

29 September 2020

## Mazagon Dock Shipbuilders

*Robust revenue visibility, valuation at discount to peers*

Issue Price: ₹135-145

[Subscribe](#)

**MiniRatna-I Defence PSU:** Incorporated in Feb'1934, Mazgaon Dock Shipbuilders (MDS), a public-sector undertaking under the Department of Defence production, constructs and repairs warships and conventional submarines for the Ministry of Defence (MoD) for the Indian Navy, besides vessels for commercial clients. It has production capacity of 40,000 DWT, with two segments shipbuilding (naval shipbuilding/repairs) and submarine/heavy engineering.

**Greater focus on ship repairs:** To diversify its revenue stream, it is looking to scale up its stable ship-repair business. For this, it is exploring a greenfield shipyard at Nhava Sheva, Navi Mumbai, focusing on construction/repair of warships and commercial ships. Its greater efforts regarding ship repair would enable it to diversify and broaden its client base, reducing dependence on the MoD for orders.

**Exploring export opportunities:** Limited capacity restrained it from taking up export opportunities. Post-modernisation, however, it has further capacity that can be used for exports. Hence, it is reviving exports of its Defence and commercial products having identified certain Defence and civil sector orders. It intends exports in the next few years to comprise 10-15% of revenue.

**View & Valuation:** Over FY17-20, its consolidated revenue/adj. PAT registered a 12/3% CAGR. At the upper end of the issue-price band, the stock trades at ~5x FY20 earnings vs peers (Cochin Shipyard/GRSE)'s 7x/11x. At the IPO price, we believe the company is grossly undervalued given its strong order backlog (book-to-bill 11x FY20 revenue), potential from coming submarine orders and its net cash balance (Rs58bn in FY20). It also offers attractive dividend yield of 7.4%. We recommend subscribe. **Risk:** The continuing Covid-19 pandemic and a shutdown of operations at the Mazagon Docks would be strong headwinds to its performance.

### Key data

IPO issue date	29th Sep– 1st Oct'20
Face value	₹10
Lot size	103 shares
Issue price	₹135-145
IPO issue size-OFS	₹4.4bn
No. of shares-OFS	30.6m
Fresh issue size	-
No. of shares – Fresh issue	-
QIB	Up to 50%
Retail	35%
Non-institutional	15%

Shareholding pattern (%)	Pre-IPO	Post-IPO
Promoter	100	85
Non-promoter group	0	15
Total	100	100

Key financials (YE Mar)	FY17	FY18	FY19	FY20
Sales (₹ m)	35,191	44,704	46,140	49,777
Net profit (₹m)	5,983	4,962	5,325	6,470
EPS (₹)	29.7	24.6	26.4	32.1
PE (x)	4.9	5.9	5.5	4.5
EV / EBITDA (x)	-37.8	-25.5	-16.2	-10.7
PBV (x)	1.2	1.1	1.0	1.0
RoE (%)	20.0	17.5	16.6	15.5
RoCE (%)	21.5	17.4	20.4	18.7
Dividend yield (%)	55.2	7.6	3.1	7.4
Total debt / equity (x)	-2.8	-2.5	-2.3	-1.9

Source: Company

Ashwani Sharma

Research Analyst

Rahul Jain

Research Associate

Anand Rathi Share and Stock Brokers Limited (hereinafter "ARSSBL") is a full-service brokerage and equities-research firm and the views expressed therein are solely of ARSSBL and not of the companies which have been covered in the Research Report. This report is intended for the sole use of the Recipient. Disclosures and analyst certifications are present in the Appendix.

## Quick Glance – Financials and Valuations

**Fig 1 – Income statement (Rs m)**

Year-end: Mar	FY17	FY18	FY19	FY20
Net revenues (Rs m)	35,191	44,704	46,140	49,777
<b>Growth (%)</b>		<b>27.0</b>	<b>3.2</b>	<b>7.9</b>
Material cost	21,749	27,846	31,652	28,654
Employee & Other expense	12,184	15,310	11,880	18,443
EBITDA	1,257	1,547	2,608	2,680
<b>EBITDA margins (%)</b>	<b>3.6</b>	<b>3.5</b>	<b>5.7</b>	<b>5.4</b>
- Depreciation	417	525	643	687
Other income	7,558	5,573	5,907	5,577
Interest Exp	93	91	91	93
PBT	8,306	6,504	7,781	7,477
Effective tax rate (%)	34.6	39.5	39.5	47.4
+ Associates/(Minorities)	554	1,026	621	934
Net Income	5,983	4,962	5,325	4,771
Adjusted income	5,983	4,962	5,325	6,470
WANS	202	202	202	202
<b>FDEPS (Rs/share)</b>	<b>29.7</b>	<b>24.6</b>	<b>26.4</b>	<b>32.1</b>
<b>EPS growth (%)</b>		<b>-17.1</b>	<b>7.3</b>	<b>21.5</b>

**Fig 3 – Cash-flow statement (Rsm)**

Year-end: Mar	FY17	FY18	FY19	FY20
PBT	8,306	6,504	7,781	7,354
+ Non-cash items	-7,048	-4,957	-5,173	-4,797
Oper. prof. before WC	1,257	1,547	2,608	2,557
- Incr./(decr.) in WC	70,448	-5,846	3,468	-14,280
Others incl. taxes	-7,946	-3,022	-3,375	-1,814
Operating cash-flow	63,760	-7,321	2,701	-13,537
- Capex (tang. +intang.)	-7,055	-1,794	-1,727	-980
Free cash-flow	56,705	-9,115	974	-14,517
- Div. (incl. buyback& taxes)	2,398	2,954	1,206	2,618
+ Equity raised	26,316	-3,569	-291	-3,630
+ Debt raised	-	-	-	-
- Fin investments	3,836	456	15	535
- Misc. (CFI + CFF)	-6,840	-4,360	-3,338	-4,586
Net cash-flow	83,629	-11,733	2,801	-16,714

