# ArihantCapital

#### Plant Visit Note 19<sup>th</sup> Apr, 2023

### **Titagarh Wagons**

#### Wagons on cards

#### **CMP: INR 295**

#### Rating: BUY

#### Target Price: INR 470

Stock Info	
BSE	532966
NSE	TWL
Bloomberg	TWL:IN
Reuters	TITW.NS
Sector	Capital Goods
Face Value (INR)	2
Equity Capital (INR mn)	239
Mkt Cap (INR mn)	35,273
52w H/L (INR)	310 / 93.4
Avg Yearly Volume (in 000')	178.3

#### **Shareholding Pattern %**

(As on Dec, 2022)			
Promoters			47.82
DII			6.78
FII			5.27
Public & Others			40.10
Stock Performance (%)	3m	6m	12m
TWL			183.6

-1.9

2.3

4.4

#### **TWL vs Nifty**

NIFTY



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Balasubramanian A bala@arihantcapital.com 022-67114780 We visited the Titagarh freight wagon's and Shipbuilding plant at Titagarh, Kolkata; and Rolling stocks, Propulsion systems and traction motor plant at Uttarpara, Kolkata. Also, we interacted with Mr. Saket Kandoi – Freight Rolling Stock COO, Mr. Mrinal Kanti Das – Freight Wagon Plant Head, Mr. Dilip Jadeja – Passenger Rolling Stock COO, Mr. Veerakumar Sivasubramanian – Passenger Rolling Stock Plant Head, Mr. Sai Subramaniam – Propulsion Plant Head, Mr. Saurav Singhania – Jt CFO & Group Finance Controller, Mr. Anil Kumar Agarwal – Director (Finance), CFO & CBRO and other Titagarh members.

#### **Key Highlights**

**Strong revenue visibility backed by order book:** The company has an order book of 25,000 wagons and around 7,500 - 10,000 wagons are expected to complete in FY24E at optimum utilization levels. We are expecting around INR 39bn – INR 40bn revenue in FY24E on a conservative basis. The company is manufacturing around 600-700 wagons per month and focused to manufacture 1,000 wagons per month from September onwards due to improvement in supply chain efficiencies. The plant is making around 32-34 wagons per day and is focused to reach 40 wagons per day. Out of 40 wagons, 25 are BOXNHL wagons and 15 are Covered Wagons. There is a structural change in wagons and rail systems due to make in India. The industry is expected to manufacture 20,000 to 30,000 wagons per annum and Titagarh is expected to capture a 30%-35% share over medium term.

**First mover advantage in wheelsets:** Titagarh Wagons bagged orders from the Ministry of Railways to supply ~1.54 million forged wheels of different rolling stocks of Indian Railways over a period of 20 years at about 77,000 wheels per annum. The order worth is around INR 122.3bn, spread over 20 years. The company has 50:50 partnerships with RK Forgings. The project costs around INR 10bn and will be funded through internal accruals (50%) and long-term debts. The funding is expected to complete in the next 2 years. The company is setting up a capacity of 2 lakh wheels per annum. Around 77,000 wheels are expected to supply to Indian railways and the remaining to others. In the Wheelset plant, the breakeven is normally expected at 40,000 to 50,000 wheels.

Casting wheelset cost around INR 2.3 lakhs, while forged wheelsets cost around INR 2.7 lakhs to INR 2.8 lakhs. Forged wheelsets are costlier and stronger than casting wheelsets. On a conservative basis, we assume INR 2lakh per wheel, Titagarh's revenue share is expected around INR 40bn to INR 50bn in 5 years which starts from FY26E. The payback period is expected in 3 years. Wheelsets business margins are expected around 15% going forward. Titagarh –RK forgings is expected to export wheelsets after a few years, which will be a potential opportunity.

**Backward Integration will lead to margin improvement:** The backward integration of traction motor and propulsion systems will lead to margin improvements.

1) Propulsion: BHEL is having development order for propulsion and BHEL is a major supplier for Indian Railways. Titagarh Wagons propulsion is under the testing stage.

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#### **Key Highlights**

The trail is expected to complete in the next few months, post that supply is expected to start to Indian railways (EMU). The propulsion cost comes to around INR 20mn to INR 30mn which is around 20%-30% of the Rolling stocks cost. The propulsion margin is higher and stood at 20%. The indigenization of propulsion systems would lead to margin improvement.

2) Traction Motor: The market traction motor requirement is around 4,000 to 5,000 motors per year. The motor cost comes to around INR 10lakhs to INR 25lakhs based on size and applications. One MW per motor costs around INR 25lakhs. The plant is manufacturing 50 motors per month and is expected to reach 200 motors per month in the next two months. The company has a potential opportunity for traction motors.

**Potential opportunity in Vandhe Bharat Trains:** The company is confirmed 80 Vandhe Bharat trains. The first delivery is expected in 24 months. Around 1,280 cars will be manufactured in this order. The first delivery is expected to start in the next 2 years and is expected to complete in 72 months. The company has revenue visibility of INR 112bn for making trains and maintenance revenue visibility of INR 112.7bn (assumed 3.1% of rail cost every year) which spread over the next 35 years.

Vandhe Bharat train speed reaches 120km/hour in 10-15 sec due to propulsion. EMU train crosses around 50km in 1 hour with multiple stops while the normal train takes 3 hours. The government is planning for 1,000 Vandhe Bharat trains and Titagarh Wagons has the potential opportunity.

**Continuous traction in Metros:** The Pune metro is expected to complete in July/Aug. The company has a good relationship with CRRC and further confidence is expected post-Bangalore metro execution. Tenders are expected from Chennai, Bangalore, Surat, and Ahmedabad metros in the next 1 year. The company is well-positioned for metro projects.

**Outlook & Valuation:** Titagarh Wagons has a strong order book (~4.43x of FY22 TTM revenue), well positioned to benefit from railways, Italy's business net profitability is expected in FY24, Capacity expansion, backward integration, New orders for Vandhe Bharat Trains and Wheelsets will drive business growth going forward. In Base Case, Revenue is expected to grow at CAGR 42.1% over the period of FY22-FY25E, and RoE is expected to improve from 7.5% (FY22-TTM) to 23.7% in FY25E. The stock is trading at 17.3x its FY24E EPS. In Base Case Scenario, At the CMP of INR 295 per share, We are valuing the stock at 18x of its FY25E EPS and arrived at a price objective of INR 470, an upside of 59.4%. On our price objective of INR 470, the stock would trade at 8.4x FY25E EV/EBITDA. We have a "BUY" rating on the company.

#### **Scenario Analysis**

Bull Case (INR mn)	FY23E	FY24E	FY25E
Freight Rolling Stock	19,869	32,000	44,280
Passenger Rolling Stock	4,475	14,400	21,600
Shipbuilding, Bridges and Defence	656	683	696
Others	-	-	-
Total Revenue	25,001	47,083	66,576
	EV32E	EV.24E	EV/2E E
Base Case (INR mn)	FY23E	FY24E	FY25E
Freight Rolling Stock	19,703	29,070	38,400
Passenger Rolling Stock	4,475	10,200	16,320
Shipbuilding, Bridges and Defence	656	670	683
Others	-	-	-
Total Revenue	24,835	39,940	55,403
Bear Case (INR mn)	FY23E	FY24E	FY25E
Freight Rolling Stock	19,536	25,380	34,200
Passenger Rolling Stock	4,425	8,640	13,440
Shipbuilding, Bridges and Defence	656	663	670
Others	-		
Total Revenue	24,618	34,683	48,310
Source: Company, Arihant Capital Research			

### **Plant Visit Note**

### **Titagarh Wagons**

#### **Scenario Analysis**

Particular (INR mn)	FY23E	FY24E	FY25E
Revenue	25,001	47,083	66,576
EBITDA	2,433	4,397	6,471
EBITDA Margin (%)	9.7%	9.3%	9.7%
PAT	1,157	2,574	3,971
PAT Margin (%)	4.6%	5.5%	6.0%
EPS (INR)	9.7	21.5	33.2

EPS (INR)	33.2
P/E (x)	20.0
Target Price (INR)	664
CMP (INR)	295
Upside/Downside (%)	125.2%
Courses Company, Arihant Conital Bossensh	

Source: Company, Arihant Capital Research

#### Base Case Scenario

Particular (INR mn)	FY23E	FY24E	FY25E
Revenue	24,835	39,940	55,403
EBITDA	2,290	3,730	5,385
EBITDA Margin (%)	9.2%	9.3%	9.7%
PAT	1,052	2,040	3,123
PAT Margin (%)	4.2%	5.1%	5.6%
EPS (INR)	8.8	17.1	26.1

Valuation - P/E (FY25E)	
EPS (INR)	26.1
P/E (x)	18.0
Target Price (INR)	470
CMP (INR)	295
Upside/Downside (%)	59.4%

Source: Company, Arihant Capital Research

Bear Case Scenario			
Particular (INR mn)	FY23E	FY24E	FY25E
Revenue	24,618	34,683	48,310
EBITDA	2,103	3,239	4,695
EBITDA Margin (%)	8.5%	9.3%	9.7%
PAT	917	1,647	2,585
PAT Margin (%)	3.7%	4.7%	5.4%
EPS (INR)	7.7	13.8	21.6

Valuation - P/E (FY25E)	
EPS (INR)	21.6
P/E (x)	16.0
Target Price (INR)	346
CMP (INR)	295
Upside/Downside (%)	17.3%

Source: Company, Arihant Capital Research

Note: Valuations are based on FY25E, Titagarh Wagons has first mover advantage in wheelsets and expected to supply 77,000 wheels per annum to railways and remaining to private & exports. The revenue is expected to start from FY26E onwards.

