TEGA INDUSTRIES LIMITED | Industrial Equipments

...strong player in a high growth industry

LKP

Tega Industries (Tega) is a leading manufacturer and distributor of specialized critical to operate and recurring consumable products for the global mineral beneficiation, mining and bulk solids handling industry. These are 'critical to operate' consumable products, with strong industry dynamics such as low cyclicality (opex constitutes 3x of capex; depleting ore grades), high entry barriers (long customer conversion cycle) and oligopolistic market (top 5 players control 50% market share). Globally, the company is the second largest producer of polymer based mill liners deriving 88% of its sales from outside India. It has 6 manufacturing facilities, 3 in India and 3 abroad having more than 55 product portfolios spread across multiple geographies.

We believe Tega is well positioned to outpace industry growth due to 1) diversified product portfolio coupled with introduction of new products - DynaPrime liners opening opportunities in global steel mill liner market (ex-China) currently stands at US$900mn (Tega's market share is 5%) for conversion, 2) strong relationships with customers (>10 years) with sticky customer base as 75%+ sales comes from repeat orders, 3) de-risked business model due to low customer concentration (top 10 customers: 20% of sales) and diverse manufacturing base (India, Chile, South Africa, and Australia) 4) cross selling of products and capacity expansion.

Q1FY23 performance for the company remained strong despite challenges witnessing 41%/96%/94% growth in revenues/Ebitda/PAT while margins expanded 532bps despite higher commodity inflation and higher freight cost. We expect the company to deliver sales/EPS CAGR of 15%/17% over FY22-24E with healthy return ratios of 17%. The stock currently trades at 20x on FY24 EPS and we value Tega Industries at PER of 24x FY24E EPS to arrive at a target price of ₹569 and initiate Buy on the stock.

Diverse portfolio and high entry barriers ensure gain in market and wallet share

Tega remains well positioned given its diversified product portfolio comprising 55 mineral processing and material handling products installed at 450 customer sites in about 70 countries. Company's strong customer base (>10 years) with sticky customer base (+75% sales coming from repeat orders) and low customer concentration (top 10 customers contributing 20% of sales) along with diverse manufacturing base (India, Chile, South Africa, and Australia) helping to sustain its steady growth rate and strong outlook ahead.

Key Financials	FY20	FY21	FY22	FY23E	FY24E
Total Sales (Rs mn)	6,848	8,055	9,518	11,017	12,642
EBITDA Margins (%)	15.7	23.3	19.2	20.4	21.2
PAT Margins	7.5	7.4	6.5	6.6	7.4
EPS (Rs)	11.4	24.1	19.7	19.4	23.7
P/E(x)	41.4	19.5	23.9	24.3	19.9
P/BV (x)	6.8	5.1	4.2	3.6	3.0
EV/EBITDA (x)	30.8	17.3	18.0	14.5	11.9
RoE(%)	15.2	22.2	17.3	16.4	17.0
RoCE(%)	12.1	26.4	19.0	18.3	19.6

Rating	BUY
Current Market Price (₹)	469
12 M Price Target (₹)	569
Potential upside (%)	21

Stock Data	
FV (₹) :	10
Total Market Cap (₹ bn) :	31
Free Float Market Cap (₹ bn) :	7
52-Week High / Low (₹)	768 / 397
6M Avg. Dly Traded Volume (in lakh)	1.24
BSE Code / NSE Symbol	543413 / TEGA
Bloomberg :	TEGA IN

Shareholding Pattern

(%)	Jun-22	Mar-22	Dec-21
Promoter	79.17	79.17	79.17
FPIs	2.39	2.17	2.73
MFs	9.57	8.95	7.38
Others	8.87	9.71	10.72

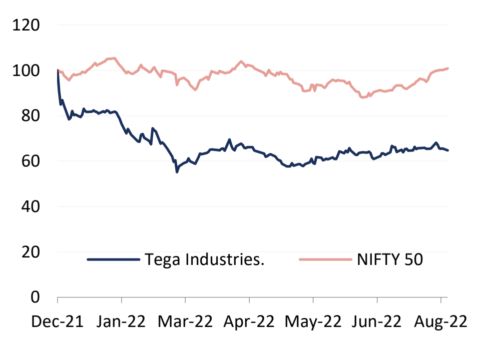
Source: BSE

Price Performance

(%)	1M	3M	6M
Tega Industries	1.1%	11.8%	-5.9%
Nifty 50	8.0%	6.8%	1.8%

** To date / current date : August 8, 2022*

Tega Industries vs Nifty 50



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Innovative products like Dynaprime an ice breaker product

The management expects Dynaprime (25% of FY22 sales) to be the key growth driver and acceptance for the same has been increasing. The segment is likely to grow at a CAGR of 25%+ (33% growth in FY22) in near to medium term mainly on account of key benefits like higher throughput, lower power consumption and manpower cost over steel mill liners. Currently, global steel mill liner market is US$900mn (Tega's market share is 5%) and collectively, it is the addressable market for the company as it aims at replacing the steel mill liners with its flagship product (Dynaprime) given long standing customer relationships.

Capacity expansion to drive volume growth

Tega expects to triple its capacity in Chile through a mix of brownfield and Greenfield expansion, entailing capex of ~₹700mn in FY23E, which would cater to the Latin America market. Chile capacity is ~3,000MT with capacity utilisation of ~80%. The company is gradually adding capacity there and it is expected to reach 8,000MT by FY25.

Second-largest producer in an oligopolistic market

Tega is the world's second-largest producer of polymer-based mill liners (fifth largest in the overall liners market) in an oligopolistic market (top 5 players account for 50% market share). The mill liner industry is expected to grow at 6% CAGR over the next 10 years driven by greater demand from gold/copper and depleting ore grades. The industry is characterised by strong fundamentals such as low cyclicality as opex constitutes 3x of initial capex in the mineral processing industry and high entry barriers as customer conversion cycles are fairly long (12-18 months) along with high costs associated with supplier switch.

Outlook and Valuation

Tega Industries, being the second largest producer of polymer-based mill liners and fifth largest in overall mill liners industry with offerings of 'critical to operate' consumable products, high entry barriers (long cycle of customer conversion), focusing on opex spends (~3x of capex) and diversified manufacturing base (India, Chile, South Africa and Australia), customer stickiness (75% revenue comes from repeat orders and relationship with key customers span more than 10 years) and reducing client concentration (Top 10 customers contributes 20% of revenue), we believe the company is well positioned to leverage the opportunity which is available in the market. With introduction of new products such as DynaPrime (unlocked US$ 900 mn opportunity for converting metallic liners), the company has set new avenues for driving the growth. We expect the company to deliver sales/EPS CAGR of 15%/17% over FY22-24E with healthy return ratios of 17%. The stock currently trades at 20x on FY24 EPS and we value Tega Industries at PER of 24x FY24E EPS to arrive at a target price of ₹569 and initiate Buy on the stock.