Source: Company

**Fig 2 – Balance sheet (Rs m)**

Year-end: Mar	FY17	FY18	FY19	FY20
Share capital	2,490	2,241	2,241	2,017
Net worth	29,901	28,341	32,169	30,691
Debt	-	-	-	-
Minority interest	-	-	-	-
DTL/(Assets)	-5,068	-5,522	-5,820	-4,117
<b>Capital employed</b>	<b>24,833</b>	<b>22,819</b>	<b>26,349</b>	<b>26,575</b>
Net tangible assets	5,441	6,769	7,873	8,312
Net intangible assets	214	284	230	171
Goodwill	-	-	-	-
CWIP (tang. &intang.)	984	854	888	800
Investments (strategic)	-	-	-	-
Investments (financial)	3,836	4,291	4,307	4,842
Current assets (ex cash)	94,740	1,04,088	1,14,665	1,33,436
Cash	83,629	71,896	74,697	57,983
Current liabilities	1,64,010	1,65,363	1,76,310	1,78,969
Working capital	-69,270	-61,276	-61,645	-45,533
<b>Capital deployed</b>	<b>24,833</b>	<b>22,819</b>	<b>26,349</b>	<b>26,575</b>

**Fig 4 – Ratio analysis**

Year-end: Mar	FY17	FY18	FY19	FY20
P/E (x)	4.9	5.9	5.5	4.5
EV/EbitDA (x)	-37.8	-25.5	-16.2	-10.7
EV/sales (x)	-1.4	-0.9	-0.9	-0.6
P/B (x)	1.2	1.1	1.0	1.0
RoE (%)	20.0	17.5	16.6	15.5
RoCE (%) - After tax	21.5	17.4	20.4	18.7
DPS (Rs per share)	80.0	11.0	4.5	10.8
Dividend yield (%)	55.2	7.6	3.1	7.4
Dividend payout (%) - Inc. DDT	44.2	75.0	25.6	68.2
Net debt/equity (x)	-2.8	-2.5	-2.3	-1.9
Receivables (days)	86	92	118	108
Inventory (days)	418	309	300	339
Payables (days)	98	197	232	351
CFO:PAT%	1,065.8	-147.5	50.7	-209.2

Source: Company

## Salient features of the issue

- The offer: Rs4.4bn (at the upper end of the band)
- Offer for sale: 30.6m equity shares of Rs10 each.
- Listing: on the BSE and the NSE
- Issue size: Rs4.1bn – 4.4bn
- Price band: Rs135-145
- Bid lot: 103 shares, then in multiples thereof
- Post-issue implied market cap: Rs27.2bn–29.2bn
- BRLMs: Yes Securities, Axis Capital, Edelweiss Financial, IDFC Securities, JM Financial
- Registrar: Alankit Assignments
- Issue opens: 29<sup>th</sup>Sep'20
- Issue closes: 1<sup>st</sup>Oct'20

**Fig 5 – Indicative timetable**

Activity	Approximate Date
Finalisation of the basis of allotment	7 <sup>th</sup> Oct'20
Refunds/ unblocking ASBA Fund	8 <sup>th</sup> Oct'20
Credit of equity shares to DP A/c	9 <sup>th</sup> Oct'20
Trading commences	12 <sup>th</sup> Oct'20

Source: Company

**Fig 6 – Issue break-up**

Category	No. of shares	₹m	% of issue
QIB*	15,126,750	2,042.1 – 2,193.4	50
NIB	4,538,025	612.6 – 658	15
Retail	10,588,725	1,429.5 – 1,535.4	35
Employees	345,517	46.6 – 50.1	-
Total	30,599,017	4,130.9 – 4,436.9	100

Source: Company

**Fig 7 – Shareholding (%)**

	Pre-issue	Post-issue
Promoters & Promoter group	100.00	85.00
Public	0.00	15.00
Total	100.00	100.00

Source: Company

### Objective of the Issue

The issue comprises OFS only; thus, the company will not utilize the proceeds for its business. However, listing would enhance its brand image and shareholders would enjoy greater liquidity.

## Company background

Incorporated in 1934 in Mumbai, Mazgaon Dock Shipbuilders (MDS) is a public sector undertaking under the Department of Defence Production. It constructs and repairs warships and submarines for the Ministry of Defence for use by the Indian Navy, besides other vessels for commercial clients. It has capacity of 40,000 DWT. Also, it is one of the first shipyards in India to manufacture corvettes. It operates in two segments naval shipbuilding (incl. repairs) and submarine & heavy engineering.