#### **Sensitivity Analysis**

Freight Wagons Revenue (INR mn) - FY24E

					Freig	ght Wagon R	ealization (I	NR mn/Wag	;on)			
	29,070	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5
	6,000	21,000	21,600	22,200	22,800	23,400	24,000	24,600	25,200	25,800	26,400	27,000
	6,400	22,400	23,040	23,680	24,320	24,960	25,600	26,240	26,880	27,520	28,160	28,800
	6,800	23,800	24,480	25,160	25,840	26,520	27,200	27,880	28,560	29,240	29,920	30,600
les	7,200	25,200	25,920	26,640	27,360	28,080	28,800	29,520	30,240	30,960	31,680	32,400
Volumes	7,600	26,600	27,360	28,120	28,880	29,640	30,400	31,160	31,920	32,680	33,440	34,200
٥ ۲	8,000	28,000	28,800	29,600	30,400	31,200	32,000	32,800	33,600	34,400	35,200	36,000
Wagon	8,400	29,400	30,240	31,080	31,920	32,760	33,600	34,440	35,280	36,120	36,960	37,800
N S	8,800	30,800	31,680	32,560	33,440	34,320	35,200	36,080	36,960	37,840	38,720	39,600
	9,200	32,200	33,120	34,040	34,960	35,880	36,800	37,720	38,640	39,560	40,480	41,400
	9,600	33,600	34,560	35,520	36,480	37,440	38,400	39,360	40,320	41,280	42,240	43,200
	10,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000	44,000	45,000

#### Freight Wagons Revenue (INR mn) - FY25E

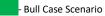
			Freight Wagon Realization (INR mn/Wagon)									
	38,400	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5
	6,300	22,050	22,680	23,310	23,940	24,570	25,200	25,830	26,460	27,090	27,720	28,350
	6,800	23,800	24,480	25,160	25,840	26,520	27,200	27,880	28,560	29,240	29,920	30,600
	7,300	25,550	26,280	27,010	27,740	28,470	29,200	29,930	30,660	31,390	32,120	32,850
nes	7,800	27,300	28,080	28,860	29,640	30,420	31,200	31,980	32,760	33,540	34,320	35,100
Volumes	8,300	29,050	29,880	30,710	31,540	32,370	33,200	34,030	34,860	35,690	36,520	37,350
	8,800	30,800	31,680	32,560	33,440	34,320	35,200	36,080	36,960	37,840	38,720	39,600
Wagon	9,300	32,550	33,480	34,410	35,340	36,270	37,200	38,130	39,060	39,990	40,920	41,850
Wa	9,800	34,300	35,280	36,260	37,240	38,220	39,200	40,180	41,160	42,140	43,120	44,100
	10,300	36,050	37,080	38,110	39,140	40,170	41,200	42,230	43,260	44,290	45,320	46,350
	10,800	37,800	38,880	39,960	41,040	42,120	43,200	44,280	45,360	46,440	47,520	48,600
	11,300	39,550	40,680	41,810	42,940	44,070	45,200	46,330	47,460	48,590	49,720	50,850

#### Rollingstocks Revenue (INR mn) - FY24E

					Ro	olling stocks	Realization	(INR mn/ca	·)			
	10,200	60	65	70	75	80	85	90	95	100	105	110
	74	4,440	4,810	5,180	5,550	5,920	6,290	6,660	7,030	7,400	7,770	8,140
	84	5,040	5,460	5,880	6,300	6,720	7,140	7,560	7,980	8,400	8,820	9,240
les	94	5,640	6,110	6,580	7,050	7,520	7,990	8,460	8,930	9,400	9,870	10,340
Volumes	104	6,240	6,760	7,280	7,800	8,320	8,840	9,360	9,880	10,400	10,920	11,440
	114	6,840	7,410	7,980	8,550	9,120	9,690	10,260	10,830	11,400	11,970	12,540
stocks	124	7,440	8,060	8,680	9,300	9,920	10,540	11,160	11,780	12,400	13,020	13,640
sto	134	8,040	8,710	9,380	10,050	10,720	11,390	12,060	12,730	13,400	14,070	14,740
Rolling	144	8,640	9,360	10,080	10,800	11,520	12,240	12,960	13,680	14,400	15,120	15,840
Rol	154	9,240	10,010	10,780	11,550	12,320	13,090	13,860	14,630	15,400	16,170	16,940
	164	9,840	10,660	11,480	12,300	13,120	13,940	14,760	15,580	16,400	17,220	18,040
	174	10,440	11,310	12,180	13,050	13,920	14,790	15,660	16,530	17,400	18,270	19,140

#### Rollingstocks Revenue (INR mn) - FY25E

		Rolling stocks Realization (INR mn/car)										
	16,320	60	65	70	75	80	85	90	95	100	105	110
	160	9,600	10,400	11,200	12,000	12,800	13,600	14,400	15,200	16,000	16,800	17,600
	168	10,080	10,920	11,760	12,600	13,440	14,280	15,120	15,960	16,800	17,640	18,480
Jes	176	10,560	11,440	12,320	13,200	14,080	14,960	15,840	16,720	17,600	18,480	19,360
Volumes	184	11,040	11,960	12,880	13,800	14,720	15,640	16,560	17,480	18,400	19,320	20,240
	192	11,520	12,480	13,440	14,400	15,360	16,320	17,280	18,240	19,200	20,160	21,120
stocks	200	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000	21,000	22,000
ste	208	12,480	13,520	14,560	15,600	16,640	17,680	18,720	19,760	20,800	21,840	22,880
Rolling	216	12,960	14,040	15,120	16,200	17,280	18,360	19,440	20,520	21,600	22,680	23,760
Rol	224	13,440	14,560	15,680	16,800	17,920	19,040	20,160	21,280	22,400	23,520	24,640
	232	13,920	15,080	16,240	17,400	18,560	19,720	20,880	22,040	23,200	24,360	25,520
	240	14,400	15,600	16,800	18,000	19,200	20,400	21,600	22,800	24,000	25,200	26,400