Investment Rationale

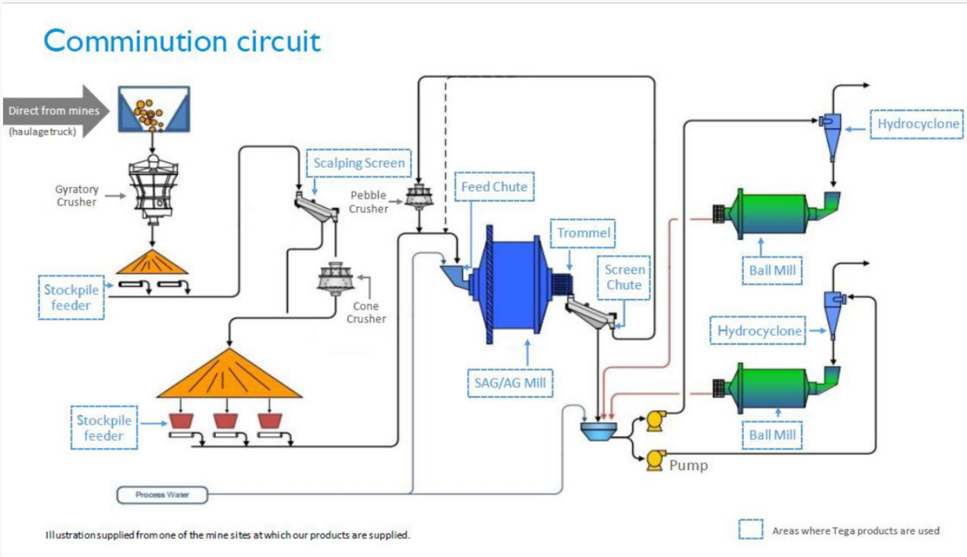
Second largest producer of polymer-based mill liners and fifth largest in mill liners industry

Tega Industries is a leading manufacturer and distributor of specialised 'critical to operate' and recurring consumable products for the global mineral beneficiation, mining and bulk solids handling industry. It is the second largest producer of polymer-based mill liners preceded by Metso Outotec. Tega Industries has 5% market share in a global mill liners industry, with top 5 producers (Metso Outotec, Me Elecmetal, Bradken, PT Growth and Tega Industries) capturing 49% global market share.

Comprehensive Solutions Provider across the value chain of mineral processing site

Tega offers comprehensive solutions in the mineral beneficiation, mining and bulk solids handling industry, through wide product portfolio of specialised abrasion and wear-resistant rubber, polyurethane, steel and ceramic-based lining components, used by the customers across different stages of mining and mineral processing, screening, grinding and material handling, including after-market spends on wear, spare parts, grinding media and power. The company's product portfolio comprises more than 55 mineral processing and material handling products.

Tega's product usability areas

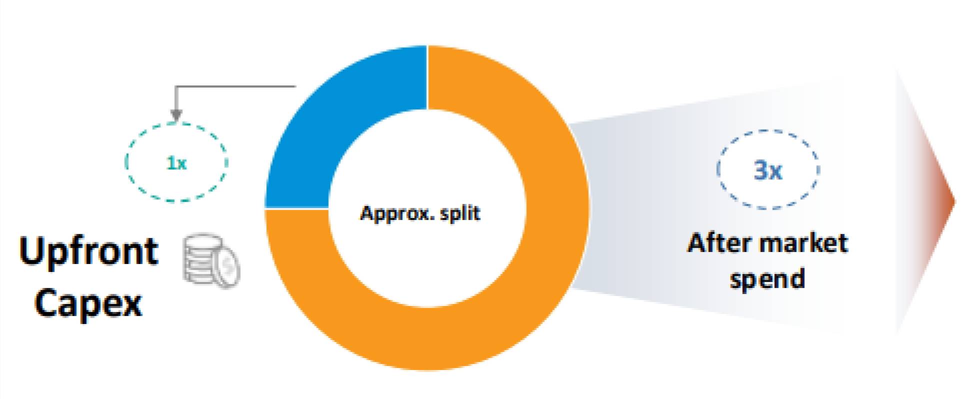


Source: Company RHP

Immunity from mining Capex Cycles

Majority of the products are linked to the opex budget of the mining site. Thus, the company is insulated from capex cyclicality of mining players. Given the company's presence in miners' critical and necessary opex spends and mill liners form 4-15% of overall operating costs, management believes that it can pass-through entire costs with lag of one to two quarters. The company caters to both after-market spends and upfront capex of mining players. Over the lifecycle of the mill, after-market spend is generally 3x of upfront capex and its recurring costs for miners leading to high repeat orders (Comprises of sale of products and services for the company), which stood at 75-80% over FY19-22.

Upfront capex & Aftermarket spend over the life cycle of a mill



Source: Company, LKP Research

Exhibit 1: High share of repeat customers

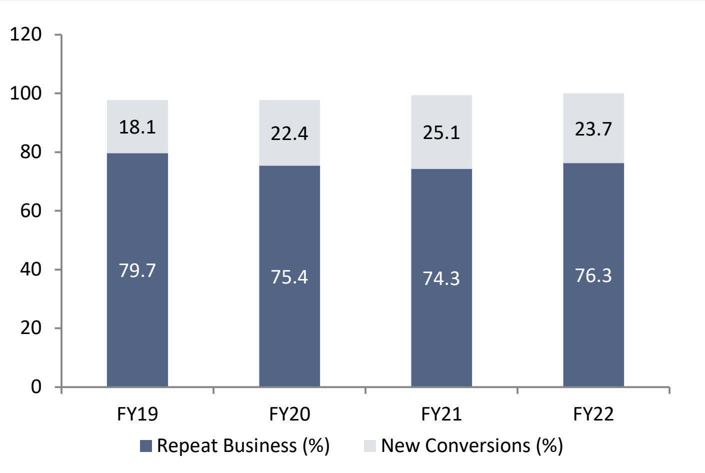
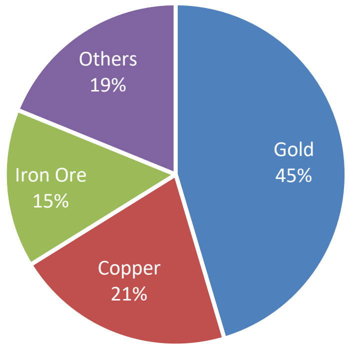


