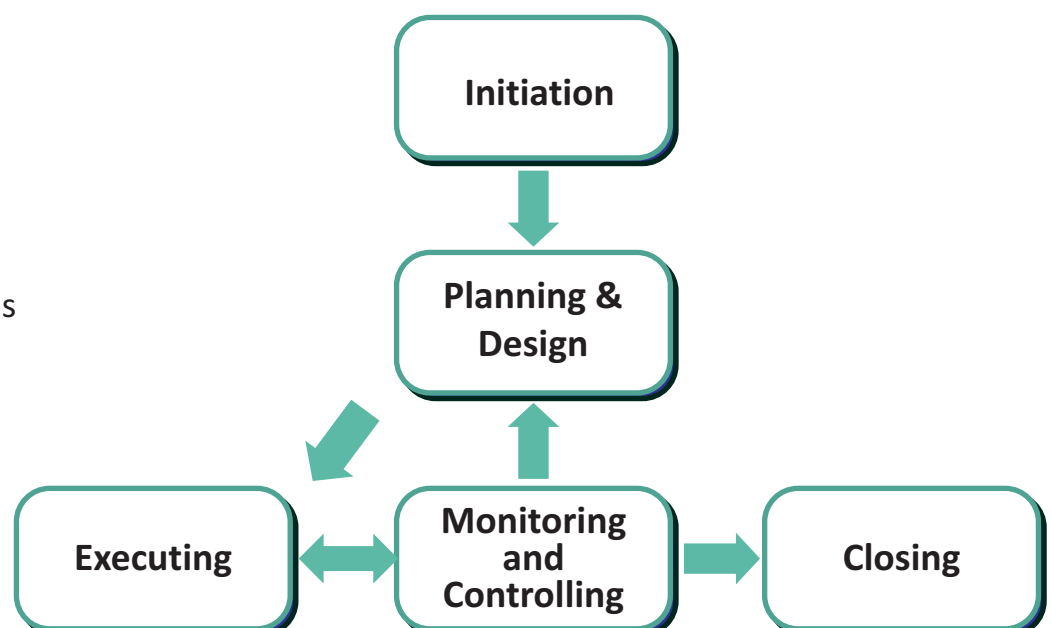
Quality control inspections for new buildings and conversions

Quality control inspections jointly with classification requirements and owner's requirements

Drydock and repair supervisions

Superintendent inspections for vessels on drydock and repair yard

Complete reporting with photographic details and other evidences



MARINE SURVEYS



Green Ship Technologies provides extensive range of surveys undertaken by Highly Experienced and Qualified Professionals



Flag and Classification Surveys

Flag inspection to the requirement of various flags and classification surveys

ISM Consultancy

Other than external audits, we can arrange Internal Audits and ISM consultancy services.

Pre-purchase surveys

Detailed inspection of vessels for prospective buyers and detailed reporting with photographs, documents etc.

On and off hire surveys

Vessel's verification before and after hire period to assess the status of the vessel in detail with photos and evidences and all types of condition assessment surveys for Insurers, as per request

Draft Surveys

Draft surveys for assessment of Cargo, Light weight, Displacement etc.

Damage Surveys

Damage assessment surveys for Recognized organizations, other authorities & owners

Bunker surveys

Bunker surveys to assess quantity of Bunker on board

Towage Surveys

Towage approval surveys for assessment of towage

Vessel feasibility inspection for Projects Operation Demolition Voyages etc.

Specific inspections and reporting for vessel's suitability to projects, operations, demolition voyages etc.

Specific assessment is made in addition to general assessments



FLAG & CLASS CONSULTANCY



Green Ship Technologies provides consultancy in Flag and Class documentation for vessels as given below:

Indian Flag and IRS Classification

We act as owners representative for obtaining all registry and class documentation from Indian flag and Indian Register of Shipping.

Ship Registrations with various Flags

Complete registration formalities with various flags. For details of flag administrations, please contact our office.

Offshore Corporations

Registration of ship owning companies with various flags, as required by clients.



AGENCY OF SHIP REPAIR & SHIP BUILDING SERVICES

Green Ship Technologies acts as agents in India for many Ship Repair & Ship Building Companies.



We arrange Technical & Commercial co-ordination for ship repair and ship building requirements for Indian ships, Middle East and Far East.

For foreign owners, we provide same service for assistance in India for repairs and new building.

Hassle free assistance provided by our technical qualified staff.

Sale & Purchase



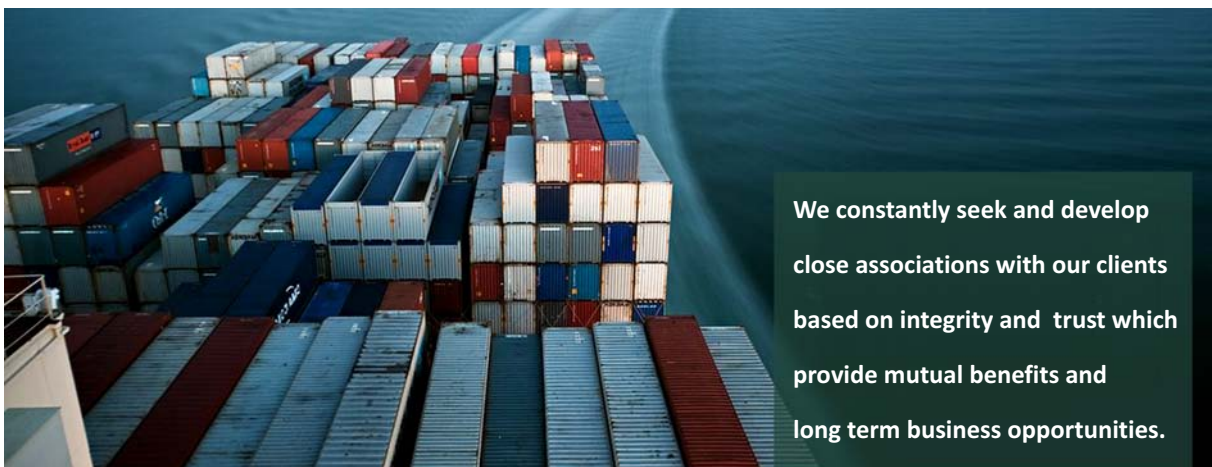
With our close associates around the globe, we provide comprehensive and quality services to direct clients with respect to Purchase and Sale of various vessels:

DRY CARGO VESSELS, BULK CARRIER, RORO VESSELS, TUGS, UTILITY SUPPLY VESSELS, BARGES, FLOATING DOCK, OIL TANKER ETC.

- ⊕ We provide quick and reliable information according to client requirements.
- ⊕ We also arrange consultancy in Class, Flags and Insurance for vessels on sale.

Chartering

We are Ship brokers in Chartering of cargo vessels, offshore vessels etc. Our continuous coordination being done with numerous ship owner & charterers worldwide, we are committed in providing quality & professional services in chartering.





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