- Base Case Scenario

- Bear Case Scenario

Source: Company, Arihant Capital Research

	Titagarh (Freight Wagons Plant)
Particular	Details
Steel Yard	<ul> <li>The steel yard storage capacity stood around 8,000 tonnes.</li> <li>Steel are procuring from Jindal Steel, Sail, Tata Steel and others.</li> </ul>
	<ul> <li>Around 12 tonnes of steels are required for 1 wagon.</li> <li>The plant has 5 CNC plasma cutting machines and several shearing machines in Cutting line. The machines are hought from Massar sutting systems.</li> </ul>
Cutting Line	<ul> <li>machines are bought from Messer cutting systems.</li> <li>All the CNC plasma machines are imported from Germany and each machine costs around INR 20mn to INR 30mn. L&amp;T is the service provider for these machines.</li> </ul>
	<ul> <li>The sheet metal thickness ranges from 8mm to 15mm based on applications.</li> <li>The cutting line is processing around 400 tonnes per day. The wastage scrap around 5% in</li> </ul>
	cutting line.
Cold rolled form section	All the cold rolled form section bought from outside.
	<ul> <li>The company is manufacturing around 600-700 wagons per month and focused to manufacture 1,000 wagons per month from September onwards due to improvement in supply chain efficiencies.</li> </ul>
	<ul> <li>The wagons weight without loading around 21 tonnes and around 40 tonnes with loading. The process from steel yards to complete wagon manufacturing processes takes around 36 hours.</li> </ul>
Wagons	<ul> <li>The plant is making around 32-34 wagons per day and focused to reach 40 wagons per day. Out of 40 wagons, 25 are BOXNHL wagons and 15 are Covered Wagons.</li> </ul>
	<ul> <li>The company is ramping up execution, because the delay penalty is around 0.5% per wagon per week.</li> <li>The company has order book of 25,000 wagons and around 7,500 - 10,000 wagons are expected</li> </ul>
	<ul> <li>The company has order book of 25,000 wagons and around 7,500 - 10,000 wagons are expected to complete in FY24E at optimum utilization levels.</li> <li>15 bays are available for wagons production.</li> </ul>
	<ul> <li>Wheelsets are imported from china for private wagons.</li> </ul>
Whoolcots	<ul> <li>Wheelsets are supplied by Railways for railway wagons.</li> </ul>
Wheelsets	<ul> <li>Casting wheelset cost around INR 2.3 lakhs, while forged wheelset cost around INR 2.7 lakhs to INR 2.8 lakhs. Forged wheelsets are costlier and stronger than casting wheelsets.</li> </ul>
Foundry division	<ul> <li>Foundry division capacity stood around 30,000 tonnes per annum and operating at 80%-85% capacity utilization.</li> </ul>
	<ul> <li>Foundry capacity is expected to reach 50,000 tonnes per annum going forward.</li> </ul>
Bogie cost	<ul> <li>Bogie cost comes around INR 6-8 lakhs per wagons and Wheels per wagons comes around INR 8 lakhs.</li> </ul>
	<ul> <li>Bogie with wheels cost around 50% of wagons. Two Bogies and Two Wheelsets are required for one wagon.</li> </ul>
	<ul> <li>Freight wagons working capital days around 45-60days and company focused to bring down to 30 days.</li> </ul>
Working capital days	<ul> <li>Passenger rolling stocks working capital days around 55-60days.</li> <li>The inventory days stood around 45 to 60 days.</li> </ul>
	<ul> <li>National rail freight network stood at 22%-26% and expected to reach 40%-45% going forward.</li> <li>Commercial vehicle cost around INR 8/km, Waterways cost around INR 5/km and Railways</li> </ul>
Freight Rail network	freight cost around INR 3-4/km.
	<ul> <li>Railway freight cost is lower and loading/unloading time are less.</li> <li>Ship revenue is expected around INR 1bn to INR 1.5bn on yearly basis. Ships are majorly</li> </ul>
Other Highlights	<ul> <li>supplying to Indian Navy.</li> <li>Automation is difficult due change in designs from Indian Railways and Private players.</li> <li>Around 20 engineers are rotating for checking the quality.</li> </ul>
	The company is buying bearings from Timken India.

Source: Company, Arihant Capital Research

-	Uttarpara – (Rolling stocks and Propulsion Plant)
Particular Vandhe Bharat Trains	<ul> <li>Details</li> <li>The company is confirmed 80 Vandhe Bharat trains. The first delivery is expected in 24 months. Around 1,280 cars (16 cars/train) will be manufacture in this order. The first delivery is expected to start in next 2 years and expected to complete in 72 months.</li> <li>The company has revenue visibility of INR 112bn for making trains and maintenance revenue visibility of INR 112.7bn (assumed 3.1% of rail cost every year) which spread over next 35 years.</li> <li>Vandhe Bharat train speed reaches to 120km/hour in 10-15 sec due to propulsion. EMU train crosses around 50km in 1 hour with multiple stops while normal train takes 3 hours.</li> </ul>
Coaches	<ul> <li>The aluminium coach length around 22 meters. The lane weight comes around 250kg/piece.</li> <li>Currently, Hindalco and Vedanta is planning to setup this facilities in India. The coach bottom and top are coming from Firema, Italy.</li> <li>Aluminium material are low weight and noise cancellations from outside to Inside. The weight reduction leads to power savings and increase in speeds. However, Aluminium cost is higher than steel Europe and China are mostly using aluminium for high speed trains.</li> <li>The company is making stainless steel cars and aluminium cars.</li> </ul>
Rolling stocks manufacturing capacity	<ul> <li>Uttarpara plant has 11 stations, The whole process takes 6 days to manufacture 1 car. The plant is making 9-12 cars per month per shift which comes around 36 cars per month.</li> <li>Around 4 stations (3 bays fully and 1 bay is partially) are operating remaining stations are expected to operate shortly. Overall, the plant has the capacity of 72 cars per month.</li> </ul>
Rolling stocks order-book	<ul> <li>In rolling stock order book, around 1,280 cars for Vandhe Bharat trains, around 216 cars with 6 trains in Bangalore metro, 3 cars each for 34 trains in Pune Metro.</li> <li>Around 17 trains already supplied and remaining is expected to supply in next few months.</li> </ul>
Welding	<ul> <li>In India, Maximum speed of trains around 160km/hour and average speed around 140km/hour.</li> <li>The welding are done by remote control which is very precision. The welder qualification takes around 7 month due to high standards.</li> </ul>
Metro cars	<ul> <li>Every 48 hours, 1 metro car will be produced.</li> <li>The metro lifecycle around 35 years and 300 passengers are expected to travel per train.</li> <li>The company has good relationship with CRRC and further confidence is expected post Bangalore metro execution.</li> <li>The company is getting around 20% advance for metro trains.</li> </ul>
Quality checking	<ul> <li>The quality checking standards are certified by European Standards.</li> <li>The quality checking are through Visual checking by Dye penetration test, eddy current test and ultrasound test etc.</li> </ul>
Propulsion Systems	<ul> <li>BHEL is having development order for propulsion and BHEL is major supplier for Indian Railways. Titagarh wagons propulsion is under testing stage. The trail is expected to complete in next few months, post that supply is expected to start to Indian railways (EMU).</li> <li>The propulsion cost comes around INR 20mn to INR 30mn which is around 20%-30% of wagons cost. The propulsion margin is higher and stood at 20%.</li> <li>In propulsion, designing to supply takes around 18 months.</li> </ul>
Traction Motors	<ul> <li>The market traction motor requirement around 4,000 to 5,000 motors per year. The plant is manufacturing 50 motors per month and expected to reach 200 motors per month in next two months.</li> <li>The motor cost comes around INR 10 lakhs to INR 25 lakhs based on size and applications. One MW per motor cost around INR 25 lakhs.</li> <li>Around 6 traction motor required for every locomotives and around 4 traction motors required for every EMU.</li> </ul>
Rolling stock components procurement	<ul> <li>Around 20km cables for one car. The cables are procuring from Siechem, Pondicherry.</li> <li>The rolling stocks are indigenized around 80% to 85%.</li> <li>The gears are procuring from ICW which is based in Pune.</li> <li>The load testing are done by Promec machines.</li> <li>Bigie cost comes around INR 6mn to INR 7mn and each wagon required two bogies.</li> <li>Air conditioner systems are procuring from Knorr-bremse for rolling stocks.</li> </ul>

Source: Company, Arihant Capital Research

#### Industry Wagon Volumes - Indian Railways (RSP)

#### Wagon Industry Note

ArihantCapi		ons
	.Wagnes are gearing up on the right bri	ю.,
	Considering the 2012 AL for these control of the 2014 AL for the other AL for the 2014 AL for	enter arthur rs. The enter rs. The rs. The enter rs. The r
Contraction of the local division of the loc	The segment manufacturer is served to experient to prior at 2100 CAME over the service of VEX. Socies to be used on other visions retries for the lastice under any ender the second perior ways. Therefore any exercise distribution and lastice advection of their cases to de to incomparison periormeters and 2000 basis for the perior second second and the theread's to the terminant of the CAME of the second seco	n pela IMTEN FY254 gods ment o
	The price ager experts to concretely in the target of RMS Johns to RHS 6 form instand on models. Private segments prices in RH 66 data in RH 36 data higher the moders aspents where the DS. Physical segments are finded price sections, so aspen manufactures an 2004/2004 advanced are concretents to RH for an enceteding statement. The primite segment sectoristics general is around 8.122 months, findings sequence conductions are provided by the sector of the sector sector sector sector and concretences. There are also been used to previous and the sector sector sector and Mahay industries. Wages transport is some convertient and economical their commu- vations.	takin takin orde agh t teas t, Cos
	Thispesh wapper's order looks to ensemp into stood at 4.815 (972) THM resenant, provides revenues stability. The company has monoted scales for 24.079 arguing free theory of the stability of the stability of the stability of the stability of the theory of the stability of the stability of the stability of the stability of the theory of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stability of the stab	traffic canto for it (1 fe when
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Source: Arihant Capital Research