**Fig 8 – Details of vessels delivered in the past 18 years**

Name of the ship	Year of delivery	Name of the ship	Year of delivery
<b>P15 A Destroyers</b>		<b>Pontoons</b>	
INS Kolkata	2014	SLB	2002
INS Kochi	2015	Vahak	2007
INS Chennai	2016	Vivan	2014
<b>P17 Frigates</b>		<b>Varenya</b>	
INS Shivalik	2010	Floating Border outpost	-
INS Sahyadri	2012	Seema Prahari Dwarka	2003
INS Satpura	2011	Seema Prahari Sagar	2003
<b>Multi-support vessel</b>		Seema Prahari Kamakhya	
Hercules -I	2012	Seema Prahari Somnath	2004
Go-Surf	2014	Seema Prahari Shakti	2004
<b>Dredger</b>		Seema Prahari Bajarang	
BBMB Dredger	2004	Seema Prahari Durga	2004
Jalangi	2004	Seema Prahari Pratap	2004
Mahananda	2004	Seema Prahari Trishul	2004
Tizu	2004	<b>Missile boats</b>	
DCI Dredger XVIII	2009	Prabal	2002

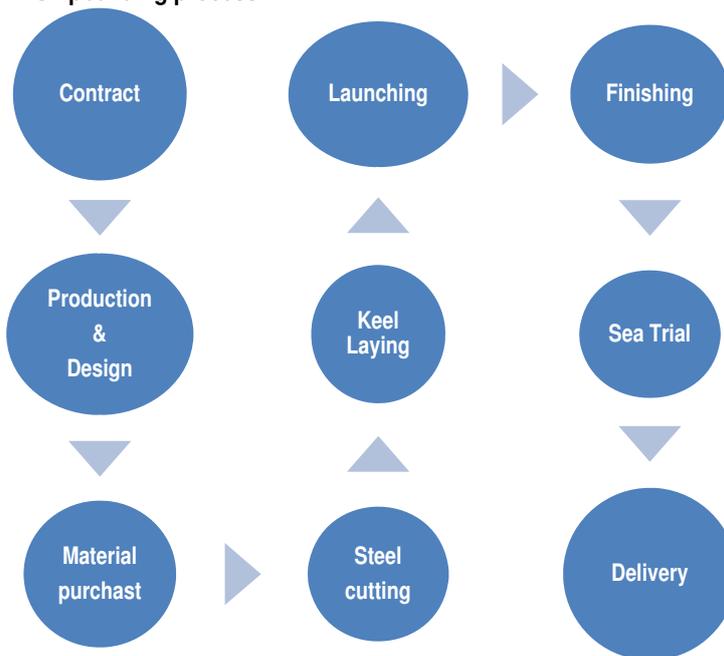
Source : Company

**Fig 9 – Product Offerings – Shipbuilding**

Vessel Type	Description
P17 frigates	The company recently constructed and delivered three Shivalik-class frigates for the MoD for use by the Indian Navy. The P17 frigates are multi-role and first-of-its kind warships built in India incorporating stealth features
P17A frigates	The P17A frigate is a design derivative of the Shivalik-class stealth frigates with much more advanced stealth features and indigenous weapons and sensors. The company is building four P17A frigates using integrated-construction methods
P15A destroyers	It recently constructed and delivered three P15A destroyers to the MoD for use by the Indian Navy. The role of the P15A destroyers is to co-ordinate a task force in 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 ships
P15B destroyers	These are a follow-on class of the P15A destroyers with improved stealth features, latest weapons and sensors and platform-management systems. Currently, four P15B destroyers are in various stages of construction. The role of P15B destroyers is similar to that of P15A destroyers.
Multipurpose support vessels	Two multi-purpose support vessels designed for diesel fuel, fresh water and deck cargo carriage, RoV operations and for azimuth-thruster operations were constructed and delivered to foreign clients

Source : Company

**Fig10 – Shipbuilding process**



Source : Company

**Fig 11 – Some submarines built by MDS in the past or being built**

Vessel Type	Description
SSK submarines	Two Shishumar (SSK Type 1500) class submarines constructed. Medium refitting of four submarines of the Shishumar class undertaken. Medium refitting and life-certification of one submarine recently undertaken
Scorpene submarines	Building/in the process of delivering five Scorpene submarines as part of Project 75 pursuant to a transfer-of-technology partnership with the Naval Group. This transfer involves appropriate technical support by the Naval Group to MDL in construction, integration and testing submarines in India, achieved through transfer of technical data to the company through information systems as well as on-the-job training on critical technologies to the company's personnel

Source : Company

**Fig 12 – Submarines built and delivered to the MoD for the Indian Navy**

Name of the submarine	Year of delivery
INS Shalki	1992
INS Shankul	1994
INS Kalvari	2017
INS Khanderi	2019

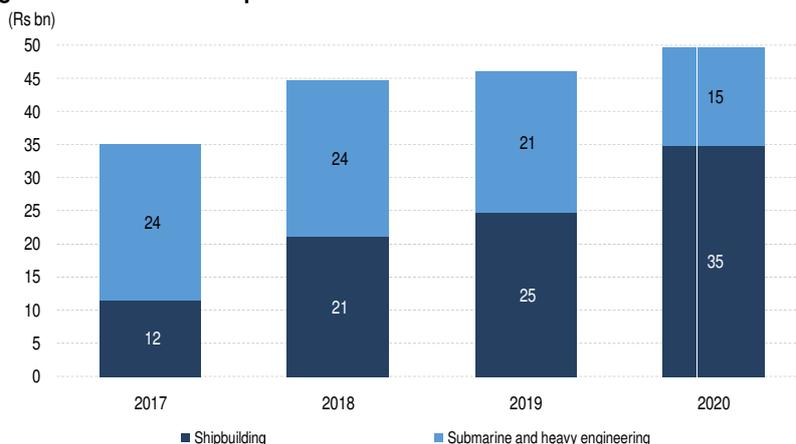
Source : Company

**Fig 13 – Medium refitting carried out**

Name of the submarine	Year of delivery
INS Shishumar	2000
INS Shankhush	2005
INS Shalki	2009
INS Shankul	2011