Exhibit 2: Proportion of sales towards gold & copper mining



Source: Company, LKP Research

High entry barriers ensure gain in market and wallet share

Customer stickiness : Tega's diversified customer base includes marquee Indian and multinational mining companies, as well as small and medium-sized companies in the mining and minerals beneficiation industry in emerging regions. In FY19/FY20/FY21, the company's domestic and overseas customer base included 479/498/513 mining sites, respectively, which reduces the risk of client concentration and it is reflected in the company's top customers' revenue contribution as well. Top 10/20/50 customers contributed 29/42/65% of its overall revenue, respectively, over FY19-21 period and currently, Top 10/20 customers contribute 20/45% of its overall revenue in FY22 respectively. Longevity with certain key customers span more than 10 years.

High Entry barriers: Generally, in mineral processing sites, switching costs for the customers are high on account of high cost of initial planning involved, the lead time required for approval, degree of certainty of the products of an established supplier, the high cost of downtime or shut down of a site, and relatively lower percentage cost of components in the total operating costs of a mineral processing site. New customer conversion typically takes 12 months which includes six months of product trials and validation which is a reflection of high entry barriers in the industry. These approvals do not have any expiry period.

High Entry Barriers

Operating in a **near oligopolistic market structure** with top 5 producers capturing 49% of global market share

Down time can be expensive for customers, overall opportunity cost per hour of downtime could go as high as $174,042

Presence across value chain of mineral processing site with a wide range of products & solutions

High cost of initial planning, degree of certainty of the products of an established supplier play a key role

Limited number of established customers

9-12 months to become an approved supplier at every customer site (no expiry period)

Product play a critical role in determining a unit's productivity, in terms of throughput lower grinding consumption, lower energy consumption nd lower downtime, leading to lower operating costs for customers

Mineral processing sites do not tend to switch to a substitute supplier even if an alternative is offered by a new player

Industry Dynamics

Gold and copper mill sites require superior quality of consumables and have higher beneficiation requirements. Across copper mines, ore grades have declined by around less than 1% per ton over the last few years. Similarly, ore grades have also depleted in the gold mines over the last few years, which has led to disproportionate industry growth of around 5-7% for mining and mineral processing equipment at each customer site. Also, decreasing ore grades has led to a greater demand for larger-sized equipment, leading to an overall growth of 17% of the mill lining industry in Fiscal 2021.

DynaPrime - an icebreaker product: Large sized mills using traditional used steel liners had a lower liner life leading to higher installation downtime. Higher downtime accounted for unplanned shut down leading to lower reliability. Overall, opportunity cost per hour of downtime could go as high as US$ 174,042. Further, constant replacement of steel liners also had concerns relating to installation safety. Upon critical examining of the dynamics of the mill, the company has introduced DynaPrime in 2018, with its improved profile and material composition (a composite liner of rubber and steel) to cater to higher life. DynaPrime was designed with lesser number of pieces and fixing points which ensured faster installation. The company has incorporated new design with bolting from outside and lesser weight (35-40% lighter) of the lining which eliminated the risk during the installation of the liner. The DynaPrime range has been designed specifically for the bigger size of the mills where modern liner handlers are available.

- DynaPrime has set new avenues of growth for the company by replacing existing metallic liners with an addressable market size of ~US$ 900-1,000 mn where the company's market share stands at 2-2.5%. This is an addition to the already available opportunity of US$ 400-500 mn in composite mill liners market where the company's market share stands at 16%.

- In FY22, DynaPrime product alone has contributed 24.1% of sales as compared to 6.7/20.4/21.4% in FY19/FY20/FY21, respectively. DynaPrime's revenue grew at a CAGR of 75.7% over FY19-22 on a low base. The company expects DynaPrime's revenue momentum to continue and grow at a CAGR of 25-30% in the near to medium-term on account of benefits it provides as compared to metallic liners.
- Realisation of this product is also higher by 35-40% than traditional metallic liners. Average life expectancy of a DynaPrime in a SAG mill is ~four months whereas in a ball mill it is ~18 months.
- DynaPrime was installed in 23/28 sites in FY21/1QFY22, respectively, which has increased to 60 as of now.

Dynaprime and its advantages

<table>
<tr><th>Increase asset productivity</th><th>Reduce operating expenses</th><th>Reduce risk</th><th>Improve safety</th><th>Improve environmental sustainability</th></tr>
<tr><td>Increase mill availability to process more ore</td><td>Lower maintenance cost</td><td>Do away with unplanned shut-down</td><td>Installation from outside.</td><td>Lower CEE required, enabling reduction in carbon footprint</td></tr>
<tr><td>Increase mill operation time as a result of faster relining</td><td>Lower energy expenses</td><td rowspan="3">Better liner profile stability throughout the campaign</td><td rowspan="3"></td><td rowspan="3">Reduces the environmental contamination by eliminating oxy-flame cutting</td></tr>
<tr><td>Increase life as per plant requirement</td><td>Less personnel required for installation</td></tr>
<tr><td>Increase ball charge volume due to decrease in liner weight</td><td>Faster reline due to lesser number of fixings for liner installation</td></tr>
</table>

Source: Company

Capacity expansion, capex and its utilisation and global presence

Current total capacity is ~30,000 MT (24,558 MT in FY21). Out of which, 20,000 MT (18,000 MT in FY21) is in India and balance across Chile, South Africa and Australia. The company's facilities are located close to mining and emerging industrial markets and material handling industries, allowing economies of scale and logistical advantages for the customers, and to insulate them from local supply or other disruptions. The company does not outsource any of the products, unlike certain competitors, which reduces the company's external dependencies and adds ability to turnaround customised designs in a short timeframe. Current capacity utilisation is ~61% (60% in FY22). Chile capacity is ~3,300 MT with utilisation of ~80% and the company is expected to increase its capacity to 8,000 MT by FY25. The company expects capex of ₹700 mn in FY23E.

Leveraging in-house R&D capabilities to grow product offerings and capitalise on future trends

The company continues to work on introducing similar (DynaPrime) combination linings in single equipment to allow uninterrupted operations without downtime at customers' sites. As per the management, there are few products which are in the pipeline in R&D for mill liners as well as non-mill liners segment. The company also expressed about implementing industry 4.0 features in its existing products (Mill liners as well as non-mill liners) and expects to go live from December 2022 onwards. The company aims at increasing its R&D expenditure to 3% of its sales from the current levels of ~0.7%.