#### **Railway Sector Note**

ArihantCap		Railway
		Ready to leave station
talway Theme	Indian railway system is 4 <sup>th</sup> largest in the world, be	
"NP and National Rail Ran inflastructure is expected to graw 25% for from INR 33 bits to INR 542 bits or mar the second of CP3 2 (2007)	the 4+ largest rail freight carrier in the world, employer is india and the 8 <sup>th</sup> largest in the wer uptick and remain robust for the next decade. In alletted 1081 3.1 Jubb or to the Nucley of Balance.	16. The Ballway Capes is witnessing the FY22 budget, the government
Permittee FV22 Annual report. Releases will develop new products	towards dedicated freight corridors, network dec semi-high-speed train projects. The "Atmanifohar I	Sharat" initiative for the development
and efficient legistics services for movement of panish. 'One Estim- Dre Product' cancet, will be	alternative high-tech machines, that are needed to plan for 2030, Indian railways is expected to reach to bring down logistics cost and ensure 100% ele	h a future-ready railway system by 2
popularized to help local businesses &	ralway infrastructure investment is expected around	
From Incon FY22 Annual report.	The increasing income in urban and rural areas h	
By apportunity in Vendhe Aharat Realine: 1600 Vendhe Bharat Trains are canning up and 75 Vandhe Bharat Trains are expected to complete by two-2027.	number of Indians. The improvement in naral con growth. In nalways, around 350 new stations an pessenger and freight growth and opportuniti- opoulation is expected to reach 541 mb by 1723 wi	re coming up will be a big booster es for railway companies. The un
All capacturity under Karsch	National infrastructure investments are reach IN	This has been a second and the second
"Under Kavach, Automatic Train Instantian (477) spitem, will be andreed across the entire call retwork	and the National Infrastructure Plan outlined by 1 labls or over the period of F12D-F123E. Transport, "80% of NP spending of planned of INR 111 labl	the Government investment of INR Drengy, and water projects account
beginning with 2,000 km in FY22 and will be railed out in 6,000 to 5,000 km metry subsequent year".	under construction and EPC has the opportunity a section. The redevelopment opportunity in raile	at INE 42 labb or highest in the trans age has INE 3 labb or with comme
Opportunity is Cargo Terminolic '100 PM Gatabaliti Cargo Terminolo in	development accounting for "70% of developm identified by the railways and 1° station Habits station redevelopment scheme is espected to be in	igary has completed construction.
carrieg three years".		
Opportunities in redevelopment and new advices: The redevelopment of 128 rolescy stations along with real estate development is estimated MR 50,000er and around new 358 estima are carried up?	The railway infra players have the potential oppor 75 Vandhe Bhanka trains are expected to leave Cargo Terminal, 2,200 km coverage under Kavach stations redevalopment and convectivity to the un- expected to finance through budgetary support a market bornswings & institutional finance.	nplete by Aug-2023, 100 PM Gatal , Solar power feed in 7,000 stations, sajor ports. The planned capes out
Opportunities in Aferts cal projects: Notes cal projects are reported to process thit 1.7 task or (2016 of urban rdfa) of opportunities for construction companies over the period of D122- D12277.	Deubling of Lines and New lines capes is expected Rail Vikas Nagam's 50% of business comes from the patential business opportunity going forward. Los around 20% of the total railway capes and Titaga and Jasifer Waterin are sequented to benefit action	me areas which show the company h omotives and Wagers capes is exper rh Wagers, Texnaco Rail & Enginee
Opportunities in High & Seni high	around 19% of total railways capes and Rites is ha by Indian railways. The sameany has potential	
Ahmediated high-speed rail project canceloned at a total cast of \$34.52 be?	Transmission lines capes is especied around 25 o and Kalpataru Power Transmission are expected capes. The automatic signaling capes is expected	ef total railways capes, KEC Internati to benefit from transmission rails around 2% of railways capex and Ro
"Fune-Nachisk sensi high-speed rail project conctioned at a total cost of NR 55,000 cr".	<ul> <li>is well positioned on signaling and modernizatio companies are incon international, KEC Internatio Texmaco Rail &amp; Engineering, Rites, Raihel, Kalpata Kernes Micro Sostems are expected to be ben</li> </ul>	rol, Rol Vikos Ngaro, Titogarh Wag ru Power Transmission, Jupiter Wag
Antonia inin Mahakakan gerbartan kantar	forward. All the Railways lifes companies are main the revenue which shows potential business visibili	retaining at least 2X of the order book

Source: Arihant Capital Research

Wagon Volumes (company wise)	FY19	FY20*	FY21#	FY22	FY23
Titagarh Wagons	1,395	2,169	2,453	2,468	4,942
Jupiter Wagons	2,114	1,826	1,637	1,743	2,423
Texmaco	1,047	1,430	863	668	2,327
Modern	627	995	1,055	789	702
H.E.I	837	694	504	473	2,342
Besco (WD)	412	163	175	279	934
Besco (FD)	-	-	-	-	300
Oriental	-	166	318	-	403
Amtek	125	60	10	6	17
CIMMCO	603	495	72	-	-
CEBBCO	-	64	419	2	-
Jindal	284	-	-	-	-
Braithwaite	874	911	962	1,092	1,451
SRBWIL	696	697	438	284	684
Total Industry Wagons	9,014	9,670	8,906	7,804	16,525

FY19	FY20*	FY21#	FY22	FY23
276	429	284	156	562
57	62	356	156	50
50	191	215	186	299
16	6	0	0	-
122	246	301	84	499
521	934	1156	582	1,410
	276 57 50 16 122	276 429 57 62 50 191 16 6 122 246	2764292845762356501912151660122246301	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

9,535 10,604 **Total Wagons** 10,062 8,386 17,935 Source: Ministry of Railways, Arihant Capital Research; \*- Apr-Feb, #- Aug-Mar; Volumes as per RSP (Indian Railways), Private supply wagons volume not included.

Wagon Volumes (type wise)	FY19	FY20*	FY21#	FY22	FY23
BCNHL/BCNA	1,641	718	957	1,565	5,243
BOXNHL	2,070	6,304	4,860	2,708	9,487
BRN22.9/BRNA	635	220	657	1,212	385
BOBRNHSM1	238	1,056	1,376	1,074	1,072
BOSTHSM2	1,477	213	-	-	-
BTPGLN	22	16	-	-	-
BVCM	-	3	125	368	179
BFNS	231	140	50	-	-
BTPN	111	121	298	271	114
BOBSN	21	157	63	45	45
BOYEL	-	181	3	-	-
BOBYN	16	27	472	561	-
BOXNS	2,552	514	45	-	-
Total Industry Wagons	9,014	9,670	8,906	7,804	16,525

Rly. Workshop Wagon Volumes (type wise)	FY19	FY20*	FY21#	FY22	FY23
BCNHL/BCNA	-	-	-	-	-
BOXNHL	366	751	839	404	645
BRN22.9/BRNA	-	-	-	-	207
BOBRNHSM1	-	-	-	-	66
BVCM	155	183	317	178	430
BTPN	-	-	-	-	62
BOBSN	-	-	-	-	-
BOBYN	-	-	-	-	-
Total Rly.workshop Wagons	521	934	1,156	582	1,410
Total Wagons	9,535	10,604	10,062	8,386	17,935

Source: Ministry of Railways, Arihant Capital Research, \*- Apr-Feb, #- Aug-Mar

#### Industry Wagon Volumes – Indian Railways (RSP)

Production under RSP	FY19	FY20*	FY21#	FY22	FY23
Private Sector Units	8,140	8,759	7,944	6,428	14,390
Public Sector Units	874	911	962	1,376	2,135
Railway w/shops	521	934	1,156	582	1,410
Total	9,535	10,604	10,062	8,386	17,935
Industry Wagons Target vs Actual	FY19	FY20*	FY21#	FY22	FY23
Wagon Production - Targetted volumes	9800	10800	9000	8640	18,300
Actual Production	9014	9670	8906	7804	16,522
Excess/Short fall	-786	-1130	-94	-836	-1778
Rly/W.shop Target vs Actual	FY19	FY20*	FY21#	FY22	FY23
Rly/W.shop - Targeted Volumes	1200	1200	1000	960	2,700
Actual Production	521	934	1156	582	1,410
Excess/Short fall	-679	-266	156	-378	-1290

