



STATISTICS OF INDIA'S SHIP BUILDING AND SHIP REPAIRING INDUSTRY

2018-19



**Government of India
Ministry of Shipping
Transport Research Wing
New Delhi**

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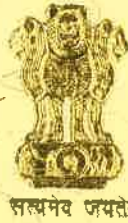
2018-19



सत्यमेव जयते

**Government of India
Ministry of Shipping
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गोपाल कृष्ण
GOPAL KRISHNA



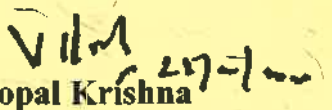
सचिव
SECRETARY
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पोत परिवहन मंत्रालय
MINISTRY OF SHIPPING

P R E F A C E

Transport Research Wing (TRW) in the Ministry of Shipping is the nodal agency for providing information/data on various facets of water borne transport. The present issue “**Statistics of India’s Ship Building and Ship Repairing Industry 2018-19**” gives information on India’s Ship Building and Ship Repairing Industry.

The present volume consists of five sections and is designed to provide information on developments in Ship Building, Ship Repairing, Employment and Financial position of India’s Ship Building & Ship Repair industry, including a section pertaining to Shipbuilding from a global perspective. The present volume includes features such as ship order book position in terms of export order and domestic order respectively and permanent and contractual labour employed in domestic ship building industry.

Information contained in the volume is obtained from a large number of sources spread across both public as well as private sector. I wish to record my deep appreciation of the outstanding support and cooperation provided by all who have contributed to improve and complete this issue. This publication is a joint endeavour, with each officer contributing with their knowledge and professional commitment. Suggestions from the users of information are welcome to improve quality and coverage.


Gopal Krishna

New Delhi
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ACRONYMS

Nil	-	Nil
Neg	-	Negligible
-	-	Not available
(P)	-	Provisional
LST (T)	-	Landing Ship Tank (Large)
OSV	-	Offshore Supply vessels
PCV	-	Passenger Cargo vessels
DSV	-	Diving Support vessels
HSD	-	High Speed Diesel (Tanker)
FRP	-	Fiberglass Reinforced Plastic
SDBS	-	Seaward Defence Boats
FPVs	-	Fast Patrol vessels
MPV	-	Multi Purpose Vessels
AHTS	-	Anchor Handling Tug Supply Vessels
PCVs	-	Pollution Control vessels
OPVs	-	Offshore Patrol vessels
I V Barges	-	Inland Vessel Barges
KODS	-	Khidderpore Outer Dock Sill
GRP	-	Glass-reinforced Plastic
CGT	-	Compensated Gross Tonnage
GT	-	Gross Tonnage
DWT	-	Dead Weight Tonnage
APV	-	Advanced Patrol vessels
AHTS	-	Anchor handling Tug Supply vessels
ACRL	-	A.C. Roy & Comp. Ltd.
ASMPL	-	A.S. Moolobhoy Pvt. Ltd.
ABGS	-	ABG shipyard Ltd.
AAL	-	Alcock Ashdown (Gujarat) Ltd.
BDIL	-	Bharati Defence & Infrastructure Ltd.
BBPL	-	Bristol Boats Pvt. Ltd.
CSL	-	Cochin Shipyard Limited
C&CL	-	Chowgule & Co Ltd
CSPL	-	Chidambaram Shipcare Pvt. Ltd
DSEL	-	Dempo Shipbuilding & Engineering Pvt. Ltd.

FSL	-	Ferromar Shipping Pvt. Ltd.
GRSE	-	Garden Reach Ship-Builders & Engineers Ltd.
GSL	-	Goa Shipyard Ltd.
HSL	-	Hindustan Shipyard Ltd.
HDPEL	-	Hooghly Dock & Port Engineers Ltd.
HEW	-	Homa Enigneering Works
L & T	-	Larsen & Tourbo Shipbuilding Ltd
MDSL	-	Mazagaon Dock Shipbuilders Ltd
MIPL	-	Modest Infrastructure Pvt. Ltd.
MDD	-	Mandovi Dry Docks
MFPL	-	Marine Frontiers Pvt. Ltd.
MMRPL	-	Marks Marine Radio Pvt. Ltd.
NNSE	-	N N Shipbuilders and Engineers Pvt. Ltd
RNEL	-	Reliance Naval and Engineering Ltd.
SWL	-	Shalimar Works Ltd.
SKL	-	Sembmarine Kakinada Ltd.
SSPL	-	Shoft Shipyard Pvt. Ltd.
TDPL	-	Timblo Drydocks Pvt. Ltd.
TSL	-	Tebma Shipyard Ltd
TWL	-	Titagarh Wagons Ltd.
VMS	-	Vijai Marine Shipyard
WCSL	-	West Coast Shipyard Ltd.

CONTENTS

Tables		Page No.
AN OVERVIEW		
		i-xx
SECTION – 1: INDIA'S SHIP-BUILDING INDUSTRY		
INTRODUCTION		1-5
1.1	Ship Building Maximum Size/ Capacity of the Company–By Type and Size (As on 31 st March, 2019)	6-8
1.2	Ship Building Maximum Size/ Capacity–By Company Wise (2015-16 to 2018-19)	9
1.3	Ship Order Book Position–By Type of Vessel (As on 31 st March, 2019)	10-12
1.4	No. of Ships on Order, Company- wise (2016-19)	13
1.5	Size and Number of Ships Delivered, Company- wise (2015-16 to 2018-19)	14-15
1.6	No. of Ships on Order and Number of Ships Delivered, Company- wise (2015-16 to 2018-19)	16
1.7	No. of Ships-By Keel Laid, Launched and Ships Under Construction, Company- Wise (2015-16 to 2018-19)	17-18
SECTION – 2: INDIA'S SHIP-REPAIRING INDUSTRY		
INTRODUCTION		19-22
2.1	Ship Repairing Capacity of the Company (As on 31 st March, 2019)	23-25
2.2	Ship Repairing Capacity-By Company and Maximum Size (2016- 2019)	26
2.3	Ship Repairing Facilities, Company- wise for Dry Docks & Wet Docks (As on 31 st March, 2019)	27
2.3a	Ship Repairing Facilities, Company- wise for Other Facilities (As on 31 st March, 2019)	28-29
2.4	No. of Ships Repaired and Earnings, Company-wise (2015-16 to 2018-19)	30-31
2.5	Dry Dock & Ship Repairing Facilities at Major Ports (2018-19)	32
2.6	Dry Dock Hire Charges Existing at Major Ports	33-34
2.7	Equipments Available at Major Ports	35
SECTION – 3: EMPLOYMENT IN SHIP- BUILDING/SHIP - REPAIRING INDUSTRY		
INTRODUCTION		36-37
3.1	Employment in Ship-Building/Ship-Repairing Companies (As on 31 st March, 2019)	38
3.2	Employment Pattern in Ship-Building/Ship-Repairing Companies (2015-2019)	39
SECTION – 4: FINANCIAL POSITION OF SHIP-BUILDING/ SHIP-REPAIRING COMPANIES		
INTRODUCTION		40-41
4.1	Financial Performance (Income Earned & Expenditure), Company wise (2015-2019)	42-44
SECTION – 5: INTERNATIONAL SCENARIO		
INTRODUCTION		45-47
5.1	Ships on Order and Completed (1999-2018)	48
5.2	Ships on Order by Major Types and Company of Build (As on 1 st July, 2018)	49
5.3	Ships on Order by Type (2016-18)	50
5.4	Merchant Ships Completed –By Country of Build (2015-17)	51
5.5	World Merchant Ships Completed- By Principal Types (1989-2017)	52-53
5.6	Total Order Book – By Country of Build (As on 1 st July, 2018)	54
APPENDIX		
Terminology Used in Shipping		

AN OVERVIEW

Shipbuilding is technology driven, skill and material intensive assembly operation. Being a labour intensive industry, the cost of labour plays an important determinant in a country's competitive position vis-à-vis others. Over the years, the industry has shifted from Europe to Japan and then to Republic of Korea and has now taken firm roots in China. The factors governing this shift have been relatively high wage in Europe coupled with strong competitive strength of manufacturing and steel making sectors and active state support in the leading shipbuilding nations of East & Far East Asia. This decisive shift in shipbuilding activities from Europe to Asia has opened up window of opportunities for Indian ship yards in both public and private sectors. Over 90% of shipbuilding in 2018 occurred in China, the Republic of Korea and Japan.

2. India has a coastline of 7,517 Kms. with 12 Major ports and 205 notified Non-major Ports facilitating sea-borne trade. Coastal and overseas cargo movement is effected through ocean-going vessels. In addition, small ships/crafts also ply on inland waterways and canals. Indian owned ships/vessels carried 7.7% of India's overseas trade during 2018-19. India's emergence as a major economic power would mean greater integration in terms of trade with the rest of the world requiring huge shipping tonnage. As on 31st March 2019, Indian shipping tonnage was 12.78 million Gross Registered Tonnage (GRT) with 1404 ships.

3. With the opening of Indian economy, there has been a steady increase in handling of cargo traffic at Indian Ports. India's share in global exports has increased from 0.8% in 2003 to 1.7% in 2018 (Source: World Trade Statistical Review, 2019). To sustain the momentum of foreign trade and improve competitiveness, the country would need adequate and efficient infrastructure in terms of ports, ships and maritime services.

4. At the time of independence, there were about a dozen shipyards around Kolkata and Mumbai, which rose to around 45 shipyards in the late seventies. At present, there are 30 shipyards, out of which 8 shipyards are in the public sector and the rest are in the private sector. The demand for ships, semi-submersibles and port auxiliary vessels, new ship building as well as ship-repair activities are projected to grow in view of rising cargo traffic from/to India in coming years.

The “Manufacturing Plan – Strategies for Accelerating Growth of Manufacturing in India in the 12th Five Year Plan and Beyond” released by the erstwhile Planning Commission lists “Ship building and Ship Repair” as one of the key sectors of strategic importance.

5. ‘Make in India’ has been initiated to promote growth of manufacturing sector in the country as it has higher employment multiplier effects compared to service and agriculture sectors. An impetus on shipbuilding and ship repair industry in India is needed for the following reasons:-

(a) The shipbuilding industry has the same impact as infrastructure sectors due to higher multiplier effects on investment and turnover and high employment potential.

(b) The shipbuilding industry is a strategically important industry. To ensure safety of our vast coastline, naval requirement of sophisticated and modern vessels is growing rapidly.

6. The Indian Ship-Building Industry can broadly be categorized into following categories:-

- (i) Large ocean-going vessels catering to overseas as well as coastal trade;
- (ii) Medium size specialized vessels like Port Crafts, Fishing Trawlers, Offshore vessels, Inland and other smaller crafts and;
- (iii) Defence /Naval crafts and Coast Guard Vessels.

7. There are 33 dry-docks for repairing ships in India both in public and private sector as per data reported. These dry docks include the 9 dry docks operated by 5 major ports. The major ports which have no dry-dock facilities are Mormugao Port, JNPT, New Mangalore, Chennai, Kamrajar, V.O. Chidambarnar and Haldia Dock Complex of Kolkata Port. Cochin Port Trust has handed over its Dry Dock to M/s Cochin Shipyard Ltd.

8. MAJOR SHIPYARDS AND R&D FACILITIES IN THE PUBLIC SECTOR

UNDER THE MINISTRY OF SHIPPING:

- Cochin Shipyard Limited, Kochi
- Hooghly Dock and Port Engineers Limited, Kolkata

UNDER MINISTRY OF DEFENCE:

- Hindustan Shipyard Limited, Visakhapatnam
- Mazagon Dock Limited, Mumbai
- Garden Reach Ship-builders and Engineers Limited, Kolkata*.

(*Rajabagan Dockyard Limited, under Central Inland Water Transport Corporation, Kolkata merged with Garden Reach Shipbuilders and Engineers Ltd. Kolkata w.e.f. 1st July 2006.)

- Goa Shipyard Limited, Goa

UNDER THE CONTROL OF STATE GOVERNMENTS:

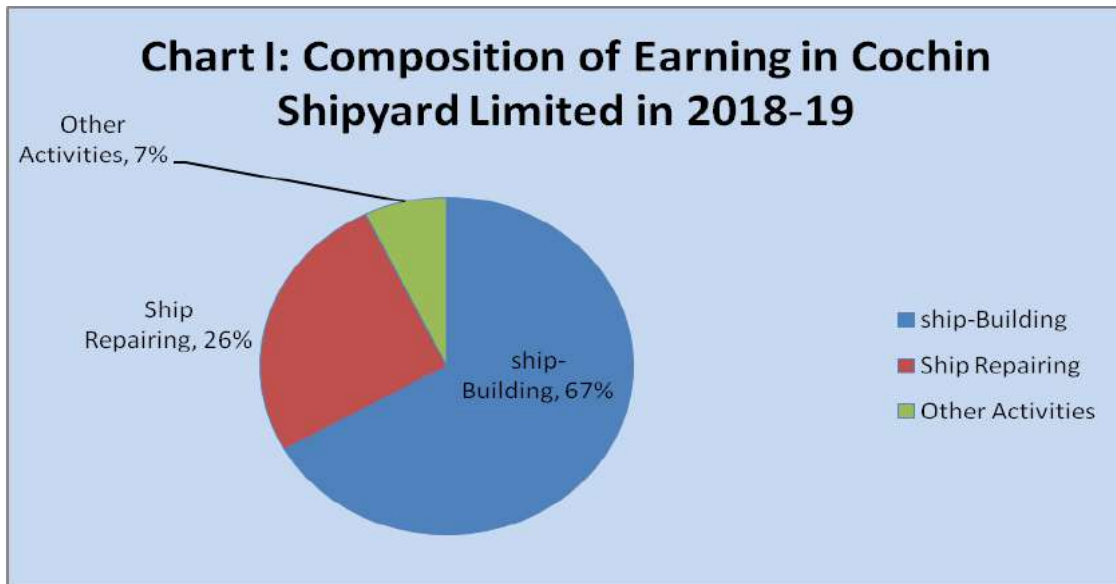
- Alcock Ashdown Co. Limited, Gujarat
- Shalimar Works Limited, Kolkata, West Bengal,

8.1 COCHIN SHIPYARD LIMITED (CSL)

8.1.1 Cochin Shipyard is strategically located midway on the international sea route, connecting Europe, West Asia and the Pacific Rim. It has evolved into a builder of large size vessels in India for the Merchant Navy and the Indian Navy. This Greenfield shipyard was incorporated in the year 1972 under technical collaboration with M/s MHI, Japan.

8.1.2 During the year 2018-19, the yard completed delivery of three Tuna Long Liner Cum Gilnetter Fishing Boats for the beneficiaries of Tamil Nadu.

8.1.3 The percentage shares of income earned by Cochin Shipyard Ltd. from ship building, ship repairing and other activities during 2018-19 are depicted in chart I.



8.1.4 Ship repair Industry

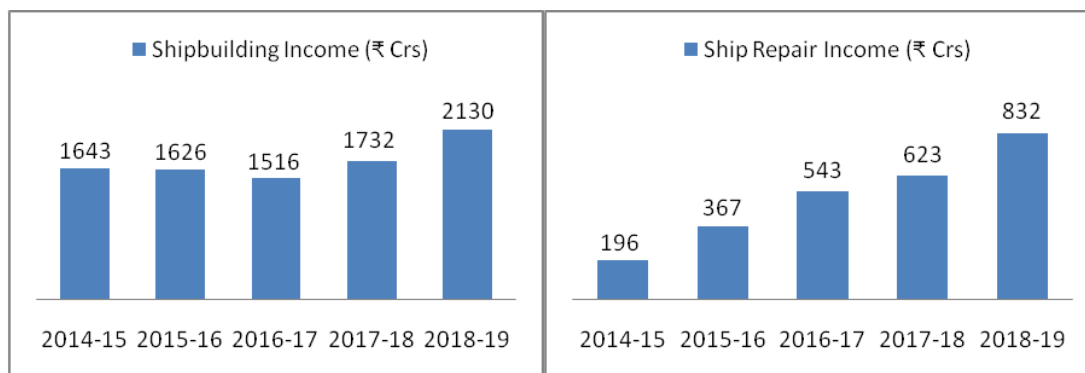
- (a) One of the major initiatives under the Sagarmala project was to lease out the ship repair facilities available at the major ports to specialists to generate more revenue and create a positive ship repair industrial climate. Based on this, the Ministry had decided that CSL, a Govt. entity under the same Ministry may be offered the first opportunity for ship repair operations at various port facilities.

- (b) Accordingly, CSL entered into an agreement with Mumbai Port Trust on October 20, 2018 and commenced operations and management of the Indira Dock on January 18, 2019. CSL has also signed an MOU with Kolkata Port Trust to take over their Netaji Subhas Dock on lease basis. Similarly, discussions are underway for operation & maintenance of the Marine Dockyard facility under the A&N administration in Port Blair. These initiatives would help better utilization of existing ship repair facilities in the country and is likely to positively impact the Company's revenue.

8.1.5 Financial Highlights

- (a) The Company achieved a total shipbuilding income of ₹2,130.18 crores during 2018-19 as against ₹1,731.86 crores in 2017-18. During the year 2018-19, CSL delivered three Tuna Long Liner Cum Gilnetter Fishing Boats for the beneficiaries of Tamil Nadu.

(b) During the year, the Company achieved a total ship repair income of ₹831.97 crores as compared to ₹623.27 crores during the financial year 2017-18. Major vessels repaired during the year include INS Vikramaditya, INS Shardul, Modu Sagar Bhushan, ICGS Samar, INS Sagardhwani, RV Sindhu Sadhana, INS Jamuna etc.



8.1.6 Research and Development Activities

R&D activities have been undertaken during the year, mainly in the areas of welding procedure development. Weld procedure development was undertaken in-house for welding of lower thickness grade A plate using SAW process with ceramic backing and a Weld Procedure Specification (WPS) has been prepared. This new process saves considerable amount of man hour and effort since turning of large welded plates is avoided and helps in completing the weld pass in single side. The procedure has been validated by ABS Classification Society.

8.2 HOOGHLY DOCK & PORT ENGINEERS LIMITED, KOLKATA (HDPEL)

8.2.1 HDPEL, situated at Kolkata, is one of the oldest shipyards in India. It was established in 1819 in the private sector known as Hooghly Docking & Engineering Company Limited. On merger of the Port Engineering Works with Hooghly Docking & Engineering Limited, the Hooghly Dock & Port Engineers Limited was formed by an Act of Parliament “The Hooghly Docking and Engineering Company Limited (Acquisition and Transfer of Undertakings) Act, 1984”

8.2.2 The Government of India took it over to utilize the available infrastructure and augment the ship building capacity. The nationalized company was with the M/o Industry till July 1986 and thereafter was transferred to the then M/o Surface Transport now (Ministry of Shipping).

8.2.3 Joint Venture of CSL (Cochin Shipyard Limited) with Hooghly Dock and Port Engineers Ltd. (HDPEL)

- (a) The Ministry of Shipping vide Letter No. SY-11018/1/2010- HDPE dated March 29, 2017 approved the formation of joint venture partnership between Cochin Shipyard (74% stake in equity) and HDPEL (26% stake in equity) for upgradation and modernization of shipbuilding infrastructure at the two shipyard sites of Salkia and Nazirgunge in Kolkata.
- (b) On October 23, 2017 a joint venture company named Hooghly Cochin Shipyard Ltd. (HCSL) has been incorporated as a subsidiary company of Cochin Shipyard. The Company executed shareholders agreement on November 17, 2017, and concession agreement and lease agreement were executed on January 19, 2018. The consultancy work for DPR is awarded to M/s. KITCO.

8.2.4 The percentage shares of income earned by Hooghly Dock & Port Engineers Ltd. from ship building, ship repairing and other activities during 2018-19 as depicted from table 4.1 (Page No. 42-44) indicates that income is only from other activities in “HDPEL”.

8.3 GOA SHIPYARD LIMITED

Goa Shipyard Ltd (GSL) is one of the leading shipyards, building medium- sized sophisticated vessels for Indian Navy and Indian Coast Guard and others. Goa Shipyard Limited is located at Vasco da Gama, Goa on the southern bank of river Zuari. Goa Shipyard Limited (GSL) was established by the Portuguese, on 26 November 1957 as ‘Estaleros Navais de Goa’. It started functioning under its own Board of Directors since 26 September 1967. GSL is a CPSE under the administrative control of Ministry of Defence, Department of Defence Production with 98.3% of its shareholding held by the Government of India. **GSL is capable of indigenously designing and building state of the art high technology and sophisticated ships to cater for maritime security requirements of the country and its friendly neighbours. GSL has its in-house R&D unit equipped with state of the art CAD/CAM facilities using world class AVEVA Marine software which is recognized by DSIR, Ministry of Science & Technology, Govt. of India.** GSL has designed, built and commissioned a wide range of sophisticated vessels for varied applications in the defence and commercial sectors with special expertise in building modern Patrol Vessels of Steel, Aluminium and now Composite (GRP) hull structure. Having built and delivered 216 ships

and 157 GRP boats in the last six decades, **GSL is a Miniratna, Category-I, ISO 9001:2015 (QMS), 14001:2015 (EMS) and 45001:2018 (OHSMS) certified company** with state of the art infrastructure. About 66% of its income is from Shipbuilding, 20% from Ship repairing and rest from other sources.

8.4 GARDEN REACH SHIPBUILDERS & ENGINEERS LIMITED

8.4.1. The odyssey of Garden Reach Shipbuilders & Engineers Ltd. (GRSE), began in 1884, when it started its journey as a small workshop to repair vessels of River Steam Navigation Company. During the Second World War (1939-45) the Company made its mark in carrying out construction, conversion and repair of around 4000 merchant & naval vessels. The Company was taken over by the Government of India in 1960. GRSE, then known as Garden Reach Workshop Ltd., was the first shipyard of independent India to build a Seaward Defence Boat(SDB) INS Ajay and delivered the same to the Indian Navy in 1961, within a year of being taken over. GRSE was conferred the status of a Mini-Ratna Category I Company in the year 2006. The In-House Design & Construction of “CGS Barracuda”- the first ever Export Warship of India, has been yet another feather in the cap of GRSE for which GRSE received the Defence Minister’s Award for Excellence in in-house design development.

8.4.2. GRSE is the biggest Defence Shipyard of India for asset holding and the facilities are spread across seven units over an area of 176.15 acres. GRSE is a Defence Public Sector Undertaking (DPSU) with shipbuilding its core business and also the only DPSU shipyard of the country involved in Engineering and Engine business. It is a profit making and dividend paying DPSU for the last 25 years and listed in BSE & NSE on 10th October, 2018. GRSE designs, develops, constructs and supplies warships and other ships primarily required for Indian Navy & Indian Coast Guard. The Company has full-fledge design department equipped with latest software and State of the Art facilities to cater to the requirements of shipbuilding business. GRSE has a robust R&D Plan to monitor the R&D and Innovative activities in the company.

8.4.3. GRSE has built around 780 platforms which include 100 warships to Indian Navy, Indian Coast Guard & Government of Mauritius which is highest number of warships built & delivered by any shipyard in the country. From building 05 ton boats to 24600 ton Fleet Tanker, GRSE has proved its mettle as a pioneer warship builder of the nation.

8.4.4. Over the years, GRSE has established well proven capabilities for in-house ship design & ship building and has made significant contribution to the success of indigenous warship construction program by successfully designing and building complex warships such as Frigates and Anti-Submarine Warfare Coverttes, Fleet Tanker, Landing Ship Tank (Large), Offshore Patrol Vessel, Fast Attack Crafts, Inshore Patrol Vessel, Fast Patrol Vessels, Water Jet Fast Attack Crafts, Survey Vessels, Ocean Going Tugs etc. GRSE has a dedicated facility for construction of smaller warships for Indian Navy and Indian Coast Guard at its unit called Rajabagan Dockyard. This unit was acquired in 2006 from CIWTC and turned around from a sick unit to a profit making one. GRSE inducted latest technology in ship design by establishing the virtual reality lab in 2018 for achieving better ergonomics and in-depth understanding of the details of the Ship at the Design Stage itself.

8.4.5. Apart from shipbuilding & ship repairs, GRSE has diversified into Engineering Business and is the only Defence Shipyard to have done so. Engineering product profile includes pre-fabricated steel bridges, various deck machinery items such as Anchor Capstans, Boat Davits, Pump etc. & Assembly/ Testing/ Overhauling of Motor & Turbine Union (MTU) Diesel Engines. About 79% of its income is from Shipbuilding, 10% from Ship repairing and 11% from other sources.

8.5 HINDUSTAN SHIPYARD LTD

1. Hindustan Shipyard Ltd., strategically located on the East Coast of the Indian peninsula, at Visakhapatnam, Andhra Pradesh, is the nation's premier shipbuilding organization catering to the needs of shipbuilding, ship repairs, submarine construction and refits as well as design and construction of sophisticated state-of-the-art offshore and onshore structures. Direct sea access, excellent infrastructure, skilled work force, rich expertise garnered over the years in building 189 vessels (including 11 wellhead platforms), repairing 1975 vessels of various types and refitting 3 classes of submarines enable HSL to offer competent services for the defence and maritime sectors.

2. The shipyard was acquired by GoI and incorporated as Hindustan Shipyard Ltd on 21 Jan 1952. It became a fully owned GoI undertaking in 1961 under the administrative control of Ministry of Shipping. Considering the strategic requirements, the yard was brought under the

administrative control of the Ministry of Defence on 22 Feb 2010. The Registered Office of the company is located in Visakhapatnam and has regional office at New Delhi.

8.5.1. Shipbuilding

1. Existing Infrastructure and Facilities. Sprawling in an area of 117 acres, the shipyard has an ergonomic layout that ensures unidirectional material flow. 2000 T / month of steel can be processed in the yard with a stockyard that can hold 30,000 tonnes of steel, modern plate and section treatment plant, NC Cutting Machines, heavy duty presses, self-elevating trucks capable of handling blocks up to 250 tonnes and large prefabrication shops with EOT cranes of adequate capacity. The hull construction facilities include a fully-covered Building Dock (240 x 53 M) equipped with cranes of max. capacity of 300 T and three Slip Ways capable of launching up to 33000 DWT. Indeed, the first ever 30000 DWT launch in India was done in 2007 in HSL. The Yard has a long outfitting quay (460 m) of 10 M clear depth equipped with self-contained services and facilities.

2. In addition to the existing facilities, the yard has about 21 Acres of land (OPF Yard) and 20 Acres of land in the colony which can be effectively utilised for augmenting the existing facilities for new construction projects.

3. Design Resources. HSL has a well-equipped Design & Drawing Office, which in the past has developed in-house design for a number of vessels. HSL's design department has been recognized as in-house R&D unit by Department of Scientific & Industrial Research (DSIR), Ministry of Science & Technology. HSL's design capability embraces wide spectrum of general and special purpose vessels. The design office has been upgraded in the recent past under modernisation program. With this, the design office has mastered the art of producing composite drawings which would enable adoption of integrated modular construction methodology with a high level of pre-outfitting of blocks-modules.

8.5.2. Ship Repairs

The Dry dock, constructed in the year 1971, is an important adjunct to the Shipyard for undertaking repairs of ships and oil rigs. With a size of 244 x 38 M, it is capable of handling vessels up to 70,000 DWT. The Dry Dock, the biggest and modern dock in the East Coast, with 544 meters of berths with a depth of 10 M, has accomplished intricate repair jobs on a variety of Naval Ships including Submarines, Merchant Ships and Oil Rigs.

8.5.3 Submarine Refit

HSL happens to be the only yard in India to have carried out the refits of three classes of submarines (refit of two Egyptian submarines in 1971, refit of F-class (INS Vagli) and EKM

class (INS Sindhukirti) submarine). The Medium Repair-cum-Modernisation of Russian made INS Sindhukirti, was successfully completed and handed over to the Navy on 26 Jun 2015. HSL has requisite capability, infrastructure & spare capacity for executing EKM class submarine refits. As part of capability enhancement, HSL has signed a comprehensive MoU with USBC of Russia to provide complete technical-logistics support for such works / refits / upgrades.

8.5.4 Technology Up-gradation

HSL is also venturing into the latest technological up gradations available in the market, aiming for a seamless process flow of information and to bring in best practices adopted in other Indian and foreign shipyards. HSL has partnered with M/s Tech Mahindra Ltd as System Integrator (SI) to implement SAP S4/HANA ERP system. The unique feature of this ERP system would be integration of Design software, Aveva Marine including its 3D features with an embedded PLM in SAP. This would be first time in any Indian Shipyard that Design software would be integrated with any ERP software through PLM. 'GO LIVE' of the SAP S4/HANA ERP system commenced on 10 May 2019.

8.5.5. Financial Performance:

1. The shipyard has undergone a major financial turnaround by achieving operating profit and net profit for the last four consecutive years despite legacy liabilities which has taken away a sizable portion of its earnings. HSL has achieved an operating profit of Rs 68.08 Cr and profit after tax (PAT) of Rs 36.23 Cr during FY 2018-19.
2. HSL has been delivered 13 Ships and repaired 61 Ships during last five years. During 2018-19, about 24% of its income is from Shipbuilding, 74% from Ship repairing and 2% from other sources

8.5.6. Improvement in Order Book

HSL has turned around in securing orders in the competitive bidding process. HSL has emerged as the lowest bidder (L1) in the competitive tendering process for 4 tenders during the last three years. All these contracts have been secured amidst stiff competition from sister public sector shipyards and Private shipyards.