Distributed manufacturing facilities

Tega has six manufacturing sites, including three in India (at Dahej in Gujarat, at Samali and Kalyani in West Bengal), and three in major mining hubs of Chile, South Africa, and Australia. Facilities in India cater to the domestic and overseas markets across mineral processing and materials handling industries, while facilities in Chile, South Africa, and Australia cater to their respective local and regional mineral processing and materials handling industries. Additionally, the joint venture in India with the UK branch of Hosch Group, Germany, is engaged in precision conveyer belt cleaning and caters to various industries in India. Tega also has 18 global and 14 domestic sales offices located close to key customers and mining sites.

Manufacturing facilities

	Facility location	Capabilities/products manufactured	COD/Acquisition
	Domestic		
1	Dahej, Gujarat	Mill Liners, Wear products, Screens and Trommels	2013
2	Samali, West Bengal	Mill Liners, Wear products, Hydrocyclones, screens, trommels and conveyors products	1985
3	Kalyani, West Bengal	Mill liners (except Dynaprime), Conveyor products, Chute liners and Pump liners, Hydrocyclones	1978
	International		
1	Chile	Mill liners, Trommels, Chute liners, Screens, Pipe and pipe repair and spools	2011
2	South Africa	Mill liners (except Dynaprime), Spillex, Screen panels and Chute liners	2006
3	Australia	Chute liners and Trommel	2010

Source: Company

Financials

Strong financial track record

The company's revenue grew at a CAGR of 14.5% over FY19-22 (~76% CAGR growth of DynaPrime while rest of the mill liners products exhibited a CAGR growth of 8.7% and non-mill liners segment grew at a CAGR of 4.2%) while EBITDA grew at a CAGR of 23.6%, over the same period. Company's 75% revenue in FY22 was from mill liner products, out of which 25% of the revenue was from its flagship product DynaPrime, which is a rubber steel composite mill liner, while 50% of the revenue was from polymer based mill liner. Balance 25% of the revenue was from non-mill liner based products like trommel screens, hydrocyclone pumps, etc. for applications in mineral benefaction process. Order book stood at ₹3.0 bn in Q1FY23 which provides strong revenue visibility. Management expects DynaPrime to sustain its revenue momentum and grow at a CAGR of 25-30% while non-mill liners segment expected to grow at a CAGR of 10-12% in the near to medium-term. Overall, the company expects ~15- 16% revenue growth in the near to medium-term with EBITDA margins expected to be in the range of 21-23% (19.2% in FY22) on the back of pass-through of raw material costs and ease in freight costs along with operating leverage.

Strong overall Q1FY23 performance

The company continues to perform strongly across its revenues/Ebitda and PAT witnessing 41%/96%/94% growth while margins expanded 532bps despite higher commodity inflation and higher freight cost which is gradually coming down but still at higher levels compared to pre-pandemic. Dynaprime continues to grow strong during the quarter grew 157% largely dominated by volume growth (+150% YoY). Management maintained that Dynaprime will grow at 30% CAGR for the next couple of years given the low base which will help push the volumes further. Non mill liner grew 15% YoY (8% volume and 7% value growth). Order book at ₹3,004mn providing healthy revenue visibility ahead. Management reiterated that overall revenue to grow at 15-18% while margins to remain in the range of 21-23%.

Exhibit 3: Quarterly performance

(₹ mn)	Q1FY23	Q1FY22	YoY (%)	Q4FY22	QoQ (%)
Gross sales	2,444	1,732	*41.1*	2,901	*(15.7)*
Raw Material	1,009	685	*47.3*	1,259	*(19.8)*
% of Sales	*41.3*	*39.6*		*43.4*	
Employee Cost	385	350	*10.0*	364	*5.9*
% of Sales	*15.8*	*20.2*		*12.5*	
Other Exp	588	461	*27.4*	588	*(0.0)*
% of Sales	*24.0*	*26.6*		*20.3*	
Total Exp	1,983	1,497	*32.4*	2,211	*(10.3)*
EBITDA	462	235	*96.5*	690	*(33.0)*
EBITDA Margin (%)	*18.9*	*13.6*	*532.3*	*23.8*	
Other Income	(33)	62	*(153.1)*	124	*(126.4)*
Interest	50	36	*37.6*	76	*(34.5)*
Depreciation	91	105	*(13.0)*	91	*0.3*
Exceptional Items	-	-	-	-	-
PBT	288	156	*84.9*	647	*(55.5)*
Tax	67	43	*56.3*	165	*(59.4)*
Tax rate (%)	*23.4*	*27.6*	-	*25.6*	-
Adjusted PAT	221	113	*95.9*	481	*(54.1)*
Share of associates	9.8	6.2	-	7.6	-
Reported PAT	230	119	*94.0*	489	*(52.8)*
PAT Margin (%)	*9.4*	*6.9*	-	*16.9*	-
EPS (₹)	3.5	2.1	-	7.3	*(52.1)*

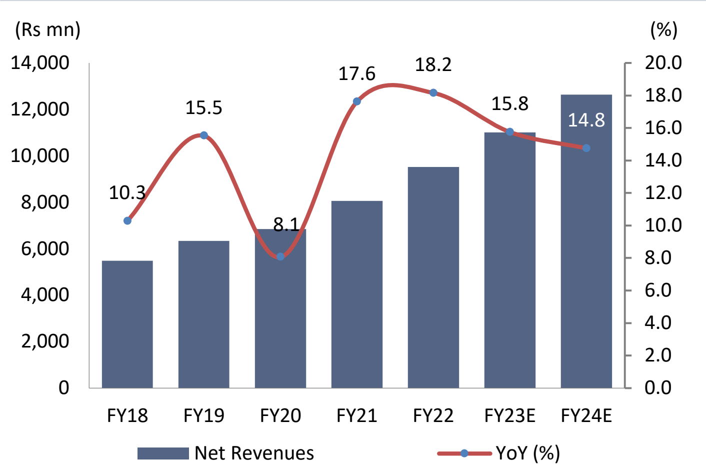
Source: Company, LKP Research

Key Risks

- Inability to comply with quality standards may adversely impact operations
- Cancellations in orders or inability to forecast demand may impact operations,
- Adverse movement in currency may impact revenues and margins.

