



---

**Inmex India 2011 at Mumbai September 29<sup>th</sup> to October 01**

**Opportunities for Equipment Suppliers  
in  
Indian Shipbuilding Industries**

**Anand V Sharma  
Mantrana Maritime Advisory Pvt Ltd**

---



## Indian Shipbuilding - Overview

Segment	Market Focus	Type of Ship	Investment	Companies	Equipment Suppliers	Perspective
					Entry Parameter	Winning Factor
High End Naval Ships	Indian Navy	Frigates, Corvettes, Submarines, Patrol Vessel, Aircraft Carrier	US \$100 mn to billion	Defence Yards owned by MOD/ Private yards with licence	Empanelment in Navy as approved vendor is the primary criteria. Indigenization is encouraged. Ex - MTU, Wartsilla Lisp	Quality, Durability, Spares, Existing Infrastructure with Navy, Price
Large Commercial Vessels	Indian / International Shipping Firms, Drilling Firms	Large Conventional Ships, Rigs - Jackups/Drillships	US\$30 mn to US\$ 500 mn	ABG, Bharati, Cochin, Pipavav	Have mostly been ordered to foreign yards. However, trend is likely to change in future.	Brand for key component, Price
Specialised Ships	Indian/International Offshore Firms, Indian Navy, Coastal Operators	Offshore Vessels, Towage/ Pilotage/ Coastal Vessels	US\$10 mn to US\$80 mn	ABG, Alcock, Bharati, Chowgule Cochin, Goa, L&T, Pipavav, Shoft	Critical Equipment - propulsion system owner has a say, rest of decision with shipyard	Quality, Brand of equipment, Price
Low Value Small Ships	Small Local Company	Barges, River Craft	US\$2 mn to US\$5 mn	Several yards spread over the coast dominated - Goa, some in WB	Local manufacturer dominate, Engine dominated by Cummins manufactured locally	Price



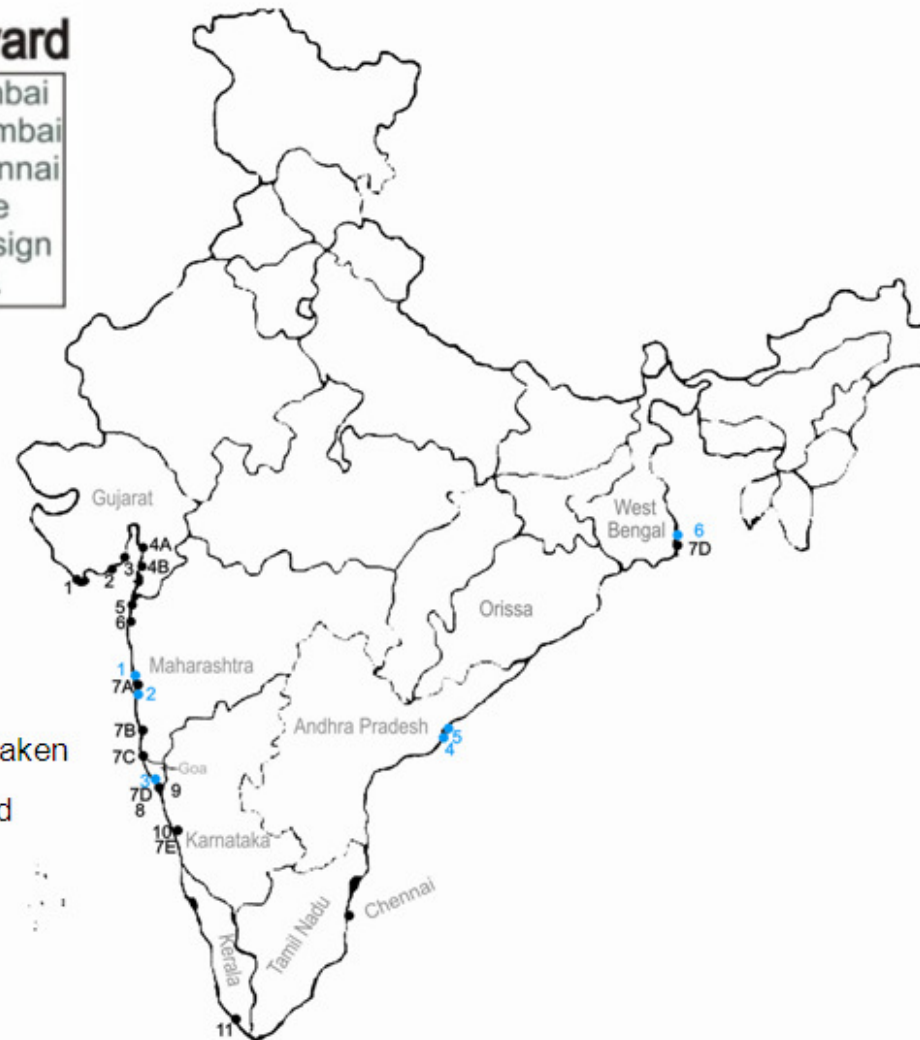
## Details on Functional Infrastructure in Commercial Segment