- (a) Construction of 2 Nos Diving Support Vessels worth Rs 2390 Cr for Indian Navy (this order is so far the highest since inception).
- (b) Construction of 04 Nos 50 Ton Bollard Pull Tugs worth Rs 260 Cr for Indian Navy.

- (c) Construction of 4 Nos. Pontoons (Rs 10 Cr) and 3 Nos. Flap Gates (Rs 20 Cr) for Naval Dockyard (Visakhapatnam).

8.5.7 Solar Power System

1. HSL has undertaken clean and green energy initiatives by inaugurating a 02 MW rooftop solar power system on September 21, 2018. This is the largest rooftop solar plant in Andhra Pradesh installed at a single location and will help HSL to save about Rs 48 lakh per annum in energy costs, while reducing its environmental footprint. The rooftop solar plant will meet around 35% of the HSL's total power demand, generating 28 lakh of units of clean energy per annum.
2. The entire project including design, supply, erection, testing, commissioning including warranty, operation & maintenance is being undertaken by M/s Clean Max without any operation and capital expenditure from the yard side. HSL is required to buy the generated power from M/s Clean Max at a cost of Rs 3.939/kWh as against Rs 5.60/kWh grid power of APEPDCL. Seven buildings in the shipyard premises have been equipped with solar panels, including the iconic blue sheds where naval ships & submarines are built and repaired. Overall the panels will result in the abatement of 2300 tons of CO₂ per annum, for the next 25 years. This abatement is equivalent to planting 58,000 full grown trees. While there is no investment on the part of HSL, as per the agreement arrived at with Clean Max, the yard has to buy power from it for 25 years. The project was executed under the Solar Energy Corporation of India (SECI) Rooftop Solar Scheme.

8.5.8 Product profile

Since inception, the Shipyard has built 189 ships including 11 wellhead platforms and repaired around 1975 vessels till date. The product profile includes cargo liners, bulk carriers, passenger vessels, offshore platform vessels, inshore platform vessels, survey vessel, mooring Vessel, HSD oiler, landing ship tanks, training Ship, tugs, supply vessels, drill ship, dredgers, oil recovery and pollution control vessel, research vessel, floating cranes, barges etc. for varied number of customers like Indian Navy, Indian Coast Guard, ONGC, GML, Port trusts, DCI, SCI, Andaman & Nicobar administration etc.

8.6. MAZGAON DOCK SHIPBUILDERS LIMITED

Mazgaon dock shipbuilders limited (MDL), aptly called "Ship Builders to the Nation", is one of India's leading Defence public sector undertaking shipyard under the Ministry of Defence. Main activities are construction of warships and submarines with facilities situated

at Mumbai having the capability to build warships, submarines, merchant ships upto 40,000 DWT.

8.6.1 Ship Building Introduction

1. MDL has constructed a variety of ships both for the defence and the commercial sector. The first modern warship to be built by the company was the Leander Class frigate "INS NILGIRI". The NILGIRI was launched in October, 1968 and commissioned in 1972. During the next nine years Mazagon Dock built and delivered five more frigates in this class for the Indian Navy. Indian Naval Ships Nilgiri, Himgiri, Udaygiri, Dunagiri, Taragiri and Vindhyagiri formed the main thrust package of the Navy in the seventies and eighties.

2. As the construction of the Leander series was nearing completion, the Navy evolved a design for a new generation frigate. Mazagon Dock was responsible for making all production drawings in respect of the new frigate. Unlike the Leanders, the new frigate was Indian in concept, design and execution. The ship was larger than the Leander frigate with about 25% more displacement, and could embark two large helicopters. This new class was christened as the "GODAVARI Class", and the first ship of the series "INS GODAVARI" was launched in May 1980 and commissioned in December 1983. INS GANGA and INS GOMATI followed in 1985 and 1988.

3. MDL has also constructed two corvettes for the Navy. The Corvettes are smaller warships displacing about 1,500 tonnes. The first of the series, "INS KHUKRI" was commissioned in August 1989 and the second, "INS KUTHAR" in June 1990. Mazagon Dock has also built fast and powerful Missile Boats for the Navy. Three missile boats INS VIBHUTI, INS VIPUL and INS NASHAK were commissioned into the Navy between 1991 and 1994. A fourth boat, "INS PRABAL" launched at the Shipyard in September 2000 was commissioned in March 2002.

4. MDL has delivered three Shivalik class frigates, INS SHIVALIK, INS SAHYADRI and INS SATPURA to the MoD for use by the Indian Navy between 2010 and 2012. The P17 frigates are multi role frigates and first-of-its kind warships built in India incorporating stealth features.

5. MDL has also recently constructed and delivered three P15A destroyers, INS Kolkata, INS Kochi and INS Chennai to the MoD for use by the Indian Navy between 2014 and 2016. The role of the P15A Kolkata Class destroyers is to co-ordinate a task force in exerting sea control in a multi-threat environment. The P15A destroyers are capable of striking shore based targets and providing defence against hostile aircraft, submarines and surface ship

6. MDL is currently building four P-15 B Visakhapatnam Class destroyers and four P-17A Nilgiri Class Advanced stealth frigates and four in nos. scorpene class submarines (two has been delivered) for the MoD for use by the Indian Navy. MDL has a proven track record of delivering till date 27 nos. frontline warships with the state of the art technology including submarines to the Indian Navy.

7. Besides warships for the Navy, MDL has also constructed a series of Offshore Patrol Vessels for the Coast Guard. Seven Coast Guard Ships, which today form the mainstay of the Coast Guard fleet, were built and delivered to the Indian Coast Guard between December 1983 and March 1990. Construction of Border Out Posts for the BSF was undertaken by MDL. The BOPs are floating police stations, each with four high-speed boats. MDL has built and delivered such vessels.

8. MDL has developed a wide range of products for the commercial sector and has constructed a variety of ships ranging from Multipurpose Support Vessel, Tugs, Dredgers, Water Tankers, Passenger cum Cargo Vessels, Floating cranes, Offshore supply vessels, Pontoons etc. On the export front, two multipurpose support vessel designed for diesel fuel, fresh water and deck cargo carriage, ROV operations and for azimuth thruster operation were constructed and delivered by us for foreign clients. Till date MDL has exported more than 750 number of various ships to foreign clients.

9. As one of the lead shipyard of India, MDL is committed to delivering Quality Ships, on time. MDL has come a long way from being a small repair yard in the late 18th century to the country's leading Defence Shipyard capable of meeting the requirements of the Indian Navy towards its warship building programmes including submarines. With the current order book position of Rs 52,000 crores, MDL has become one of the most progressive shipyards in the world always striving aggressively in meeting the highest level of customer satisfaction at all times both locally and globally. During 2018-19, about 87.5% of income is from Shipbuilding, 0.5% from Ship repairing and 12% from other sources.

8.7. SHALIMAR WORKS LIMITED

The Liverpool based Turner & Co. that was established in Kolkata in 1867 and by 1877 ranked third among the Calcutta Shipping Agencies. Shalimar Works under Turner Morrison Co. was one of the pioneer industries in Ship repairing with its history even older than Garden Reach Shipbuilders & Engineers Ltd. (GRSE) and Bengal Nagpur Railway (BNR) and had its hey days under the British era.

Post-independence with partition of Bengal, development of faster speed rail & road transport system and silting of the river there was a gradual decline of ships coming to Kolkata Port, thus reducing the roaring ship-repairing business. Meanwhile Shalimar Works still continued with its form of business till late 1960s gradually suffering a steady decline consequent to reducing business. With fast depleting market, eventually a Lock-out was declared in The Shalimar Works in 1974 and the Company was out of operation for 3½ years. With the initiative of the Govt. of West Bengal the Company was re-opened on 1977 under the old management.

Inspite of assistance extended by the state Govt. and the UCO Bank, the then management miserably failed to bring back the Company on a viable footing and the financial position of the Company went in bad shape in early 1979. After discussion, among Turner Morrison & Co. Ltd., UCO bank and the Govt. of West Bengal, a settlement was arrived to keep the Company open for safeguarding the interests of its employees and to support the cause, the Govt. of West Bengal provided bridging loans from time to time in running the organization.

With a background of such circumstances, to run the organization in a continued manner and also to protect the interests of its employees, the State Govt. of West Bengal finally established The Shalimar Works (1980) Ltd. incorporated in 1981 by purchasing the assets of the erstwhile Company. New era of the Company was thus initiated.

Over the years post-independence it had, with depleting ship-repairing business, diversified into castings and other jobbing activities suiting to market demands. Due to non-adoption of modern engineering practices for manufacturing of such products, depleting financial strength, as well as lack of demand for such items created a dearth of orders for the Company.

The Company at present is primarily engaged in construction and delivery of auxiliary ships to Indian Navy and repairing of vessels for West Bengal Tourism Development Corporation, Surface Transport Corporation and Kolkata Port Trust besides fabricating ship-blocks of warships for Garden Reach Shipbuilders & Engineers. Over the past few years the Company with conventional shipbuilding and launching practices, has been able to deliver on an average only 2 nos. ships per year of capacity max. 55M long x 10M wide at a price of approx. Rs. 11 Cr each.

8.7.1. Existing Facility

The shipyard encompassing an approx. area of 46,000M² has a total river frontage of approx. 240M of which open land water frontage is 85M for shipbuilding berths. The river being tidal has a varying high-draft of 5.1M to 6.8M and corresponding low-draft of 0.8M to 1.5M over the months in reference to the KODS level of KoPT. The KODS level at the edge of the river bank in front of the building berth is varying between -0₂ to +0₁.

- i) Shipbuilding bay: Over the years the open land of the shipbuilding bay at the river bank has got eroded by nearly 20M inward and continuously getting eroded day by day, thus reducing the length of the ships that can be built. The existing building berth area is 4270M² only and nearly 1420M² of river bank has eroded away.

With accumulation of silt not only the launching draft is adversely affected but the launching length has to be increased for avoiding the vessels being grounded. As the shipyard follows the old conventional method of launching on wooden slipways, launching of long or heavy ship becomes an absolutely risky affair.

- ii) Floating Fit-out area: There is only one 18.5M long Jetty protruding 45M into the river for floating fit-out work. As a result at times 2 or even 3 vessels are tied up against each other. This creates a serious constrain in moving materials and working by moving across from one vessel to the other. As the vessels are of different size and shape, during tidal bore in the river there is a high risk of side-hulls & railings of vessels getting damaged due to banging against each-other.

- iii) Dry Docking / Wet Basin: Presently the shipyard has a small creek of 610M² for blocking / beaching small vessels up to 25M length for repairing. Therefore for any major under water work or repair the shipyard lacks the necessary facility of a dry basin with gate. Without the provision of a gate, the open creek in the tidal river is devoid of steady water level to be used as a wet basin.

- iv) Fabrication Bays: There are 5 sheds available for panel fabrication, constructing doors, ladders, hatches, etc., ventilation ducting and pipe line construction layout, however nearly 40% of the floor area is utilized for storing of various materials.

- v) Material Handling: There is serious restriction of open passage movement of material and crane across the fabrication bays and building berths. Presently there are following handling facilities available which also need to be revamped:

EOT cranes in covered sheds – 3T- 1 no., 5T- 4 nos.and 10T- 2 nos. Total being 7 nos.

Open yard mobile cranes – 30T- 1 no, 14T (hydra)- 1 noand 10T- 1 no.Total 3 nos.

Gantry cranes (manual) – 2T- 2 nos., at Jetty and Main gate.

Fork lift – 3T- 1 no. and Lorry – 1 no.

- vi) Storage space:Other than General Stores for consumables & Imported Bonded stores for small size items, there are no proper dedicated storage facilities for different category of materials and these are stored haphazardly scattered across the shipyard depending on free space availability.

- vii) Production Facilities:The shipyard was primarily set-up for ship-repair and consequently has a large number of machine tools dating to British era for rectification of propulsion system and deck machinery and these machines e.g., lathe, boring, planer, radial drills, etc.,can be utilizedbut need to be repaired.

Moreover, the plate bending, pipe bending, nibbler, etc. have either pneumatic or line shaft belting as prime-mover. Thus the fabrication system of marking, cutting and bending the plates is totally depended on manual process having a higher level of scrap generation. Similarly in case of pipe line assembly the flanges and bends are welded, in absence of pipe bending and pipe flanging machines, however in case of plate welding TIG / MIG machines are used.

- viii) Engineering Utilities: The shipyard has its power supply from CESC from 6.6KVA line and has a max. specified demand of 200KVA. The supply is stepped down to 440V. The power house has a 400KVA Transformer, circuit breaker and capacitor bank for pF which are required to be revamped to reduce power loss. There are 2 nos. 125KVA Gensets as power back-up and those require total reconditioning. The electrical Main panel and DBs with underground power cables also require a serious relook based on change of product-mixand construction area relocation.

The plant has an old electric driven compressor of 300 cfm for running pneumatic driven machines. It also has one portable diesel driven compressor for blasting & painting that is inadequate.

Though there are 3 nos. tower lights, but in general illumination level within the sheds and shipbuilding bay is poor.

There is a 10,000 Lt capacity overhead fresh-water storage tank.

8.7.2. Capability enhancement through upgradation

With the upgraded shipyard becoming operational, the overall capability enhancement at a glance would be as under:

- a) Yearly Turnover: From the existing volume of 2 ships per year the quantum will go up to 3 ships in a year for large and proto-type, while the volume can be even 4 ships in a year for smaller and repeat variety.
- b) Max. Ship size: At present the maximum length of ship that can be built is only 55M. With the shipbuilding bay being re-laid out, ship length of 90M can be constructed.
- c) Launching System: The upgraded launching system of carriage trolley on rails as against the existing system of launching on wooden slides, larger & heavier vessels can be launched positively without the risk of uncontrolled movement.
- d) Float Basin: In the existing *kanchhacreek* at the most 25M long small vessel can be blocked / beached. With the new weight cum dry basin 55M long vessel can be blocked for underwater repair and painting. Moreover the same basin in wet condition can also serve the purpose of a still-water floating jetty for carrying out final stern alignment and inclining experiment, etc.
- e) Job-quality: With introduction of CNC Plate Cutting and Plate Bending, Pipe Bending and Pipe Flaring Machines, the steel fabrication quality as well as pipe line system will certainly improve. Introduction of such machinery shall also reduce scrap generation.
- f) Productivity: With introduction of Cranes and other materials handling facility, new productive machines, systematic storing of materials shall reduce the time delay during production; thus improving overall productivity of the shipyard.

- g) FRP Boats: FRP Boats up to 25M long can be constructed in temperature and humidity controlled atmosphere, and such facility will add to production of new variety of vessels.

MEASURES TO PROMOTE DOMESTIC SHIPBUILDING & REPAIR

A number of measures have been initiated by Ministry of Shipping to improve the viability of the ship manufacture and ship repair industry and encourage private sector participation, with emphasis on research.

9. SUBSIDY AND BUDGETARY SUPPORT TO INDIAN SHIPBUILDING INDUSTRY

9.1 Government of India is supporting Indian shipbuilding industry since 1971 by various policy measures such as pricing policy and shipbuilding subsidy policy. However, these policies were only applicable to Central Public Sector Shipyards building commercial vessels viz. Hindustan Shipyard Ltd., Vishakapatnam in 1971. Later on in 1972 Cochin Shipyard was established and the policies were applicable to them also. The policies were modified from time to time in 1981, 1993, 1995, 1997 and 2000. In October 2002, Government of India extended the shipbuilding subsidy scheme to all Indian shipyards including Non Central Public Sector Shipyards and Private Shipyards. To make existing shipbuilding scheme applicable to all shipyards, following modifications were made:

- For domestic orders obtained only through global tender process for construction of sea going vessel as defined under section 3(41) of Merchant Shipping Act 1958, 30% on the bid price at which the global tender was won was payable to the yard. However, the vessel was to be a merchant vessel of minimum length of 80 metres.
- For export orders obtained through global tender process or otherwise for construction of any type/size of vessel, 30% subsidy on the bid price or reasonable price in cases of negotiated orders, as the case may be, was payable to the yard. Price reasonableness certificate was issued by DG (shipping) for negotiated orders.

9.2 The shipbuilding subsidy scheme was applicable for those shipbuilding orders whose contracts were signed upto 14.08.2007. In Feb. 2009, the CCEA approved liquidation of

committed liabilities amounting to Rs. 5152 crore for 228 vessels and for which contracts were signed up to 14.08.2007. The following decisions were taken by CCEA:

- That subsidy to be released for all the cases for which contracts had been signed by 14.08.2007, as it is the committed liability of the Government of India. Subsidy will be released as per the guidelines modified from time to time and subject to submission of requisite documents in the format prescribed. Accordingly, budgetary provision of Rs. 5152 crores approx. may be approved for the period 2008-09 to 2013-14.
- Department of Shipping, Ministry of Shipping, Road Transport & Highways has made budgetary provisions for all shipyards except Defence Shipyards. Ministry of Defence made budgetary provisions for Defence shipyards under the administrative control of Ministry of Defence.
- A new scheme incorporating modified quantum and conditions for subsidy/fiscal measures for all contracts signed after 14.08.2007 is submitted.

9.3. Modified guidelines were issued on 29.09.2009. Till 31.03.2014, subsidy has been released for 121 vessels amounting to Rs. 1142 crore. Partial subsidy (10%/20%) has been released for 47 vessels. Full subsidy has been released for 74 vessels.

9.4. **New Financial Assistance Policy**

To encourage domestic shipbuilding and to provide a level playing field vis a vis foreign shipyards, the Union Cabinet approved the Shipbuilding Financial Assistance Policy for Indian Shipyards on December 09, 2015. The Government of India has approved a Rs. 4000 cr Financial Assistance Policy (FAP) to shipyards for 10 years for shipbuilding contracts secured between 01.04.2016 and 31.03.2026 (including these dates). Financial assistance will be granted to Indian Shipyards equal to 20% of the lower of “Contract Price” or the “Fair Price” or actual payments received of each vessel built by them for a period of at least 10 years commencing 2016-17. This rate of 20% will be reduced by 3% every three years. The quantum of financial assistance for a vessel shall be the product of the applicable rate of financial assistance prevailing on the date of Contract, and, the lowest of the contract price or the fair price when converted in Indian Rupees: Provided that, at the time of release of financial assistance, if the actual payment received for a vessel is lower than the contract price, such payment shall replace the contract price in the formulae for computation of the financial assistance. Further, the guidelines have been modified and consolidated in February, 2019.

2. Ministry of Shipping has released an amount of financial assistance on shipbuilding of Rs. 29.02 Cr in FY 2018-19.

3. The Cabinet Committee on Economic Affairs(CCEA) in its meeting held on 09.10.2019 has approved this Ministry's proposal regarding settlement of subsidy claims for executed shipbuilding contracts under the shipbuilding subsidy scheme, 2002-2007 wherein CCEA has approved extension of timeline and budgetary support beyond 31.03.2014 for release of committed liability of shipbuilding subsidy through budgetary support of approx. Rs.153 crores for a total number of 51 vessels, including retained subsidy for 47 vessels and full subsidy for 4 vessels. This subsidy is to be released in financial years 2019-20, 2020-21 and 2021-22.Guidelines are being formulated for release of funds.

Section-1

INDIA'S SHIP-BUILDING INDUSTRY

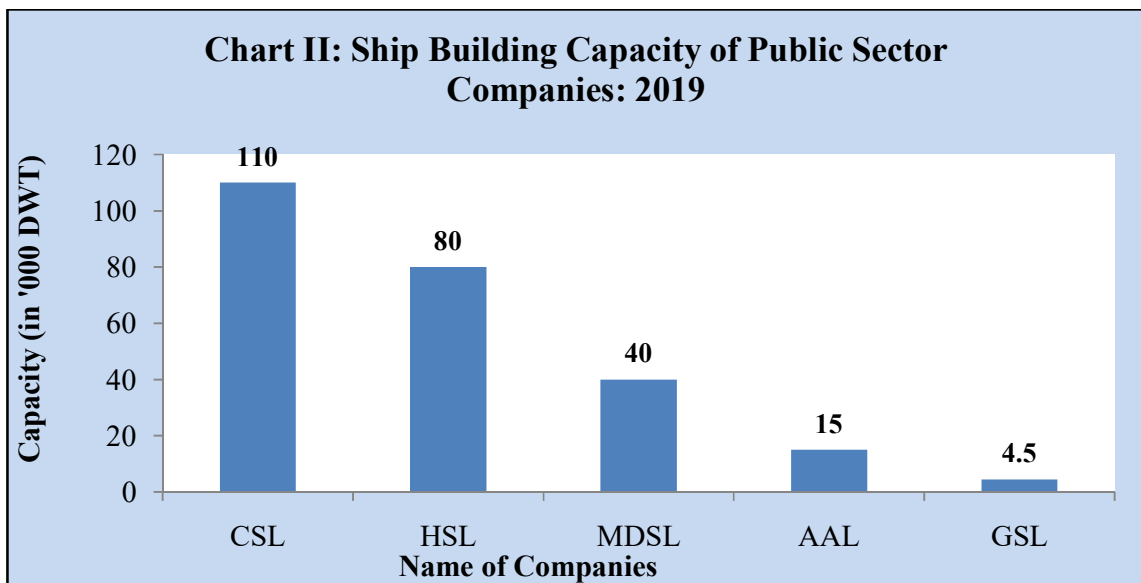
INDIA'S SHIPBUILDING INDUSTRY

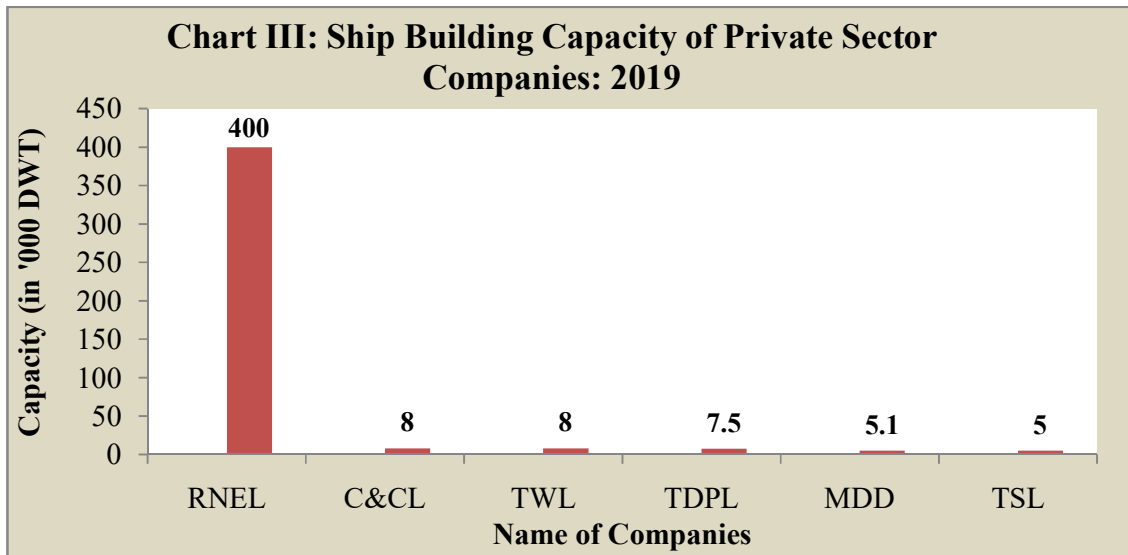
SHIPBUILDING CAPACITY:

1.1 Ship building capacity of a unit is defined in terms of the maximum carrying capacity of the ship that can be built by a shipyard measured in terms of Dead Weight Tonnage (DWT) which is the number of tonnes (one tonne = 2240 pounds) of stores, fuel and cargo that a ship can carry.

1.2 Amongst public sector companies, Cochin Shipyard Ltd. (CSL) possessed the maximum ship building capacity (110 thousand DWT) followed by Hindustan Shipyard Ltd. (HSL) (80 thousand DWT), Mazgaon Dock Shipbuilders Ltd.(MDSL) (40 thousand DWT) and Alcock Ashdown Ltd (AAL) (15 thousand DWT). Amongst the reporting private sector companies, Reliance Naval & Engineering Ltd. (RNEL) possessed the maximum ship building capacity (400 thousand DWT) followed by Chowgule & Co. Ltd. (C&CL) & Titagarh Wagons Ltd. (TWL) (8 thousand DWT) each, Timblo Drydock Pvt. Ltd. (TDPL) (7.5 thousand DWT), Mandovi Drydocks Ltd. (MDD) (5.10 thousand DWT) and Tebma Shipyard Ltd. (TSL) (5 thousand DWT).

Charts II and III (below) presents, the ship building capacity (in terms of their DWT) of some of the shipbuilding companies in public & private sector companies respectively as on 31st March 2019. Tables 1.2 provide the information on company wise shipbuilding capacity from the year 2015-16 to 2018-19 (both in public & private sector).





SHIPS ON ORDER

1.3 Indian ship-building companies at the end of 2018-19 had orders of 188 ships with gross DWT 171.75 thousand tonnes. As on 31st March, 2019 the public sector shipyards had orders of 111 ships of 123.68 thousand DWT from domestic companies. Amongst reporting companies, in terms of numbers, Cochin Shipyard Ltd. (47) had the highest number of ships on order followed by Hindustan Shipyard Ltd. (16), Garden Reach Ship-Building & Engineers Ltd. and Mazagaon Dock Shipbuilders Ltd. (14 each) and Goa Shipyard Ltd (9). Order book in terms of DWT was highest for Hindustan Shipyard Ltd with 58.32 thousand DWT, followed by Cochin Shipyard Ltd. with 49.27 thousand DWT and Garden Reach Ship-Building & Engineers Ltd. with 8.40 thousand DWT.

1.4 In private sector category, **Two Major Giants having major share in Ship Building and Ship Repairing industries namely *ABG Shipyard Ltd. and Bharti Defence and Infrastructure Ltd.*** as per their Public Notice dated 15th July, 2019 and 19th January, 2019 are under liquidation as per the Insolvency and Bankruptcy Code 2016 vide the order of the Hon'ble National Company Law Tribunal (NCLT), Ahmedabad Bench order No. IA 348 of 217 in C.P. (I.B) No. 53 of 2017 dated 25th April, 2019 and National Company Law Tribunal (NCLT), Mumbai Bench order No. MA 170/2018 CP292/ I&B/NCLT/ MAH/2019 dated 14th January, 2019 respectively. **In view of this, information for the year 2018-19 of these two companies is removed from the Publication.**

1.5 In private sector category as on 31st March, 2019, the shipyards had orders for 77 ships of total 48.06 thousand DWT. Out of these, 14 ships with total capacity of 31.78 thousand DWT were export orders and remaining 63 ships with total capacity of 16.28 thousand DWT were domestic orders. Amongst the reporting ship building companies in the private sector, Reliance Naval & Engineering Ltd. (28) had the highest number of ships on order with a total capacity of 1.50 thousand DWT followed by AC Roy & Co. (17) with a total capacity of 0.60 thousand DWT and Vijay Marine Shipyards (9) number of ships on order with a total capacity of 3.31 thousand DWT in 2018-19.

Amongst reporting companies, in terms of tonnage order book, the public sector and private sector accounted for a share of 72.0% (123.68 thousand DWT) and 28.0% (48.06 thousand DWT) respectively in the total tonnage (171.75 thousand DWT) of order book during 2018-19. Table 1.3 (a) contains Total Ship Order Book of Vessels by Domestic Order and by Export Order as on 31st March 2019.

COMPOSITION OF ORDER BOOK POSITION:

1.6 In the current order book, out of total 188 ships, 111 are with public sector yards and 77 are with private sector yards amounting to 123.68 thousand DWT and 48.06 thousand DWT respectively. **Table 3** below gives the Order Book with Indian Shipyards as on 31st March, 2019. The details are given in Table 1.3. Table 1.4 provides the information on company wise number of ships on order from the year 2015-16 to 2018-19 in public and private sector.

Type Yards	Vessel	Tankers	Dry Cargo	Bulk Cargo	Passengers	Others	Total
	Public Sector	No.	5	0	5	7	94
DWT		2.68	0	85.00	10.32	25.68	123.68
Private Sector	No.	4	8	0	3	62	77
	DWT	3.12	29.83	0	0.21	14.90	48.06
Total	No.	9	8	5	10	156	188
	DWT	5.80	29.83	85.00	10.53	40.58	171.75

SHIPS DELIVERED

1.7 During the year 2018-19, among public sector companies, Goa Shipyard Ltd. delivered highest tonnage with 2.00 thousand DWT consisting of 3 ships followed by Garden Reach Shipbuilders & Engineers Ltd at 0.71 thousand DWT (4 ships), Hindustan Shipyard Ltd. at 0.40 thousand DWT (6 ships) and Cochin Shipyard Ltd. at 0.15 thousand DWT (3 ships). Amongst reporting companies in the private sector, the highest tonnage was delivered by Mandovi Dry Docks at 12.97 thousand DWT (4 ships) followed by Titagarh Wagons Ltd. of 2.78 thousand DWT (3 ships).

Amongst reporting companies, in terms of tonnage delivered, the private sector and public sector accounted for a share of 86.6% (21.46 thousand DWT) and 13.4% (3.31 thousand DWT) respectively in the total tonnage (24.77 thousand DWT) delivered during 2018-19. Company wise number of ships delivered along with the size from financial year 2015-16 to 2018-19 in both public and private sector are given in the Table 1.5.