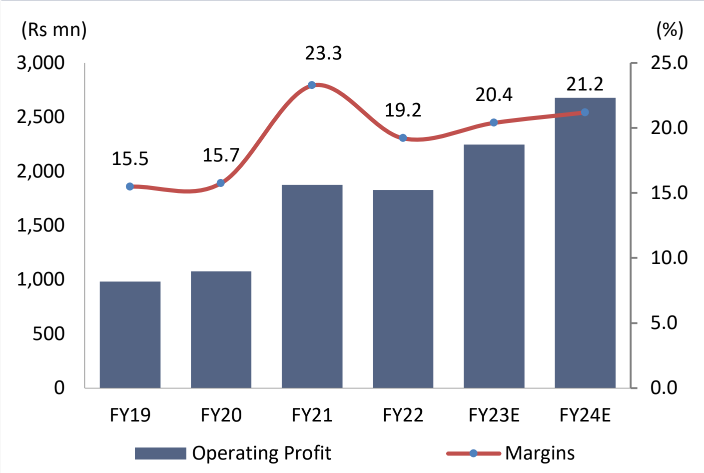
Financials in charts

Exhibit 4: Revenue trend



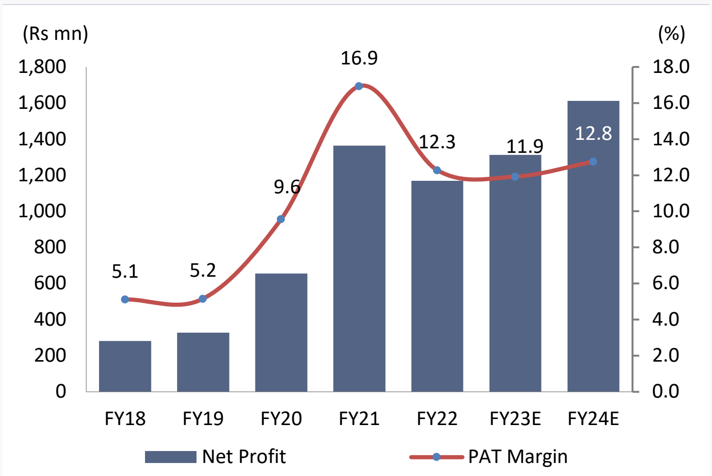
Source: Company, LKP Research

Exhibit 5: EBITDA and margin trend



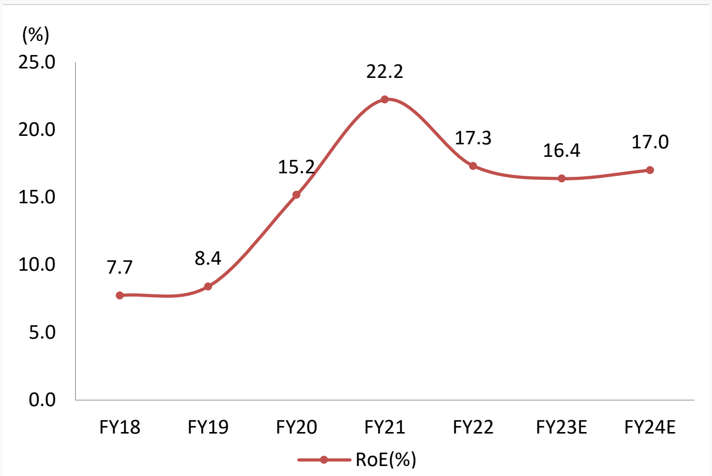
Source: Company, LKP Research

Exhibit 5: Net profit and profit margin



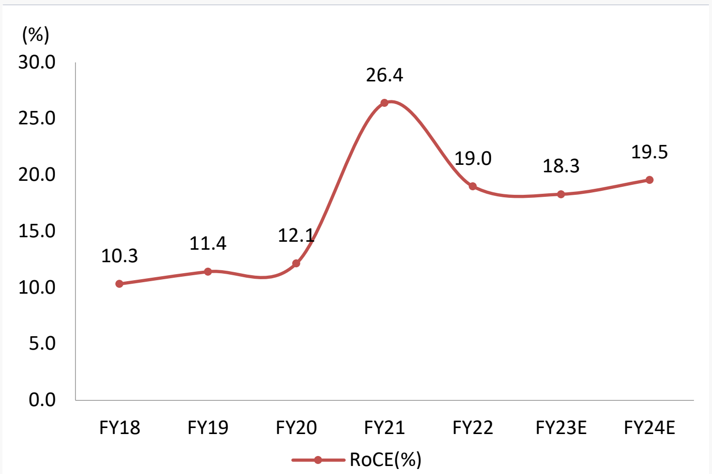
Source: Company, LKP Research

Exhibit 7: RoE trend



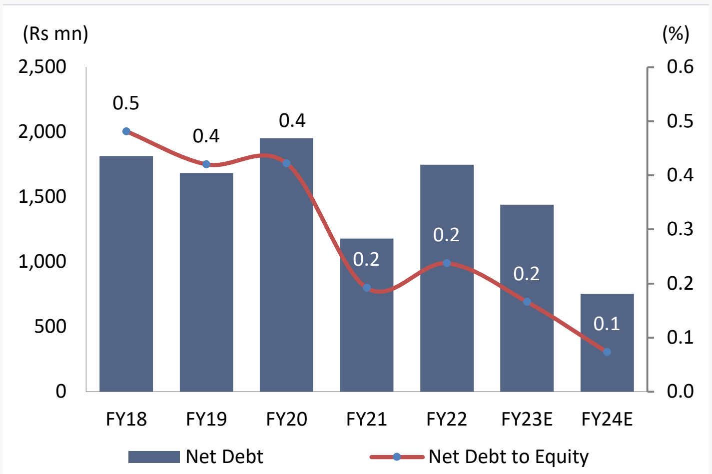
Source: Company, LKP Research

Exhibit 8: RoCE trend



Source: Company, LKP Research

Exhibit 9: Net Debt and Net Debt to Equity trend



Source: Company, LKP Research

About the Company

Tega Industries is a leading manufacturer and distributor of specialised 'critical to operate' and recurring consumable products for the global mineral beneficiation, mining and bulk solids handling industry. Globally, the company is the second largest producer of polymer-based mill liners. The company commenced its operations in 1978 in India, a foreign collaboration with Skega AB, Sweden. Madan Mohan Mohanka acquired the entire equity stake of Skega AB in the company in 2001.