Shipyard	Location	Drydock/Ship lift	Slipway (mxm)	Market Focus
ABG Shipyard	Hazira	4500 T - Shiplift		Key focus on small specialized ships
	Hazira	155 x 30 x 7.5		
	Dahej	33,000 T - Shiplift		Large commercial vessels/ Rigs
Alcock Shipyard	Bhavnagar	85 x 20		Losing activity due to heavy siltation
	Chanch	122 x 22 x 4.5		Could build ships up 20,000 DWT
Bharati Shipyard	Ratnagiri		200 x 18	Specialized ships
	Ghodbunder		100 x 17	Small Ships (Airdraft restriction)
	Goa		80 x 18	Small Ships
	Kolkata		120 x 22	Drydock being planned
	Dhabol	155 x 40		Floating Dock
Chowgule Shipyard	Goa	220 x 20 x 3.5	220 x 20	Cargo ships, built a series of ships 4500
Cochin Shipyard	Cochin	255 x 43 x 9		Large commercial vessel, Aircraft Carrier
	Cochin	270 x 45 x 12		Repair – Offshore Rigs, Navy & Commercial
Larsen & Toubro	Hazira		120 x 22	Small specialized ships upto 120 m
Pipavav Shipyard	Pipavav	662 x 65		Indian Navy, Commercial, Specialised
Shoft Shipyard	Bharuch	115 x 25		3 slipway – Small specialized ship
Tebma Shipyard	Malpe		210 x 21.5	Taken over (Bharati) – Small specialized ship

## Geographical Location of Shipyards - India

### Head office - Shipyard

1. ABG Shipyard, Mumbai
2. Bharati Shipyard, Mumbai
3. Tebma Shipyard, Chennai
4. Rest all Shipyard have their head office & design office in the same city.



Tebma Shipyard has been taken over by Bharati Shipyard

### Commercial Shipyards

1. Pipavav Shipyard, Pipavav
2. Alcock Ashdown, Bhavnagar
3. Modest Shipyard, Bhavnagar
- 4A. ABG Shipyard, Hazira
- 4B. ABG Shipyard, Dahej
5. Shoft Shipyard, Bharuch
6. L & T Shipyard, Hazira
- 7A. Bharati Shipyard, Mumbai
- 7B. Bharati Shipyard, Ratnagiri
- 7C. Bharati Shipyard, Dabhol
- 7D. Bharati Shipyard, Goa
- 7E. Bharati Shipyard, Mangalore
- 7F. Bharati Shipyard, Kolkata
8. Chowgule & Co Ltd. Goa
9. Western India Shipyard, Goa
10. Tebma Shipyard, Mangalore
11. Cochin Shipyard, Cochin

### Defence Shipyards

1. Mazagon Docks, Mumbai
2. Naval Dockyards, Mumbai
3. Goa Shipyard, Goa
4. Naval Dockyard, Vizag
5. Hindustan Shipyard, Vizag
6. GRSE, Kolkata