Source: Ministry of Railways, Arihant Capital Research; \*- Apr-Feb, #- Aug-Mar

Wagon Volumes (company wise)	FY19	FY20*	FY21#	FY22	FY23
Titagarh Wagons	1,395	2,169	1,903	2,468	4,942
Jupiter Wagons	2,114	1,826	1,210	1,743	2,423
Texmaco	1,047	1,430	633	668	2,327
Modern	627	995	802	789	702
H.E.I	837	694	501	443	2,342
Besco (WD)	412	163	167	279	934
Besco (FD)	-	-	-	-	300
Oriental	-	166	240	-	403
Amtek	125	60	10	5	17
СІММСО	603	495	31	-	-
CEBBCO	-	64	316	2	-
Jindal	284	-	-	-	-
Braithwaite	874	911	841	1,092	1,451
SRBWIL	696	697	273	284	684
Total Industry Wagons	9,014	9,670	6,927	7,773	16,525

Volume Share (%)	EV4.0	51/20*	EV.24#	EVOD	EV/22
volume share (%)	FY19	FY20*	FY21#	FY22	FY23
Titagarh Wagons	15.5%	22.4%	27.5%	31.8%	29.9%
Jupiter Wagons	23.5%	18.9%	17.5%	22.4%	14.7%
Texmaco	11.6%	14.8%	9.1%	8.6%	14.1%
Modern	7.0%	10.3%	11.6%	10.2%	4.2%
H.E.I	9.3%	7.2%	7.2%	5.7%	14.2%
Besco (WD)	4.6%	1.7%	2.4%	3.6%	5.7%
Besco (FD)	0.0%	0.0%	0.0%	0.0%	1.8%
Oriental	0.0%	1.7%	3.5%	0.0%	2.4%
Amtek	1.4%	0.6%	0.1%	0.1%	0.1%
СІММСО	6.7%	5.1%	0.4%	0.0%	0.0%
CEBBCO	0.0%	0.7%	4.6%	0.0%	0.0%
Jindal	3.2%	0.0%	0.0%	0.0%	0.0%
Braithwaite	9.7%	9.4%	12.1%	14.0%	8.8%
SRBWIL	7.7%	7.2%	3.9%	3.7%	4.1%

Source: Ministry of Railways, Arihant Capital Research; Volumes as per RSP (Indian Railways), Private supply wagons volume not included.

#### Industry Wagon Volumes – Indian Railways (RSP)

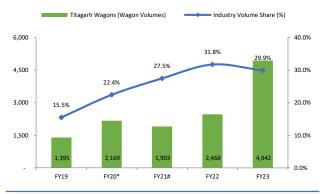
Wagon Volumes (company wise)	Q4FY21	Q1FY22	Q2FY22	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23	Q4FY23
Titagarh Wagons	559	447	620	810	591	571	1,183	1,522	1,666
Jupiter Wagons	503	560	334	388	461	326	512	830	755
Texmaco	270	209	135	258	66	29	339	913	1,046
Modern	296	215	178	264	132	250	408	-	44
H.E.I	166	222	119	91	11	203	481	923	735
Besco (WD)	80	62	113	104	-	105	219	290	320
Besco (FD)	-	-	-	-	-	-	-	85	215
Oriental	42	-	-	-	-	-	-	171	232
Amtek	-	5	-	-	-	-	17	-	-
СІММСО	9	-	-	-	-	-	-	-	-
CEBBCO	65	-	2	-	-	-	-	-	-
Jindal	-	-	-	-	-	-	-	-	-
Braithwaite	273	158	278	198	458	358	250	385	458
SRBWIL	-	-	35	88	161	101	170	206	207
Total Industry Wagons	2,263	1,878	1,814	2,201	1,880	1,943	3,579	5,325	5,678

Volume Share (%)	Q4FY21	Q1FY22	Q2FY22	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23	Q4FY23
Titagarh Wagons	24.7%	23.8%	34.2%	36.8%	31.4%	29.4%	33.1%	28.6%	29.3%
Jupiter Wagons	22.2%	29.8%	18.4%	17.6%	24.5%	16.8%	14.3%	15.6%	13.3%
Texmaco	11.9%	11.1%	7.4%	11.7%	3.5%	1.5%	9.5%	17.1%	18.4%
Modern	13.1%	11.4%	9.8%	12.0%	7.0%	12.9%	11.4%	0.0%	0.8%
H.E.I	7.3%	11.8%	6.6%	4.1%	0.6%	10.4%	13.4%	17.3%	12.9%
Besco (WD)	3.5%	3.3%	6.2%	4.7%	0.0%	5.4%	6.1%	5.4%	5.6%
Besco (FD)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	3.8%
Oriental	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	4.1%
Amtek	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%
СІММСО	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CEBBCO	2.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Jindal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Braithwaite	12.1%	8.4%	15.3%	9.0%	24.4%	18.4%	7.0%	7.2%	8.1%
SRBWIL	0.0%	0.0%	1.9%	4.0%	8.6%	5.2%	4.7%	3.9%	3.6%

Source: Ministry of Railways, Arihant Capital Research; Volumes as per RSP (Indian Railways), Private supply wagons volume not included.

#### Industry Wagon Volumes – Indian Railways (RSP)

# Exhibit 1: Titagarh Wagons ramped up production and maintains ~30% volume share as of FY23.



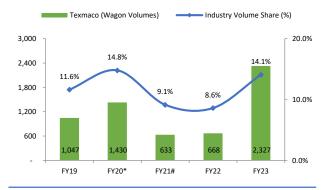
Source: Ministry of Railways, Industry, Arihant Capital Research

Exhibit 3: JWL has ramped-up Private wagon manufacturing in FY23 and reduced railway volumes. Private wagons are yielding higher realizations compared to Indian railway wagons.



Source: Ministry of Railways, Industry, Arihant Capital Research

# Exhibit 5: Texmaco ramped up production and maintains 14% volume share as of FY23.



Source: Ministry of Railways, Industry, Arihant Capital Research

# Exhibit 2: Titagarh Wagons volumes increased by ~3x over the period of Q4FY21-Q4FY23.



Source: Ministry of Railways, Industry, Arihant Capital Research

# Exhibit 4: Jupiter Wagons volumes increased by ~1.5x over the period of Q4FY21-Q4FY23.



Source: Ministry of Railways, Industry, Arihant Capital Research

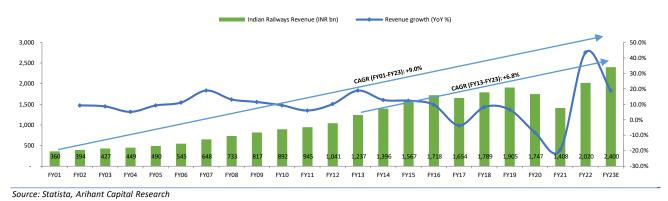
# Exhibit 6: Texmaco volumes increased by ~3.9x over the period of Q4FY21-Q4FY23.



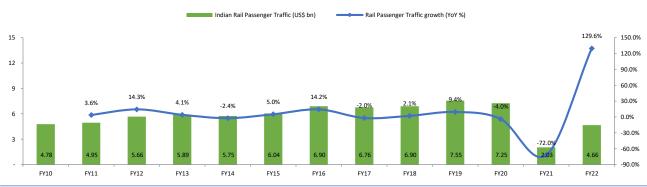
Source: Ministry of Railways, Industry, Arihant Capital Research

#### **Railways and Wagons Industry**

#### Exhibit 7: Indian railway revenue has grew at a CAGR of 9% over the period of FY01-FY23E.

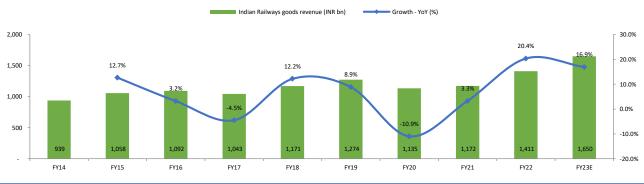


#### Exhibit 8: Indian rail passenger traffic growth strongly recovered in FY22.



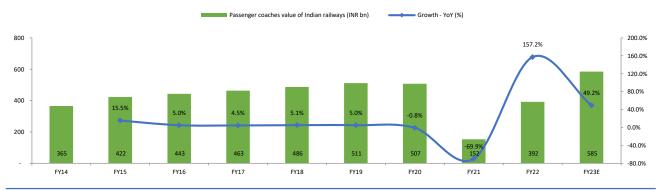
Source: Statista, Arihant Capital Research

#### Exhibit 9: Indian railways goods revenue grew at a CAGR 6.5% over the period of FY14-FY23E.



Source: Statista, Arihant Capital Research

#### Exhibit 10: Indian railways passenger coaches value grew at a CAGR 5.4% over the period of FY14-FY23E.

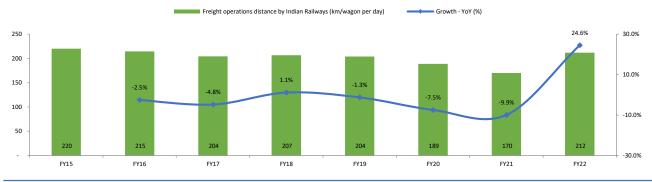


Source: Statista, Arihant Capital Research

#### **Arihant Capital Markets Ltd**

#### **Railways and Wagons Industry**

#### Exhibit 11: Freight operations are back to pre-covid levels. Around 212km/wagon per day freight operations distance in FY22.