Source : Company

**Fig 14 – Revenue break-up**



Source : Company

**Mazgaon Docks for shipbuilding, submarines; Nhava Sheva for repair**

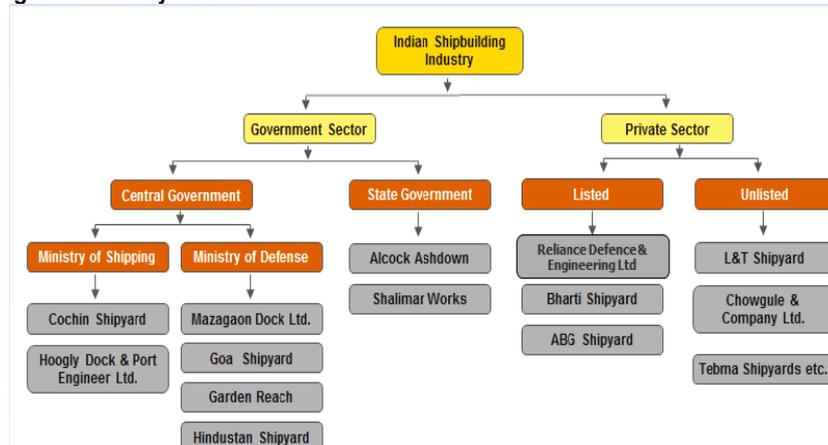
At MDS’ dockyard in Mazgaon, Mumbai, the north and south yards are for shipbuilding; the east yard is where submarines are constructed. The Alcock yard is just north of the north yard and is now being used to augment the submarine-hull construction capacity. The second submarine fabrication facility is already in use. Land adjacent to the south yard is available to construct and accommodate ships and submarines (a modular workshop for shipbuilding, a cradle workshop for submarine building, a Goliath crane, a wet basin).

The company is exploring the development of a greenfield shipyard at Nhava Sheva, Navi Mumbai, with a shiplift, a wet basin, workshops, stores and buildings and a ship-repair facility over 37 acres. The focus of this shipyard would be construction and repair of commercial and warships. The above-water construction structure is ready.

**The Indian shipbuilding industry**

India’s major shipyards have in the past been in the public sector. They primarily built merchant navy ships and naval vessels. The Indian shipbuilding industry comprises eight public-sector shipyards, of which four naval shipyards come under the purview of India’s Ministry of Defence. On the other hand there are about six private companies, listed and unlisted, catering to the Indian shipbuilding sector.

**Fig 15 – Industry structure**



Source : Company

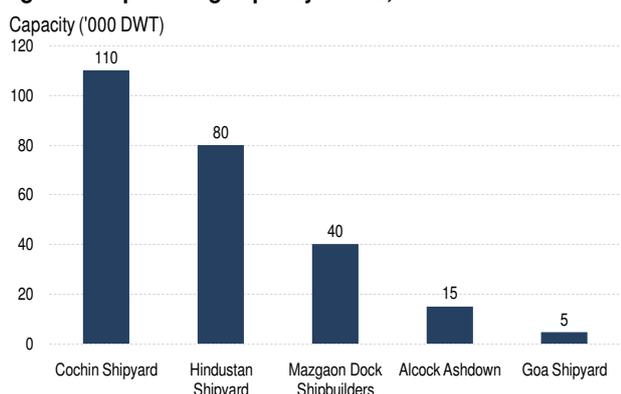
**Fig 16 – Shipbuilding capacity of public and private shipyards by type of vessels**

Name of player	Tanker	Dry cargo	Bulk carriers	Passenger/Passenger cum - cargo ships	Product carriers	Other	Defence ships
<b>Public sector</b>							
Alcock Ashdown (Gujarat)(AAL)	✓		✓			✓	
Cochin Shipyard (CSL)	✓	✓	✓	✓	✓	✓	✓
Hindustan Shipyard(HSL)	✓	✓	✓	✓	✓	✓	✓
Hooghly Dock & Port Engineers (HDPE)	✓			✓		✓	
Shalimar Works (SWL)						✓	
Goa Shipyard (GSL)							✓
Mazagon Dock Shipbuilders							✓
Garden Reach Shipbuilders & Engineers*(GRSE)							✓
<b>Private sector</b>							
ABG Shipyard(ABGS)	✓		✓			✓	
Bharati Defence & Infrastructure(BDIL)	✓	✓	✓	✓		✓	
Reliance Defence & Engineering (RDEL))		✓	✓	✓		✓	✓

Source : Company

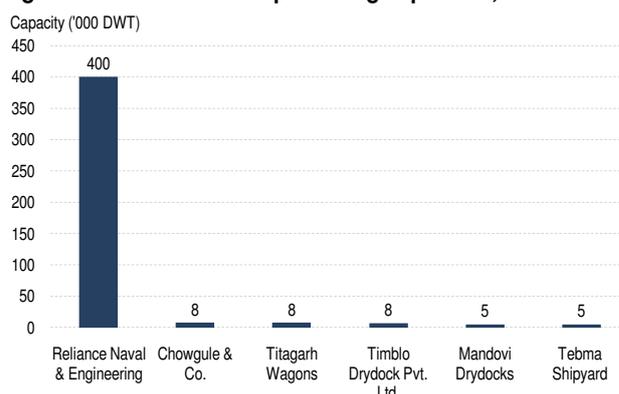
Shipbuilding capacity of the majors in the industry, public and private, is 683,000 DWT, of which public-sector capacity is 250,000 DWT.