## New Building Delivery Schedule (Offshore) – Indian Owners

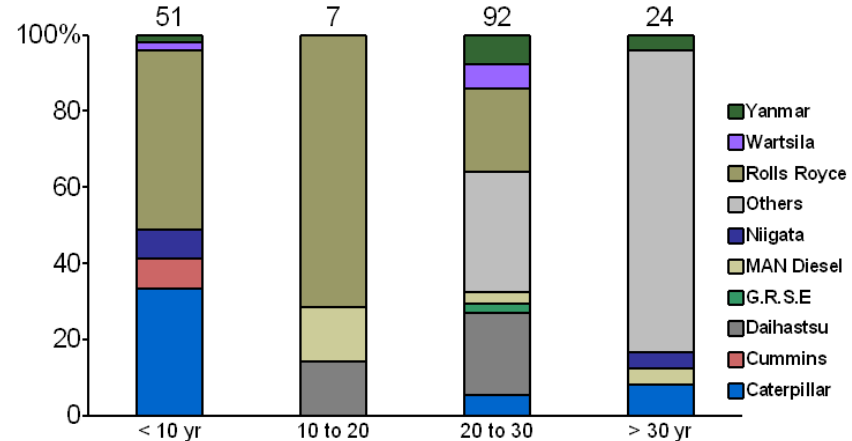
Calendar Years		2011		2012				2013		Total	Shipyards
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2		
Great Offshore	MSV						1			1	Bharati Shipyard
Greatship	AHTS					1	1			2	Drydocks - Singapore
	MSV				1	1				2	Mazgoan Docks
	ROV						1	1	1	3	Colombo Drydocks
ONGC	AHTS	1	1	1	1	2	2	2	2	12	Pipavav Shipyard
SCI	AHTS		1	1	1					3	Bharati Shipyard
	PSV						1	1		2	Cochin Shipyard
<b>Total</b>		<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>25</b>	

- SCI took delivery of AHTSV “SCI Panna” from Bharati Yard, and is expecting 3 more by 2011 end.
- SCI has also placed orders for 2 PSVs with Cochin shipyard, for which construction started in Sept. 2011
- As of March 2011, Greatship has a fleet of 12 OSVs with an average age of 3.25 years
- In FY 2010-11, Greatship took deliveries of 2 MSVs and 1 ROV
- Great Offshore has 2 newbuilding orders with Bharati Shipyard; a Jackup and an MSV, to be delivered in Dec. 2011 and Dec. 2012 respectively



## Suppliers to Indian Offshore Industry

**Market Share of Engines in Indian Offshore Fleet (Sample size 174 ships)**



Owners have high influence in selecting critical equipments. In case of Offshore Fleet, Propulsion systems make is dictated by owners

In other segments shipyard takes a call.

Equipment	Country of Origin for Supplier (Alphabetical)
HVAC	Australia, Denmark, Korea, Netherlands, Singapore
Boiler Plant	Belgium, Denmark , Sweden
Anchor Chain	China, Hongkong, India, Singapore
Shaft Alternator	India, UK
Valves	Germany, India, Korea, Netherlands, Scotland, Singapore
Marine Duty Pumps	Denmark, Germany, India, Italy, Netherlands, Singapore, Spain
Lashing Range	Denmark, Hong Kong, India, Singapore
Fire Fighting System	Germany, Greece, Holland, Japan, Singapore, UK
Inter Communication	Denmark, India, Singapore
Air Compressor	Holland, Germany, Singapore, UK
Winch	Australia, Belgium, Denmark, Holland, Japan, Singapore
Towing Winch	Belgium, Denmark, Holland, Japan, Netherlands, Spain