1.8 Company wise number of ships on order and delivered from 2015-16 to 2018-19 is given in Table 1.6 and number of ships by keel laid, launched and ships under construction from financial year 2015-16 to 2018-19 are given in Table no 1.7.

1.9 **Table 4** depicts the size and number of ships delivered by both public and private ship yards in India during 2017-18 and 2018-19.

Table No. 4 : Size and Number of Ships Delivered				
Name of Companies	Ships Delivered			
	2017-18		2018-19	
	No.	DWT('000)	No.	DWT('000)
(1)	(2)	(3)	(4)	(5)
A. PUBLIC SECTOR (Total)	15	5.01	17	3.31
1. Alcock Ashdown & Co. Ltd.	0	0	0	0
2. Cochin Shipyard Ltd.	2	0.12	3	0.15
3. Garden Reach Ship- Builders & Engineers	4	1.02	4	0.71
4. Goa Shipyard Ltd.	7	3.82	3	2.00
5. Hindustan Shipyard Ltd.	-	-	6	0.40
6. Hooghly Dock & Port Engineers Ltd.	-	-	-	-
7. Mazagaon Dock Shipbuilders Ltd.	1	-	-	-
8. Shalimar Works Ltd.***	1	0.05	1	0.05

	Ships Delivered			
	2017-18		2018-19	
	No.	DWT('000)	No.	DWT('000)
B. PRIVATE SECTOR (Total)	49	105.35	24	21.46
9. ABG Shipyard Ltd. @	-	-	-	-
10. A.C. Roy & Comp. Ltd.	10	3.41	2	1.01
11. A.S. Moloobhoy Pvt. Ltd.	-	-	-	-
12. Bharati Defence & Infrastructure Ltd. @	2	0.05	-	-
13. Bristol Boats	-	-	-	-
14. Chidambaram Shipcare Pvt. Ltd	-	-	-	-
15. Chowgule & Co. Ltd.	-	-	2	-
16. Dempo Shipbuilding & Engineering Ltd.	-	-	3	0.1
17. Ferromar Shipping Pvt. Ltd.	-	-	-	-
18. Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust			
19. Larsen & Toubro Ltd.	-	-	1	1.91
20. Mandovi Dry Docks	7	14.36	4	12.97
21. Marine Frontiers Pvt. Ltd.	-	-	4	0.03
22. Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments			
23. Modest Infrastructure Pvt. Ltd.	-	-	-	-
24. N.N. Shipbuilders & Engineers Ltd.	-	-	-	-
25. Reliance Naval & Engineering Ltd.	1	74.50	1	-
26 Sembmarine Kakinada Ltd***	-	-	-	-
27. Shoft Shipyard Pvt. Ltd.	4	4.04	3	2.43
28 Tebma Shipyard Ltd.	1	0.36	-	-
29. Timblo Drydocks Pvt. Ltd.	13	5.23	-	-
30. Titagarh Wagons Ltd.	-	-	3	2.78
31. Vijai Marne Shipyards	11	3.4	1	0.2
32. West Coast Shipyard Ltd.	-	-	-	-
Grand Total (A + B)	64	110.36	41	24.77

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.1

**Ship Building Capacity of the Company By Types & Size
(As on 31st March, 2019)**

S. No.	Name of the company	Type of vessel/ship	Max. Size/Capacity			
			Length	Width	Draft	DWT
			(Mts.)	(Mts.)	(Mts.)	(in thousand)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. PUBLIC SECTOR						
1	Alcock Ashdown (Gujarat) Ltd.(AAL)	(a) Bulk Carrier (b) Tankers (c) Tugs/Barges/OSV	130.00 130.00 63.00	20.00 20.00 14.60	8.70 8.70 4.00	15.00 15.00 1.20
2	Cochin Shipyard Ltd.(CSL)	All types of ships including bulk carriers, oil tankers, passenger vessels, tugs, dredgers etc.	250.00	38.00	5.50	110.00
3	Garden Reach Shipbuilders & Engineers Ltd. (GRSE)	01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Dry Dock – 1 (Old) of Main Unit (Dry Dock's Length:- 160 mts., Width:- 25 mts. & Draft:- 8 mts. above KODS*) 01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Dry Dock – 2 (New) of Main Unit (Dry Dock's Length:- 180 mts., Width:- 29 mts. & Draft:- 12mts. which is 02 mts. below KODS* and 10 mts. above KODS*) 03 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Dry Dock – 2 of RBD Unit (Dry Dock's Length:- 158mts., Width:- 18 mts. & Draft:- 8 mts. above KODS*) 01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Building Berth (BB)/ Inclined Berth (IB) – 1 (Old) of Main Unit (BB/ IB – 1 (Old) Length:- 162mts., Width:- 25 mts. and Sill Height:- 0.9 mts. above KODS*) 01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Building Berth (BB)/ Inclined Berth (IB) – 2 (New) of Main Unit (BB/ IB – 2 (New) Length:- 180 mts., Width:- 23mts. and Sill Height 0.0 mts. above KODS*) 01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Finger Jetty – 1 of FOJ Unit (Finger Jetty's Length:- 184.5 mts., Width:- 11.5mts. & Draft:- 7.0mts. minimum above KODS*) 01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Finger Jetty – 2 of FOJ Unit (Finger Jetty's Length:- 184.5 mts., Width:- 11.5mts. & Draft:- 7.0 mts. minimum above KODS*) 02 No. each of Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Naval Jetty of FOJ Unit (Naval Jetty's Length:- 229 mts., Width:- 10 mts. & Draft:- 8.0 mts. minimum above KODS*) 01 Nos. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Wet Basin of Main Unit (Wet Basin's Length:- 109mts., Width:- 23mts. Draft:- 8.0 mts., with Sill Height:- 1.83 mts. above KODS*) 01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Western Jetty of Main Unit (Western Jetty's Length:- 100mts. with Pontoon of Length:- 25mts., Width:- 9mts., and Height:- 4.5 mts.,) 01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Canteen Jetty of Main Unit (Canteen Jetty's Length:- 100mts., with Pontoon of Length:- 13.5mts., Width:- 4.5mts., and Height:- 1.0 mts.,) 01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Hooghly Jetty of RBD Unit (Hooghly Jetty's Length:- 88mts., with Pontoon of Length:- 25mts., Width:- 9.0mts., and Height:- 1.9 mts.,) 01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Ganga Jetty of Main Unit (Ganga Jetty's Length:- 75 mts., with Pontoon of Length:- 25mts., Width:- 9.0mts., and Height:- 1.9 mts.,)	< 160 < 180 ≤ 50 < 160 < 180 180.00 180.00 180.00 80.00 80.00 80.00 80.00 80.00	24.00 < 29 ≤ 8 24.00 < 23 24.00 24.00 24.00 11.00 11.00 11.00 11.00 11.00	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	

Table No. 1.1 Cont...

Ship Building Capacity of the Company By Types & Size
(As on 31st March, 2018)

S. No	Name of the company	Type of vessel/ship	Max.Size/Capacity			
			Length	Width	Draft	DWT
			(Mts.)	(Mts.)	(Mts.)	(in thousand)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
4	Goa Shipyard Ltd.(GSL)	Advanced Offshore Petrol Vessels, Fast Patrol Vessels, Fast Attack Crafts, Survey Vessels, Sail Training Ships, Missile Crafts, Frigates, Landing Crafts, Tugs, Dredgers, Launchers, Passenger Ferries, Fishing Vessels, GRP boats and other medium sized sophisticated vessels	130.00	20.00	5.00	4.50
5	Hindustan Shipyard Ltd.(HSL)	All Types of Ocean going vessels.	195.00	38.00	17.00	80.00
6	Hooghly Dock & Port Engineers Ltd. (HDPE)	a) Tanker b) Dredger/Passengers/Light Ship c) Work accomodation Boat d) Cargo/Tug/Trawler	67.00 90.00 24.00 30.00	12.50 16.00 8.00 12.00	4.00 4.50 1.50 4.50	1.20 3.00 0.06 -
7	Mazagaon Dock Shipbuilders Ltd.(MDSL)	Destroyers and Frigates Merchant Ships like Bulk Carriers	180.0 200.0	22.0 27.0	3.5/6.2 3.5/10	- 40.0
8	Shalimar Works Ltd.(SWL) ***	Barge/Ferry Craft	65.00	12.00	3.50	0.50
B. PRIVATE SECTOR						
9	ABG Shipyard Ltd.(ABGS) @					
10	A.C.Roy & Co. Ltd.(ACRL)	(a) Launch (b) Tug (c) Barge	26.00 20.00 65.00	7.00 6.00 12.00	2.50 2.50 3.00	0.04 0.03 1.50
11	A.S. Moloobhoy Pvt. Ltd.(AS MPL)	-	-	-	-	-
12	Bharti Defence & Infrastructure Ltd. (BDIL) @					
13	Bristol Boats Pvt. Ltd.(BBPL)	(a) FRP Petrol Crafts (b) Others	20.00 12.00	5.00 4.00	4.00 3.50	0.05 0.015
14	Chidambaram Shipcare Pvt. Ltd. (CSPL)	-	-	-	-	-
15	Chowgule & Co. Pvt. Ltd. (C&CL)	(a) Dry Cargo, Tanker, Container Vessels. (b) Defence Vessels (c) Tugs, Fishing Trawlers, Launches, Passanger Vessels	120.00 120.00 70.00	20.00 20.00 20.00	3.3/6.0 3.3/6.0 3.3/6.0	8.00 NA NA
16	Dempo Shipbuilding & Engineering Pvt Ltd.(DSEL)	(a) Barges - Sea Going, RSV, Containers, Tankers, MPV, Crane Barges, Passenger Ferries, Split Barges, Ro-Ro Vessels, Spud Pontoons, Jackup Barges (b) Tugs - Sea Going, IV, RSV, Dredgers, AHTS (c) Supply Vessels - Offshore, Pilot Launches, Mooring Launches, Harbour Crafts.	100.00 100.00 100.00	20.00 20.00 20.00	2.20 2.20 2.20	4.50 - -
17	Ferromar Shipping Pvt. Ltd. (FSL)	Inland Vessel Coastal Vessel	70.00 100.00	13.00 13.00	1.20 1.30	2.00 2.50
18	Homa Engineering Works (HEW)	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust				
19	L&T Shipbuilding Ltd.(L&T)	Any type of Commercial/ Defence Vessels upto a length of 200 mtr. and beam of 46 mtr.				
20	Mandovi Dry Docks (MDD)	Fuel Barge General Cargo Barge Landing Craft Split Hooper Barge	80.00 81.18 65.48 63.50	18.00 17.40 14.20 11.36	3.50 5.00 3.00 3.30	4.50 5.10 1.46 1.31

Table No. 1.1 Cont...

**Ship Building Capacity of the Company By Types & Size
(As on 31st March, 2019)**

S. No.	Name of the company	Type of vessel/ship	Max.Size/Capacity			
			Length	Width	Draft	DWT
			(Mts.)	(Mts.)	(Mts.)	(in thousand)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
21	Marine Frontiers Pvt. Ltd. (MFPL)	36.0m Utility Vessel	36.00	7.60	2.40	0.12
		22.0m Passenger Ferry	22.00	6.00	1.60	0.02
		20.0m Barge	17.00	5.00	0.62	0.05
		17.0m Landing Craft	17.00	5.40	0.60	0.03
		17.0m Mini Tug	17.00	5.90	0.75	0.02
		12.0m Fast Patrol Vessel	12.00	3.80	0.50	0.003
		9.5m Fast Patrol Vessel	9.50	3.30	0.44	0.002
		8.5m RIB	8.50	3.30	0.60	0.001
		7.0m RIB	7.00	2.36	0.45	0.001
		Punt Boat	5.00	1.52	0.25	0.001
		Pontoon Boat	5.85	2.20	0.85	0.001
22	Marks Marine Radio Pvt. Ltd.(MMRPL)	Only provide Sales and Service of Marine Navigation/ Communication Equipments				
23	Modest Infrastructure Pvt. Ltd. (MIPL)	a) Fuel Barge/Oil Tanker	58.00	11.00	3.00	0.50
		b) Multi Purpose Vessel	72.00	13.00	2.50	0.80
		c) Product Tanker	60.00	12.00	3.20	1.00
		d) Cement Carrier	78.00	13.50	3.00	2.20
		e) Ferry Craft	72.00	12.80	2.80	200 men
		f) Tug	33.00	11.50	4.10	Bollard Pull- 65 T
		g) Offshore Survey Vessel	59.20	15.00	2.50	-
		h) Axiliary Craft	80.00	13.00	2.80	-
		i) Dredger	27.00	12.00	2.50	1250 m3/hr
		j) Offshore Dumb Barge	72.00	20.00	3.50	3.50
		k) Non Propelled Stowage Barge	40.00	18.00	2.50	<1000T
24	N N Shipbuilders and Engineers Pvt. Ltd.(NNSE)	(a) Tugs - (2)	40.00	10.00	2.30	-
		(b) Pontoons - (4)	40.00	12.00	4.00	-
		(c) Ferry/Barges	30.00	10.00	2.30	-
25	Reliance Naval and Engineering Ltd. (RNEL)	All types of sea going vessels and craft	380.00	58.00	10.00	400.00
26	Sembmarine Kakinada Ltd. (SKL) ***	Offshore Vessels, Barges, Bulk carrier, Drill ships, Tankers, Tugs, Geo-technical vessels, Diving Support vessels, Passenger vessels and others.	200.00	40.00	8.50	50.00
27	Shoft Shipyard Pvt. Ltd.(SSPL)	Barges	70.00	14.00	3.30	2.35
		Multi Utility Crafts	18.50	7.00	1.50	0.041
		Cargo Vessels	81.00	15.00	2.80	2.27
		Tugs	23.50	7.80	2.00	0.036
28	Tebma Shipyards Ltd. (TSL)	MPOV, PSV	80.00	20.00	6.00	4.50
		GTRV, MSPV	85.00	20.00	6.00	5.00
		Mini Bulk Carrier	110.00	20.00	5.00	3.00
29	Timblo Drydocks Pvt. Ltd.(TDPL)	Cargo Vessels	120.00	20.00	4.50	6.00
		Multi Purpose Barges	120.00	20.00	4.50	7.50
		Ferry Crafts	100.00	20.00	4.50	200 Pax
		Tug Boats	70.00	12.00	4.50	50T BP
		Naval Ships of various Class/ Types	110.00	15.00	4.00	-
FRPBoats/ High Speed Boats	50.00	12.00	3.50	35 Knots		
30	Titagarh Wagons Ltd. (TWL)	All Types	150	20	3	8
31	Vijai Marine Shipyard (VMS)	Passanger	105	20	2.5	0.2
		Tankers	105	20	2.5	2.7
		Cargo	105	20	2.5	2.9
32	West Coast Shipyard Ltd. (WCSL)	Landing Craft	35.00	9.00	1.30	0.175
		Bulk Carriers	67.10	12.00	3.20	1.75
		Bulk Carriers	69.80	13.40	3.30	2.20

*Khidderpore Outer Dock Sill

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.2

**Ship Building Capacity - By Company-wise
(2015-16 to 2018-19)**

(DWT in thousand tons)

S. No.	Name of The Company	2015-16	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)	(6)
	<u>A. PUBLIC SECTOR</u>				
1	Alcock Ashdown (Gujarat) Ltd.	15.00	15.00	15.00	15.00
2	Cochin Shipyard Ltd.	110.00	110.00	110.00	110.00
3	Garden Reach Shipbuilders & Engineers Ltd.	0.55	0.22	-	-
4	Goa Shipyard Ltd.	4.50	4.50	4.50	4.50
5	Hindustan Shipyard Ltd.	80.00	80.00	80.00	80.00
6	Hooghly Dock & Port Engineers Ltd.	3.00	3.00	3.00	3.00
7	Mazagaon Dock Shipbuilders Ltd.	-	**	40.00	40.00
8	Shalimar Works Ltd. ***	1.20	0.05	0.50	0.50
	<u>B. PRIVATE SECTOR</u>				
9	ABG Shipyard Ltd. @	20.00	120.00	120.00	
10	A.C.Roy & Co. Ltd.	1.50	1.50	1.50	1.50
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-
12	Bharati Defence & Infrastructure Ltd. @	70.00	70.00	70.00	
13	Bristol Boats Pvt. Ltd.	0.05	0.05	0.05	0.05
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-
15	Chowgule & Co. Pvt. Ltd.	8.00	8.00	8.00	8.00
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	5.50	5.50	4.50	4.50
17	Ferromar Shipping Pvt. Ltd.	2.00	2.00	2.00	2.50
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust			
19	L&T Shipbuilding Ltd.	30.00	*	*	*
20	Mandovi Dry Docks	-	-	4.50	5.10
21	Marine Frontiers Pvt. Ltd.	-	-	-	0.12
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments			
23	Modest Infrastructure Pvt. Ltd.	3.50	3.50	3.50	3.50
24	N N Shipbuilders And Engineers Pvt Ltd	-	-	-	-
25	Reliance Naval and Engineering Ltd.	400.00	400.00	400.00	400.00
26	Sembmarine Kakinada Ltd.***	50.00	50.00	50.00	50.00
27	Shoft Shipyard Pvt. Ltd.	-	-	2.35	2.35
28	Tebma Shipyards Ltd.	12.00	12.00	12.00	5.00
29	Timblo Drydocks Pvt. Ltd.	-	-	7.50	7.50
30	Titagarh Wagons Ltd.	-	-	-	8.00
31	Vijai Marine Shipyards	-	-	2.90	2.90
32	West Coast Shipyard Ltd.	-	-	-	2.20

* Any type of Commercial/ Defence Vessels upto a length of 200 mtr. and beam of 46 mtr.

** Annual capacity is 0.97 EFU (Effective Frigate Unit)

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.3

Ship Order Book Position by Type of Vessels
(As on 31st March, 2019)

(DWT in thousand tons)

S. No.	Name of Company	Type of Ship on Domestic Order (A - For Sea Going Vessels)												Type of Ship on Domestic Order (B - For Other Crafts)								Total (A + B)				
		Tanker		Dry Cargo		Bulk Carriers		Passenger/Passenger-cum-Cargo Ships		Product Carriers		Others		Port Craft		Fishing Trawlers		Off-shore Sector		IWT				Others		
		No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
	A. Public Sector																									
1	Alcock Ashdown (Gujarat) Ltd.	-	-	-	-	-	-	-	-	-	-	5	1.11	-	-	-	-	-	-	-	-	-	-	-	5	1.11
2	Cochin Shipyard Ltd.	-	-	-	-	4	32.00	4	10.17	-	-	1	3.52	-	-	13	0.64	-	-	10	1.57	15	1.37	47	49.27	
3	Garden Reach Ship-builders and Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	14	8.40	-	-	-	-	-	-	-	-	-	-	14	8.40	
4	Goa Shipyard Ltd.	2	2.00	-	-	-	-	-	-	-	-	7	3.74	-	-	-	-	-	-	-	-	-	-	9	5.74	
5	Hindustan Shipyard Ltd.	-	-	-	-	1	53.00	-	-	-	-	3	4.89	-	-	-	-	-	-	-	-	-	12	0.430	16	58.32
6	Hooghly Dock & Port Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
7	Mazagaon Dock Shipbuilders Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	14	0.00
8	Shalimar Works Ltd. ***	3	0.68	-	-	-	-	3	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	0.83	
	Total (A)	5	2.68	0	0.00	5	85.00	7	10.32	0	0.00	30	21.67	0	0.00	13	0.64	0	0.00	10	1.57	41	1.80	111	123.68	
	B. Private Sector																									
9	ABG Shipyard Ltd. @	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
10	A.C.Roy & Co. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	0.6	-	-	17	0.60	
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
12	Bharati Defence & Infrastructure Ltd. @	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
13	Bristol Boats Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
15	Chowgule & Co. Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	1	0.90	-	-	-	-	-	-	-	-	-	-	1	0.90	
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
17	Ferromar Shipping Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust																								
19	L&T Shipbuilding Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
20	Mandovi Dry Docks	-	-	2	4.51	-	-	-	-	-	-	-	-	2	0.09	-	-	-	-	1	0.00	-	-	5	4.60	
21	Marine Frontiers Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments																								
23	Modest Infrastructure Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	2	1.00	
24	N N Shipbuilders And Engineers Pvt Ltd	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	0.00	
25	Reliance Naval and Engineering Ltd.	-	-	-	-	-	-	-	-	-	-	25	1.50	-	-	-	-	-	3	-	-	-	-	28	1.50	
26	Sembmarine Kakinada Ltd.***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
27	Shoft Shipyard Pvt. Ltd.#	-	-	-	-	-	-	-	-	-	-	-	4.98	-	-	-	-	-	-	-	-	-	-	0	4.98	
28	Tebma Shipyards Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
29	Timblo Drydocks Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
30	Titagarh Wagons Ltd.	1	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.19	
31	Vijai Marine Shipyards	2	2.20	-	-	-	-	2	0.12	-	-	-	-	2	0	1	0.10	-	-	-	-	-	-	7	2.51	
32	West Coast Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
	Total (B)	3	2.39	2	4.51	0	0.00	2	0.12	0	0.00	30	8.38	4	0.18	1	0.10	3	0.00	18	0.60	0	0.00	63	16.28	
	Total (A + B)	8	5.07	2	4.51	5	85.00	9	10.44	0	0.00	60	30.05	4	0.18	14	0.74	3	0.00	28	2.17	41	1.80	174	139.96	

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

Shoft Shipyard Builds Hull Block s/ Units of Warship for DPSU on contract basis.

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.3 (Contd.)

Ship Order Book Position by Type of Vessels
(As on 31st March, 2019)

(DWT in thousand tons)

S. No.	Name of Company	Type of Ship on Export Order (A - For Sea Going Vessels)												Type of Ship on Export Order (B - For Other Crafts)								Total (A + B)					
		Tanker		Dry Cargo		Bulk Carriers		Passenger/Passenger-cum-Cargo Ships		Product Carriers		Others		Port Craft		Fishing Trawlers		Off-shore Sector		IWT		Others		No. of Ships	DWT		
		No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT	No. of Ships	DWT				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
	A. Public Sector																										
1	Alcock Ashdown (Gujarat) Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	
2	Cochin Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
3	Garden Reach Ship-builders and Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
4	Goa Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
5	Hindustan Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
6	Hooghly Dock & Port Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
7	Mazagaon Dock Shipbuilders Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
8	Shalimar Works Ltd. ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
	Total (A)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	B. Private Sector																										
9	ABG Shipyard Ltd. @	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
10	A.C.Roy & Co. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
12	Bharati Defence & Infrastructure Ltd. @	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
13	Bristol Boats Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
15	Chowgule & Co. Pvt. Ltd.	-	-	6	25.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	25.32
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	1	0.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.74
17	Ferromar Shipping Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust																									
19	L&T Shipbuilding Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4.60	-	-	-	-	-	2	4.60
20	Mandovi Dry Docks	-	-	-	-	-	-	1	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.09
21	Marine Frontiers Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	2	0.24	-	-	-	-	-	-	-	-	-	-	-	-	2	0.24
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments																									
23	Modest Infrastructure Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
24	N N Shipbuilders And Engineers Pvt Ltd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
25	Reliance Naval and Engineering Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
26	Sembmarine Kakinada Ltd.***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
27	Shoft Shipyard Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
28	Tebma Shipyards Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
29	Timblo Drydocks Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
30	Titagarh Wagons Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
31	Vijai Marine Shipyards	-	-	-	-	-	-	-	-	-	-	2	0.80	-	-	-	-	-	-	-	-	-	-	-	-	2	0.80
32	West Coast Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00
	Total (B)	1	0.74	6	25.32	0	0.00	1	0.09	0	0.00	4	1.04	0	0.00	0	0.00	2	4.60	0	0.00	0	0.00	0	0.00	14	31.78
	Total (A + B)	1	0.74	6	25.32	0	0.00	1	0.09	0	0.00	4	1.04	0	0.00	0	0.00	2	4.60	0	0.00	0	0.00	0	0.00	14	31.78

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19, based on the list provided by Shipping Association of India (SAI).

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Table No. 1.3 (a)

**Total Ship Order Book of Vessels by Domestic Order and
by Export Order (As on 31st March, 2019)**

(DWT in thousand tons)

S.No	Name of Company	Domestic Order		Export Order		Total Ship Order	
		No. of Ships	DWT	No. of Ships	DWT	No. of Ships (2+4)	DWT (3+5)
1	2	3	4	5	6	7	8
	A. Public Sector						
1	Alcock Ashdown (Gujarat) Ltd.	5	1.11	0	0.00	5	1.11
2	Cochin Shipyard Ltd.	47	49.27	0	0.00	47	49.27
3	Garden Reach Shipbuilders & Engineers Ltd.	14	8.40	0	0.00	14	8.40
4	Goa Shipyard Ltd.	9	5.74	0	0.00	9	5.74
5	Hindustan Shipyard Ltd.	16	58.32	0	0.00	16	58.32
6	Hooghly Dock & Port Engineers Ltd.	0	0.00	0	0.00	0	0.00
7	Mazagaon Dock Shipbuilders Ltd.	14	0.00	0	0.00	14	0.00
8	Shalimar Works Ltd. ***	6	0.83	0	0.00	6	0.83
	Total (A)	111	123.68	0	0.00	111	123.68
	B. Private Sector						
9	ABG Shipyard Ltd. @	0	0.00	0	0.00	0	0.00
10	A.C.Roy & Co. Ltd.	17	0.60	0	0.00	17	0.60
11	A.S. Moloobhoy Pvt. Ltd.	0	0.00	0	0.00	0	0.00
12	Bharati Defence & Infrastructure Ltd. @	0	0.00	0	0.00	0	0.00
13	Bristol Boats Pvt. Ltd.	0	0.00	0	0.00	0	0.00
14	Chidambaram Shipcare Pvt. Ltd.	0	0.00	0	0.00	0	0.00
15	Chowgule & Co. Pvt. Ltd.	1	0.90	6	25.32	7	26.22
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	0	0.00	1	0.74	1	0.74
17	Ferromar Shipping Pvt. Ltd.	0	0.00	0	0.00	0	0.00
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust					
19	L&T Shipbuilding Ltd.	0	0.00	2	4.60	2	4.60
20	Mandovi Dry Docks	5	4.60	1	0.09	6	4.69
21	Marine Frontiers Pvt. Ltd.	0	0.00	2	0.24	2	0.24
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments					
23	Modest Infrastructure Pvt. Ltd.	2	1.00	0	0.00	2	1.00
24	N N Shipbuilders And Engineers Pvt Ltd	2	0.00	0	0.00	2	0.00
25	Reliance Naval and Engineering Ltd.	28	1.50	0	0.00	28	1.50
26	Sembmarine Kakinada Ltd.***	0	0.00	0	0.00	0	0.00
27	Shoft Shipyard Pvt. Ltd.	0	4.98	0	0.00	0	4.98
28	Tebma Shipyards Ltd.	0	0.00	0	0.00	0	0.00
29	Timblo Drydocks Pvt. Ltd.	0	0.00	0	0.00	0	0.00
30	Titagarh Wagons Ltd.	1	0.19	0	0.00	1	0.19
30	Vijai Marine Shipyards	7	2.51	2	0.80	9	3.31
31	West Coast Shipyard Ltd.	0	0.00	0	0.00	0	0.00
	Total (B)	63	16.28	14	31.78	77	48.06
	Total (A + B)	174	139.96	14	31.78	188	171.75

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Shoft Shipyard Builds Hull Block s/ Units of Warship for DPSU on contract basis.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.4

**No. of Ships on Order - Company-wise
2016-2019**

S.No.	Name of the Company	As on 31st March			
		2016	2017	2018	2019
(1)	(2)	(3)	(4)	(5)	(6)
	<u>A. PUBLIC SECTOR(Total)</u>	104	78	69	111
1	Alcock Ashdown (Gujarat) Ltd.	5	5	5	5
2	Cochin Shipyard Ltd.	11	8	9	47
3	Garden Reach Ship-builders and Engineers Ltd.	15	19	14	14
4	Goa Shipyard Ltd.	32	15	7	9
5	Hindustan Shipyard Ltd.	13	10	14	16
6	Hooghly Dock & Port Engineers Ltd.	0	0	0	0
7	Mazagaon Dock Shipbuilders Ltd.	17	14	14	14
8	Shalimar Works Ltd. ***	11	7	6	6
	<u>B. PRIVATE SECTOR(Total)</u>	192	170	162	77
9	ABG Shipyard Ltd. @	63	47	44	
10	A.C.Roy & Co. Ltd.	9	10	6	17
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	0
12	Bharati Defence & Infrastructure Ltd. @	57	56	54	
13	Bristol Boats Pvt. Ltd.	0	0	0	0
14	Chidambaram Shipcare Pvt. Ltd.	0	0	0	0
15	Chowgule & Co. Pvt. Ltd.	1	7	9	7
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	1	0	0	1
17	Ferromar Shipping Pvt. Ltd.	0	0	0	0
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust			
19	L&T Shipbuilding Ltd.	8	3	3	2
20	Mandovi Dry Docks	-	-	6	6
21	Marine Frontiers Pvt. Ltd.	-	-	-	2
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments			
23	Modest Infrastructure Pvt. Ltd.	1	0	1	2
24	N N Shipbuilders And Engineers Pvt Ltd	4	4	2	2
25	Reliance Naval and Engineering Ltd.	42	42	28	28
26	Sembmarine Kakinada Ltd.***	0	0	0	0
27	Shoft Shipyard Pvt. Ltd.	-	-	1	0
28	Tebma Shipyards Ltd.	6	1	1	0
29	Timblo Drydocks Pvt. Ltd.	-	-	4	0
30	Titagarh Wagons Ltd.	-	-	-	1
31	Vijai Marine Shipyards	-	-	3	9
32	West Coast Shipyard Ltd.	-	-	-	0
	C. Total (A + B)	296	248	231	188