**Fig 17 – Shipbuilding capacity: PSUs, 2019**



Source: Statistics of India's Ship Building and Ship Repairing Industry-2018-19

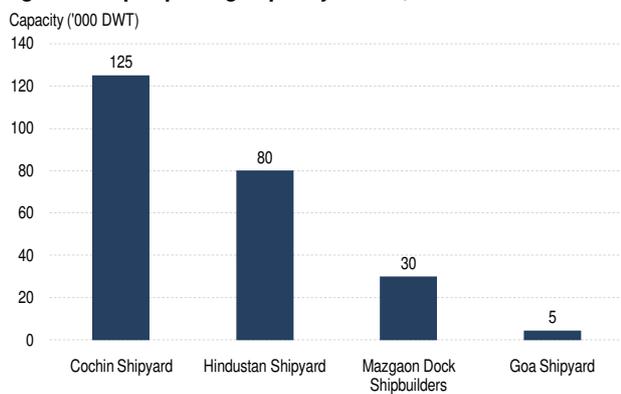
**Fig 18 – Private sector ship-building capacities, 2019**



Source: Statistics of India's Ship Building and Ship Repairing Industry-2018-19

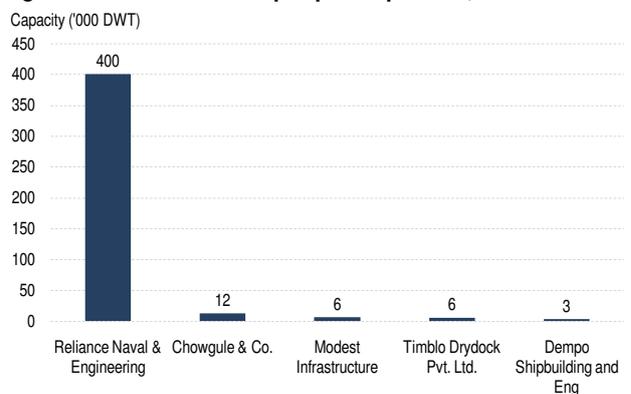
Ship-repair capacity of the majors in the industry, public and private, is 667,000 DWT, of which public-sector capacity is 240,000 DWT.

**Fig 19 – Ship-repairing capacity: PSUs, 2019**



Source: Statistics of India's Ship Building and Ship Repairing Industry-2018-19

**Fig 20 – Private sector ship-repair capacities, 2019**



Source: Statistics of India's Ship Building and Ship Repairing Industry-2018-19

## Competitive strength

### Strong order book

MDS order book on 31<sup>st</sup> Jul'20 was Rs541bn, offering 6-7 years' revenue assurance. The order book comprises three major shipbuilding and two submarine projects. The company has already bid for a few orders for ship repairs; due to the pandemic, however, closure was delayed. The company is also looking at export orders. Given its expertise and sturdy manufacturing facilities, we believe it would keep its order book strong, providing robust revenue assurance for the future.

**Fig 21 – Order book**

Particulars	Nos.	Client	Value (Rs m)
<b>Shipbuilding</b>			
P15B destroyers	4	MoD	2,63,850
P17A stealth frigates	4	MoD	2,36,490
Repair, refitting and services	1	MoD	110
<b>Submarine and heavy engineering</b>			
P75 Scorpene submarines	4	MoD	32,020
Medium refitting and life certification (MRLC) of a submarine	1	MoD	8,270
<b>Order book</b>			<b>5,40,740</b>

Source : Company

**Fig 22 – Orders received and delivered in the last 18 years**

Division	Orders Received	Orders Delivered
Shipbuilding	15	27
Submarine and heavy engineering	10	5

Source : Company

### Modernisation program led to greater capacity

Its vast expertise and well-built infrastructure and facilities give the company an edge over competition. Its facilities comprise three dry docks, two wet basins, three slipways, production shops, assembly shops, a module shop, sheet metal shop, pipe shop, machine and fitting shop, dry dock and dredging, electrical repair shop and instrumentation shop for the shipbuilding division. Its submarine division infrastructure includes shops for fabrication of frames, sub-section assemblies and section formations, a cradle assembly shop for structural and equipment outfitting and final assembly, one dry dock and submarine section assembly shop.

The company had undertaken a modernisation program at its Mazgaon dock. Thereby, its capacity to outfit warships increased from eight to 10 and its submarine capacity increased from six to 11. For this a Rs9bn investment was made, of which Rs8bn was provided by the government of India, the rest from internal accruals. Besides, it has a shore integration facility which enables it to complete combat system integration off-site prior to on-board installation. It has also constructed a submarine assembly workshop which comprises two bays, equipped with two levels of EOT cranes as well as semi-Goliath cranes.

**Location of the facilities provides various benefits**

The Mazagaon Dockyard is strategically located in Mumbai on the west coast of India, connecting with Europe, West Asia and the Pacific Rim, a busy international maritime route. Its customers being the Ministry of Defence, the Indian Coast Guard and vendors based in Mumbai leads to better co-ordination and greater efficiencies. Further, most sub-contractors are in and around Mumbai, which provides the company ease of access to labour. We believe that the location of its facilities provides it with a strategic competitive advantage over its peers.