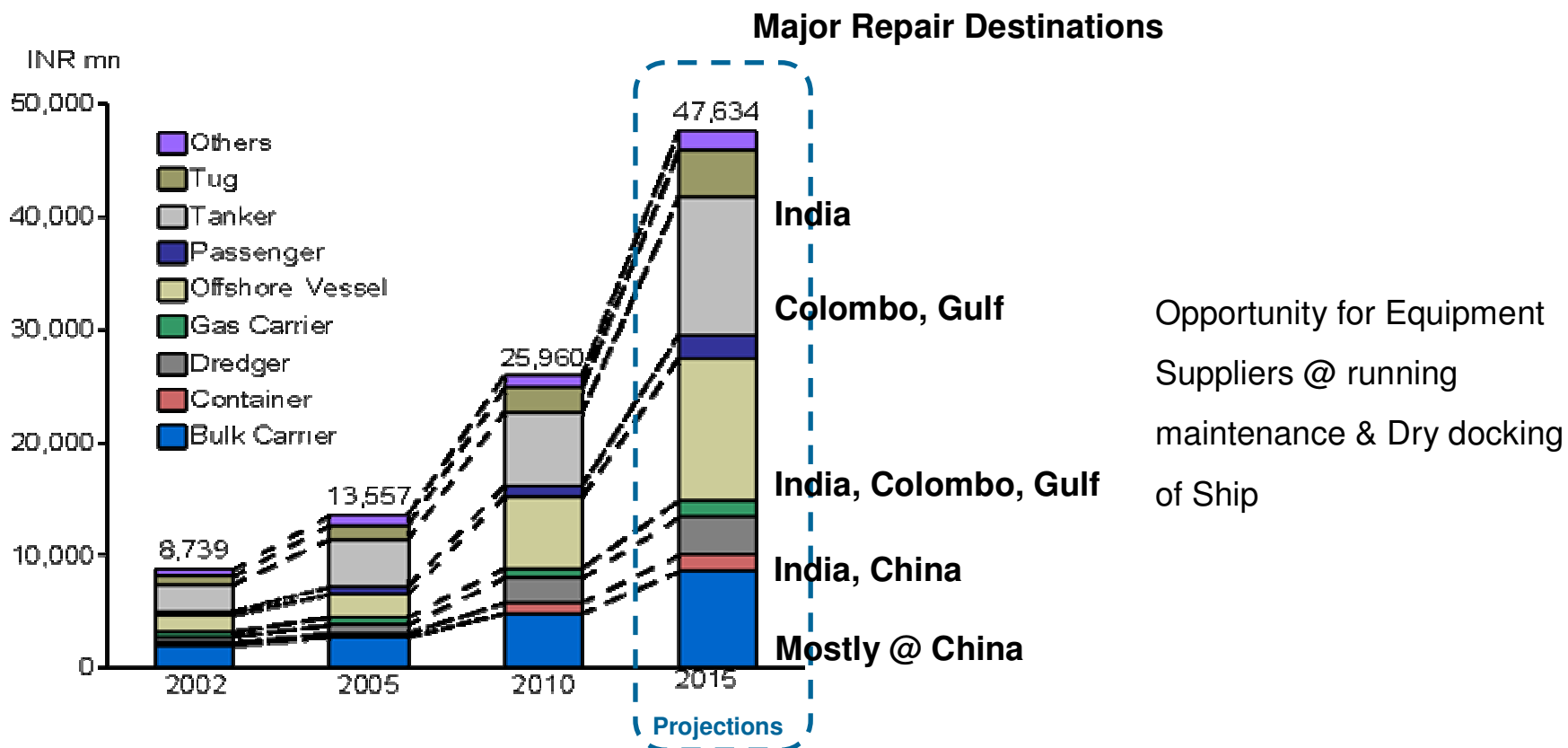


## New Building Delivery Schedule (Cargo) – Indian Owners

Year of Delivery	2011	2012	2013	2014	Total
SCI	10	6	2		18
Chowgule Shipping	2	2	2	2	8
Great Eastern	2				2
Essar Shipping		9	5		14
Good Earth Maritime	1				1
Adani Group		2			2
Gujarat Ambuja	2				2
<b>Total</b>	<b>17</b>	<b>19</b>	<b>9</b>	<b>2</b>	<b>47</b>