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.5

**Size And Number Of Ships Delivered, Company-wise
(2015-16 to 2018-19)**

S.No	Name of the Company	Year	DWT(in thousand tons)			
			Ship Delivered		Size ('000 DWT)	
			No.	DWT('000)	Maximum	Minimum
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	A. PUBLIC SECTOR	2018-19	17	3.31		
		2017-18	15	5.01		
		2016-17	23	47.45		
		2015-16	32	48.51		
1	Alcock Ashdown (Gujarat) Ltd.	2018-19	0	0.00	0.00	0.00
		2017-18	0	0.00	0.00	0.00
		2016-17	0	0.00	0.00	0.00
		2015-16	0	0.00	0.00	0.00
2	Cochin Shipyard Ltd.	2018-19	3	0.15	0.05	0.05
		2017-18	2	0.12	0.06	0.06
		2016-17	5	45.54	45.54	45.54
		2015-16	6	1.50	1.50	1.50
3	Garden Reach Ship-Builders and Engineers Ltd.	2018-19	4	0.71	0.22	0.06
		2017-18	4	1.02	0.52	0.06
		2016-17	4	0.41	0.22	0.06
		2015-16	1	45.00	45.00	45.00
4	Goa Shipyard Ltd.	2018-19	3	2.00	1.00	1.000
		2017-18	7	3.82	1.00	0.062
		2016-17	9	0.99	0.46	0.062
		2015-16	15	1.27	0.46	0.014
5	Hindustan Shipyard Ltd.	2018-19	6	0.40	0.19	0.002
		2017-18	-	-	-	-
		2016-17	3	0.46	0.20	0.07
		2015-16	3	0.46	0.20	0.06
6	Hooghly Dock & Port Engineers Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	4	0.24	0.06	0.06
7	Mazagaon Dock Shipbuilders Ltd.	2018-19	-	-	-	-
		2017-18	1	-	-	-
		2016-17	1	-	-	-
		2015-16	2	-	-	-
8	Shalimar Works Ltd. ***	2018-19	1	0.05	0.05	0.05
		2017-18	1	0.05	0.05	0.05
		2016-17	1	0.05	0.05	0.05
		2015-16	1	0.04	0.04	0.04
	B. PRIVATE SECTOR	2018-19	24	21.46		
		2017-18	49	105.35		
		2016-17	13	80.54		
		2015-16	23	94.53		
9	ABG Shipyard Ltd. @	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	3	1.70	1.50	0.10
10	A.C.Roy & Comp. Ltd.	2018-19	2	1.01	0.62	0.39
		2017-18	10	3.41	0.72	0.04
		2016-17	4	0.38	0.23	0.04
		2015-16	3	1.49	1.44	0.03
11	A.S. Moloobhoy Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
12	Bharati Defence & Infrastructure Ltd @	2018-19	-	-	-	-
		2017-18	2	0.05	0.05	0.05
		2016-17	-	-	-	-
		2015-16	2	0.03	0.02	0.02

Table No. 1.5

**Size And Number Of Ships Delivered, Company-wise
(2015-16 to 2018-19)**

S.No	Name of the Company	Year	DWT(in thousand tons)			
			Ship Delivered		Size (DWT)	
			No.	DWT	Maximum	Minimum
(1)	(2)	(3)	(4)	(5)	(6)	(7)
13	Bristol Boats Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
14	Chidambaram Shipcare Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
15	Chowgule & Co. Pvt. Ltd.	2018-19	2	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	4	2.65	2.65	2.65
16	Dempo Shipbuilding & Engineering Pvt. Ltd.	2018-19	3	0.1	0.04	0.04
		2017-18	-	-	-	-
		2016-17	4	-	-	-
		2015-16	-	-	-	-
17	Ferromar Shipping Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust				
19	L&T Shipbuilding Ltd	2018-19	1	1.91	1.91	1.91
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	2	5.00	2.50	2.50
20	Mandovi Dry Docks	2018-19	4	12.97	5.1	1.3
		2017-18	7	14.36	5.1	0.06
21	Marine Frontiers Pvt. Ltd.	2018-19	4	0.03	0.02	0.001
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments				
23	Modest Infrastructure Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	1	3.30	3.30	3.30
		2015-16	2	1.60	0.80	0.80
24	N N Shipbuilders and Engineers Pvt Ltd	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
25	Reliance Naval & Engineering Ltd.	2018-19	1	-	-	-
		2017-18	1	74.50	74.50	74.50
		2016-17	3	76.50	73.50	1.50
		2015-16	3	76.50	73.50	1.50
26	Sembmarine Kakinada Ltd. ***	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
27	Shoft Shipyard Pvt. Ltd.	2018-19	3	2.43	2.26	0.08
		2017-18	4	4.04	2.27	0.004
28	Tebma Shipyards Ltd	2018-19	-	-	-	-
		2017-18	1	0.36	0.36	0.36
		2016-17	1	0.36	0.36	0.36
		2015-16	4	5.56	4.65	0.36
29	Timblo Drydocks Pvt. Ltd.	2018-19	0	0.00	0.00	0
		2017-18	13	5.23	4.23	1
30	Titagarh Wagons Ltd.	2018-19	3	2.78	1.30	0.19
31	Vijai Marine Shipyards	2018-19	1	0.2	0.2	0.2
		2017-18	11	3.4	1.5	0.2
32	West Coast Shipyard Ltd.	2018-19	-	-	-	-
Grand Total (A + B)		2018-19	41	24.77		
		2017-18	64	110.36		
		2016-17	36	127.99		
		2015-16	55	143.04		

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.6**No. Of Ships On Order And No. Of Ships Delivered -Company-wise (2015-16 to 2018-19)**

S.No.	Name of The Company	No. of Ships On Order During the year				Ships Delivered During the year			
		2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6	7	8	9	10
	A. PUBLIC SECTOR	104	78	69	111	32	23	15	17
1	Alcock Ashdown (Gujarat) Ltd.	5	5	5	5	0	0	0	0
2	Cochin Shipyard Ltd.	11	8	9	47	6	5	2	3
3	Garden Reach Shipbuilders & Eng. Ltd	15	19	14	14	1	4	4	4
4	Goa Shipyard Ltd.	32	15	7	9	15	9	7	3
5	Hindustan Shipyard Ltd.	13	10	14	16	3	3	0	6
6	Hooghly Dock & Port Engineers Ltd.	0	0	0	0	4	0	0	0
7	Mazagaon Dock Shipbuilders Ltd.	17	14	14	14	2	1	1	-
8	Shalimar Works Ltd. ***	11	7	6	6	1	1	1	1
	B. PRIVATE SECTOR	192	170	162	77	23	13	49	24
9	ABG Shipyard Ltd. @	63	47	44		3	-	-	
10	A.C.Roy & Comp. Ltd.	9	10	6	17	3	4	10	2
11	A.S. Moloobhoy Pvt. Ltd.	-	-	0	0	-	-	-	-
12	Bharati Defence & Infrastructure Ltd @	57	56	54		2	-	2	
13	Bristol Boats Pvt. Ltd.	0	0	0	0	0	-	-	-
14	Chidambaram Shipcare Pvt. Ltd.	0	0	0	0	-	-	-	-
15	Chowgule & Co. Pvt. Ltd.	1	7	9	7	4	-	-	2
16	Dempe Shipbuilding & Engineering Pvt. Ltd.	1	0	0	1	0	4	-	3
17	Ferromar Shipping Pvt. Ltd.	0	0	0	0	-	-	-	-
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust							
19	L&T Shipbuilding Ltd	8	3	3	2	2	-	-	1
20	Mandovi Dry Docks	-	-	6	6	-	-	7	4
21	Marine Frontiers Pvt. Ltd.	-	-	-	2	-	-	-	4
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communiication Equipments							
23	Modest Infrastructure Pvt. Ltd.	1	0	1	2	2	1	-	-
24	N N Shipbuilders and Engineers Pvt Ltd	4	4	2	2	-	-	-	-
25	Reliance Naval & Engineering Ltd.	42	42	28	28	3	3	1	1
26	Sembmarine Kakinada Ltd. ***	0	0	0	0	-	-	-	-
27	Shoft Shipyard Pvt. Ltd.	-	-	1	0	-	-	4	3
28	Tebma Shipyards Ltd	6	1	1	0	4	1	1	0
29	Timblo Drydocks Pvt. Ltd.	-	-	4	0	-	-	13	0
30	Titagarh Wagons Ltd.	-	-	-	1	-	-	-	3
31	Vijai Marine Shipyards	-	-	3	9	-	-	11	1
32	West Coast Shipyard Ltd	-	-	-	0	-	-	-	-
	TOTAL(A+B)	296	248	231	188	55	36	64	41

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 1.7**No. Of Ships - By Keel Laid, Launched And Ships Under Construction, Company-wise (2015-16 to 2018-19)**

S.No.	Name of The Company	Year	Keel-laid	No. of Ships Launched	Under Construction at	Under Fitting at Jetty Quay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. PUBLIC SECTOR						
1	Alcock Ashdown (Gujarat) Ltd.	2018-19	5	-	5	-
		2017-18	5	-	5	-
		2016-17	5	-	5	-
		2015-16	5	-	5	-
2	Cochin Shipyard Ltd.	2018-19	6	2	2	3
		2017-18	4	-	-	2
		2016-17	-	-	-	2
		2015-16	1	-	-	2
3	Garden Reach Shipbuilding & Engineers Ltd.	2018-19	2	-	-	6
		2017-18	3	1	-	7
		2016-17	-	3	4	11
		2015-16	3	6	-	6
4	Goa Shipyard Ltd.	2018-19	-	-	5	2
		2017-18	-	-	5	2
		2016-17	-	4	7	6
		2015-16	16	4	11	12
5	Hindustan Shipyard Ltd.	2018-19	-	-	-	7
		2017-18	6	-	-	4
		2016-17	6	-	-	4
		2015-16	6	1	5	6
6	Hooghly Dock & Port Engineers Ltd.	2018-19	0	0	0	0
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
7	Mazagaon Dock Shipbuilders Ltd.	2018-19	2	6	4	2
		2017-18	2	4	4	1
		2016-17	-	1	-	-
		2015-16	-	1	-	-
8	Shalimar Works Ltd. ***	2018-19	0	0	5	1
		2017-18	0	0	5	1
		2016-17	-	-	4	1
		2015-16	-	-	5	2
B. PRIVATE SECTOR						
9	ABG Shipyard Ltd. @	2018-19	-	-	-	1
		2017-18	44	-	-	1
		2016-17	46	-	-	1
		2015-16	62	-	-	1
10	A. C. Roy & Comp. Ltd.	2018-19	0	6	10	0
		2017-18	4	1	1	-
		2016-17	9	-	-	1
		2015-16	6	-	-	6
11	A.S. Moloobhoy Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
12	Bharati Defence & Infrastructure Ltd	2018-19	-	2	40	8
		2017-18	-	-	40	8
		2016-17	-	3	36	8
		2015-16	-	-	-	-
13	Bristol Boats Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
14	Chidambaram Shipcare Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-

Table No. 1.7(Contd...)

No. Of Ships - By Keel Laid, Launched And Ships Under Construction, Company-wise (2015-16 to 2018-19)

S.No.	Name of The Company	Year	Keel-laid	Launched	No. of Ships	
					Under Construction at Berth	Under Fitting at Jetty Quay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
15	Chowgule & Co. Pvt. Ltd.	2018-19	6	-	3	1
		2017-18	4	-	2	-
		2016-17	-	-	1	-
		2015-16	-	-	-	-
16	Dempo Shipbuilding & Engineering Pvt. Ltd.	2018-19	-	-	1	-
		2017-18	-	-	-	3
		2016-17	-	-	-	-
		2015-16	-	-	1	-
17	Ferromar Shipping Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
18	Homa Engineering Works	Carry out only ship repairing in Mumbai Harbour and at Mumbai Port Trust				
19	L&T Shipbuilding Ltd.	2018-19	-	-	-	2
		2017-18	-	-	-	3
		2016-17	-	-	-	3
		2015-16	4	3	4	3
20	Mandovi Dry Docks	2018-19	6	3	-	-
		2017-18	2	6	1	-
21	Marine Frontiers Pvt. Ltd.	2018-19	1	-	1	-
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments				
23	Modest Infrastructure Pvt. Ltd.	2018-19	1	-	1	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	1	-	1
24	N N Shipbuilders and Engineers Pvt	2018-19	-	-	2	-
		2017-18	-	-	2	-
		2016-17	-	-	4	-
		2015-16	-	-	4	-
25	Reliance Naval & Engineering Ltd.	2018-19	2	2	2	7
		2017-18	2	2	2	7
		2016-17	-	-	-	-
		2015-16	-	-	-	-
26	Sembmarine Kakinada Ltd.***	2018-19	-	-	-	-
		2017-18	-	-	-	-
		2016-17	-	-	-	-
		2015-16	-	-	-	-
27	Shoft Shipyard Pvt. Ltd.	2018-19	2	2	2	2
		2017-18	1	4	5	-
28	Tebma Shipyards Ltd	2018-19	-	-	-	-
		2017-18	-	-	-	1
		2016-17	-	-	-	1
		2015-16	2	1	1	-
29	Timblo Drydocks Pvt. Ltd.	2018-19	-	-	-	-
		2017-18	2	3	2	3
30	Titagarh Wagons Ltd.	2018-19	-	-	-	1
31	Vijai Marine Shipyards	2018-19	-	1	5	4
		2017-18	8	7	1	1
32	West Coast Shipyard Ltd.	2018-19	-	-	-	-
Total (A+B)		2018-19	32	22	47	37
		2017-18	87	30	75	44
		2016-17	66	8	65	38
		2015-16	105	20	72	47

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

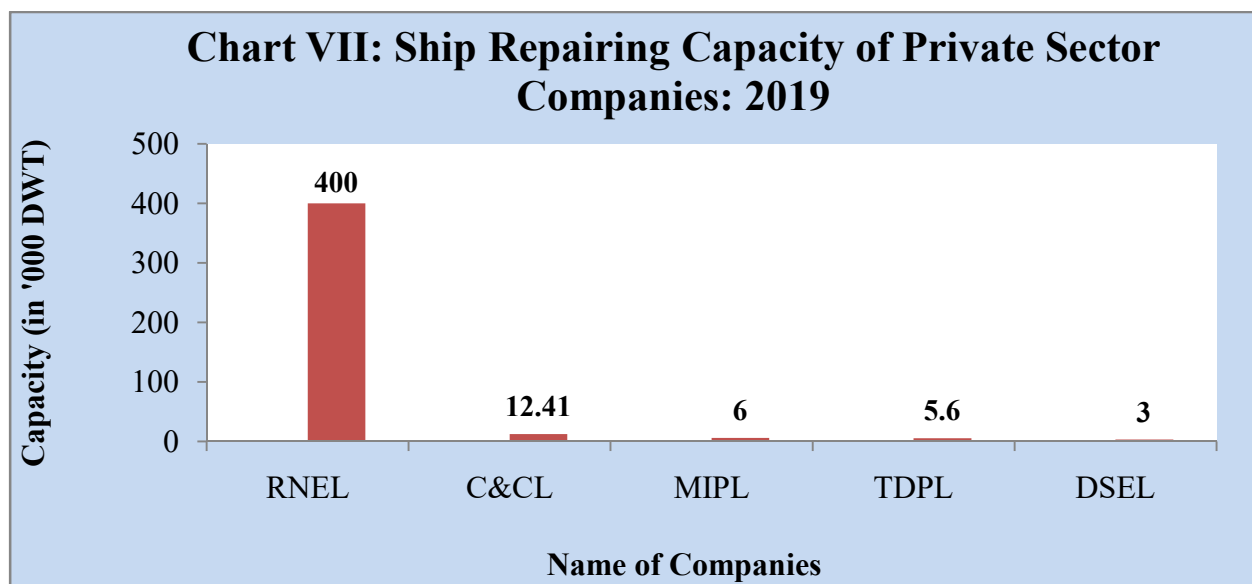
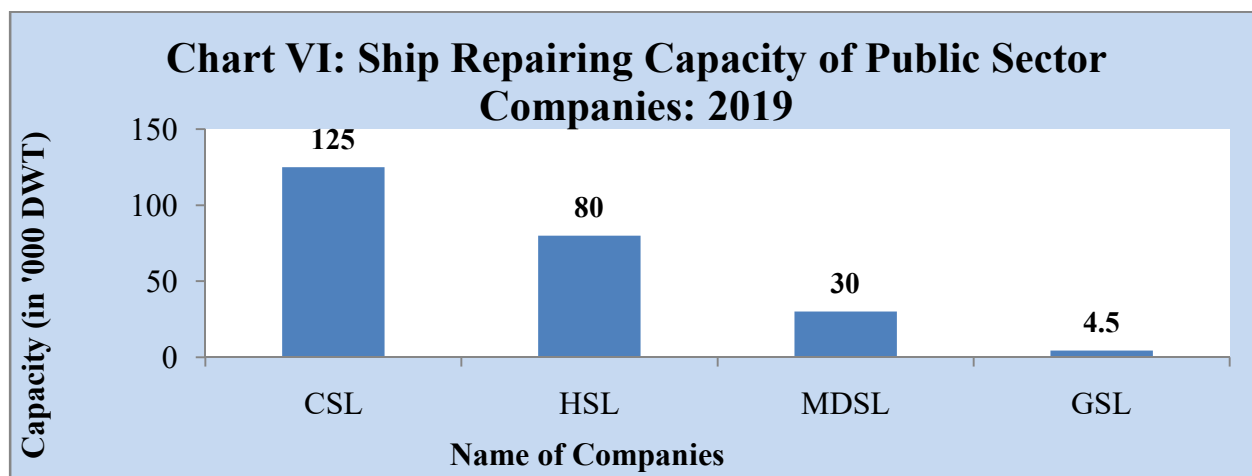
Section-2

INDIA'S SHIP-REPAIRING INDUSTRY

2. INDIA'S SHIP-REPAIRING INDUSTRY

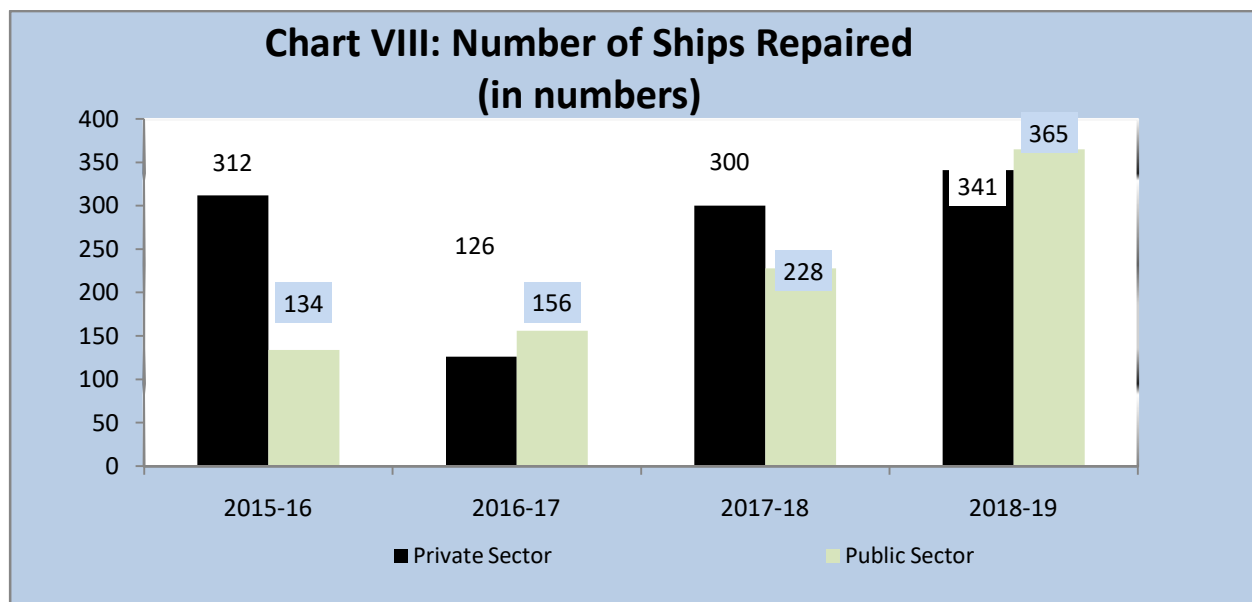
2.1 Ship repair capacity essentially reflects capability in terms of the number of ships repaired and maximum size of ship that can be repaired in terms of DWT.

2.2 Amongst public sector companies, Cochin Shipyard Ltd (CSL) had the highest capacity for ship repairing (125 thousand DWT) followed by Hindustan Shipyard Ltd. (HSL) (80 thousand DWT), Mazgaon Dock Shipbuilders Ltd. (MDSL) (30 thousand DWT) and Goa Shipyard Ltd. (GSL) (4.5 thousand DWT) in 2018-19. In private sector category amongst the reporting companies, Reliance Naval & Engineering Ltd. (RNEL) (400 thousand DWT) had the highest capacity for ship repairing followed by Chowgule & Co. Ltd. (C&CL) (12.41 thousand DWT), Modest Infrastructure Pvt. Ltd. (MIPL) (6 thousand DWT), Timblo Drydock Pvt. Ltd. (TDPL) (5.6 thousand DWT) and Dempo Shipbuilding and Engineering Pvt. Ltd. (3 thousand DWT) Charts VI & VII below depict the ship repairing capacity of major public and private sector shipbuilding yards as on 31st March 2019 and details of the same are given in table 2.1.



NUMBER OF SHIPS REPAIRED

2.3 In 2018-19, total 706 ships were repaired out of which 341 ships were repaired by private sector shipyards and 365 ships were repaired by public sector shipyards against 528 ships repaired in 2017-18. Chart–VIII given below depicts comparative picture of the number of ships repaired by all public and private sector shipbuilding yards during 2015-16 to 2018-19 and details of the same are given in Table 2.2.



2.4 In 2018-19 amongst the Public sector, Cochin Shipyard Ltd had repaired the highest number of ships (329 ships with earnings of Rs. 831.98 crore) followed by Goa Shipyard Ltd. (22 ships with earnings of Rs. 198.26 crore) and Hindustan Shipyard Ltd. (13 ships with earnings of Rs 74.61 crore). In the private sector, amongst the reporting companies Chidambaram Shipcare Pvt. Ltd. had the highest number of ships repaired (160 ships with earnings of Rs 9.62 crore) followed by Chowgule & Co. Pvt. Ltd. (54 ships with earnings of Rs 0.82 crore), Vijai Marine Shipyards (18 ships with earnings of Rs 6.03 crore), Dempo Shipbuilding & Engineering Pvt. Ltd. (DSEL) (15 ships with earnings of Rs 9.01 crore), Tebma Shipyards Ltd. (14 ships with earnings of Rs 0.89 crore), A.C. Roy & Company Ltd. (12 ships repaired with an earnings of Rs 0.65 crore), L&T Shipbuilding Ltd (10 ships repaired with an earnings of Rs. 109.32 crore) and Mandovi Drydocks (7 ships repaired with an earnings of Rs. 1.44 crore). Amongst reporting companies, in terms of ships repaired, the private sector and public sector accounted for a share of 48.3% (341 Ships) and 51.7% (365 Ships) respectively in the total ships repaired (706 Ships) during 2018-19. Company wise ship repairing facilities for dry docks and wet docks as on 31st March 2019 is given in Table 2.3. Company wise earnings from the year 2015-16 to 2018-19 along with number of ships repaired by Indian vessels and foreign vessels is given in Table 2.4.

2.5 Table 5 given below depicts the number of ships repaired and earnings by both public and private ship yards in India during 2017-18 and 2018-19.

Table No. 5 : Number of Ships Repaired and Earnings												
Name of The Company	2017-18						2018-19					
	Indian Vessels		Foreign Vessels		Total Vessels		Indian Vessels		Foreign Vessels		Total Vessels	
	S	E	S	E	S	E	S	E	S	E	S	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A. PUBLIC SECTOR (Total)	228	95282.75	0	0	228	95282.75	364	113159.60	1	7.00	365	113166.60
1. Alcock Ashdown & Co. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
2. Cochin Shipyard Ltd.	194	62326.64	-	-	194	62326.64	329	83197.46	-	-	329	83197.46
3. Garden Reach Shipbuilders & Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
4. Goa Shipyard Ltd.	20	22367.35	-	-	20	22367.35	22	19825.96	-	-	22	19825.96
5. Hindustan Shipyard Ltd.	14	10588.76	-	-	14	10588.76	12	7454.18	1	7.00	13	7461.18
6. Hooghly Dock & Port Engineers Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
7. Mazagon Dock Shipbuilders Ltd.	-	-	-	-	-	-	1	2682.00	-	-	1	2682.00
8. Shalimar Works Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
B. PRIVATE SECTOR (Total)	268	24189.06	32	1026.71	300	25215.77	302	21972.72	39	1029.13	341	23605.22
9. ABG Shipyard Ltd. @	3	6.00	-	-	3	6.00						
10. A.C.Roy & Co. Ltd.	16	83.00	-	-	16	83.00	12	65.00	-	-	12	65.00
11. A.S. Moloobhoy Pvt Ltd	-	3550.81	-	-	-	3550.81	-	-	-	-	-	-
12. Bharati Defence & Infrastructure Ltd @	3	174.32	-	-	3	174.32						
13. Bristol Boats Pvt. Ltd.	3	14.09	-	-	3	14.09	4	51.12	-	-	4	51.12
14. Chidambaram Shipcare Pvt. Ltd	149	538.09	25	141.44	174	679.53	130	818.08	30	143.86	160	961.94
15. Chowgule Pvt. Ltd	-	-	-	-	-	-	54	82.00	-	-	54	82.00
16. Dempo Ship building & Engg. Ltd.	32	1026.00	-	-	32	1026.00	15	900.86	-	-	15	900.86
17. Ferromar Shipping Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
18. Homa Engineering Works	-	-	-	-	-	-	2	-	-	-	-	-
19. L & T Shipbuilding Ltd	15	3988.16	-	-	15	3988.16	10	10932.17	-	-	10	10932.17
20. Mandovi Drydocks	13	356.24	-	-	13	356.24	7	143.70	-	-	7	143.70
21. Marine Frontiers Pvt. Ltd.							6	40.83	-	-	6	40.83
22. Marks Marine Radio Pvt. Ltd.	-	-	-	-	-	-	Only provide Sales and Service of Marine Navigation/Communication Equipments					
23. Modest Infrastructure Pvt. Ltd.	4	237.61	-	-	4	237.61	4	263.50	-	-	4	263.50
24. NN Shipbuilders & Engg. Pvt Ltd	-	-	-	-	-	-	-	-	-	-	-	-
25. Reliance Naval &	2	7315.00	-	-	2	7315.00	2	1775.97	-	-	2	1775.97

Engineering Ltd.												
26. Sembmarine Kakinada Ltd.***	19	6219.37	7	885.27	26	7104.64	19	6219.37	7	885.2	26	7104.64
27. Shoft Shipyard Pvt. Ltd.	3	654.81	-	-	3	654.81	5	501.40	-	-	5	501.40
28. Tebma Shipyard Ltd	-	-	-	-	-	-	14	88.93	-	-	14	88.93
29. Timblo Drydocks Pvt. Ltd.	1	-	-	-	1	-	-	-	-	-	-	-
30. Titagarh Wagons Ltd.	-	-	-	-	-	-	-	-	-	-	-	-
31. Vijai Marine Shipyards	5	25.56	-	-	5	25.56	16	-	2	-	18	603.37
32. West Coast Shipyard Ltd.	-	-	-	-	-	-	2	89.79	-	-	2	89.79
Grand Total (A + B)	496	119471.81	32	1026.71	528	120498.52	666	135132.32	40	1036.13	706	136771.82

Note (1): S : No. of Ships ; E : Earnings in Rs. Lakh;

Note (2): Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

SHIP REPAIR FACILITIES AVAILABLE AT MAJOR PORTS

2.6 Apart from shipbuilding yards, ship repair facilities are also available at major ports. Data provided by different major ports on dry docks, dry dock hire charges and equipments available for ship repairing have been compiled and presented in three different tables (Table 2.5, Table 2.6 & Table 2.7). Company wise ship repairing facilities are given in Table 2.3 (a).

2.7 Available data on Ship repair facilities reveal that Kolkata Port has a maximum number of dry docks (5), Mumbai, Visakhapatnam, Deendayal Port Trust/Kandla Port Trust and Paradip ports have 1 Dry Dock each. The remaining major Ports do not have any ship repairing facilities. With regard to cranes availability and capacity, Kolkata port has five cranes followed by Mumbai port, Deendayal Port Trust/Kandla Port, Visakhapatnam Port and Paradip Port (1 each).

DRY DOCK HIRE CHARGES

2.8 Dry dock hire charges vary from port to port depending upon a number of factors, which include the size and type of vessels and time spent at dock. The charges are different for different types of vessels (foreign going and coastal). The charges also vary for inner harbour and fishing harbour. At Kolkata port, the charges are different for different dry docks.