**Greater indigenisation over the past few years**

In the past, for its warships and submarines, the company imported equipment related to several processes. Importing resulted in higher costs, quality compromises and unsatisfactory after-sales support. In this regard, it intends to increase the quantum of indigenised components for its warships and submarines, thereby giving an impetus to the GoI's 'Make in India' campaign. In Project 15 bravo and 17 alpha, the company has indigenisation of 72-75%; in weapons, 30-40%. Greater indigenisation has reduced reliance on third-party component manufacturers and cost of vessel construction.

## Strategies

MDS has strategized to focus on areas such as exports, currently nil, increased impetus in ship repairs with augmentation of greenfield capacity.

### **Exports: 10-15% of revenue aimed at in the next few years**

At present, MDS caters to the Defence sector in India. Its last export was in 2012, since when it has catered only to Defence sector orders. Export opportunities were not considered due to limited capacity. Now, post-modernisation, it has additional capacity that can be used for export. Hence, it is in the process of reviving export of its Defence and commercial products to Latin America, Africa, South-East Asia, the Middle East and the Scandinavian region. For this, it has identified certain Defence and civil orders in such regions. With such a focus, it intends exports to make up 10-15% of revenue in the next few years.

### **Greater impetus to ship repairs**

Revenue from shipbuilding and submarine & heavy engineering are subject to achievement of certain milestones. Hence, to have a stable revenue stream, the company has started focussing on ship repairs. In the past it undertook ship repair for Defence and commercial clients. Focussing on ship repair would also enable MDS to diversify and broaden its client base, thereby reducing dependence on the MoD for orders. To strengthen its ship-repair business, it has been exploring a greenfield shipyard at Nhava Sheva, Navi Mumbai, with facilities such as ship lifting, a wet basin, workshops, stores and buildings and a ship repair plant spread over 37 acres.

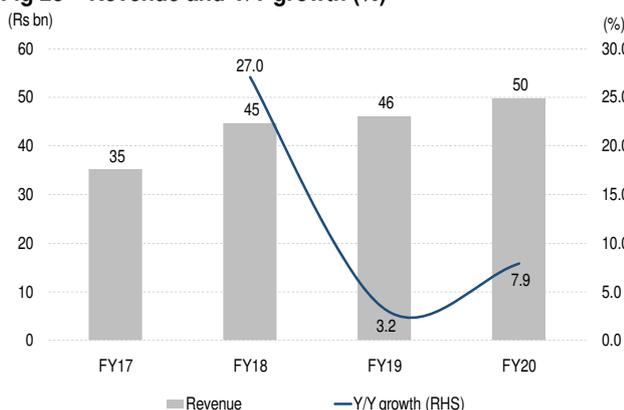
### **Infrastructure-augmentation and enhancing manufacturing capacity**

MDS is presently undertaking capital expenditure for its submarine & heavy engineering division by constructing a submarine launch pad and a blast-painting chamber. This, now being constructed, will enable it to execute future submarine orders. It is also leveraging the latest construction methods to speed up construction of its warships. Besides, it is exploring options of creating a greenfield shipyard at Nhava Sheva, Navi Mumbai, to cater to ship repairs. Such augmentation of facilities and greenfield plans would help it broaden its revenue stream and customer base, domestically and internationally.

## Financials

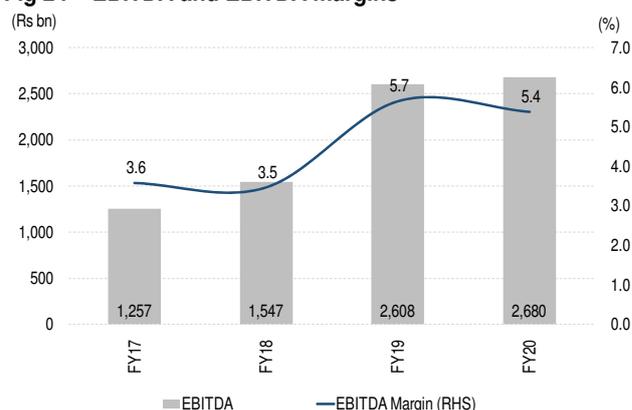
Consolidated revenue registered a 12.3% CAGR over FY17-20 to Rs49.8bn, while PAT declined from Rs5.4bn to Rs4.9bn. The EBITDA margin averaged 4.5%. With Rs58bn cash on the books in FY20, other income was Rs5.6bn. Of this Rs58bn, ~Rs8.3bn was free cash; the rest, project cash. The RoE declined from 20% to 15.5%. MDS is debt-free. At the upper end of the band, the stock trades at 4.5x FY20 earnings.