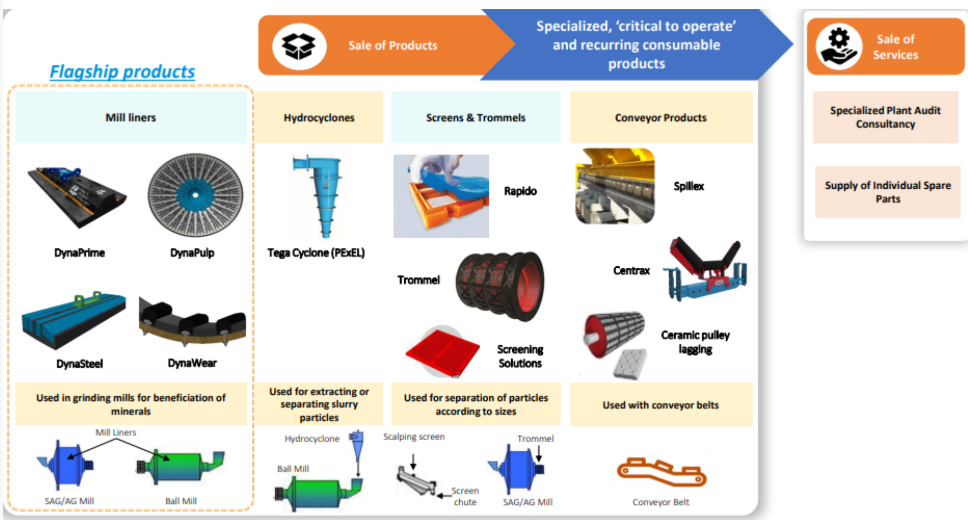
Corporate structure

Source: Company, LKP Research

Product Portfolio

The company's product portfolio comprises more than 55 mineral processing and material handling products.

Diverse & Innovative Products



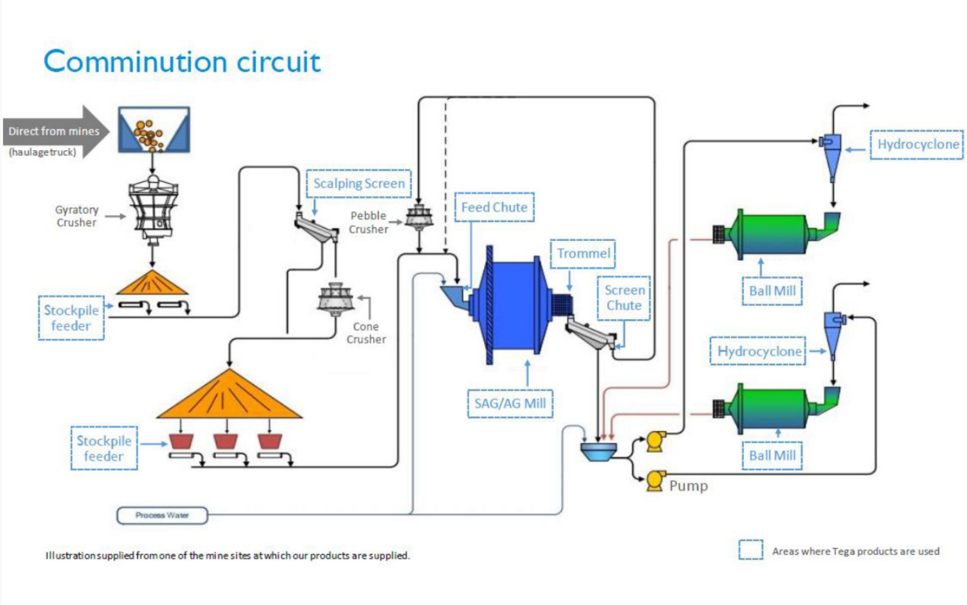
Source: Company, LKP Research

The company's mineral processing and material handling products offering covers a wide range of solutions in the mining equipment, aggregates equipment and the mineral consumables industry. Tega Industries' products offerings include consumables required in the mines and mineral processing industry. In the sequence of their usage in the mineral processing value chain, after blasting to floatation, products include chutes and its liners, grinding mill liners, trommels and screens, hydrocyclones, pumps and floatation parts and conveyor products.

Services segment

The services segment offering ranges from undertaking specialised plant audit consultancy service to customers for grinding and classification upgrades, supplying individual spare parts, to comprehensive solutions covering maintenance and operations. The company focuses on creating unique solutions to enhance the performance and productivity of its customers' plants and equipment throughout their entire lifecycle.

Areas where Tega Industries' products are used according to mineral processing and material handling industry value chain



Source: Company, LKP Research

Competitive landscape in Mill Liners operational areas based on Mill size

Mill size (Diameter in mtrs)	SAG Mill				Ball Mill			
	Rubber	Composite	Hybrid	Metallic	Rubber	Composite	Hybrid	Metallic
<=2.4	SAG Mill below 3.8m does not exist				Tega, Metso, Weir, Polycorp, Multotec, PT Growth, Regional players			Less presence
>2.4; <=3.8								
>3.8; <=4.6		Tega, Metso, Multotec, Weir		Less presence		Tega, Metso, Weir, Polycorp, Multotec, PT Growth, Regional players		
>4.6; <=5.5		Tega, Metso, Weir, Polycorp, Multotec		Medium presence				Medium presence
>5.5; <=8.5		Tega, Metso, Weir, Polycorp, Multotec					Tega Metso, Siom	High presence
>8.5; <=9.5		Tega, Metso, Siom		High presence	Ball mill above 8.5m does not exist			
>9.5;<=12.5			Tega					

Source: Company, LKP Research

Major competitors according to products	
Products	**Competitors**
Mill liners	Metso-Outotec, Mc Elecmetal, Bradken, FL Smidth and Wier
Hydrocyclones	Wier, FL Smidth, Metso-Outotec, Schlumberger and Technip
Trommels and Screens	Multotec, Sandvik, FL Smidth and Metso-Outotec
Mineral processing equipment	Metso-Outotec, Trelleborg AB, FL Smidth and Wier

Diverse global presence – Manufacturing & Sales capabilities

Source: Company, LKP Research

The company owns and operates six strategically located manufacturing facilities across the globe, including three in India (Dahej in Gujarat and Samali & Kalyani in West Bengal) and three in the major global mining locations of Chile, South Africa and Australia, with a total built-up area of 74,255 sq mtrs.