Table No. 2.1

**Company-wise Ship Repairing Capacity
(As on 31st March, 2019)**

Sl. No.	Name of the company	Type of Vessels/Ships	Ship repair capacity/Maximum size capacity				
			Length	Width	Draft	DWT	
			(Mts.)	(Mts.)	(Mts)	(in thousand)	
1	2	3	4	5	6	7	
A.	<u>PUBLIC SECTOR</u>						
1	Alcock Ashdown (Gujarat) Ltd.	No Repair					
2	Cochin Shipyard Ltd.	All types of vessels	270.00	40.00	6.50	125.0	
3	Garden Reach Shipbuilders and Engineers Ltd.	<p>01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Dry Dock – 1 (Old) of Main Unit (Dry Dock's Length:- 160 mts., Width:- 25 mts.& Draft:- 8 mts. above KODS*)</p> <p>01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Dry Dock – 2 (New) of Main Unit (Dry Dock's Length:- 180 mts., Width:- 29 mts.& Draft:- 12mts. which is 02 mts. below KODS* and 10 mts. above KODS*)</p> <p>03 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Dry Dock – 2 of RBD Unit (Dry Dock's Length:- 158mts., Width:- 18 mts.& Draft:- 8 mts. above KODS*)</p> <p>01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Finger Jetty – 1 of FOJ Unit (Finger Jetty's Length:- 184.5 mts., Width:- 11.5 mts.& Draft:- 7.0 mts. minimum above KODS*)</p> <p>01 No. Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Finger Jetty – 2 of FOJ Unit (Finger Jetty's Length:- 184.5 mts., Width:- 11.5mts.& Draft:- 7.0 mts. minimum above KODS*)</p> <p>02 No. each of Fleet Tanker or Frigate or Corvette or Landing Ship Tank (Large) at Naval Jetty of FOJ Unit (Naval Jetty's Length:- 229 mts., Width:- 10 mts.& Draft:- 8.0 mts. minimum above KODS*)</p> <p>01 Nos. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Wet Basin of Main Unit (Wet Basin's Length:- 109mts., Width:- 23mts.Draft:- 8.0 mts., with Sill Height:- 1.83 mts. above KODS*)</p> <p>01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Western Jetty of Main Unit (Western Jetty's Length:- 100mts. with Pontoon of Length:- 25mts., Width:- 9mts.,and Height:- 4.5 mts.,)</p> <p>01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Canteen Jetty of Main Unit (Canteen Jetty's Length:- 100mts., with Pontoon of Length:- 13.5mts., Width:- 4.5mts.,and Height:- 1.0 mts.,)</p> <p>01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Hooghly Jetty of RBD Unit(Hooghly Jetty's Length:- 88mts., with Pontoon of Length:- 25mts., Width:- 9.0mts.,and Height:- 1.9 mts.,)</p> <p>01 No. each of Offshore Patrol Vessel (OPV) or Landing Craft Utility (LCU). Alternatively, 02 Nos. each of Fast Attack Craft (FAC) or Inshore Patrol Vessel (IPV) or Fast Patrol Vessel (FPV) at Ganga Jetty of Main Unit(Ganga Jetty's Length:- 75 mts., with Pontoon of Length:- 25mts., Width:- 9.0mts.,and Height:- 1.9 mts.,)</p>	< 160	24.00	4.00		
			< 180	< 29	4.00		
			≤50	≤8	4.00		
			180.00	24.00	4.00		
			180.00	24.00	4.00		
			180.00	24.00	4.00		
			80.00	11.00	4.00		
			80.00	11.00	4.00		
			80.00	11.00	4.00		
			80.00	11.00	4.00		
			80.00	11.00	4.00		
			80.00	11.00	4.00		
4	Goa Shipyard Ltd.	Advanced Offshore Patrol Vessels, Fast Patrol Vessels, Fast Attack Crafts, Survey Vessels, Sail Training Ships, Missile Crafts, Landing Crafts, Tugs, Dredgers, Launches, Passenger Ferries, Fishing Vessels, GRP boats and other medium sized sophisticated vessels	130.00	20.00	5.00	4.5	

Table No. 2.1 contd.

Company-wise Ship Repairing Capacity
(As on 31st March, 2019)

Sl. No.	Name of the company	Type of Vessels/Ships	Ship repair capacity/Maximum size capacity			
			Length	Width	Draft	DWT
			(Mts.)	(Mts.)	(Mts)	(in thousand)
1	2	3	4	5	6	7
5	Hindustan Shipyard Ltd.	Cargo Vessels, Passenger Vessel, Tugs, OPVs, Dredgers, Naval Ships, Floating Docks, Oil Tankers, Fishing Trawlers, Submarine Retrofit.	220.00	32.20	18.00	80.00
6	Hooghly Dock & Port Engineer Ltd.	Indian Coast Guard	45.00	12.00	4.00	-
		Inland Vessel	65.00	12.50	4.00	-
		Tanker/Cargo	65.00	12.30	4.00	-
7	Mazagaon Dock Shipbuilders Ltd.	Destroyers/ Frigates	200.00	18.00	5.30	-
		Merchant Ships like Bulk Carriers	200.00	18.00	5.30	30.00
8	Shalimar Works Ltd. ***	Survey Vessels	55.00	11.00	3.00	0.07
		Tug/Launch	10.00	4.00	1.50	0.02
B.	PRIVATE SECTOR (Contd.)					
9	ABG Shipyard Ltd. @					
10	A.C. Roy & Co. Ltd.	a) launch	25.00	7.00	2.00	0.03
		b) barge	60.00	16.00	3.50	2.00
		c)Tug	20.00	6.00	2.00	0.03
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-	
12	Bharati Defence & Infrastructure Ltd. @					
13	Bristol Boats Pvt. Ltd.	Various FRP crafts, life Boats and Rescue Boats 10 to 20 Nos.	20.00	5.00	4.00	0.05
14	Chidambarm Shipcare Pvt. Ltd.	-	-	-	-	
15	Chowgule & Company Pvt. Ltd.	OSV (Offshore Supply Vessels)	60.00	18.00	4.40	2.50
		Hopper Dredger	104.00	24.00	4.80	12.41
		Offshore Patrol Vessels	105.00	12.90	3.60	-
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	a) MBC - Sea going, RSV, container.	80.00	16.00	2.20	3.00
		b) Barges - Sea Going, RSV, Containers, Tankers, MPV, Crane Barges, Passengers, Ferries, Split Barges, Ro-Ro Vessels, Spud Pontoon, Jackup Barges	80.00	16.00	2.20	2.50
		c) Tugs - Sea Going, IV, RSV, Dredgers, AHTS	80.00	16.00	2.20	-
17	Ferromar Shipping Pvt. Ltd.	Inland Vessel	70.00	13.00	1.20	2.00
		Coastal Vessel	100.00	13.00	1.30	2.50
18	Homa Engineering Works	Repair all class of vessels, but do not have own dry dock and wet basin facility				
19	L&T Shipbuilding Ltd	Any type of Commercial/ Defence Vessels upto a length of 200 mtr. and beam of 46 mtr.				
20	Mandovi Drydocks	Passenger Vessels	22.05	8.50	1.30	72 GT
		Barge	80.00	16.00	2.00	-
		Tug	23.50	7.80	2.30	-
		Dumb Barge	21.30	5.50	0.75	-

Table No. 2.1 (Contd.)

**Company-wise Ship Repairing Capacity
(As on 31st March, 2019)**

Sl. No.	Name of the company	Type of Vessels/Ships	Ship repair capacity/Maximum size capacity				
			Length (Mts.)	Width (Mts.)	Draft (Mts)	DWT (in thousand)	
1	2	3	4	5	6	7	
21	Marine Frontiers Pvt. Ltd.	All type of Ships	60.00	10.00	4.00	0.15	
22	Marks Marine Radio Pvt. Lt.	Only provide Sales and Service of Marine Navigation/ Communication Equipments					
23	Modest Infrastructure Pvt. Ltd.	a) General Cargo	99.00	18.00	4.50	6.00	
		b) Tug	33.00	11.50	4.10	Bollard Pull - 65 T	
		c) Survey Vessel	42.18	8.53	3.96	-	
		d) OSV	59.20	15.00	2.50	-	
		e) Cement Carrier	97.00	17.00	4.20	4.00	
		f) Product Tanker	75.00	13.00	5.60	3.30	
		g) Dry Bulk Carrier	82.00	14.00	4.20	4.20	
		h) Container Carrier	67.20	12.80	3.20	94 TEU	
24	N N Shipbuilders and Engineers Pvt Ltd	a) Tugs/Pontoons	30.00	10.00	2.30	-	
		b) Small Ship	-	12.00	2.00	-	
		c) Barges	30.00	-	2.30	-	
25	Reliance Naval & Engineering Ltd.	All types of sea going vessels and crafts	380.00	58.00	10.00	400.00	
26	Sembmarine Kakinada Ltd.***	All types of vessels with a docking displacement of Max. 15000 T	200.00	32.20	6.5 (Docking Draft)	54.0	
27	Shoft Shipyard Pvt. Ltd.	Cargo Ships	70.00	15.00	3.50	2.00	
		Passenger Ships	90.00	15.00	3.50	1.50	
		Barges	70.00	14.00	2.50	1.50	
		Tugs	40.00	10.00	3.50	0.06	
28	Tebma Shipyards Ltd.	TUG, AHTS	48.00	14.00	5.00	2.10	
		Barges Mini Bulk Carrier	120.00	20.00	3.00	2.50	
		PSV	80.00	20.00	6.00	2.00	
29	Timblo Drydocks Pvt. Ltd.	Cargo Vessels	100.00	18.00	5.00	5.60	
		Multi Purpose Barges	120.00	20.00	5.00	5.60	
		Naval vessels	100.00	15.00	4.00	-	
		Ferry Crafts	100.00	18.00	4.00	200 Pax	
		FRP Boats/ High Speed Boats	50.00	12.00	3.50	35 Knots	
		Tug Boats	70.00	15.00	4.50	50T BP	
30	Titagarh Wagons Ltd.	-	-	-	-		
31	Vijai Marine Shipyards	Tankers	75.00	14.50	2.20	2.50	
		Cargo	75.00	14.50	2.20	2.50	
		Passangers	75.00	14.50	2.20	0.20	
32	West Coast Shipyard Ltd.	Bulk Carriers	67.10	12.00	3.20	1.75	
		Bulk Carriers	69.80	13.40	3.30	2.20	

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 2.2

Ship Repairing Capacity-By Company and Maximum Size (2016-2019)

(DWT in thousand)

S.No	Name of The Company	As on end 31st March			
		2016	2017	2018	2019
1	2	3	4	5	6
	A. PUBLIC SECTOR				
1	Alcock Ashdown (Gujarat) Ltd.	-	-	-	No Repair
2	Cochin Shipyard Ltd.	125.00	125.00	125.00	125.00
3	Garden Reach Shipbuilders & Engineers Ltd.	9.00	26.00	-	-
4	Goa Shipyard Ltd.	4.50	4.50	4.50	4.50
5	Hindustan Shipyard Ltd.	80.00	80.00	80.00	80.00
6	Hooghly Dock & Port Engineers Ltd.	-	-	-	-
7	Mazagaon Dock Shipbuilders Ltd.	-	-	30.00	30.00
8	Shalimar Works Ltd. ***	0.70	0.07	0.07	0.07
	B. PRIVATE SECTOR				
9	ABG Shipyard Ltd. @	20.00	120.00	120.00	
10	A.C Roy & Comp. Ltd.	2.00	2.00	2.00	2.00
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-
12	Bharati Defence & Infrastructure Ltd @	20.00	20.00	20.00	
13	Bristol Boats Pvt. Ltd.	0.05	0.05	0.05	0.05
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-
15	Chowgule & Co. Pvt. Ltd.	-	-	-	12.41
16	Dempo Shipbuilding & Engineering Pvt. Ltd.	-	-	3.00	3.00
17	Ferromar Shipping Pvt. Ltd.	2.00	2.00	2.00	2.50
18	Homa Engineering Works	Repair all class of vessels, but do not have own dry dock and wet basin facility			
19	L&T Shipbuilding Ltd	30.00	*	*	*
20	Mandovi Drydocks	-	-	3.00	72 GT
21	Marine Frontiers Pvt. Ltd.	-	-	-	0.15
22	Marks Marine Radio Pvt. Ltd.	y provide Sales and Service of Marine Navigation/ Communication Equipme			
23	Modest Infrastructure Pvt. Ltd.	6.00	6.00	6.00	6.00
24	N N Shipbuilders and Engineers Pvt Ltd	-	-	-	-
25	Reliance Naval & Engineering Ltd.	400.00	400.00	400.00	400.00
26	Sembmarine Kakinada Ltd.***	54.00	54.00	54.00	54.00
27	Shoft Shipyard Pvt. Ltd.	-	-	2.00	2.00
28	Tebma Shipyards Ltd	-	-	-	2.50
29	Timblo Drydocks Pvt. Ltd.	-	-	4.00	5.60
30	Titagarh Wagons Ltd.	-	-	-	-
31	Vijai Marine Shipyards	-	-	2.50	2.50
32	West Coast Shipyard Ltd.	-	-	-	2.20

* Any type of Commercial/ Defence Vessels upto a length of 200 mtr. And beam of 46 mtr.

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India

Table No. 2.3

Ship Repairing Facilities-Company-Wise for Dry Docks and Wet Docks (As on 31st March, 2019)

Sl. No.	Name of Company	Dry Dock Owned					Wet Docks/Basin Owned					
		Capacity					Capacity					
		No.	Length (Mtrs.)	Width (Mtrs.)	Draft (Mtrs.)	DWT (in thousand tons)	No.	Length (Mtrs.)	Width (Mtrs.)	Draft (Mtrs.)	DWT (in thousand tons)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
A. PUBLIC SECTOR												
1	Alcock Ashdown (Gujarat) Ltd.	No Ship Repairing Facility Available										
2	Cochin Shipyard Ltd.	1	270.0	45.0	12.0	125.0	-	-	-	-	-	
		1	255.0	43.0	9.0	110.0	-	-	-	-	-	
3	Garden Reach Shipbuilders & Engineers Ltd.	1	160.0	25.0	8.0	-	1	109.0	23.0	8.0	-	
		1	180.0	29.0	12.0	-	-	-	-	-	-	
		1	158.0	18.0	8.0	-	-	-	-	-	-	
4	Goa Shipyard Ltd.	-	-	-	-	-	-	-	-	-	-	
5	Hindustan Shipyard Ltd.	1	244.0	38.0	11.5	80.0	1	226.0	73.0	10.0	50.0	
		1	168.0	73.0	10.0	30.0	-	-	-	-	-	
6	Hooghly Dock & Port Engineers Ltd.	1	94.0	13.4	8.6	1.0	-	-	-	-	-	
7	Mazagaon Dock Shipbuilders Ltd.	1	41.15	10.06	2.75	-	1	274.0	26.2	9.1	-	
		1	216.00	18.90	5.49	4.0	-	-	-	-	4.0	
		1	129.87	16.76	4.89	-	1	225.0	112.0	6.0	-	
		1	89.39	17.00	-	-	-	-	-	-	-	
8	Shalimar Works Ltd. ***	-	-	-	-	-	-	-	-	-	-	
B. PRIVATE SECTOR												
9	ABG Shipyard Ltd. @	-	-	-	-	-	-	-	-	-	-	
10	A.C. Roy & Co. Ltd.	-	-	-	-	-	2	50.0	18.0	3.0	2.0	
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	
12	Bharati Defence & Infrastructure Ltd @	-	-	-	-	-	-	-	-	-	-	
13	Bristol Boats Pvt. Ltd.	1	25.0	8.0	1.5	0.05	-	-	-	-	-	
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	
15	Chowgule & Co. Pvt. Ltd.	1	116.0	26.0	6.0	7.7	1	260.0	-	6.5	-	
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	2	90.0	18.0	2.2	3.0	-	-	-	-	-	
17	Ferromar Shipping Pvt. Ltd.	-	-	-	-	-	3	100.0	13.0	3.2	2.5	
18	Homa Engineering Works	Do not have their own Dry Dock and Wet Basin facility										
19	L&T Shipbuilding Ltd	-	-	-	-	-	4	200-260	-	10.0	-	
20	Mandovi Drydocks	1	84	16	2.5	2.1	1	250	-	-	-	
21	Marine Frontiers Pvt. Ltd.	-	-	-	-	-	-	-	-	-	-	
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments										
23	Modest Infrastructure Pvt. Ltd.	2	95.0	16.0	3.5	3.5	-	-	-	-	-	
			120.0	21.0	4.5	6.0	-	-	-	-	-	
24	N N Shipbuilders and Engineers Pvt Ltd	-	-	-	-	-	-	-	-	-	-	
25	Reliance Naval and Engineering Ltd.	1	662.0	65.0	10.0	400.0	1	344.0	50.0	6.0	-	
26	Sembmarine Kakinada Ltd.***	1	200.0	32.2	6.5	54.0	635 m length wet berth available with depth of 12 m					
27	Shoft Shipyard Pvt. Ltd.	-	-	-	-	-	-	The outfitting jetty/Berth is located between slipway 1&2 as well as slipway 2&3. The vessels are kept afloat all the time with berthing pontoons rigidly connected to the shore. Vessels of length upto 100 mts. With draft upto 5.5 mts can be kept afloat even during lowest of low tide. The vessels can also be berth side by side. the length is about 540 mts.				
28	Tebma Shipyards Ltd.	-	-	-	-	-	-	-	-	-	-	
29	Timblo Drydocks Pvt. Lt.	2	210 & 220	16 & 22	3.5	1.0	1	-	-	-	-	
		1	120	20	4.5	5.0	-	-	-	-	-	
30	Titagarh Wagons Ltd.	-	-	-	-	-	-	-	-	-	-	
31	Vijai Marine Shipyards	1	75	16	2.2	2.9	-	-	-	-	-	
32	West Coast Shipyard Ltd.	1	130	20	3.3	-	-	-	-	-	-	

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 2.3a

**Company-wise Ship Repairing Facilities
(As On 31st March, 2019)**

Sl. No.	Name of Company	Other repairing facilities					
		Item	Nos.	Capacity			
				Length (Mtrs.)	Width (Mtrs.)	Draft (Mtrs.)	DWT (in thousand tons)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A.	<u>PUBLIC SECTOR</u>						
1	Alcock Ashdown (Gujarat) Ltd.	No Ship Repairing Facility Available					
2	Cochin Shipyard Ltd.	ISRF	1	66	12.5	4	-
		CMSRU	1	304.8	30.08	9.75	-
3	Garden Reach Shipbuilding and Engineers Ltd.	Naval Jetty At FOJ unit	1	229.0	10.0	8.0	-
		Finger Jetty-1 at FOJ unit	1	184.5	11.5	7.0	-
		Finger Jetty-2 at FOJ unit	1	184.5	11.5	7.0	-
		River Jetty-Ganga	1	25.0	9.0	1.9	-
		River Jetty-Hoogly	1	25.0	9.0	1.9	-
		River Jetty-Canteen	1	13.5	4.5	1.0	-
		River Jetty-Bargepuri	1	12.5	4.5	1.0	-
		River Jetty-Dolphin 1	1	25.0	9.0	4.5	-
		River Jetty-West Jetty	1	25.0	9.0	4.5	-
4	Goa Shipyard Ltd.	Repair Berth-1	1	130.0	29.5	-	-
		Repair Berth-2	1	130.0	30	-	-
		Construction Berth 3	1	136.0	42.5	-	-
		Construction Berth 4	1	136.0	44.0	-	-
		Shiplift	1	120.0	25.0	-	6.0
		New Jetty	1	250.0	16.0	5.5	-
		Outfit & Commissioning Jetty	1	105.0	17.0	5.5	-
		Berthing Jetty alongside the construction berth 3	1	136.0	-	5.5	-
		Ship Assembly Workshop-1 (SAW-1)	1	126.0	35.0	36	-
		Ship Assembly Workshop-2 (SAW-2)	1	126.0	35.0	36	-
		New construction Bay	1	96.5	26.0	14.1	-
		Slipway	1	119.0	22.0	4	1.0
5	Hindustan Shipyard Ltd.	Dolphin Jetty	1	150.0	-	8.0	-
6	Hooghly Dock & Port Engineers Ltd.	Jetty	3	45.0-36.0	-	-	At Salkia works-One & at Nazirgunge works-Two
7	Mazagaon Dock Shipbuilders Ltd.	South Yard 1	1	188	26	-	-
		South Yard 2	1	188	26	-	-
		North Yard	1	190	29	-	-
8	Shalimar Works Ltd.***	Kuccha Basin	2	-	-	-	-
		Fitting out jetty	1	-	-	-	-

Table No. 2.3a(Contd...)

**Company-wise Ship Repairing Facilities
(As On 31st March, 2019)**

Sl. No.	Name of Company	Other repairing facilities					
		Item	Nos.	Capacity			
				Length (Mtrs.)	Width (Mtrs.)	Draft (Mtrs.)	DWT (in thousand tons)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
B. PRIVATE SECTOR							
9	ABG Shipyard Ltd. @						
10	A.C. Roy & Company Ltd.	-	-	-	-	-	-
11	A.S. Moloobhoy Pvt. Ltd.	-	-	-	-	-	-
12	Bharati Defence & Infrastructure Ltd @						
13	Bristol Boats Pvt. Ltd.	-	-	-	-	-	-
14	Chidambaram Shipcare Pvt. Ltd.	-	-	-	-	-	-
15	Chowgule & Co. Pvt. Ltd	Others (Specify)	3	150	40	-	-
			3	120	40	-	-
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	Slipway	1	30.0	10	1	0.5
		Jetty	3	70.0	-	-	-
17	Ferromar Shipping Pvt. Ltd.	-	-	-	-	-	-
18	Homa Engineering Works						
19	L&T Shipbuilding Ltd	Shiplift	1	200.0	46.0	8.0	-
20	Mandovi Drydocks	-	-	-	-	-	-
21	Marine Frontiers Pvt. Ltd.	-	1.00	50.00	10.50	8.00	0.15
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments					
23	Modest Infrastructure Pvt. Ltd.	-	-	-	-	-	-
24	N N Shipbuilders and Engineers Pvt Ltd	Slipways	3	70.0	7.0	2.3	-
25	Reliance Naval and Engineering Ltd.	Fit-out Berth	1	175.0	16.9	6	-
		Offshore Yard	1	750.0	265.0	-	-
26	Sembmarine Kakinada Ltd.***	1 No. Dolphin with bollard for carrying out bollard pull test for Anchor handling vessels up to 150 T					
27	Shoft Shipyard Pvt. Ltd.	Other (specific)- Slipway	3	90.00	18.00	2.50	-
			3	120.00	22.00	4.00	-
			3	150.00	36.00	4.00	-
28	Tebma Shipyards Ltd.	-	-	-	-	-	-
29	Timblo Drydocks Pvt. Ltd.	-	-	-	-	-	-
30	Titagarh Wagons Ltd.	-	-	-	-	-	-
31	Vijai Marine Shipyards	Slipway	1.00	118.00	18.00	2.80	2.50
32	West Coast Shipyard Ltd.	-	-	-	-	-	-

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 2.4

No. Of Ships Repaired And Earnings, Company-wise - (2015-16 to 2018-19)

(Rs. in Lakhs)

S.No	Name of The Company	Year	Indian Vessels		Foreign Vessels		Total		
			No.	Earnings	No.	Earnings	No.	Earnings	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	A. PUBLIC SECTOR(Total)	2018-19	364	113159.60	1	7	365	113166.60	
		2017-18	228	95282.75	0	0	228	95282.75	
		2016-17	156	88727.22	0	0	156	88727.22	
		2015-16	122	61182.16	12	6636	134	67817.70	
	Alcock Ashdown (Gujarat) Ltd.	2018-19	-	-	-	-	0	0.00	
		2017-18	-	-	-	-	0	0.00	
		2016-17	-	-	-	-	0	0.00	
		2015-16	-	-	-	-	0	0.00	
	2	Cochin Shipyard Ltd.	2018-19	329	83197.46	-	-	329	83197.46
			2017-18	194	62326.64	-	-	194	62326.64
			2016-17	128	54304.93	-	-	128	54304.93
			2015-16	89	35552.00	-	-	89	35552.00
3	Garden Reach Shipbuilders and Engineers Ltd.	2018-19	-	-	-	-	0	0.00	
		2017-18	-	-	-	-	0	0.00	
		2016-17	-	-	-	-	0	0.00	
		2015-16	-	-	-	-	0	0.00	
4	Goa Shipyard Ltd.	2018-19	22	19825.96	-	-	22	19825.96	
		2017-18	20	22367.35	-	-	20	22367.35	
		2016-17	15	19339.95	-	-	15	19339.95	
		2015-16	14	10459.43	12	6635.54	26	17094.97	
5	Hindustan Shipyard Ltd.	2018-19	12	7454.18	1	7.00	13	7461.18	
		2017-18	14	10588.76	-	-	14	10588.76	
		2016-17	12	15052.72	-	-	12	15052.72	
		2015-16	16	15042.89	-	-	16	15042.89	
6	Hooghly Dock & Port Engineers Ltd.	2018-19	-	-	-	-	0	0.00	
		2017-18	-	-	-	-	0	0.00	
		2016-17	-	-	-	-	0	0.00	
		2015-16	-	-	-	-	0	0.00	
7	Mazagaon Dock Shipbuilders Ltd.	2018-19	1	2682.00	-	-	1	2682.00	
		2017-18	-	-	-	-	0	0.00	
		2016-17	-	-	-	-	0	0.00	
		2015-16	-	-	-	-	0	0.00	
8	Shalimar Works Ltd. ***	2018-19	0	0.00	-	-	0	0.00	
		2017-18	0	0.00	-	-	0	0.00	
		2016-17	1	29.62	-	-	1	29.62	
		2015-16	3	127.84	-	-	3	127.84	
	B. PRIVATE SECTOR (Total)	2018-19	302	21972.72	39	1029.13	341	23605.22	
		2017-18	268	24189.06	32	1026.71	300	25215.77	
		2016-17	119	15756.09	7	885.27	126	16641.36	
		2015-16	257	13668.97	55	2422.87	312	13762.37	
9	ABG Shipyard Ltd. @	2018-19	-	-	-	-	-	-	
		2017-18	3	6.00	-	-	3	6.00	
		2016-17	-	368.60	-	-	0	368.60	
		2015-16	-	700.50	-	-	0	1111.00	
10	A.C.Roy & Co. Ltd.	2018-19	12	65.00	-	-	12	65.00	
		2017-18	16	83.00	-	-	16	83.00	
		2016-17	24	145.00	-	-	24	145.00	
		2015-16	26	155.00	-	-	26	155.00	
11	A.S. Moloobhoy Pvt. Ltd.	2018-19	-	-	-	-	0	0.00	
		2017-18	-	3550.81	-	-	0	3550.81	
		2016-17	-	-	-	-	0	0.00	
12	Bharati Defence & Infrastructure Ltd @	2018-19	-	-	-	-	-	-	
		2017-18	3	174.32	-	-	3	174.32	
		2016-17	-	214.36	-	-	0	214.36	
		2015-16	-	1019.92	-	-	0	633.96	

Table No. 2.4 (Contd...)