**Fig 23 – Revenue and Y/Y growth (%)**



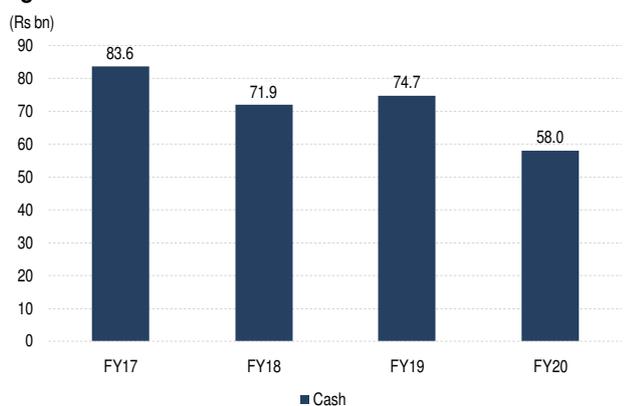
Source: Company

**Fig 24 – EBITDA and EBITDA margins**



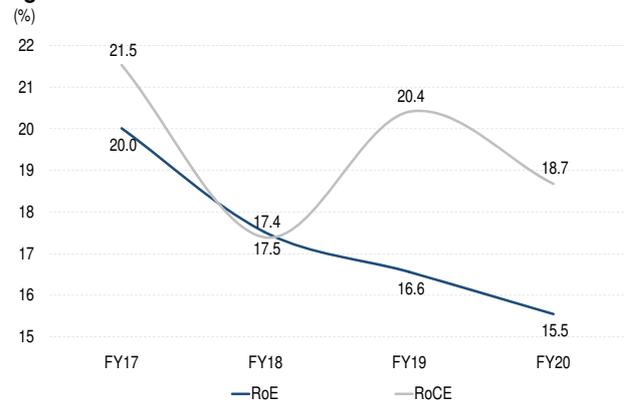
Source: Company

**Fig 25 – Cash**



Source: Company

**Fig 26 – RoE and RoCE**



Source: Company

**Fig 27 – Peer comparison**

	Price (Rs)	Mkt Cap (Rs bn)	FY20 FDEPS (Rs)	P/E (x)	P/Bv (x)	Div Yield (%)	RoE (%)	Book/Bill (x)
Cochin Shipyard	332	44	48	6.6	1.12	4.7	17.9	5.0
GRSE	184	21	15	11.4	1.91	4.1	16.8	18.0
MDL	144	29	32	4.5	0.9	7.5	15.5	11.0

Source: Company

## Key risks

- The impact of the continuing Covid-19 pandemic on business and operations is highly uncertain and cannot be predicted.
- The entire business operations are conducted out of a single yard at Mumbai. The loss of, destruction or shutdown of, operations at the shipyard in Mumbai would have a material effect on the business, financial condition and results of operations.
- In the past negative net cash-flows from operating activities were seen. This may continue.
- Customers claiming liquidated damages and invoking performance bank guarantees / indemnity bonds could materially affect results of operations. MDS may face liabilities and claims by customers in future.

## About the management

**Chairman and Managing Director Narayan Prasad** served in the Indian Navy for over 36 years, holding several assignments afloat and onboard (INS Rana, INS Ranjit and INS Talwar; chief staff officer (technical)/headquarter Eastern Naval Command, admiral superintendent of the Naval Dockyard, Vishakhapatnam, assistant chief of material (nuclear systems maintenance). He was also director-general of the naval project at Visakhapatnam. He has been awarded AtiVishishtSeva Medal and NavSena Medal for his services.

**Director (Submarine & Heavy Engineering) Jasbir Singh** has been associated with MDS since May'10. Previously, he was in the Indian Navy for over 22 years and held several assignments afloat and onboard (INS Mumbai, INS Kuthar) and various appointments in the warship-overseeing team, Directorate of Naval Design, Directorate of Ship Production and Naval Dockyard, Vishakhapatnam.

**Director (Shipbuilding) K Saxena** served in the Indian Navy for about 35 years in various capacities (warship production, superintendent of the warship overseeing team, Mumbai, and director-general of naval design). He also held appointments in the Directorate of Naval Architecture and Directorate of Ship Production of the Indian navy. He also served at the both naval dockyards at Mumbai and Vishakhapatnam.

**Director (Finance) Sanjeev Singhal**, B.Com (Hons) Delhi University, is a cost accountant with more than 32 years' experience in finance and accounting. He was with The Steel Authority of India (finance and accounts) and Director (Finance), Mishra Dhatu Nigam before joining the company on 8<sup>th</sup> Jan'20.

**Director (Corporate Planning and Personnel) T. V. Thomas** was previously in the Indian Navy for over 28 years, holding several assignments, afloat and ashore, incl. engineer officer of INS Viraat, executive officer of INS Shivaji and command engineer officer of the Southern Naval Command. He has been with the company since May'13.

## Appendix

### Analyst Certification

The views expressed in this Research Report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. The research analysts are bound by stringent internal regulations and also legal and statutory requirements of the Securities and Exchange Board of India (hereinafter "SEBI") and the analysts' compensation are completely delinked from all the other companies and/or entities of Anand Rathi, and have no bearing whatsoever on any recommendation that they have given in the Research Report.

### Anand Rathi Ratings Definitions

Analysts' ratings and the corresponding expected returns take into account our definitions of Large Caps (>US\$1bn) and Mid/Small Caps (<US\$1bn) as described in the Ratings Table below:

Ratings Guide (12 months)	Buy	Hold	Sell
Large Caps (>US\$1bn)	>15%	5-15%	<5%
Mid/Small Caps (<US\$1bn)	>25%	5-25%	<5%

### Research Disclaimer and Disclosure inter-alia as required under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) (Research Entity) is a subsidiary of Anand Rathi Financial Services Ltd. ARSSBL is a corporate trading and clearing member of Bombay Stock Exchange Ltd, National Stock Exchange of India Ltd. (NSEIL), Multi Stock Exchange of India Ltd (MCX-SX) and also depository participant with National Securities Depository Ltd (NSDL) and Central Depository Services Ltd. ARSSBL is engaged in the business of Stock Broking, Depository Participant and Mutual Fund distributor.