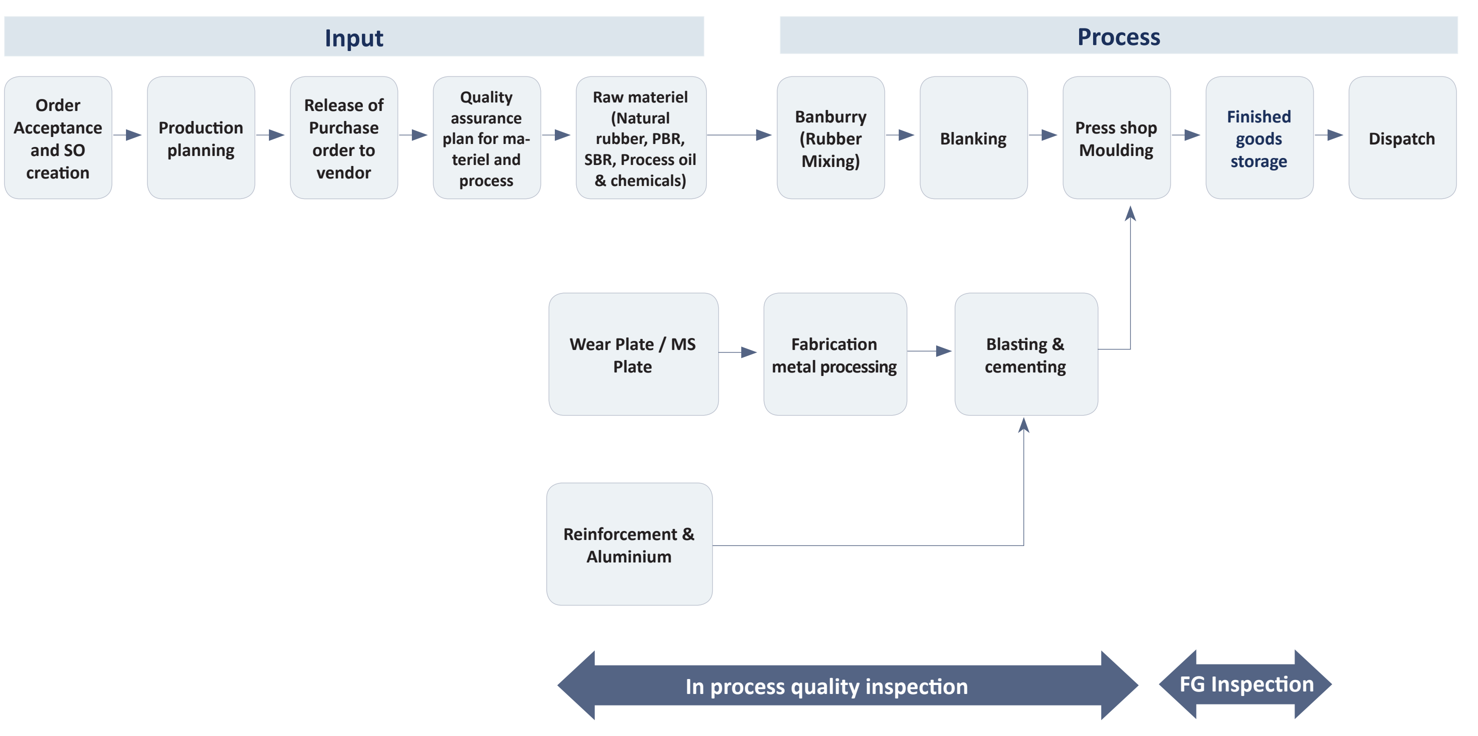
The company's facilities are located close to mining and emerging industrial markets and material handling industries, allowing economies of scale and logistical advantages for the customers, and to insulate them from local supply or other disruptions. The company does not outsource any of the products, unlike certain competitors, which reduces the company's external dependencies and adds to the company's ability to turnaround customised designs in a short timeframe.

Exhibit 10 :Manufacturing facilities' capacity and its utilisation

	FY21			FY20			FY19		
Location	Installed capacity (MT)	Production (MT)	Utilisation (%)	Installed capacity (MT)	Production (MT)	Utilisation (%)	Installed capacity (MT)	Production (MT)	Utilisation (%)
Dahej	9,633	4,898	51	8,538	5,485	64	8,173	4,390	54
Samali	7,057	2,624	37	6,550	1,785	27	6,449	1,842	29
Kalyani	2,008	1,373	68	2,008	1,536	76	2,008	1,776	88
South Africa	3,192	1,642	51	3,192	1,219	38	3,192	1,049	33
Chile	3,276	2,400	73	2,490	1,800	72	1,240	1,125	91
Overall	**25,166**	**12,937**	**56**	**22,777**	**11,825**	**56**	**21,061**	**10,182**	**59**

Source: Company, LKP Research

Manufacturing process flow diagram of Mill Liners



Source: Company, LKP Research

Industry Analysis

Mineral Processing Industry

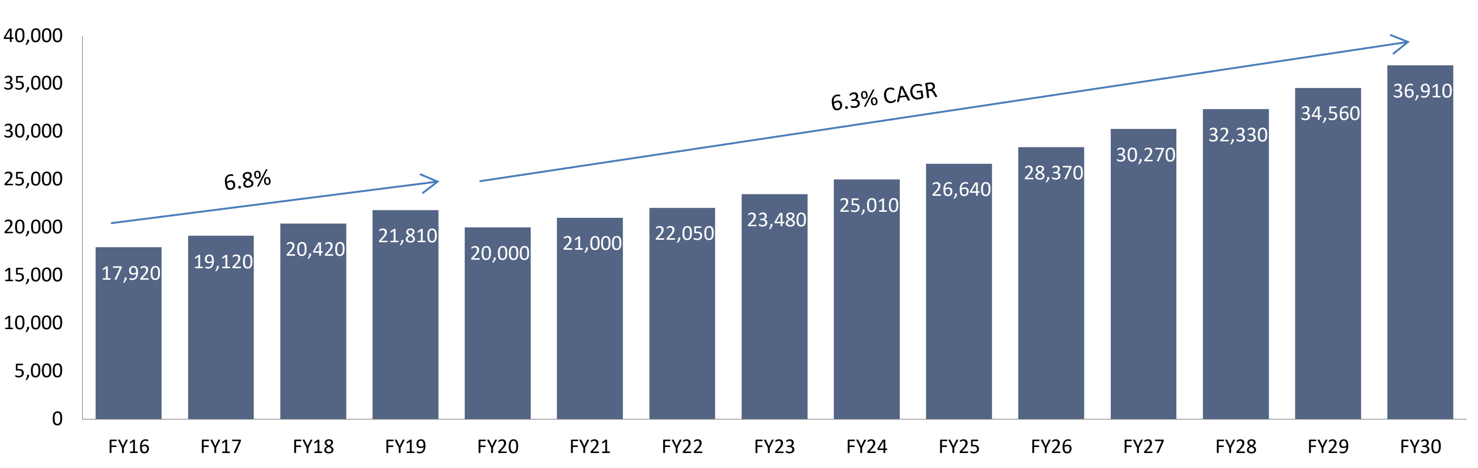
The mineral processing value chain (after mining the ore to floatation) requires various mineral processing equipment such as chutes, grinding mills, trommels and screens, hydrocylones, pumps, floatation parts and conveyors. The surfaces of these equipment are subjected to high impact, sliding abrasion and corrosion. To protect them, have a longer service life, reduce downtime, and reduce noise levels during the operation, it is very critical to install liners that can withstand sliding abrasion in these equipment.