No. Of Ships Repaired And Earnings, Company-wise - (2015-16 to 2018-19)

(Rs.in Lakhs)

S.No	Name of The Company	Year	Indian Vessels		Foreign Vessels		Total	
			No.	Earnings	No.	Earnings	No.	Earnings
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13	Bristol Boats Pvt. Ltd	2018-19	4	51.12	-	-	4	51.12
		2017-18	3	14.09	-	-	3	14.09
		2016-17	5	170.56	-	-	5	170.56
		2015-16	1	4.75	-	-	1	4.75
14	Chidambaram Shipcare Pvt. Ltd.	2018-19	130	818.08	30	143.86	160	961.94
		2017-18	149	538.09	25	141.44	174	679.53
		2016-17	-	-	-	-	0	0.00
		2015-16	115	1201.37	40	205.03	155	1406.40
15	Chowgule & Co. Pvt. Ltd.	2018-19	54	82.00	-	-	54	82.00
		2017-18	-	-	-	-	-	-
		2016-17	-	-	-	-	-	-
16	Dempo Shipbuilding & Engineering Pvt. Ltd.	2018-19	15	900.86	-	-	15	900.86
		2017-18	32	1026.00	-	-	32	1026.00
		2016-17	56	824.00	-	-	56	824.00
		2015-16	73	1218.62	-	-	73	1218.62
17	Ferromar Shipping Pvt. Ltd.	2018-19	-	-	-	-	0	0.00
		2017-18	-	-	-	-	0	0.00
		2016-17	-	-	-	-	0	0.00
		2015-16	-	-	-	-	0	0.00
18	Homa Engineering Works	2018-19	2	-	-	-	2	0.00
19	L&T Shipbuilding Ltd	2018-19	10	10932.17	-	-	10	10932.17
		2017-18	15	3988.16	-	-	15	3988.16
		2016-17	14	7731.94	-	-	14	7731.94
		2015-16	23	3149.44	8	1332.57	31	2128.00
20	Mandovi Drydocks	2018-19	7	143.70	-	-	7	143.70
		2017-18	13	356.24	-	-	13	356.24
21	Marine Frontiers Pvt. Ltd.	2018-19	6	40.83	-	-	6	40.83
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communication Equipments						
23	Modest Infrastructure Pvt. Ltd.	2018-19	4	263.50	-	-	4	263.50
		2017-18	4	237.61	-	-	4	237.61
		2016-17	1	82.26	-	-	1	82.26
		2015-16	-	-	-	-	0	0.00
24	N N Shipbuilders and Engineers Pvt. Ltd.	2018-19	-	-	-	-	-	-
		2017-18	-	-	-	-	-	-
		2016-17	-	-	-	-	-	-
25	Reliance Naval & Engineering Ltd.	2018-19	2	1775.97	-	-	2	1775.97
		2017-18	2	7315.00	-	-	2	7315.00
		2016-17	-	-	-	-	-	-
26	Sembmarine Kakinada Ltd. ***	2018-19	19	6219.37	7	885.27	26	7104.64
		2017-18	19	6219.37	7	885.27	26	7104.64
		2016-17	19	6219.37	7	885.27	26	7104.64
		2015-16	19	6219.37	7	885.27	26	7104.64
27	Shoft Shipyard Pvt. Ltd.	2018-19	5	501.40	-	-	5	501.40
		2017-18	3	654.81	-	-	3	654.81
28	Tebma Shipyards Ltd	2018-19	14	88.93	-	-	14	88.93
		2017-18	-	-	-	-	-	-
		2016-17	-	-	-	-	-	-
29	Timbio Drydocks Pvt. Ltd.	2018-19	-	-	-	-	-	-
		2017-18	1	-	-	-	1	0.00
30	Titagarh Wagons Ltd.	2018-19	-	-	-	-	-	
31	Vijai Marine Shipyards	2018-19	16	-	2	-	18	603.37
		2017-18	5	25.56	-	-	5	25.56
32	West Coast Shipyard Ltd.	2018-19	2	89.79	-	-	2	89.79
		2018-19	666	135132.32	40	1036.13	706	136771.82
		2017-18	496	119471.81	32	1026.71	528	120498.52
		2016-17	275	104483.31	7	885.27	282	105368.58
		2015-16	379	74851.13	67	9058.41	446	81580.07

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 2.5

Dry Dock & Ship Repairing Facilities at Major Ports 2018-19

Name of Ports	No. of Dry Docks and their Size	No. of Work-shops	No. of Cranes & Capacity	No. of Vessels Repaired during 2018-19	No. of days at Dry Dock Occupancy during 2018-19	
1	2	3	4	5	6	
Chennai	No dry dock. One Slipway of Length 607 ft. Breadth 67 ft. and Depth 4 ft. 3inch.	Marine Repair Shop, Plating Shop, Welding and Panting shop	NIL	4	25 (Appx.)	
Cochin	Cochin Port Trust has leased out its dry dock for 30 years to Cochin Shipyards Ltd. On 11.4.2013, and as such no dry dock hire charges have been collected by this Port in 2018-19.					
Deendayal Port Trust / Kandla	<u>One</u> Length : 95mtrs.+ 4.5mtrs. Extended platform each at FWD and AFT ends Width : 20 mtrs. Depth : 5.5 mtrs.	1. One owned by Port. 2. Full fledge private workshops are also available	<u>One</u> 5 MT	37	349	
Haldia Dock Complex	There is no dry dock facility at Haldia Dock Complex.					
JNPT	The port doesn't have the facility for ship building and ship repairing.					
Kamarajar	The dry dock facility is not available at Port.					
Kolkata	NSDD-1	E*-(178X32.3X14.32) B@-(165.2X27.43X14.32)	---	2 Nos. 3T/6T, 1 No. 3T	9	668
	NSDD-2	E-(182.88X32.3X14.32) B-(170.08X27.43X14.32)				
	KPDD-1	E-(166.72X21.23X7.62) B-(163.98X20.39X7.62)		1 No. 5T		
	KPDD-2	E-(151.48X21.23X7.46) B-(148.8X20.57X7.46)		1 No. 7T		
	KPDD-3	E-(106.68X18.28X7.31) B-(102.87X17.44X7.31)				
Mormugao Port Trust	The dry dock facility is not available at Port.					
Mumbai***	<u>One</u> Length : 1000 ft. Breadth : 102 ft. Depth : 44 ft.		One 20 T crane at west dwarf (derated to 7.5 T) [under repair]			
NMPT	The infrastructure and dry dock facility are not available at Port.					
Paradip	<u>One</u> Length : 75 mtrs. Breadth : 15 mts. Depth : 6 mts.	1	<u>One (Twin Hook)</u> 3/10 MT	21	317	
Visakhapatnam	<u>One</u> Length : 140.2 mtrs. Breadth : 18.2 mtrs. Depth : 5.6 mtrs.	0	<u>One</u> 4 T	13	132	
V.O.Chidambaranar	NIL	NIL	NIL	NIL	Not Applicable	

E*: Entry Level

B@: Bottom Level

*** Repeated 2017-18 information.

Table No. 2.6

Dry Dock Hire Charges Existing at Major Ports

Name of Ports 1	Dry Dock Hire Charges for different sizes of vessels 2					
Cochin	Cochin Port Trust has leased out its dry dock for 30 years to Cochin Shipyards Ltd. On 11.4.2013, and as such no dry dock hire charges have been collected by this Port in 2018-19.					
Deendayal Port Trust/ Kandla	Rate Per Vessel					
	Craft up to 30 mtrs		Craft between 30 to 60 mtrs		Craft above 60 mtrs	
<u>Particulars</u>	Coastal Vessel (in Rs.)	Foreign going vessel (in US \$)	Coastal Vessel (in Rs.)	Foreign going vessel (in US \$)	Coastal Vessel (in Rs.)	Foreign going vessel (in US \$)
Docking & undocking the vessel including 1st day hire and cleaning of dry dock	135009.1	5461.01	161846.16	6547.18	188822.03	7638.46
Dry dock hire from 2nd day to 8 day (both days inclusive) per day or part thereof	47730.85	1930.86	57279.79	2317.14	66828.75	2703.44
Dry dock hire from 9th day to 20th day (both days inclusive) per day or part thereof	71600.00	2896.43	85917.41	3475.63	100238.5	4054.97
Dry dock hire from 21st day or part thereof	115353.71	4666.42	138425.08	5599.72	161494.35	6532.97
<u>Particulars</u>				Coastal vessel (in Rs.)	Foreign going vessels (in US \$)	
Removing and refitting keel blocks in way of repairs. Besides, special blocks, if required to be laid on account of peculiarities in the construction of any vessel.				7591.04 per block	307.07 per block	
Mormugao	National Charges				It doesnot have any Dry Dock of its own.	
	International Charges					
Mumbai***	GRT (in MT)	Coastal Vessel (in Rs.)		Foreign going vessel (in US \$)		
	Upto 1000	39331.70		1868.25		
	1001 to 2000	42609.10		2026.96		
	2001 to 3000	45887.60		2780.50		
	3001 to 4000	52442.30		2491.01		
	4001 to 5000	58998.10		2803.25		
	5001 to 10000	65552.90		3113.76		
	10001 to 20000	72108.70		3426.01		
> 20001	81940.80		3893.49			
Paradip	National Charges				Rs. 24000/-	
	International Charges					
Vishakapatnam				1st day to 14th day	15th day to 30th day	31st day onwards
	National Charges (in Rs.)			88532	132755	177063
	International Charges (in US\$)			3150.15	4723.69	6300.28
V.O. Chidambaranar	NIL					

Dry Dock Hire Charges Existing at Major Ports

Name of Ports	Dry Dock Hire Charges for different sizes of vessels						
1	2						
Kolkata***	I. During first 10 days of occupancy of vessel (part day or part thereof):						
	Size of vessel in GRT	1 & 2 N.S. Dry Dock		1 & 2 K.P. Dry Dock		3 K.P. Dry Dock	
		Foreign going vessel (in US \$)	Coastal Vessel (in Rs.)	Foreign going vessel (in US \$)	Coastal Vessel (in Rs.)	Foreign going vessel (in US \$)	Coastal Vessel (in Rs.)
	Upto 1000 GRT	2520	55440	2268	52920	2268	50400
	1001 to 2000	2772	60480	2520	57960	2268	54180
	2001 to 3000	3024	65520	2772	63000	2268	55440
	3001 to 4000	3276	75600	3024	70560	2268	56700
	4001 to 5000	3528	85680	3276	78120	2268	57960
	5001 to 10000	4032	95760	3528	88200	2268	60480
	10001 & above	4536	105840	3780	98280	2268	63000
	II. From 11 th to 30 th days of occupation: 200% of rates as stated above per day or part thereof.						
	III. Beyond 30 th days of occupation: 300% of rates as stated above per day or part thereof.						
	IV. If the undocking on the day as per the undocking list is deferred on account of Kopt, the corresponding dry dock hire charges for the days of delay will not be charged. This shall, however, not be applicable for Saturdays/ Sundays/ Holidays.						
	V. In case the vessel occupies the dry dock beyond the period for which the dry dock has been initially allotted due to reasons attributable to the Kopt, the dry dock hire charges for the period of such extension will not be chargeable. This shall, however, not be applicable for Saturdays/ Sundays/ Holidays.						
	VI. In case the vessel occupies the dry dock beyond the period for which the dry dock has been initially allotted for reasons other than (iv) and (v) above, hire charges shall be levied at double the rate prescribed at (i) to (iii) above for the period of such overstay or proportional incremental charges for the entire period of occupancy as per the following slabs, which ever is higher:						
	Total stay period			Rate			
	Up to 15 days			Rate as prescribed at (i) to (iii) above			
More than 15 days but less than/equal to 30 days			1.25 times the rate as prescribed (i) to (iii) above				
More than 30 days but less than/equal to 45 days			1.5 times the rate as prescribed (i) to (iii) above				
More than 45 days but less than/equal to 60 days			2 times the rate as prescribed (i) to (iii) above				
More than 60 days			5 times the rate as prescribed (i) to (iii) above				
VII. If the vessel has requisitioned for a dry dock but it is not ready to dock at the time specified according to the docking programme, no charges shall be leviable provided an intimation of cancellation/postponement of dry docking is given (excluding the day of docking) 2 days in advance of the specified time of docking. In such cases a cancellation fee of US dollar 52.5/ Rs 2100/- will be recovered in such cases in case of Foreign/ Coastal respectively. However, if no such intimation is given 5% additional charge shall be recovered calculated on the rates applicable during the first 10 days of occupation for the period the vessel did not actually occupy the dry dock.							

Source: All major ports.

*** Repeated 2017-18 Information

Table No. 2.7

Equipments available at Major Ports

Name of Ports	Equipments available in the Workshops
1	2
Chennai	No dry dock. One Slipway of Length 607 ft. Breadth 67 ft. and Depth 4 ft. 3inch.
Cochin	Cochin Port Trust has leased out its dry dock for 30 years to Cochin Shipyard Ltd. On 11.4.2013, and as such no dry dock hire charges have been collected by this Port in 2018-19.
Deendayal Port Trust/ Kandla***	Lathe Machines (6), Flexible Grinding Machine (2), (Welding Machine, Gas Cutting Sets and Grinding Machines [3 each]), (Radial Drill Machine, Vertical Drill Machine, Milling Machine, Shapping Machine, Saw Cutting Machine, Hardness Testing Machineand Flexible Welding Machine [1 each])
Haldia Dock Complex	There is no dry dock facility at Haldia Dock Complex.
JNPT	The port doesn't have the facility for ship buildig and ship repairing.
Kamarajar Port	The dry dock facility is not available at Port.
Kolkata	Commercial (Non-KoPT) vessels are repaired by the concerned Dry Dock users by their own arrangement.
	KoPT-owned vessels are repaired by KoPT-through contractors by open tendering process.
Mormugao	No Dry dock facility available at the Port.
Mumbai***	Nil. Private contractors are deployed by the vessel owners.
NMPT	The infrastructure and dry dock facility are not available at Port.
Paradip***	1 Overhead crane, capacity: 10 Ton 1 Lathe Machine type- EP3225, Height = 16 inches, Chuck = 24 inch, Bed length = 12 feet 1 Lathe Machine Type-H 26, Height = 10 inches, Chuck = 14 inches, Bed length = 12 feet 1 Bending Machine (3 rollers), Rollers Diameter = 200mm (1 nos.); 180mm (2 nos.) Length = 2 meters 1 Stand Radial Drill Machine , Make : HMT, Machine no. 32358 1 Electric Saw
Visakhapatnam	NIL
V.O.Chidambaranar	NIL

*** Repeated 2017-18 information in respect of Mumbai and Deendayal Port and 2015-16 information for Paradip Port.

Section- 3

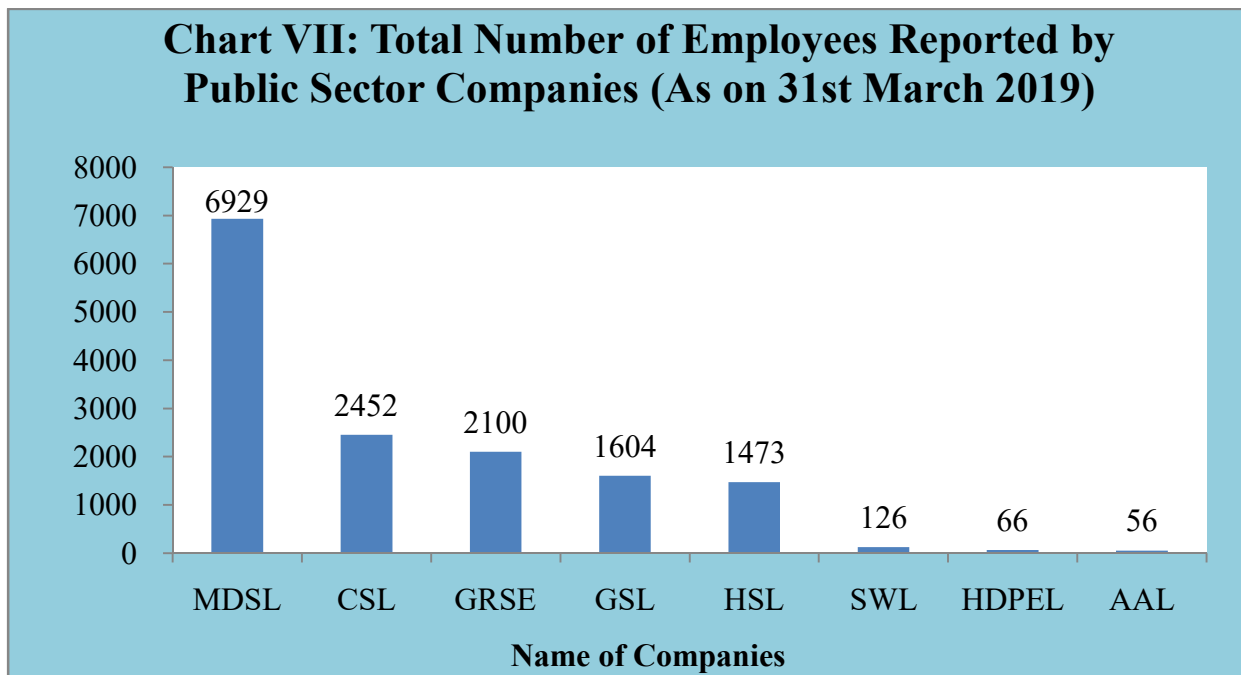
EMPLOYMENT IN SHIP- BUILDING/SHIP-REPAIRING INDUSTRY

3. EMPLOYMENT IN SHIP-BUILDING/SHIP-REPAIRING INDUSTRY

3.1 The total number of employees under the eight Public Sector Shipyards during 2018-19 was 14806 which included 2689 officers (18.2% of the total number of employees). The maximum number of employees in the public sector Shipyards as on 31st March 2019 was 6929 in Mazagon Dock Shipbuilders Ltd (MDSL) followed by 2452 employees in Cochin Shipyard Ltd (CSL), 2100 employees in Garden Reach Shipbuilders and Engineers Ltd. (GRSE), 1604 employees in Goa Shipyard Ltd. (GSL) and 1473 employees in Hindustan Shipyard Ltd. (HSL).

3.2 The total number of employees in private sector companies were 4366 as on 31st March 2019 of which total number of officers were 1489 (34.1% of the total number of employees). Amongst the reporting companies, Reliance Naval & Engineering Ltd. had highest number of employees (1344) followed by Shoft Shipyard Pvt. Ltd. (SSPL) (719 employees) and L&T Shipbuilding Ltd. (501 employees).

3.3 The total number of employees among the eight public sectors undertakings is shown in chart VII below and details of the same are given in Table 3.1.



3.4 Chart VIII given below depicts a downward trend in Ship-building and Ship-repairing industries during the period 2014-15 to 2018-19 and details of the same are given in Table 3.2.

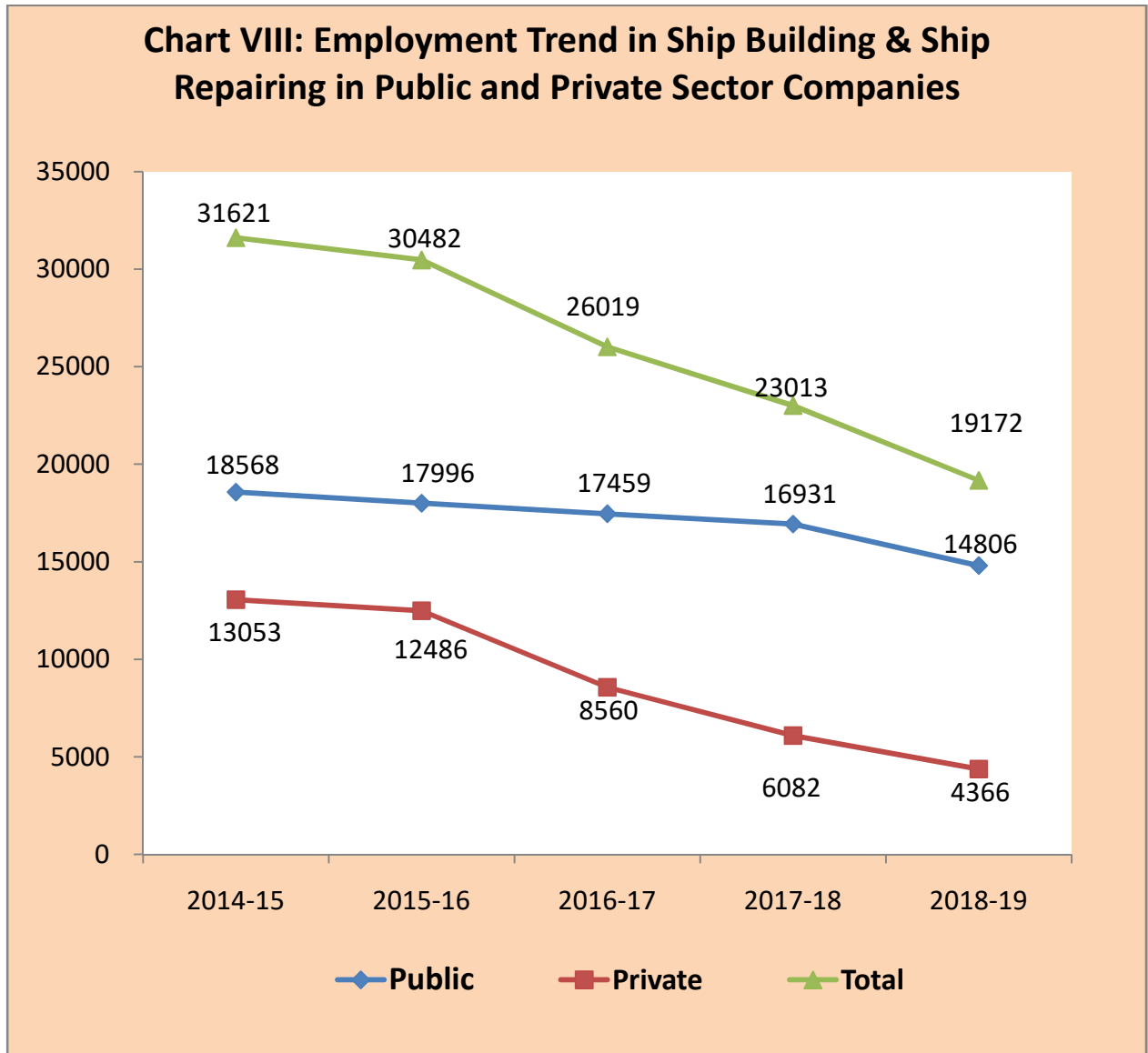


Table No. 3.1

Employment In Ship-Building/Ship-Repairing Companies

(As on 31st March, 2019)

S.No	Name of The Company	Officers		Supervisors		Workforce in Operation				Total	
		Permanent	Contractual	Permanent	Contractual	Directly involved in		Indirectly involved in		Permanent	Contractual
						(7)	(8)	(9)	(10)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	A. PUBLIC SECTOR (Total)	2478	211	592	40	6758	2744	1110	873	10938	3868
1	Alcock Ashdown (Gujarat) Ltd.	19	1	0	0	24	0	12	0	55	1
2	Cochin Shipyard Ltd.	340	113	152	2	1156	0	96	593	1744	708
3	Garden Reach Shipbuilders & Engineers Ltd	472	0	123	12	1145	5	343	0	2083	17
4	Goa Shipyard Ltd.	255	32	170	4	909	57	140	37	1474	130
5	Hindustan Shipyard Ltd.	317	29	145	19	467	335	98	63	1027	446
6	Hooghly Dock & Port Engineers Ltd.	1	8	2	3	26	0	14	12	43	23
7	Mazagaon Dock Shipbuilders Ltd.	1070	7	0	0	2951	2347	387	167	4408	2521
8	Shalimar Works Ltd. ***	4	21	0	0	80	0	20	1	104	22
	B. PRIVATE SECTOR (Total)	1408	81	70	4	1332	897	325	249	3135	1231
9	ABG Shipyard Ltd. @									0	0
10	A.C.Roy & Comp. Ltd.	30	0	1	0	4	10	13	0	48	10
11	A.S. Moloobhoy Pvt. Ltd.	92	0	50	0	0	0	0	0	142	0
12	Bharati Defence & Infrastructure Ltd @									0	0
13	Bristol Boats Pvt. Ltd.	5	0	0	0	15	0	1	0	21	0
14	Chidambaram Shipcare Pvt. Ltd.	21	0	5	0	2	22	0	0	28	22
15	Chowgule & Co. Pvt. Ltd.	93	0	0	0	31	0	0	0	124	0
16	Dempo Shipbuilding & Engineering Pvt. Ltd.	32	0	0	0	0	140	1	30	33	170
17	Ferromar Shipping Pvt. Ltd.	2	0	0	0	0	0	0	0	2	0
18	Homa Engineering Works	7	0	0	0	8	0	8	0	23	0
19	L&T Shipbuilding Ltd	480	20	0	0	1	0	0	0	481	20
20	Mandovi Drydocks	34	17	0	0	0	0	0	182	34	199
21	Marine Frontiers Pvt. Ltd.	10	0	9	0	84	0	11	9	114	9
22	Marks Marine Radio Pvt. Ltd.									Only provide Sales and Service of Marine Navigation/ Communication Equipments	
23	Modest Infrastructure Pvt. Ltd.	45	0	0	0	15	0	5	0	65	0
24	N N Shipbuilders and Engineers Pvt Ltd	12	0	3	0	65	0	12	0	92	0
25	Reliance Naval & Engineering Ltd.	284	0	0	0	856	0	204	0	1344	0
26	Sembmarine Kakinada Ltd. ***	16	0	0	0	79	0	0	0	95	0
27	Shoft Shipyard Pvt. Ltd.	130	35	0	0	60	475	11	8	201	518
28	Tebma Shipyards Ltd	9	9	0	4	0	0	0	20	9	33
29	Timblo Drydocks Pvt. Ltd.	18	0	0	0	23	0	9	0	50	0
30	Titagarh Wagons Ltd.	75	0	0	0	60	250	2	0	137	250
31	Vijai Marine Shipyards	11	0	2	0	26	0	47	0	86	0
32	West Coast Shipyard Ltd.	2	0	0	0	3	0	1	0	6	0
	C. Grand Total (A + B)	3886	292	662	44	8090	3641	1435	1122	14073	5099

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Table No. 3.2

**Employment Pattern In Ship-Building/
Ship-Repairing Companies - (2015-2019)**

(In numbers)

S.No	Name of The Company	Particulars	As on 31st March					
			2015	2016	2017	2018	2019	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	A. PUBLIC SECTOR (Total)	Total	18568	17996	17459	16931	14806	
		Officers	2536	2628	3202	2682	2689	
1	Alcock Ashdown (Gujarat) Ltd.	Total	109	96	86	68	56	
		Officers	48	45	32	23	20	
2	Cochin Shipyards Ltd.	Total	2544	2461	2632	2398	2452	
		Officers	318	348	700	386	453	
3	Garden Reach Shipbuilders & Engineers Ltd.	Total	2834	2592	2401	2214	2100	
		Officers	484	496	504	482	472	
4	Goa Shipyards Ltd.	Total	1545	1605	1656	1644	1604	
		Officers	234	262	465	276	287	
5	Hindustan Shipyards Ltd.	Total	2270	2001	1794	1610	1473	
		Officers	364	403	379	354	346	
6	Hooghly Dock & Port Engineers Ltd.	Total	408	135	95	87	66	
		Officers	35	16	9	9	9	
7	Mazagaon Dock Shipbuilders Ltd.	Total	8679	8927	8658	8784	6929	
		Officers	1034	1039	1085	1127	1077	
8	Shalimar Works Ltd.	Total	179	179	137	126	126	
		Officers	19	19	28	25	25	
	B. PRIVATE SECTOR (Total)	Total	12914	12468	8524	6082	4366	
		Officers	2317	2146	2032	1988	1489	
9	ABG Shipyards Ltd.	Total	1020	784	784	784		
		Officers	540	414	414	414		
10	A.C.Roy & Comp. Ltd.	Total	58	58	58	58	58	
		Officers	30	30	30	30	30	
11	A.S. Moloobhoy Pvt. Ltd.	Total	0	0	127	134	142	
		Officers	0	0	36	43	92	
12	Bharati Defence & Infrastructure Ltd.	Total	1124	1090	981	727		
		Officers	110	105	93	41		
13	Bristol Boats Pvt. Ltd.	Total	12	24	25	23	21	
		Officers	3	4	6	5	5	
14	Chidambaram Shipcare Pvt. Ltd.	Total	44	44	39	50	50	
		Officers	27	27	17	18	21	
15	Chowgule & Co. Pvt. Ltd.	Total	94	109	109	124	124	
		Officers	72	59	59	74	93	
16	Dempo Shipbuilding & Engineering Pvt. L	Total	240	248	175	203	203	
		Officers	38	18	36	32	32	
17	Ferromar Shipping Pvt. Ltd.	Total	2	2	4	4	2	
		Officers	2	2	2	2	2	
18	Homa Engineering Works	Total	-	-	-	-	23	
		Officers	-	-	-	-	7	
19	L&T Shipbuilding Ltd	Total	4126	4126	586	500	501	
		Officers	605	605	506	499	500	
20	Mandovi Drydocks	Total	0	0	0	291	233	
		Officers	0	0	0	51	51	
21	Marine Frontiers Pvt. Ltd.	Total	-	-	-	-	123	
		Officers	-	-	-	-	10	
22	Marks Marine Radio Pvt. Ltd.	Total	Only provide Sales and Service of Marine Navigation/ Communication Equipments					
		Officers						
23	Modest Infrastructure Pvt. Ltd.	Total	352	141	111	65	65	
		Officers	68	60	50	45	45	
24	N N Shipbuilders and Engineers Pvt Ltd	Total	92	92	92	92	92	
		Officers	12	12	12	12	12	
25	Reliance Naval & Engineering Ltd.	Total	4930	4930	4930	1518	1344	
		Officers	633	633	633	362	284	
26	Sembmarine Kakinada Ltd. ***	Total	95	95	95	95	95	
		Officers	16	16	16	16	16	
27	Shoft Shipyards Pvt. Ltd.	Total	0	0	0	718	719	
		Officers	0	0	0	165	165	
28	Tebma Shipyards Ltd	Total	725	725	408	408	42	
		Officers	161	161	122	122	18	
29	Timblo Drydocks Pvt. Ltd.	Total	0	0	0	202	50	
		Officers	0	0	0	46	18	
30	Titagarh Wagons Ltd.	Total	0	0	0	0	387	
		Officers	0	0	0	0	75	
31	Vijai Marine Shipyards	Total	0	0	0	86	86	
		Officers	0	0	0	11	11	
32	West Coast Shipyards Ltd.	Total	0	0	0	0	6	
		Officers	0	0	0	0	2	
	C. Grand Total (A + B)	Total	31482	30464	25983	23013	19172	
		Officers	4853	4774	5234	4670	4178	

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Section-4

FINANCIAL POSITION OF SHIPBUILDING AND SHIP REPAIRING COMPANIES

4. FINANCIAL POSITION OF SHIP BUILDING AND SHIP REPAIRING COMPANIES

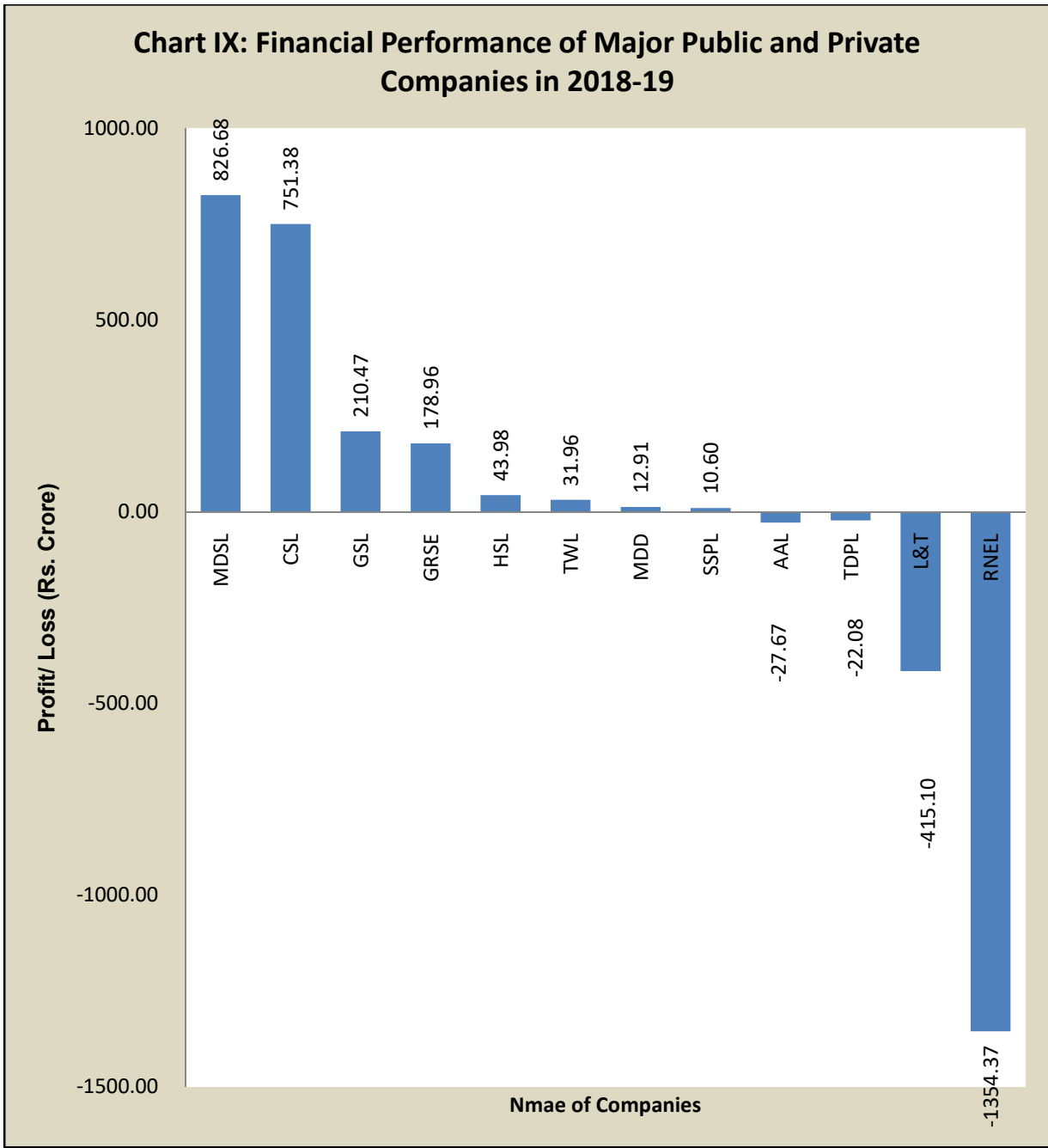
4.1 Amongst public sector companies, the highest income earned during 2018-19 was Rs. 5289.53 crore by Mazagon Dock Shipbuilders Ltd followed by Rs. 3190.27 crore by Cochin Shipyard Ltd, Rs. 1557.66 crore by Garden Reach Shipbuilders & Engineers Ltd, Rs. 986.29 crore by Goa Shipyard Ltd. and Rs. 615.45 crore by Hindustan Shipyard Ltd.