The research analysts, strategists, or research associates principally responsible for the preparation of Anand Rathi research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

**General Disclaimer:** This Research Report (hereinafter called "Report") is meant solely for use by the recipient and is not for circulation. This Report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. The recommendations, if any, made herein are expression of views and/or opinions and should not be deemed or construed to be neither advice for the purpose of purchase or sale of any security, derivatives or any other security through ARSSBL nor any solicitation or offering of any investment /trading opportunity on behalf of the issuer(s) of the respective security (ies) referred to herein. These information / opinions / views are not meant to serve as a professional investment guide for the readers. No action is solicited based upon the information provided herein. Recipients of this Report should rely on information/data arising out of their own investigations. Readers are advised to seek independent professional advice and arrive at an informed trading/investment decision before executing any trades or making any investments. This Report has been prepared on the basis of publicly available information, internally developed data and other sources believed by ARSSBL to be reliable. ARSSBL or its directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information / opinions / views. While due care has been taken to ensure that the disclosures and opinions given are fair and reasonable, none of the directors, employees, affiliates or representatives of ARSSBL shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way whatsoever from the information / opinions / views contained in this Report. The price and value of the investments referred to in this Report and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance. ARSSBL does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding taxation aspects of any potential investment.

Opinions expressed are our current opinions as of the date appearing on this Research only. We do not undertake to advise you as to any change of our views expressed in this Report. Research Report may differ between ARSSBL's RAs and/ or ARSSBL's associate companies on account of differences in research methodology, personal judgment and difference in time horizons for which recommendations are made. User should keep this risk in mind and not hold ARSSBL, its employees and associates responsible for any losses, damages of any type whatsoever.

ARSSBL and its associates or employees may; (a) from time to time, have long or short positions in, and buy or sell the investments in/ security of company (ies) mentioned herein or (b) be engaged in any other transaction involving such investments/ securities of company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) these and other activities of ARSSBL and its associates or employees may not be construed as potential conflict of interest with respect to any recommendation and related information and opinions. Without limiting any of the foregoing, in no event shall ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind.

Details of Associates of ARSSBL and Brief History of Disciplinary action by regulatory authorities & its associates are available on our website i.e. [www.rathionline.com](http://www.rathionline.com)

**Disclaimers in respect of jurisdiction:** This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject ARSSBL to any registration or licensing requirement within such jurisdiction(s). No action has been or will be taken by ARSSBL in any jurisdiction (other than India), where any action for such purpose(s) is required. Accordingly, this Report shall not be possessed, circulated and/or distributed in any such country or jurisdiction unless such action is in compliance with all applicable laws and regulations of such country or jurisdiction. ARSSBL requires such recipient to inform himself about and to observe any restrictions at his own expense, without any liability to ARSSBL. Any dispute arising out of this Report shall be subject to the exclusive jurisdiction of the Courts in India.

#### Statements on ownership and material conflicts of interest, compensation - ARSSBL and Associates

##### Answers to the Best of the knowledge and belief of ARSSBL/ its Associates/ Research Analyst who is preparing this report

Research analyst or research entity or his associate or his relative has any financial interest in the subject company and the nature of such financial interest.	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company	No
ARSSBL/its Associates/ Research Analyst/ his Relative have any other material conflict of interest at the time of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have managed or co-managed public offering of securities for the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation or other benefits from the subject company or third party in connection with the research report	No
ARSSBL/its Associates/ Research Analyst/ his Relative have served as an officer, director or employee of the subject company.	No

##### Other Disclosures pertaining to distribution of research in the United States of America

This research report is a product of ARSSBL, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by ARSSBL only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, ARSSBL has entered into an agreement with a U.S. registered broker-dealer, Cabrera Capital Markets. ("Cabrera"). Transactions in securities discussed in this research report should be effected through Cabrera or another U.S. registered broker dealer.

1. ARSSBL or its Affiliates may or may not have been beneficial owners of the securities mentioned in this report.
2. ARSSBL or its affiliates may have or not managed or co-managed a public offering of the securities mentioned in the report in the past 12 months.
3. ARSSBL or its affiliates may have or not received compensation for investment banking services from the issuer of these securities in the past 12 months and do not expect to receive compensation for investment banking services from the issuer of these securities within the next three months.
4. However, one or more of ARSSBL or its Affiliates may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon, either on their own account or on behalf of their clients.
5. As of the publication of this report, ARSSBL does not make a market in the subject securities.
6. ARSSBL or its Affiliates may or may not, to the extent permitted by law, act upon or use the above material or the conclusions stated above, or the research or analysis on which they are based before the material is published to recipients and from time to time, provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this report.

© 2019. This report is strictly confidential and is being furnished to you solely for your information. All material presented in this report, unless specifically indicated otherwise, is under copyright to ARSSBL. None of the material, its content, or any copy of such material or content, may be altered in any way, transmitted, copied or reproduced (in whole or in part) or redistributed in any form to any other party, without the prior express written permission of ARSSBL. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of ARSSBL or its affiliates, unless specifically mentioned otherwise.

Additional information on recommended securities/instruments is available on request.

ARSSBL registered address: Express Zone, A Wing, 9th Floor, Western Express Highway, Diagonally Opposite Oberoi Mall, Malad (E), Mumbai – 400097.  
Tel No: +91 22 6281 7000 | Fax No: +91 22 4001 3770 | CIN: U67120MH1991PLC064106.