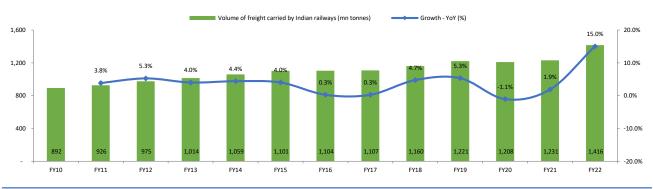
Source: Statista, Arihant Capital Research

#### Exhibit 12: Indian rail freight traffic earnings grow at CAGR 3% over the period of FY10-FY22.

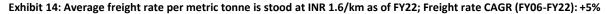


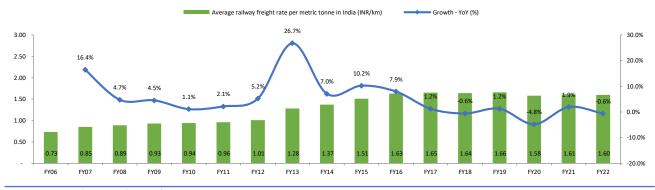
Source: Statista, Arihant Capital Research

#### Exhibit 13: Freight volumes grew at a CAGR 3.9% over the period of FY10-FY22.



Source: Statista, Arihant Capital Research





Source: Statista, Arihant Capital Research

#### Arihant Capital Markets Ltd

#### **Railways and Wagons Industry**

#### Exhibit 15: Freight train speed has increased over the years.

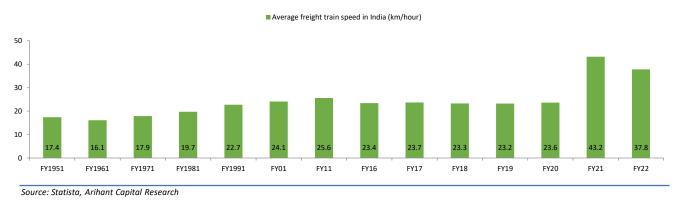
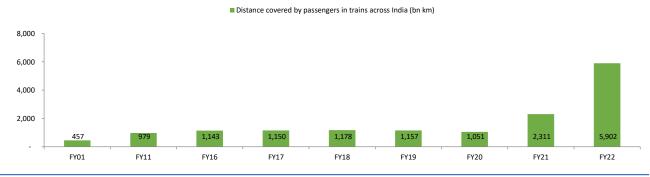


Exhibit 16: Around 13,000 passenger trains covered by 5,902 bn km as of FY22.



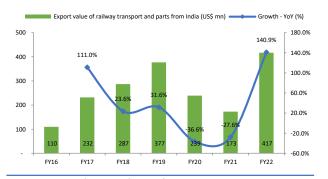
Source: Statista, Arihant Capital Research

#### Exhibit 17: Indian railways expenditure grew at a CAGR 9% over the period of FY01-FY23E.



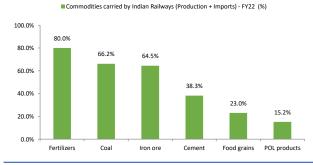
Source: Statista, Arihant Capital Research

Exhibit 18: Railway transport and parts exports grew at a CAGR ~25% over the period of FY16-FY22.



#### Source: Statista, Arihant Capital Research

Exhibit 19: Indian railways majorly transported Fertilizers, Coal, Iron ore and Cement in FY22.



Source: Statista, Arihant Capital Research

#### Vandhe Bharat update

Details					
200					
512 (Approx.)					
1) RVNL - TMH, Russia					
2) Titagarh Wagons - BHEL					
3) BEML - Siemens					
4) Alstom Transports					
RVNL - TMH					
Titagarh Wagons - BHEL					
	200 512 (Approx.) 1) RVNL - TMH, Russia 2) Titagarh Wagons - BHEL 3) BEML - Siemens 4) Alstom Transports RVNL - TMH				

Source: Company, Arihant Capital Research

Bidded details in Tender	Bid price/Car (INR bn)	Number of Train Allocated	Tender Value (INR bn)
RVNL - TMH, Russia (L1)	1.2	120	144
Titagarh Wagons - BHEL (L2)	1.398	80	112
BEML - Siemens (L3)	1.4	-	
Alstom Transports (L4)	1.65	-	
Total		200	256
Source: Company Aribant Capital Rese	arch		

urce: Company, Arihant Capital Research

Manufacturing Revenue (INR bn)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY25E-FY30E
RVNL - TMH, Russia	24	24	24	24	24	24	144
Titagarh Wagons - BHEL (L2)	19	19	19	19	19	19	112
Total Revenue	43	43	43	43	43	43	256
Source: Company, Arihant Capital Research							

ırce: Company, Arihant Capital Research

Manufacturing Revenue (%)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY25E-FY30E
RVNL - TMH, Russia	56%	56%	56%	56%	56%	56%	56%
Titagarh Wagons - BHEL (L2)	44%	44%	44%	44%	44%	44%	44%
Total Revenue	100%	100%	100%	100%	100%	100%	100%

Source: Company, Arihant Capital Research

Maintenance Revenue (INR bn)	FY25E	FY26E	FY27E	FY28E	FY29E	<b>FY30E</b>	FY31E-FY59E	FY25E-FY59E
RVNL - TMH, Russia	0.7	1.5	2.2	3.0	3.7	4.5	129.5	145.1
Titagarh Wagons - BHEL (L2)	0.6	1.2	1.7	2.3	2.9	3.5	100.5	112.7
Total Maintenance Revenue (INR bn)	1.3	2.6	4.0	5.3	6.6	7.9	230.0	257.8

Maintenance Revenue (%)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E-FY59E	FY25E-FY59E	
RVNL - TMH, Russia	56%	56%	56%	56%	56%	56%	56%	56%	
Titagarh Wagons - BHEL (L2)	44%	44%	44%	44%	44%	44%	44%	44%	
Total Maintenance Revenue (%)	100%	100%	100%	100%	100%	100%	100%	100%	
Courses Conserve Aribert Constal Decement Assured Maintenance cost at 2 10% of a province assures (serve									

Source: Company, Arihant Capital Research, Assumed Maintenance cost at 3.1% of manufacturing revenue/year.

Maintenance Revenue (INR bn)	FY25E	FY26E	<b>FY27E</b>	FY28E	FY29E	<b>FY30E</b>	FY31E-FY59E	FY25E-FY59E
RVNL - TMH, Russia	1.0	2.0	3.0	3.9	4.9	5.9	171.2	191.9
Titagarh Wagons - BHEL (L2)	0.8	1.5	2.3	3.1	3.8	4.6	133.0	149.0
Total Maintenance Revenue (INR bn)	1.7	3.5	5.2	7.0	8.7	10.5	304.2	340.9

Maintenance Revenue (%)	FY25E	FY26E	<b>FY27</b> E	FY28E	FY29E	FY30E	FY31E-FY59E	FY25E-FY59E
RVNL - TMH, Russia	56%	56%	56%	56%	56%	56%	56%	56%
Titagarh Wagons - BHEL (L2)	44%	44%	44%	44%	44%	44%	44%	44%
Total Maintenance Revenue (INR bn)	100%	100%	100%	100%	100%	100%	100%	100%

Source: Company, Arihant Capital Research, Assumed Maintenance cost at 4.1% of manufacturing revenue/year.