4.2 In terms of profit, the highest profit was earned by Mazagon Dock Shipbuilders Ltd (Rs. 826.68 crore), followed by Cochin Shipyard Ltd (Rs. 751.38 crore), Goa shipyard Ltd (Rs. 210.47 crore), Garden Reach Shipbuilders & Engineers Ltd. (Rs. 178.96 crore) and Hindustan Shipyard Ltd. (Rs. 43.98 crore).

4.3 In private sector, the highest income earned during 2018-19 amongst the reporting companies was by L&T Shipbuilding Ltd. (Rs. 606.04 crore) followed by Reliance Naval & Engineering Ltd. (Rs 184.63 crore), Titagarh Wagons Ltd. (Rs. 131.52 crore), Shoft Shipyard Pvt. Ltd. (Rs. 80.02 crore), Mandovi Drydocks (Rs. 78.73 crore), A.C. Roy & Co. Ltd (Rs 41.71 crore), A.S. Moolobhoy Pvt. Ltd. (41.63 crore), Chowgule & Co. Pvt. Ltd. (Rs. 37.34 crore), Timblo Drydock Pvt. Ltd (Rs. 36.75 crore) and Vijai Marine Shipyards (35.40 crore).

4.4 In terms of profit amongst the reporting companies, the highest profit was earned by Titagarh Wagons Ltd. (Rs. 31.96 crore) followed by Mandovi Drydocks (Rs. 12.91 crore), Shoft Shipyard Pvt. Ltd. (Rs. 10.60 crore), A.C. Roy & Co. Ltd (Rs 8.17 crore), West Coast Shipyard Ltd. (Rs. 1.64 crore), A.S. Moolobhoy Pvt. Ltd. (Rs. 1.11 crore) and Ferromar Shipping Pvt. Ltd. (Rs. 0.76 crore).

4.5 Chart IX below shows the financial performance in terms of profit/ loss of the major public and private sector companies engaged in ship building/ repair as on 31st March 2019 and details of the same from the financial year 2015 to 2019 is given in Table 4.1.



Note:

MDSL-Mazagaon Dock Shipbuilders Ltd., CSL-Cochin Shipyard Ltd., GSL- Goa Shipyard Ltd., GRSE- Garden Reach Shipbuilders & Engineers Ltd., HSL- Hindustan Shipyard Ltd., TWL- Titagarh Wagons Ltd., MDD- Mandovi Drydocks, SSPI- Shoft Shipyard Pvt. Ltd., AAL- Alcock Ashdown (Gujarat) Ltd., TDPL- Timblo Drydock Pvt. Ltd., L&T- L&T Shipbuilding Ltd. and RNEL- Reliance Naval & Engineering Ltd.

Table No. 4.1

Financial Performance (Income & Expenditure) : Company - wise (2015 to 2019)

(Rs. in lakhs)

Sl. No.	Name of the Company	As on 31st March	Income from (Rs. in lakhs)			Total Income	Expenditure incurred on (Rs. in lakhs)			Total Expenditure	Profit (+)/Loss(-)
			Ship Building	Ship Repairing	Other resources		Operating, establishment and other	Provision for Depreciation	Interest		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A. PUBLIC SECTOR											
1.	Alcock Ashdown (Gujarat) Ltd.	2019	0.00	0.00	75.64	75.64	22.00	147.02	2673.99	2843.01	-2767.37
		2018	0.00	0.00	19.55	19.55	484.74	147.02	2673.99	3305.75	-3286.20
		2017	-	-	2668.61 (&)	2668.61	1013.35	155.66	2013.91	3182.92	-514.31
		2016	-	-	24079.67(&)	24079.67	22719.25	151.25	2011.08	72.68	24006.99
		2015	-	-	4.01	4.01	4.23	1.60	66.85	63.88	-59.87
2	Cochin Shipyard Ltd.	2019	213018.41	83197.46	22811.46	319027.33	239044.17	3415.53	1430.11	243889.81	75137.52
		2018	173185.69	62326.64	18915.83	254428.16	189050.10	3751.02	1141.03	193942.15	60486.01
		2017	151582.17	54304.93	16357.63	222244.73	167939.99	3850.99	1053.58	172844.56	49400.17
		2016	162596.21	36749.03	11391.79	210737.03	163851.22	3719.25	1201.21	168771.68	41965.35
		2015	164299.24	19595.17	11402.22	195296.63	152875.64	3832.39	1832.16	158540.19	36756.44
3	Garden Reach Shipbuilders & Engineers Ltd.	2019 (P)	122845.05	15797.11	17123.93	155766.09	134965.63	2708.47	195.96	137870.06	17896.03
		2018	110917.80	24048.11	17923.40	152889.31	136939.83	2895.56	279.05	140114.44	12774.87
		2017	69804.00	23128.00	21699.00	114631.00	109675.00	2665.00	278.00	112618.00	2013.00
		2016	131451.60	1719.37	53070.92	-351399.52	158107.60	2779.80	439.85	161327.25	7602.00
		2015 ©	201089.00	##1682.00	-552488.52	-351399.52	157340.00	2711.00	170.00	160221.00	18723.00
4	Goa Shipyard Ltd.	2019(P)	64953.54	19825.96	13849.00	98628.50	72713.81	4498.04	369.38	77581.23	21047.27
		2018	111881.98	22384.93	10978.81	145245.72	107852.12	4260.64	78.87	112191.63	33054.09
		2017	83683.00	19337.00	7217.00	110237.00	88617.00	3695.00	179.00	92491.00	17746.00
		2016	55501.00	17095.00	6041.00	78637.00	66611.00	882.00	104.00	67597.00	11040.00
		2015 (P)	46659.00	10296.00	11122.00	68077.00	61789.00	898.00	73.00	60253.00 **	68077.00
5	Hindustan Shipyard Ltd.	2019(P)	14842.00	45700.00	1003.00	61545.00	55388.00	460.00	1299.00	57147.00	4398.00
		2018	30398.00	33503.00	1265.00	65166.00	61019.00	475.00	1573.00	63067.00	2099.00
		2017	47743.00	15162.00	2104.00	65009.00	57504.00	628.00	1500.00	59632.00	5377.00
		2016	36636.00	14258.00	14814.00	65708.00	61710.00	698.00	1400.00	63808.00	1900.00
		2015	12866.91	6284.00	13150.00	32300.91	50679.55	680.07	1225.10	52584.72	-20283.81
6	Hooghly Dock & Port Engineers Ltd.	2019 (P)	-	-	548.67	548.67	237.58	7.00	1230.42	1475.00	-926.33
		2018	7343.00	-	4640.33	11983.33	9016.74	8.18	1183.10	10208.02	1775.31
		2017	-	-	8353.63	8353.63	881.06	10.20	1221.84	2113.10	6240.53
		2016	1273.25	-	1532.68	2805.93	4111.14	14.26	660.52	4785.92	-1979.99
		2015	295.22	-	4931.53	5226.75	4390.66	50.57	537.97	4979.20	247.55
7	Mazagaon Dock Shipbuilders Ltd.	2019	462233.00	2682.00	64038.00	528953.00	439733.00	6142.00	410.00	446285.00	82668.00
		2018	448798.00	0.00	60386.00	509184.00	434125.00	5021.00	385.00	439531.00	69653.00
		2017	352367.00	-19.00	77157.00	429505.00	341476.00	3939.00	390.00	345805.00	83700.00
		2016	414117.00	66.00	74353.00	488536.00	421597.00	3150.00	7.00	424754.00	63782.00
		2015	361674.00	217.00	56257.00	418148.00	365900.00	3086.00	3.00	368989.00	49159.00
8	Shalimar Works Ltd. ***	2019	1846.40	0.00	204.52	2050.92	2768.10	34.82	1929.53	4732.45	-2681.53
		2018	1846.40	0.00	204.52	2050.92	2768.10	34.82	1929.53	4732.45	-2681.53
		2017	1768.49	29.62	164.27	1962.38	3170.02	34.91	1813.95	5018.88	-3056.50
		2016	4502.62	113.00	605.41	5221.03	6817.25	32.71	1800.89	8650.85	-3429.82
		2015	950.00	127.84	244.97	1322.81	1352.92	31.42	1716.59	3100.93	-1778.12
B. PRIVATE SECTOR											
9	ABG Shipyard Ltd. @	2019	-	-	-	0.00	-	-	-	0.00	0.00
		2018	-	-	-	0.00	-	-	-	0.00	0.00
		2017	-	1640.00	463.00	2103.00	42367.00	7079.00	150384.00	199830.00	-197727.00
		2016	2726.63	700.50	348.88	3776.01	222506.38	8150.79	145528.12	376185.29	-372409.28
		2015	36710.00	1864.00	1593.00	40167.00	76334.00	9914.00	72509.00	158757.00	-118590.00
10	A.C.Roy & Comp. Ltd.	2019	3291.00	65.00	815.00	4171.00	2532.00	795.00	27.00	3354.00	817.00
		2018	2979.00	83.00	612.00	3674.00	2119.00	702.00	86.00	2907.00	767.00
		2017	2354.00	145.00	292.00	2791.00	1437.00	583.00	81.00	2101.00	690.00
		2016	2529.00	116.00	105.00	2750.00	1435.00	571.00	23.00	2029.00	721.00
		2015	2312.00	155.00	171.00	2638.00	2035.00	71.00	17.00	2123.00	515.00
11	A.S. Moloobhoy Pvt. Ltd.	2019	-	4148.26	14.56	4162.82	3900.83	100.00	50.51	4051.34	111.48
		2018	-	3746.16	35.44	3781.60	3550.36	94.44	6.17	3650.97	130.63
		2017	-	3550.81	44.53	3595.34	3398.21	-	48.52	3446.73	148.61
		2016	-	4278.35	39.23	4317.58	3855.02	132.65	59.85	4047.52	270.06
		2015	-	-	-	0.00	-	-	-	0.00	0.00
12	Bharati Defence & Infrastructure Ltd @	2019	-	-	-	0.00	-	-	-	0.00	0.00
		2018	1836.08	174.32	377.61	2388.01	5182.08	5418.34	2319.28	12919.70	-10531.69
		2017	0.90	214.36	2654.20	2869.46	27462.75	5996.74	14076.87	47536.36	-44666.90
		2016	4705.17	1019.92	1072.48	6797.57	15462.54	6227.02	29656.46	51346.02	-44548.45
		2015	2497.98	624.77	1250.02	4372.77	69158.02	6227.02	29656.46	105041.50	-100668.73

Financial Performance (Income & Expenditure) : Company - wise (2015 to 2019)

(Rs. in lakhs)

Sl. No.	Name of the Company	As on 31st March	Income from (Rs. in lakhs)			Total Income	Expenditure incurred on (Rs. in lakhs)			Total Expenditure	Profit (+)/Loss(-)	
			Ship Building	Ship Repairing	Other resources		Operating, establishment and other expenses	Provision for Depreciation	Interest			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
13	Bristol Boats Pvt. Ltd.	2019	0.00	51.12	42.97	94.09	112.53	4.17	9.90	126.60	-32.51	
		2018	0.00	14.09	52.68	66.77	97.83	4.04	7.56	109.43	-42.66	
		2017	-	170.56	31.10	201.66	180.61	3.91	6.29	190.81	10.85	
		2016	-	4.74	40.50	45.24	65.26	3.85	0.19	69.30	-24.06	
		2015	-	3.70	108.47	112.17	127.07	6.82	5.14	139.03	-26.86	
14	Chidambaram Shipcare Pvt. Ltd.	2019	0.00	961.94	0.40	962.34	899.44	12.41	13.55	925.40	36.94	
		2018	0.00	676.98	7.76	684.74	770.74	13.09	5.00	788.83	-104.09	
		2017	0.00	848.17	8.23	856.40	13.09	12.38	9.52	34.99	821.41	
		2016	0.00	1170.70	11.42	1182.12	1090.41	14.79	36.14	1141.34	40.78	
		2015	36.09	1370.31	8.28	1414.68	1300.43	16.57	52.33	1369.33	45.35	
15	Chowgule & Co. Pvt. Ltd.	2019	3282.61	-17.22	468.71	3734.10	3750.34	638.21	596.19	4984.74	-1250.64	
		2018	2107.53	775.45	275.64	3158.62	2849.73	641.83	286.39	3777.95	-619.33	
		2017	219.65	272.13	229.44	721.22	1320.47	892.18	328.99	2541.64	-1820.42	
		2016	2198.97	47.65	281.79	2528.41	2134.96	1183.27	330.29	3648.52	-1120.11	
		2015	6514.16	-	168.86	6683.02	6226.81	1508.36	119.37	7854.54	-1171.52	
16	Dempo Shipbuilding and Engineering Pvt. Ltd.	2019	184.40	900.86	151.82	1237.08	1326.74	134.94	65.80	1527.48	-290.40	
		2018	87.00	1026.00	68.00	1181.00	1494.00	141.00	158.00	1793.00	-612.00	
		2017	374.00	1087.00	52.00	1513.00	1825.00	149.00	218.00	2192.00	-679.00	
		2016	0.00	1218.62	782.02	4476.37	2044.71	167.88	253.80	2466.39	2009.98	
		2015(P)*	4045.73	803.00	(-)372.36	4848.73	3812.63	204.33	251.63	4268.59	580.14	
17	Ferromar Shipping Pvt. Ltd.	2019	120.75	44.28	666.81	831.84	343.94	320.62	91.12	755.68	76.16	
		2018	-	26.70	706.68	733.38	328.74	345.69	98.77	773.20	-39.82	
		2017	-	156.33	702.40	858.73	366.47	305.75	146.40	818.62	40.11	
		2016	88.11	-	784.49^	872.60	269.11	343.82	133.73	746.66	125.94	
		2015	-	-	724.82^	724.82	169.45	391.18	125.64	686.27	38.55	
18	Homa Engineering Works	2019	-	1458.09	11.34	1469.43	1349.99	8.25	75.96	1434.20	35.23	
		2018	-	819.99	13.76	833.75	710.27	7.96	65.73	783.96	49.79	
19	L&T Shipbuilding Ltd	2019	49044.92	10932.17	626.53	60603.62	69629.21	7966.72	24517.69	102113.62	-41510.00	
		2018	69099.61	3989.19	2877.55	75966.35	85562.26	9549.19	24991.21	120102.66	-44136.31	
		2017	58645.22	3460.20	369.65	62475.07	63507.44\$\$	9515.88	24286.06	97309.38	-34834.31	
		2016	42267.13	3684.32	168.50	46119.95	89173.08\$	9244.37	18873.04	117290.49	-71170.54	
		2015	54389.52	4482.01	404.34	59275.87	81281.10	15141.39	30199.94	126622.43	-67346.56	
20	Mandovi Drydocks	2019(P)	5460.17	1337.04	1075.48	7872.69	6385.06	41.10	155.97	6582.13	1290.56	
		2018	4926.10	2209.71	393.58	7529.39	6941.60	68.43	144.73	7154.76	374.63	
		2017	6539.40	1182.13	13.65	7735.18	7279.62	45.20	131.51	7456.32	278.86	
21	Marine Frontiers Pvt. Ltd.	2019	1017.84	40.83	114.15	1172.82	1658.24	55.16	76.61	1790.01	-617.19	
		2018	117.98	2.00	73.12	193.10	285.19	73.11	52.47	410.77	-217.67	
22	Marks Marine Radio Pvt. Ltd.	Only provide Sales and Service of Marine Navigation/ Communiication Equipments										
		2018	-	1095.31	0.22	1095.53	1032.61	17.56	25.57	1075.74	19.79	
		2017	-	1063.72	44.06	1107.78	935.11	18.13	6.35	959.59	148.19	
23	Modest Infrastructure Pvt. Ltd.	2019	574.51	744.41	338.68	1657.60	1272.81	165.87	1170.98	2609.66	-952.06	
		2018	-	237.61	115.58	353.19	1108.04	196.78	1134.06	2438.88	-2085.69	
		2017	3372.34	82.26	70.62	3525.22	4611.95	208.22	1392.34	6212.51	-2687.29	
		2016	3155.95	-	105.92	3261.87	5267.43	228.46	2015.74	7511.63	-4249.76	
		2015	5117.88	48.92	134.68	5301.48	5982.26	261.27	2093.42	8336.95	-3035.47	
24	N N Shipbuilders and Engineers Pvt Ltd	2019 (P)	12.03	-	816.26	828.29	879.82	14.16	26.85	920.83	-92.54	
		2018	17.05	6.00	799.34	822.39	767.57	19.73	27.00	814.30	8.09	
		2017	1537.42	105.71	660.94	2304.07	2256.33	19.73	21.55	2297.61	6.46	
		2016	91.25	0.62	377.75	469.62	408.33	24.55	21.97	454.85	14.77	
		2015	227.52	-	1502.65	1730.17	1626.72	28.00	-	1654.72	75.45	
25	Reliance Naval & Engineering Ltd.	2019	13017.26	1775.97	3669.81	18463.04	19526.60	6565.81	127807.42	153899.83	-135436.79	
		2018	27162.72	5725.31	8496.22	41384.25	52451.81	19806.81	69739.19	141997.81	-100613.56	
		2017	36788.85	14658.94	4966.65	56414.44	49708.24	20065.17	57263.75	127037.16	-70622.72	
		2016	29303.55	40835.79	16068.57	86207.91	73814.39	13134.35	45269.29	132218.03	-46010.12	
		2015	29303.55	40835.79	16068.57	86207.91	73814.39	13134.35	45269.29	132218.03	-46010.12	
26	Sembmarine Kakinada Ltd.***	2019	-	7104.64	3380.50	10485.14	6483.01	2341.25	4005.26	12829.52	-2344.38	
		2018	-	7104.64	3380.50	10485.14	6483.01	2341.25	4005.26	12829.52	-2344.38	
		2017	-	7104.64	3380.50	10485.14	6483.01	2341.25	4005.26	12829.52	-2344.38	
		2016	-	7104.64	3380.50	10485.14	6483.01	2341.25	4005.26	12829.52	-2344.38	
		2015	-	5756.63	804.70	6561.33	7836.62	3989.81	3475.61	15302.04	-8740.71	
27	Shoft Shipyard Pvt. Ltd.	2019 (P)	7057.16	621.93	322.68	8001.77	6450.57	296.11	195.11	6941.79	1059.98	
		2018	5978.14	1442.61	333.68	7754.43	6424.39	229.71	158.69	6812.79	941.64	
		2017	5891.65	282.20	287.72	6461.57	5241.15	220.03	185.03	5646.21	815.36	

Table No. 4.1 Contd...

Financial Performance (Income & Expenditure) : Company - wise (2015 to 2019)

(Rs. in lakhs)

Sl. No.	Name of the Company	As on 31st March	Income from (Rs. in lakhs)			Total Income	Expenditure incurred on (Rs. in lakhs)			Total Expenditure	Profit (+)/Loss(-)
			Ship Building	Ship Repairing	Other resources		Operating, establishment	Provision for Depreciation	Interest		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
28	Tebma Shipyards Ltd	2019(P)	-	162.27	15.18	177.45	319.18	1176.36	4.35	1499.89	-1322.44
		2018(P)	-	110.05	51.25	161.29	4544.93	1176.36	-	5721.29	-5559.99
		2017	5282.38	-	207.80	5490.18	7106.38	1271.22	4767.68	13145.28	-7655.10
		2016	9136.22	-	935.49	10071.71	10490.65	1390.61	3941.15	15822.41	-5750.70
		2015	15142.73	-	708.50	15851.23	14256.08	1814.48	3039.75	19110.31	-3259.08
29	Timblo Drydock Pvt. Ltd.	2019	874.75	106.23	2694.34	3675.32	4710.17	180.95	991.95	5883.08	-2207.76
		2018	3213.66	0.00	1210.76	4424.42	2937.24	212.71	1122.46	4272.41	152.01
		2017	2967.94	1.77	358.33	3328.04	1978.86	153.32	1057.96	3190.14	137.90
30	Titagarh Wagons Ltd.	2019	13151.65	-	-	13151.65	9769.50	186.46	-	9955.96	3195.69
		2018	3516.72	-	-	3516.72	2921.47	46.17	-	2967.64	549.08
31	Vijai Marine Shipyards	2019	2447.05	603.37	489.49	3539.91	4037.30	103.61	186.86	4327.77	-787.86
		2018	5265.03	25.00	353.47	5643.50	5388.82	117.74	226.40	5732.96	-89.46
		2017	6076.14	446.99	354.31	6877.44	4497.10	130.24	188.75	4816.09	2061.35
32	West Coast Shipyard Ltd.	2019	337.57	95.20	80.01	512.78	322.71	25.12	0.54	348.37	164.41
		2018	70.40	38.90	236.95	346.25	341.30	29.41	0.08	370.79	-24.55

* Income from other sources excludes WIP Rs. 1858.59 lakh in 2015.

(P) Provisional / Unaudited

*** No information is received from these companies. Hence last reported data has been repeated for SKL i.e. 2015-16 and SWL i.e. 2017-18.

@ Removed in view of Point 1.4 of Chapter 1 of the Publication

© Income from other resources exclude Accr(+)/Decr(-) in WIP/Finished Goods Rs. 69450 lakhs

Income from Ship repairing sales

(&) Includes income from exceptional items.

^ Includes Deferred Tax Provision

\$ Includes loss from discontinued operations

\$\$ Figure after adjustment of Exceptional Items and Tax Expense (reversal of earlier year provision)

** Excludes Rs. 2507 lakh in 2015

Note: Four New companies (At S. No. 18, 21, 30 & 32) has been added from 2018-19; based on the list provided by Shipping Association of India (SAI).

Section -5

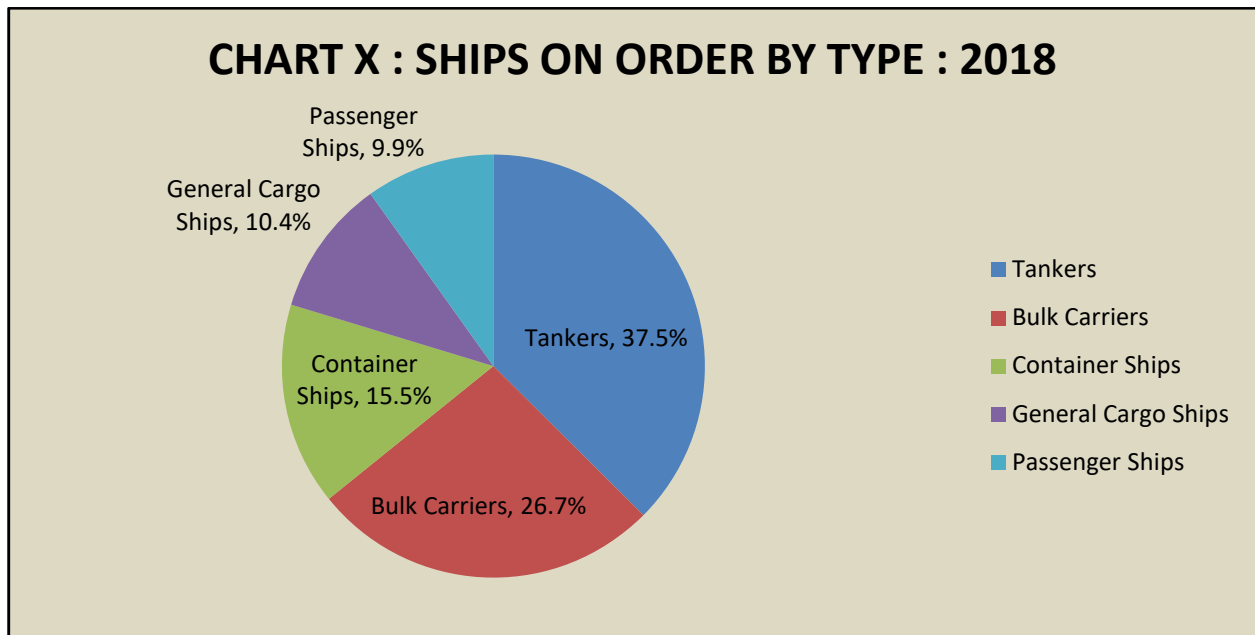
INTERNATIONAL SCENARIO

5. INTERNATIONAL SCENARIO

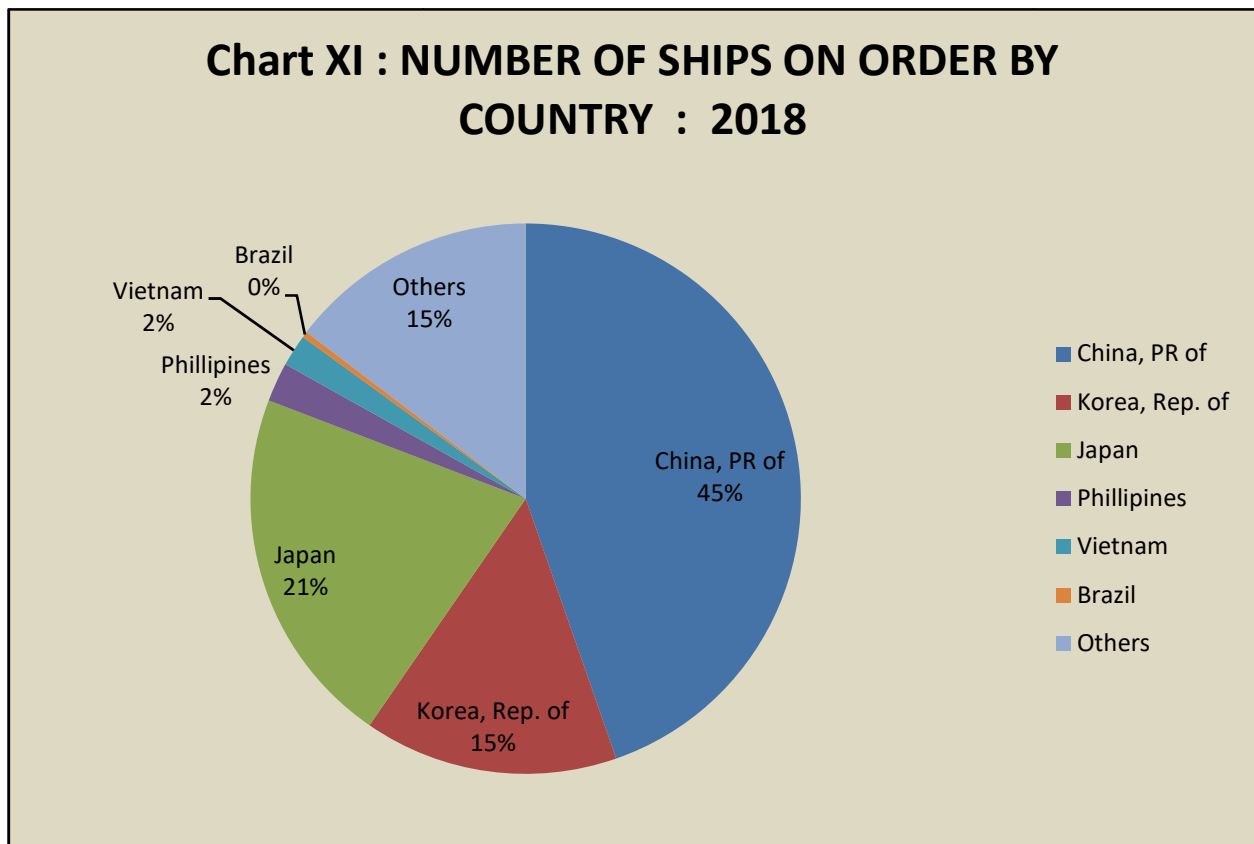
5.1 This section comprises comparative time series data on ship building activity in terms of order and completion and by type and country (Table 5.1 to 5.6) (Page No. 48-54).