- SCI has planned to place orders for 2 container vessels with Cochin Shipyard
- Essar has 6 ships each on order with STX Dalian and ABG, along with orders for 2 Jackups
- As of March 2011, GE Shipping had a fleet of 34 ships, with an average of 9.8 years
  - In FY 2010-11, the company acquired 2 newly built Kamsarmax, 1 Supramax and a General purpose product carrier
- Through its subsidiary Trust Energy Resources Pvt. Ltd. in May 2011, TATA Power took delivery of a 181,000 DWT Cape vessel, named 'Trust Agility', built at STX Dalian
  - The sister vessel, 'Trust Integrity', was delivered in Q1 FY12

## Opportunity for Equipments/Spares in Repair – Indian Fleet



- Repair & Maintenance of Fleet opens up opportunities for equipment suppliers as spare/replacement
- A large component of local demand in case of emergency breakdown is met through refurbished items from Alang Ship Dismantling Yard



## Opportunity for Equipments – Indian Navy/Coast Guard



- Empanelment with the Indian Navy is the most critical and essential of all the aspects of supplying equipments/ Machinery to Indian Navy. Once, empanelled the lowest bidder is preferred.
- The Shipyard has to select equipment at the time of bidding from Makers List provided by Navy
- Broad parameters sought by Navy for Empanelment are
  - ✓ OEM has to approach Directorate of (Specific Department under which equipment falls)
  - ✓ All approvals in place, should pass through test parameters of Navy
  - ✓ Reference list of existing supply to Internal Navy - Helpful
  - ✓ In case of breakdown, how soon OEM can provide troubleshooting to the Navy
  - ✓ After sales support provided by OEM
  - ✓ Repair centers of equipments & Machinery
  - ✓ Inventory level of spares to be maintained on a short term & long term basis
  - ✓ Infrastructure requirement
- Once empanelled, the manufacturers name is included in Maker's List

## Opportunities – Immediate Future



### **Following are key opportunities for shipyards and equipment suppliers in immediate future**

- SCI has planned to acquire 2 container vessels
  - ✓ Shipyard : Cochin Shipyard on Nomination Basis
  - ✓ Tentative price of order : US\$ 45 mn to US\$ 50 mn / Ship
  - ✓ Technical Capability : 3,400 TEU
  
- Invitation to Qualify : Newbuilding of 2 x 35 T Bollard Pull Tug under MS Act
  - ✓ Organization : Administration of Andaman & Nicobar
  - ✓ Qualification Criteria : <http://alhw.and.nic.in>
  - ✓ Bid Date : Dec 17<sup>th</sup>, 2011 (For Shipyard)
  
- Acquisition of MSV by ONGC : Tender cancelled as Yards did not qualify the technical criteria, re-tendering could be on blocks
  - ✓ Technical Specification : DP 3, FI FI – III, Accommodation 105 Pax, DWT 3,000 @ 6.5 m draft



## About Mantrana

---

- Undertakes customized research & consultancy services for Indian Shipbuilding Sector
- Specializes in Market Identification / Focused Primary Research
- Screening of customers depending upon product
- Market study for ancillary segments of Shipbuilding
- Analysing opportunities for shipbuilding and the associated industries
- Following are key services provided by Mantrana Team
  - √ Market Study
  - √ Project Feasibility Study
  - √ Business Plan
  - √ Bid Advisory
  - √ Due Diligence for investment



---

**Thank You for Attention**

**Mantrana Maritime Advisory Pvt. Ltd.**

A-207, Sai Chambers, Plot No. 44  
Sector -11 CBD Bealpur  
Navi Mumbai - 400 614.  
Maharashtra, India

Landmark : Near CBD Station, Opp. IDBI Bank Bldg.

Tel	:	+91-22-6609 8010 / 6609 8011
Fax	:	+91-22-6609 8013
Email	:	<a href="mailto:info@mantrana.in">info@mantrana.in</a>
Web	:	<a href="http://www.mantrana.in">www.mantrana.in</a>

---