#### Note

200 Vandhe Bharat Train order is expected to complete in 6 years (72 months).

The delivery of trains are expected from FY25E -FY30E, maintenance is expected for 35 years (FY25E-FY59E).

Maintenance cost ranges between 3% to 4.1%.

#### Indian Coaches and Wagon Manufacturers

S.No	Coaches and Wagon Manufacturers in India	Products
1	Abrol Engg Co	Motor Starters, Low Tension Switchgears, Miniature Circuit Breakers (MCB's), Distribution Equipment's, Electrical and Mechanical Components for Rolling Stock manufacturers.
2	Airflow Equipments	Rail car body, Rail Interior, Composites, All type of doors, Body side windows for metros, Interior lighting units and railway components.
3	Alstom, India	Rolling Stock, Components, Cybersecurity, Digital Mobility, Infrastructure, Healthier Mobility,
4	BEML Limited	Railways & Metros: Rail, Metro, Freight wagons, etc; Mining & Construction: Hydraulic excavators, buildozers, Wheel loaders, Wheel dozers, Dumb trucks, Motor graders etc; Defence & Aerospace: Bridge layer, Field artillery tractor, Medium & heavy recovery vehicle, Crash fire tenders, etc.
5	BESCO Limited (Wagon Division), India	Wagons, Electric Multiple Units (EMU), Alloy steel railway castings, (Bogies, Couplers, Draft Gears) and Friction Parts.
6	Bombardier Transportation, India	Rapid transit rolling stock, Monorails, Trams and light rail vehicles, Locomotives, Passenger cars, Regular speed multiple unit trains, High speed trains and people movers.
7	Braithwaite & Co.	Freight Wagons, Tank Wagons, Special Wagons, Ro Ro Wagons, Foundry Components, Cranes & Material Handling, Container, Ship Building, Civil Projects etc.
8	Hind Rectifiers	Rolling Stock HVAC Systems, Traction Motors, Traction & Aux Transformers, Electronics, etc
9	Jupiter Wagons	Shipping containers, Skip-Loaders, Garbage-Bin collectors, Troop carrier vehicle bodies, Prison van bodies, Water bowser bodies
10	SAIL RITES Bengal Wagon Industry Private Ltd	Wagons (BOXNHL, BOXNR, BCNAHSM1)
11	Texmaco Rail & Engineering	Rail EPC, Locomotive shells and assemblies, Coach Bogie Frames, Wagons, Bridges and Steel structures, Loco brakes and draft gears.
12	Titagarh Wagons	High speed and regional trains, Electric and diesel locomotives and coaches, Metro coaches, Static converters and traction engines, IGBT based propulsion systems for EMU and MEMU, etc.
13	Wabtec	Products and services for Locomotives, Freight Cars, Freight Services, Digital Intelligence, Transit and Mining etc.

Source: Company reports, Arihant Capital Research

### **Titagarh Wagons**

#### **Financial Statements**

#### Income statement summary

Y/e 31 Mar (INR Mn)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Revenue	17,663	15,206	19,308	24,835	39 <i>,</i> 940	55,403
Net Raw Materials	11,515	9 <i>,</i> 934	12,083	19,111	30,594	42,300
Employee Cost	1,518	2,106	2,235	600	998	1,330
Other Expenses	3,421	2,360	3,661	2,834	4,617	6,388
EBITDA	1,209	806	1,329	2,290	3,730	5,385
EBITDA Margin (%)	6.8%	5.3%	6.9%	9.2%	9.3%	9.7%
Depreciation	(291)	(299)	(333)	(218)	(344)	(414)
Interest expense	(883)	(812)	(934)	(820)	(951)	(1,066)
Other income	340	249	358	454	359	374
Profit before tax	375	(55)	290	1,615	2,794	4,279
Taxes	205	(132)	(296)	(464)	(754)	(1,155)
РАТ	580	(187)	(7)	1,151	2,040	3,123
PAT Margin (%)	3.3%	-1.2%	0.0%	4.6%	5.1%	5.6%
Loss from Discontinued operations	(941)	-	-	(99)	-	-
Net PAT	(361)	(187)	(7)	1,052	2,040	3,123
Other Comprehensive income	53	81	57	-	-	-
Net profit	(309)	(106)	50	1,052	2,040	3,123
EPS (INR)	5.0	(1.6)	(0.1)	8.8	17.1	26.1

Source: Company Reports, Arihant Capital Research

#### Balance sheet summary

Y/e 31 Mar (INR Mn)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Equity capital	231	239	239	239	239	239
Reserves	7,435	8,167	8,182	9,333	11,373	14,497
Net worth	7,666	8,406	8,421	9,572	11,612	14,736
Minority Interest	789	-	1	-	-	-
Provisions	1,017	814	912	816	875	1,214
Debt	7,644	8,584	9,316	9,866	11,266	12,416
Other non-current liabilities	1,441	1,868	145	373	599	554
Total Liabilities	18,556	19,672	18,796	20,628	24,353	28,920
Fixed assets	8,254	8,330	8,790	10,074	12,765	15,396
Capital Work In Progress	-	162	152	36	45	54
Other Intangible assets	381	536	646	646	646	646
Investments	799	923	765	745	599	831
Other non current assets	789	739	1,419	1,242	1,198	1,108
Net working capital	4,615	7,034	5,729	6,349	7,643	9,262
Inventories	3,763	3,852	5 <i>,</i> 039	6,440	9,220	12,169
Sundry debtors	2,538	5,672	6,591	3,742	4,924	6,072
Loans & Advances	531.6	-	-	-	-	-
Other current assets	1,944	2,576	2,093	2,041	1,641	2,277
Sundry creditors	(3 <i>,</i> 512)	(3 <i>,</i> 980)	(4,387)	(4,633)	(6,944)	(9 <i>,</i> 593)
Other current liabilities & Prov	(649)	(1 <i>,</i> 085)	(3,606)	(1,242)	(1,198)	(1,662)
Cash	561	1,240	421	1,039	957	930
Other Financial Assets	3,159	706	874	497	499	693
Total Assets	18,556	19,672	18,796	20,628	24,353	28,920

Source: Company Reports, Arihant Capital Research

Y/e 31 Mar (INR cr)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Tax burden (x)	1.5	3.4	(0.0)	0.7	0.7	0.7
Interest burden (x)	0.4	(0.1)	0.3	0.8	0.8	0.9
EBIT margin (x)	0.1	0.0	0.05	0.08	0.08	0.09
Asset turnover (x)	0.9	0.8	0.8	1.0	1.4	1.6
Financial leverage (x)	2.6	2.5	2.8	2.7	2.6	2.6
RoE (%)	7%	-2%	0%	13%	19%	24%

#### **Financial Statements**

Cashflow summary						
Y/e 31 Mar (INR Mn)	FY20	FY21	FY22	FY23E	FY24E	FY25E
Profit before tax	375	(55)	290	1,615	2,794	4,279
Depreciation	291	299	333	218	344	414
Tax paid	205	(132)	(296)	(464)	(754)	(1 <i>,</i> 155)
Working capital $\Delta$	254	(2,419)	1,305	(620)	(1,294)	(1,619)
Change in Goodwill	2.5	-	-	-	-	-
Operating cashflow	1,127	(2,307)	1,631	749	1,091	1,918
Capital expenditure	635	(538)	(782)	(1,386)	(3 <i>,</i> 045)	(3 <i>,</i> 054)
Free cash flow	1,762	(2,845)	849	(637)	(1,954)	(1,136)
Equity raised	(1,013)	138	24	(1)	-	-
Investments	155	(124)	158	20	146	(232)
Others	(498)	2,347	(957)	554	41	(103)
Debt financing/disposal	(1,985)	941	732	550	1,400	1,150
Other items	945	224	(1,625)	132	285	294
Net ∆ in cash	(634)	680	(820)	618	(82)	(27)
Opening Cash Flow	1,195	561	1,240	421	1,039	957
Closing Cash Flow	561	1,240	421	1,039	957	930