5.2 Table 5.1 shows that the number of ships on order reflects the demand side dynamics of the world shipping industry. Over the period 2003 to 2018 (as on 1st January), the number of ships on order at a global level has increased from 2248 units in 2003 to 2547 units in 2018. During last three years from 2016 to 2018, number of ships on order has gone down from 3880 ships in 2016 to 2547 ships in 2018. Ships on order (as on 1st January) in terms of gross tonnage (GT) have gone up from 49.16 million GT in 2003 to 70.41 million GT in 2018. During the year 2003 to 2018, order book of world shipbuilding industry had witnessed CAGR of 0.84% and 2.4% on order in term of numbers of ships and gross tonnage respectively.

There are different types of ships built by any country. These are Tanker ships, Bulk carrier ships, Container ships, General cargo ships and Passenger ships. The maximum demand for ship building was Tanker ships (37.5%) followed by bulk carrier ships (26.7%), Container ships (15.5%) and General cargo ships (10.4%) shown in the chart X below.

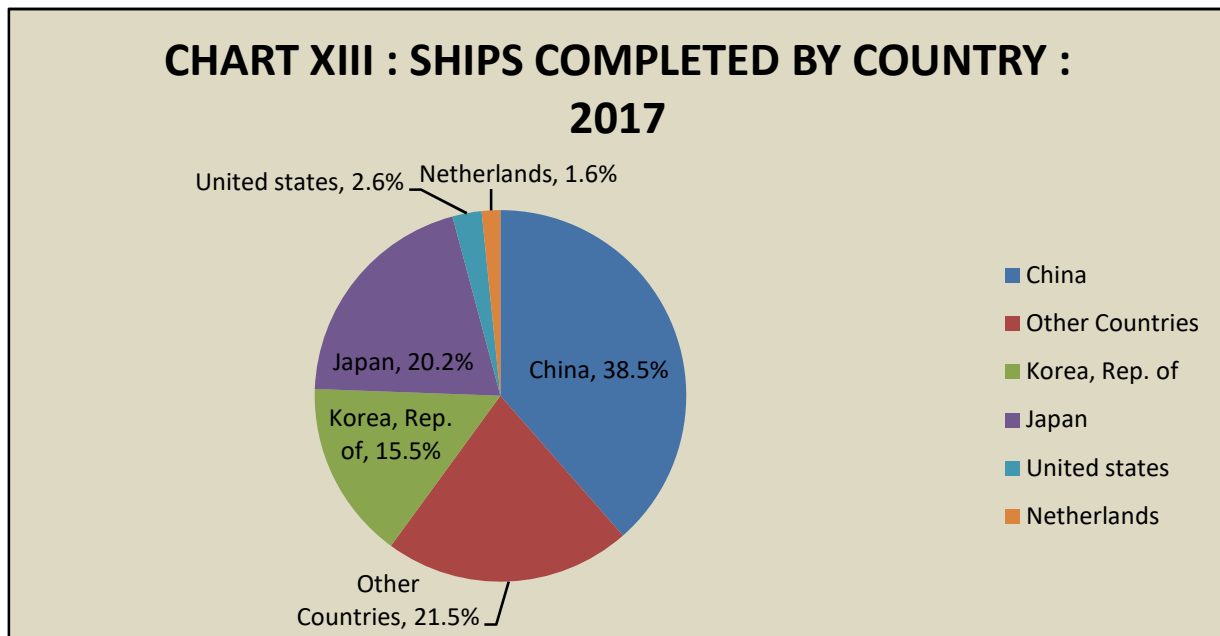
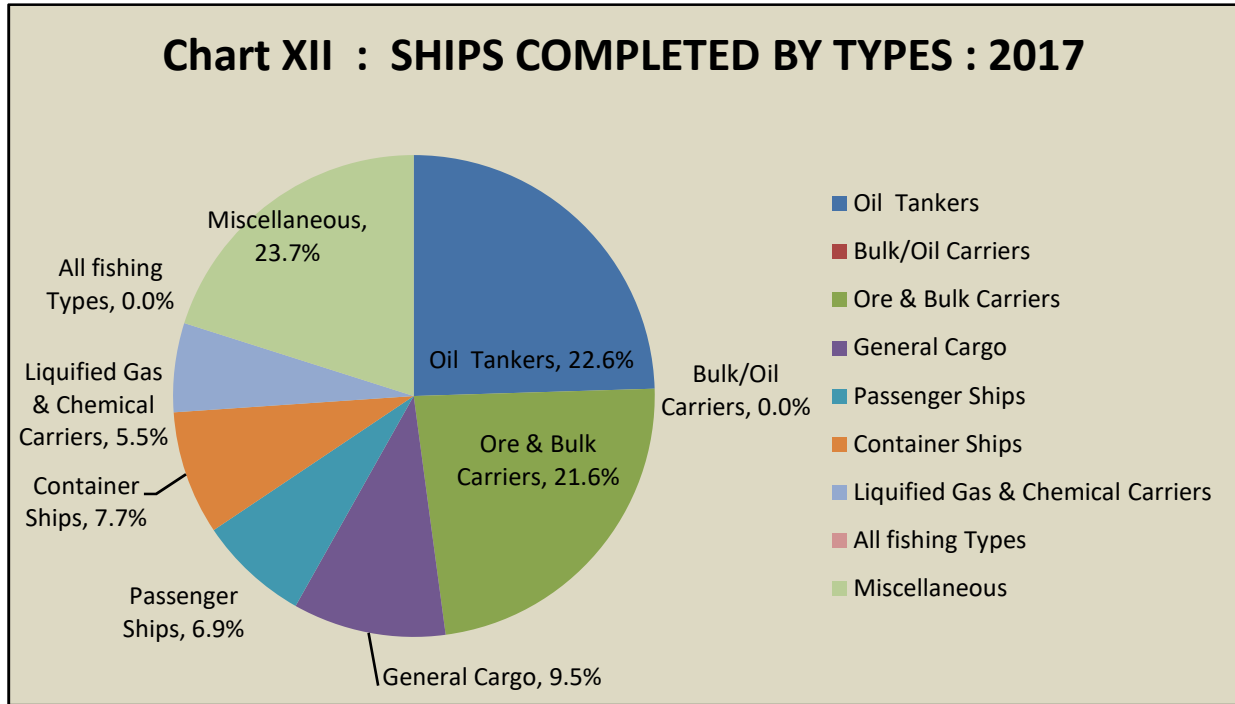


5.3 Tables 5.2 provide country-wise data on the ship order book position as on 1st July, 2018 and table 5.4 presents the country-wise ships completion during the year 2017. Country-wise percentage share of Ships on order during 2018 was given in chart XI below. Chart suggest that, China, Japan and Republic of Korea were the top three nations which accounted for a global share of 45%, 21% and 15% respectively in number of ships on order in 2018. China, Japan and Republic of Korea were the top three nations which accounted for a global share of 36.3%, 20.4% and 23.7% respectively in ships on order in terms of gross tonnage in 2018.



5.4 Country-wise number of ships built and delivered recorded in terms of gross tonnage (GT), were 65.61 million GT in 2017 (Table 5.4) reflecting a decrease of 1.75% over 66.78 million GT completed in 2016. In terms of number, the total number of ships completed decreased to 1840 units in 2017 from 1994 units in 2016 reflecting a decrease of 7.72%. Out of 65.61 million GT of ship delivered during 2017; the percentage share of Oil Tankers was 32.3% (contributed 21.2 million GT in 2017, Table 5.5) which was highest among the other types of ships delivered in the same year.

5.5 The different types of ships on order and delivered in the world may be seen from the following charts.



Other Countries: All excluding United States, Japan, Vietnam, China & Rep. of Korea for Chart XIII

Source: Shipping Statistics Yearbook 2018

Table No. 5.1

**World Ship-building - Ships On Order And Completed
During 1999 - 2018**

Year	Ships on Order *		Ships Completed @	
	No	1000 cgt	No	1000 gt
(1)	(2)	(3)	(4)	(5)
1999	1752	52933	1564	27649
2000	1905	65147	1650	31766
2001	2055	74141	1695	31342
2002	1851	66778	1709	33557
2003	2248	49155	1731	36786
2004	2984	67965	1931	40586
2005	3948	91544	1993	47566
2006	4787	106205	2309	53529
2007	6045	125474	2611	57634
2008	8887	184010	3221	68477
2009	9501	191562	3432	78522
2010	7731	153869	3558	98477
2011	6525	130035	3434	103786
2012	4804	105047	3163	96565
2013	3589	81750	2403	71071
2014	3879	92729	2200	63876
2015	4195	103838	2522	67633
2016	3880	100531	1994	66783
2017	2944	78492	1840	65612
2018	2547	70408	-	-
2018\$	2559	69497	-	-

Note 1: Figures of Ships on Order in the Table for the period 1998 to 2002 is as on 1st July and for the period 2003 onwards is as on 1st January.

* Ships of 300gt and Over.

@ Merchant Ships of 100gt and Over.

\$ As on 1st July,2018

Note: cgt-compensated gross tonnage, gt-gross tonnage

Source: Shipping Statistics Year Book 2018

Table No.5.2

**Ships on Order by Major Types and Country of Build
(As on 1st July, 2018)**

Ships of 300 gt. And above

S. No.	Country of Build	Tankers		Bulk Carriers		Container Ships		General Cargo Ships		Passenger Ships		Total	
		No.	1000 cgt	No.	1000 cgt	No.	1000 cgt	No.	1000 cgt	No.	1000 cgt	No.	1000 cgt
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	China PR of	316	6969	401	9617	210	5450	165	2171	51	1047	1143	25253
2	Japan	205	5950	212	4162	63	3287	53	672	10	122	543	14194
3	Korea Rep.	291	12670	22	872	59	2752	6	135	4	71	382	16500
4	Italy	-	-	-	-	-	-	1	10	26	2712	27	2722
5	Germany	4	36	4	32	-	-	2	27	25	2618	35	2713
6	Phillipines	11	305	40	716	5	145	-	-	3	24	59	1190
7	Finland	1	16	-	-	-	-	-	-	9	1260	10	1276
8	France	-	-	-	-	-	-	-	-	11	1668	11	1668
9	Vietnam	32	692	7	112	1	3	4	15	4	34	48	856
10	Croatia	2	45	1	12	-	-	9	147	13	169	25	373
11	US	-	-	-	-	4	92	4	102	19	104	27	299
12	Brazil	8	175	-	-	-	-	-	-	1	3	9	179
13	Taiwan	-	-	4	135	5	95	1	11	-	-	10	242
14	Australia	-	-	-	-	-	-	-	-	9	134	9	134
15	Spain	3	91	-	-	2	6	-	-	4	124	9	221
16	Norway	-	-	-	-	-	-	-	-	36	471	36	471
17	Turkey	11	113	-	-	-	-	4	30	12	87	27	230
18	Russia	8	165	-	-	-	-	11	72	5	29	24	266
19	Indonesia	7	58	-	-	12	30	-	-	14	34	33	123
20	Netherlands	-	-	1	5	-	-	15	75	4	24	20	104
21	Others	17	98	-	-	1	18	22	115	32	252	72	483
	Total	916	27383	692	15663	362	11878	297	3582	292	10987	2559	69497

Note 1: cgt-compensated gross tonnage

Note 2: Data is not available as on 1st January, 2018

Source : Shipping Statistics Year book 2018

Table No. 5.3

Ships on order by Type During 2016-18

Ships of 300gt and over

Ship Type	2016		2017		2018	
	No of Ships	1000 cgt	No of Ships	1000 cgt	No of Ships	1000 cgt
(1)	(6)	(7)	(6)	(7)	(6)	(7)
Tankers	1411	41618	1094	31891	954	28328
Bulk Carriers	1517	29188	925	18445	681	14888
Container Ships	455	18459	421	15543	395	13394
General Cargo Ships	378	5333	320	4551	266	3407
Passenger Ships	119	5933	184	8061	251	10391
Grand Total	3880	100531	2944	78492	2547	70408

Note 1: Figures from the year 2016 to 2018 is as on 1st January.

Note 2: cgt-compensated gross tonnage

Source: Shipping Statistics Year Book 2018.

Table No. 5.4

**Merchant Ships Completed By Country Of Build
(2015-2017)**

(Ships of 100 gt & Over) (a)

S. No.	Country of Build	2015		2016		2017	
		No.	1000 gt	No.	1000 gt	No.	1000 gt
1	2	5	6	7	8	7	8
(1)	Croatia	7	74.0	13	74.0	12	125.0
(2)	Brazil	31	400.0	34	222.0	19	376.0
(3)	Denmark	-	-	2	25	-	-
(4)	Finland	2	112.0	2	108.0	5	173.0
(5)	France	5	4.0	3	228.0	4	173.0
(6)	China, PR of	934	25137	733	22458.0	709	23689.0
(7)	Germany (c)	10	385.0	9	430.0	10	469.0
(8)	Italy	6	219.0	10	419.0	10	469.0
(9)	Korea, Rep. Of	357	23178.0	351	25426.0	286	22468.0
(10)	Japan	518	13005.0	412	13363.0	372	13114.0
(11)	Netherlands	33	88.0	47	174.0	30	104.0
(12)	Norway	20	53.0	17	161.0	10	68.0
(13)	Poland	33	67.0	6	37.0	10	45.0
(14)	Spain	27	38.0	13	53.0	19	46.0
(15)	Philippines	40	1865.0	29	1171.0	29	1980.0
(16)	United Kingdom	6	3.0	3	1.0	-	-
(17)	United States	75	427.0	60	350.0	47	226.0
(18)	Vietnam	88	590.0	30	414.0	32	361.0
(19)	Other Countries (d)	330	1987	220	1669	236	1726
	World Total	2522	67633	1994	66783	1840	65612

(a) Since 2003 all Ships of 300 gt and over

(c) Figures for the Federal Republic of Germany include the former German Democratic Republic from 1990 onwards.

(d) Incomplete information for 1970-1992.

Note 1: gt-gross tonnage

Source : Shipping Statistics Year Book 2018.

World Merchant Ships Completed By Principle Types (1989-2017)

(Ships of 100gt and over (a))

Year	Oil Tankers		Bulk/Oil Carriers(b)		Ore & Bulk Carriers		General Cargo		Passenger Ships	
	No.	1000gt	No.	1000gt	No.	1000gt	No.	1000gt	No.	1000gt
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1989	161	5013	2	42	103	3844	309	1180		
1990	151	5079	-	-	123	5536	350	1598	125	826
1991	175	6782	9	619	78	3083	386	1556		
1992	253	9275	14	854	64	2527	337	1698		
1993	268	9592	5	242	89	3910	322	1418		
1994	183	5459	2	91	192	6368	322	1594		
1995	163	6104	-	-	258	8459	314	1511	102	974
1996	159	6281	3	195	272	9508	338	1661		
1997	92	3866	4	305	309	9950	342	1926		
1998	140	6599	-	-	206	6039	289	2929		
1999	172	10045	4	252	187	6749	274	3453		
2000	225	11611	-	-	183	6962	311	3565	87	1254
2001	183	8137	2	78	309	11101	202	1589		
2002	254	12771	-	-	225	7726	194	1828		
2003	434	16972	2	142	160	5935	276	2440		
2004	447	16036	-	-	246	10003	436	3374		
2005	480	17173	-	-	307	12016	470	3613	86	828
2006	520	14743	-	-	322	13517	526	4485	69	1220
2007 (e)	629	17746	-	-	329	13344	615	5128	93	1490
2008	791	21115	-	-	381	13289	740	6713	104	1707
2009	838	27316	1	162	645	23601	686	6557	94	1395
2010	677	23296	4	688	1019	43605	633	7296	96	1858
2011	570	22477	3	516	1201	53674	650	7982	98	1099
2012	505	18211	-	-	1199	53818	503	6446	82	1199
2013	396	12257	-	-	760	33558	340	4856	60	780
2014	311	9483	-	-	576	25509	254	4056	88	947
2015	326	10593	2	6	614	25979	221	3190	86	955
2016	413	18192	1	3	559	25467	187	2976	95	1475
2017	451	21191	-	-	430	20252	189	3635	137	1592

World Merchant Ships Completed By Principle Types (1989-2017)

(Ships of 100gt and over (a))

Year	Container Ships		Liquified Gas & Chemical Carriers		All Fishing Types		Miscellaneous		Total	
	No.	1000gt	No.	1000gt	No.	1000gt	No.	1000gt	No.	1000gt
(1)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1989	46	1247	97	653	518	377	363	881	1599	13237
1990	68	1655	117	789	498	334	365	894	1672	15885
1991	78	1910	131	963	367	238	350	945	1574	16096
1992	88	2173	125	883	231	197	394	1026	1506	18633
1993	92	2083	131	1137	229	137	424	1196	1560	19715
1994	142	3128	106	1333	160	137	359	736	1466	18846
1995	166	3706	106	1243	157	86	401	1128	1565	22237
1996	201	4591	149	1746	175	99	435	1448	1732	25529
1997	247	5761	124	1627	186	94	546	1300	1850	24829
1998	256	6034	150	1759	164	74	524	1900	1729	25334
1999	124	2929	133	2186	144	104	526	1930	1564	27648
2000	155	5271	67	2028	247	163	462	2075	1650	31675
2001	188	6980	51	616	262	124	498	2716	1695	31341
2002	201	7217	64	1521	140	73	631	2420	1709	33556
2003	178	6261	107	2608	137	96	194	2065	1488	36519
2004	181	7204	90	2687	161	102	155	1928	1716	41334
2005	271	10250	86	2686	123	50	256	1778	1993	47566
2006	372	14932	124	3768	75	51	370	2033	2309	53529
2007 (e)	399	14247	133	4381	41	31	465	2757	2611	57634
2008	434	16067	171	7928	33	37	671	3327	3221	68476
2009	276	11824	201	7242	34	36	751	1785	3432	78523
2010	265	14955	90	1714	37	36	833	6887	3558	98477
2011	191	13365	70	1714	25	25	724	4033	3434	103786
2012	209	13672	63	610	31	21	653	3786	3163	96564
2013	203	14503	67	2613	29	20	608	3265	2403	71072
2014	201	16130	104	4340	2	3	752	4355	2200	63876
2015	211	17406	115	5336	23	25	924	4144	2522	67634
2016	131	9475	135	6733	-	-	473	2461	1994	66782
2017	153	11890	110	5213	-	-	370	1839	1840	65612

(a) : Since 2007 all ships of 300 gt and over.

(b) : Incl. Ore/oil carriers.

(d) : 1989 to 2006 all ships of 100 gt. and over are included.

(e) : Since 2003 all ships of 300 gt and over.

Source : Shipping Statistics Year Book, 2018.

Note 1: gt-gross tonnage

Table No. 5.6

**Total Order Book - By Country of Build
(As on 1st July,2018)**

(Ships of 300 gt and over)

Country	2017			2018		
	Total Order Book			Total Order Book		
	No	1000 cgt	1000 dwt	No	1000 cgt	1000 dwt
1	2	3	4	5	6	7
China, PR of	995	22795	74035	1143	25253	86851
Croatia	32	524	597	25	373	260
Phillippines	63	1679	6150	59	1190	4335
Finland	10	1271	121	10	1276	147
France	8	1262	96	11	1668	160
Germany. FR of	36	2241	367	35	2713	367
Italy	27	2668	233	27	2722	230
Japan	653	16697	49085	543	14194	44017
Korea, Republic of	368	15860	43204	382	16500	52122
Netherlands	15	76	74	20	104	88
Poland	3	21	14	7	34	21
Romania	17	299	527	5	26	4
Russia	24	172	171	24	266	743
Spain	7	212	649	9	221	490
Turkey	21	183	130	27	230	164
U.S	20	395	565	27	299	325
Other Countries	185	2453	4035	205	2428	4015
Total	2484	68808	180053	2559	69497	194339

Note 1: cgt-compensated gross tonnage, dwt-dead weight tonnage

Source: Shipping Statistics Year Book 2018

TERMINOLOGY USED IN SHIPPING

A. Terms Relating To a Ship

Ballast - Any material intended to provide stability to the ship when it is otherwise empty.

Bunker - Ship-space for storing fuel (Coal, Oil etc.).

Cargo Tonnage/Freight Ton - It refers to the earnings cargo carried by a ship and is expressed as either a weight or measurement. In the British countries the long tons of 2240 pounds for 40 cubic feet and under the metric system as in India, the metric tonne of 1000 Kg. for a cubic metre.

Dead Weight Tonnage (DWT) - It is the number of tons (2240 pounds) of stores, fuel and cargo that a ship can transport. This presents the actual carrying capacity of a ship.

Displacement Light - The weight of a ship without stores, bunker fuel, cargo, passengers and crew.

Displacement Loaded - The weight of a ship plus stores, bunker fuel, cargo, passengers and crew.

Draft - The depth necessary to submerge a ship to her load line.

Gross Registered Tonnage (GRT) - It applies to the vessel and not to cargo. It is the weight of the volume occupied by the closed – in – space of a ship taking 100 cubic feet of such closed-in-spaces as equivalent to one vessel ton. It thus refers to the cubic capacity of the vessels.

Lighterage - Loading into and discharging out of lighters.

Load Line - The outer line on the body of a ship up to which she submerges in water with safety. It varies according to the seasons and waters in which she plies.

Net Registered Tonnage (NRT) - It refers to the earning space capacity of a ship, available for the storage of cargo and accommodation of passengers. It is obtained by deducting from GRT the cubic capacity space (taking 100 cu. feet. = 1 ton) occupied by stores, fuel, machinery crew etc. and which does not represent the earning capacity of the ship.

Port Side - Left side of a ship.

Shipping Order - Authority given to a shipper to deliver the goods for loading.

Starboard Side - Right side of a ship.

B. TERMS RELATING TO TYPE OF SHIPS

Barge - A term applied to a flag officer's boat in naval usage, or to an elegantly fitted boat, or craft of ceremony propelled by oars or mechanically and reserved for the use of high officials when transported in State. In a legal sense a barge is usually held to be a boat or vessel and hence it is within the letter of the laws relating to such craft.

Bollard - Single or double cast steel post secured to a wharf or pier and used for mooring vessels by means of lines extending from the vessel and fastened to the wharf or pier.

Bollard Pull - The amount of pull exerted on a bollard of a ship.

Breaking Bulk - The commencing of discharging of cargo from ship.

Cargo Ship - A ship which is not a passenger ship

Coaster - A vessel specially designed, equipped, manned and licensed to engage regularly in the coasting trade, whether plying coast-wise or making short sea passage within certain specified geographical limits.

Coasting Ship - A ship exclusively employed in trading between any port or place in India and any other port or place in the continent of India or between ports or places in India and port or places in Sri Lanka, Bangladesh or Myanmar.

Collier - Generally a coastal ship designed to carry coal.

Craft - A term in marine parlance applied to every kind of vessels but more especially to small vessels when referred to collectively. For marine insurance purposes, a craft is any barge, lighter, river trades or any other boat or vessel employed in carrying, shipping or discharging the goods insured.

Dumb Barge - A barge which has no means of self propulsion in the way of sails or engine power and which has to be towed or is allowed to drift under the influence of the tide or current.

Fishing Vessel - A ship fitted with mechanical means of propulsion which is exclusively engaged in sea fishing for profit.

Foreign-Going Ship - A ship not being a home trade ship employed in trading between any port or place in India and any other port or place or between ports or places outside India.

Freighter - A ship designed to carry general cargo (with a limited passenger accommodation) operating on fixed routes with fixed sailing schedules and serving a group of ports.

Home-Trade Ship - A ship not exceeding three thousand tons gross which is employed in trading between any port or place in India and any other port or place in the continent of India or between ports or places in India and ports or places in Sri Lanka, Maldives Islands, Federation of Malaysia, Singapore, Bangladesh or Myanmar.

Hopper Barge - A steel or wooden barge with hopper doors employed in harbours and used for the disposal of mud, gravel, sand etc., taken from a dredger and then conveyed to a dumping ground where the cargo is discharged through the bottom; also called 'dump scow' and then conveyed to a dumping ground where the cargo is discharged through the bottom; also called 'dump scow'.

Inland Steam Vessel - A steam vessel which ordinarily plies on inland water.

Compensated Gross Tonnage (cgt) - Calculated by multiplying the tonnage of a ship by a coefficient, which is determined according to type and size of a particular ship. cgt is used as an indicator of volume of work that is necessary to build a gross ship.

Gross Tonnage (gt) - gt indicates that the ship has been measured in accordance with the requirements of the International Convention on Tonnage Measurement of Ships 1969 and is derived by formula in accordance with those requirements.

Lash - Lighter aboard ship.

Launch - A large, heavy and beamy ship's boat with flat floors and rather shallow draft, formerly used and designed for carrying stores and men.

Liner Ship - A ship that plies on regular scheduled services between groups of ports. The ships of a liner company are common carriers, offering cargo space or passenger accommodation to all shippers and passengers who require them. A liner company is generally engaged on trade-routes where large volume of cargo or passenger traffic is available.

Mooring Vessel - A vessel which is secured by moorings.

Ore/Oil and Bulk Carriers - A bulk cargo ship designed to carry ore and oil enabling it thereby to be loaded in both directions.

Passenger Liner - A ship or vessel employed in carrying passengers, mail and goods at stated intervals between regular ports.

Passenger Ship - A ship carrying more than twelve passengers.

Pilgrim Ship - A ship which makes a voyage to or from the Hedjaz during the season of the pilgrimage and which carries pilgrims in a proportion of not less than one pilgrim for every one hundred tons of the gross tonnage of the ship.

Reefer - A vessel with refrigerating facilities

Rig - The Rig of a vessel is the distinctive manner in which her masts and sails are disposed.

Roll On/Roll Off vessel - It is frequently called a vehicle FEERY. It is designed for the conveyance of road vehicles and private cars. At each terminal port, a tramp or linkspan is provided enabling the vehicles to drive on or off the vessels, thereby eliminating crane and cargo handling (and also pilferage) and permitting a quick turn round of the ship.

Sailing Vessel - Any description of vessel provided with sufficient sail area for navigation under sails alone - whether or not fitted with mechanical means of propulsion, and would include rowing boat or crane but does not include a pleasure craft.

Sea-going Vessel - A vessel proceeding to sea beyond inland water or beyond waters declared to be smooth or partially smooth by the Central Government by notification in the official Gazette.

Sponson - In a paddle-wheel-steamer, a small out board platform strongly bracketed to the side plating and supporting the paddle-wheel bearing.

Steam Vessel - Every description of vessel propelled wholly or in part by the agency of steam.

Survey Vessel - Mechanically propelled sea-going vessel specially built and equipped to carry out hydrographic and other nautical surveys in coastal waters and on the high seas. Surveying vessels are in most instances Government owned.

Tanker - A cargo ship constructed or adopted for carriage in bulk of liquid cargoes of an inflammable nature.

Tramp - A cargo ship operating in all ports of the world without a fixed route and sailing schedule in search of primarily bulk cargo carried generally in ship-loads.

Trawler - A sail or mechanically propelled vessel engaged in sea fisheries with a drag net, the most modern development of which is the otter trawl; also called dragger.

Tug Boat - A mechanically propelled vessel of small tonnage with little or no cargo capacity, used for towing or assisting vessels at sea, in or out of harbour, rivers, and docks, also for coastal or harbour towage of barges, lighters and other small craft; also called tow boat, tug.

Unberthed Passenger - A passenger of the age of twelve years or upwards for whom no separate accommodation in any cabin, state room or saloon is reserved. In the computation of passengers, two persons of the age of one year or upwards and under the age of twelve years shall be reckoned as one un-berthed passenger.

Unberthed Passenger Ship - A ship carrying more than thirty un-berthed passengers.