Source: Company Reports, Arihant Capital Research

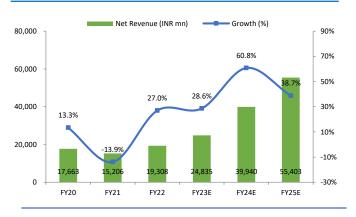
Ratio analysis						
Y/e 31 Mar	FY20	FY21	FY22	FY23E	FY24E	FY25E
Growth matrix (%)						
Revenue growth	13.3%	-13.9%	27.0%	28.6%	60.8%	38.7%
Op profit growth	45.1%	-33.3%	64.8%	72.3%	62.9%	44.4%
Profitability ratios (%)						
OPM	6.8%	5.3%	6.9%	9.2%	9.3%	9.7%
Net profit margin	3.3%	-1.2%	0.0%	4.6%	5.1%	5.6%
RoCE	11.0%	15.1%	-0.2%	9.3%	12.4%	15.0%
RoNW	7.3%	-2.3%	-0.1%	12.8%	19.3%	23.7%
RoA	3.1%	-1.0%	0.0%	5.6%	8.4%	10.8%
Per share ratios (INR)						
EPS	(2.7)	(0.9)	0.4	8.8	17.1	26.1
Dividend per share	-	-	-	-	-	-
Cash EPS	7.5	0.9	2.7	11.5	19.9	29.6
Book value per share	66.3	70.4	70.4	80.1	97.1	123.2
Valuation ratios (x)						
P/E	-	-	700.0	33.5	17.3	11.3
P/CEPS	39.2	315.8	108.2	25.8	14.8	10.0
P/B	4.4	4.2	4.2	3.7	3.0	2.4
EV/EBITDA	33.4	51.6	32.7	18.9	12.1	8.5
Payout (%)						
Dividend payout	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tax payout	-54.7%	-239.9%	102.4%	28.7%	27.0%	27.0%
Liquidity ratios						
Debtor days	62	99	116	76	40	36
Inventory days	142	140	134	110	93	92
Creditor days	98	95	85	73	58	60
WC Days	106	143	165	113	75	68
Leverage ratios (x)						
Interest coverage	1.0	0.6	1.1	2.5	3.6	4.7
Net debt / equity	0.9	0.9	1.1	0.9	0.9	0.8
Net debt / op. profit	5.9	9.1	6.7	3.9	2.8	2.1

Source: Company Reports, Arihant Capital Research

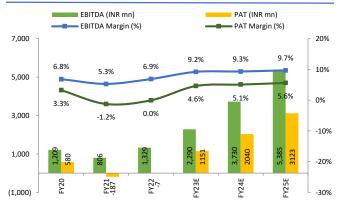
### **Titagarh Wagons**

#### **Story in Charts**

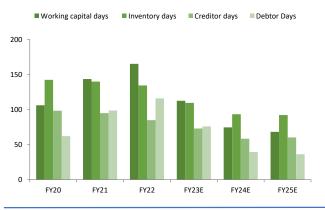
#### Exhibit 20: Freight Wagons and rolling stocks are expected to drive revenue.



#### Exhibit 22: Growth in EBITDA & PAT levels



#### Exhibit 24: Working capital days to be improve.



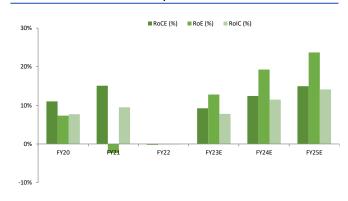
Source: Company Reports, Arihant Capital Research

#### Gross Profit (INR mn) Gross Margin (%) 20,000 60% 50% 16,000 37.4% 34.8% 34 7% 40% 12,000 30% 3.7 23.0% 8,000 20% 4.000 13,103 5,272 5,723 10% 6,148 9,346 7,225 0 0% FY20 FY22 FY23E FY24E FY25E

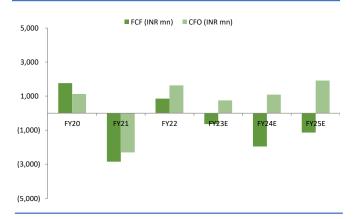
Exhibit 21: Gross margins are expected to improve going forward.

#### Exhibit 23: Return ratios to be improve

FY21



#### Exhibit 25: Cash flows to be improve.



#### **Story in Charts**

# Exhibit 26: Working capital in-terms of sales are expected to reduce going forward.

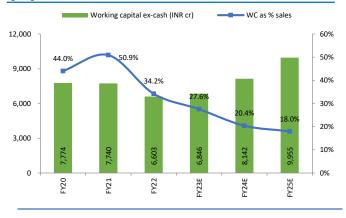
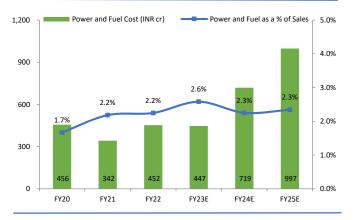
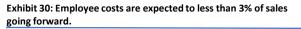
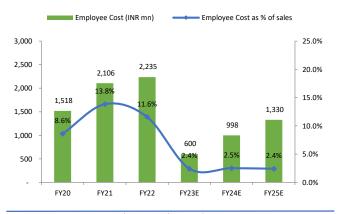


Exhibit 28: Power and fuel costs are expected to less than 3% of sales going forward.





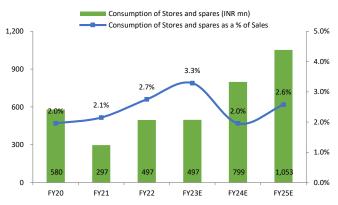


Source: Company Reports, Arihant Capital Research

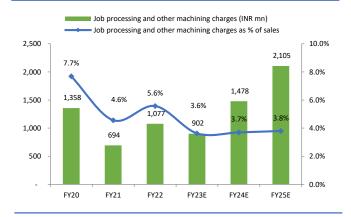
Exhibit 27: DSO are expected to reduce going forward.



### Exhibit 29: Consumption of stores and spares are expected to less than 4% of sales going forward.



### Exhibit 31: Job processing and other machining charges are expected to less than 4% of sales going forward.



**Peers Comparison** 

## Titagarh Wagons

Particular	Year	Titagarh Wagons	Jupiter Wagons	Texmaco
	FY17	17,136	-	13,235
	FY18	12,682	-	11,352
	FY19	17,108	-	18,582
Revenue (INR mn)	FY20	17,663	-	18,318
	FY21	15,206	9,958	16,888
	FY22	19,308	11,784	16,217
	FY17	3.4%	-	5.6%
	FY18	-8.8%	-	5.6%
	FY19	1.2%	-	8.3%
EBITDA Margin (%)	FY20	0.4%	-	7.1%
	FY21	4.1%	10.7%	1.6%
	FY22	6.5%	9.7%	4.5%
	FY17	1.6%	-	2.0%
	FY18	-11.6%	-	1.2%
	FY19	-1.3%	-	3.9%
PAT Margin (%)	FY20	-2.0%	-	-3.8%
	FY21	-1.2%	5.4%	0.2%
	FY22	0.0%	4.2%	0.8%
	FY17	6.4%	-	6.9%
	FY18	-8.7%	-	5.7%
	FY19	0.8%	-	9.4%
RoCE (%)	FY20	2.0%	-	-0.3%
	FY21	4.8%	11.3%	5.7%
	FY22	7.2%	11.8%	6.4%
	FY17	2.9%	-	2.8%
	FY18	-16.2%	-	1.3%
	FY19	-2.7%	-	6.7%
RoE (%)	FY20	-4.6%	-	-6.5%
	FY21	-2.3%	8.4%	0.3%
	FY22	-0.1%	7.5%	1.0%
	FY17	1.0%	-	1.4%
	FY18	-5.2%	-	0.6%
	FY19	-0.8%	-	3.0%
RoA (%)	FY20	-1.4%	-	-2.5%
	FY21	-0.7%	5.7%	0.1%
	FY22	0.0%	5.0%	0.5%
	FY17	49	-	128
	FY18	73	-	188
	FY19	66	-	136
Receivables (days)	FY20	62	-	132
	FY21	98	26	125
	FY22	116	22	119
	FY17	132	-	73
	FY18	140	-	80
Inventory (days)	FY19	103	-	67
	FY20	93	-	89
	FY21	91	90	84
	FY22	84	87	67
	FY17	91	-	96
	FY18	104	-	101
	FY19	96	-	89
Payables (days)	FY20	97	-	338
	FY21	138	70	244
	FY22	126	58	228

Source: Ace Equity, Arihant Capital Research

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Fax: (91-22) 42254880	
Stock Rating Scale	Absolute Return
BUY	>20%
ACCUMULATE	12% to 20%
HOLD	5% to 12%
NEUTRAL	-5% to 5%

SELL

REDUCE

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-5% to -12%

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