- **Mineral processing happens over three stages – Crushing, Screening and Concentration**
  - Crushing is done to reduce the size of rocks, stones, and ores.
  - Screening is used to separate the granulated ore into multiple grades by particle size
  - Concentration - The common ore dressing methods are gravity concentration, flotation, magnetic separation, electric separation, chemical dressing, and so on.

Global Mineral Processing Industry

The global mineral processing equipment market was an estimated USD 20 bn in CY20. The market reported a growth of 7% CAGR until CY19. The industry is likely to recover in CY22 and is estimated to grow to USD36.9 bn by CY30, at a CAGR of 6.3%.

Exhibit 11: Global Mineral Processing Industry Market Size (Million Tons)



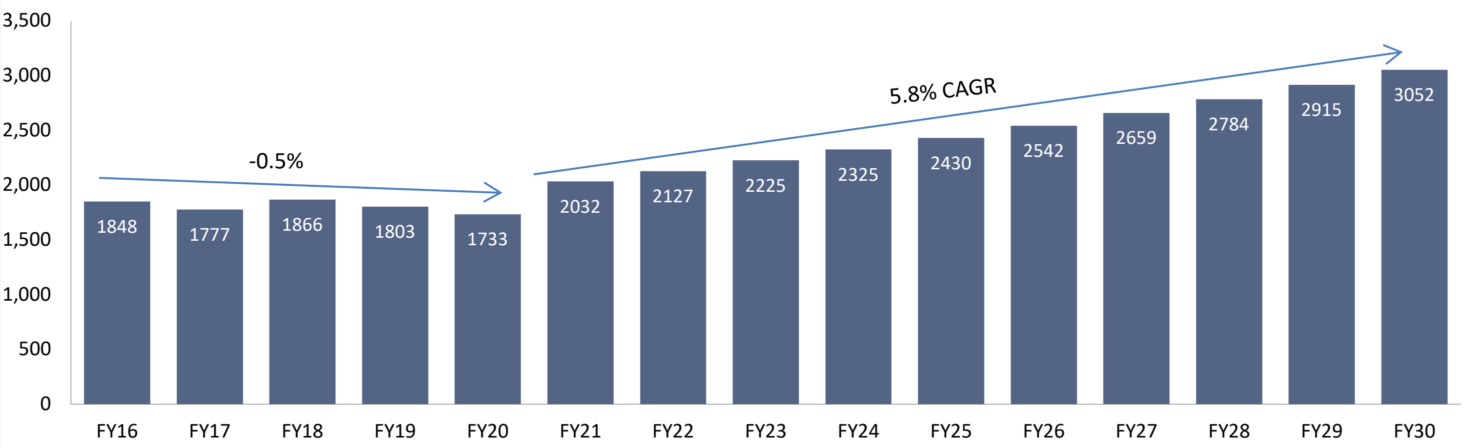
Source: Company RHP, LKP Research

Global Mill Liner Industry

Overview

- A mill is a machine that grinds, cuts, and crushes solid materials into useable sizes for further processing. Mill liners fundamentally protect mills from the wear that comes with grinding harsh raw materials.
- Mill liners improve a mill's performance, efficiency, and longevity; however, not all mill liners are made equal, even though they all serve the same purpose. Mill liners can be classified as metallic, rubber or composite materials based on the type of material used.
- Copper and gold mine processing sites are key consumers of mill liners, as the mined material is significantly abrasive; also, the yield per tonne of ore mined in these two segments is declining due to ore degradation and excess mining in the past. Mill liners primarily have a life of 6 months to 2 years, depending on the hardness of the ore to be refined.
- The global mill liner market was estimated at USD1.73bn in CY20 and was largely driven by ore beneficiation in gold and copper worldwide and iron ore in Brazil and China. The market is oligopolistic in nature with the top 5 producers, namely Metso- Outotec, Me Elecmetal, Bradken, PT Growth and Tega Industries, capturing a global market share of 49%.
- Demand is primarily driven by LATAM countries, which account for 40% of global copper production and 8% of global gold production, largely due to the presence of large copper and iron ore mines in the region. China accounts for 10%. Demand of mill liners is higher in replacement against newly installed grinding machine with mill liner in a year. The ratio is expected to be about 70% to 80% from replacement and 20% - 30% from new installed machines

Exhibit 12: Mill Liner Industry (in $ Mn)



Source: Company RHP, LKP Research

Exhibit 13: Global Mill Liner Market Share Breakdown by Type, 2020 & 2030

Source: Company, LKP Research

Global Mill Liner Market by Type

Steel mill liners are preferred in large grinding mills, unlike rubber mill liners that are best suited to small and medium-sized mills with diameter up to 6.5-meters.

- Rubber lines, often available in ball mills less than 3.8 meters in diameter, are most usually employed in smaller operations.
- Composite mill liners are made with a combination of various steel alloys and rubber compounds. These mill liners have large demand from primary ball and SAG mill. Advantages of composite mill liners:
  - Composite mill liners are nearly 35-40% lighter in weight vs. conventional metallic mill liners - offer less downtime and quick installation.
  - Composite offers flexibility in the design and has fewer components. This reduces joints between liners and minimises joint gaps.
  - Composites are faster to produce and, therefore, the lead times are shorter.
  - Lighter mills can be optimised to increase volumetric capacity, resulting in higher production.
- Hybrid mill liner is made from a combination of various steel alloys and rubber compounds. It has a special attachment system that does not require the crew to be present in the grinding mill, making it secure and faster to install than a conventional metallic liner.

Global Mill Liner Market Size by Application

- SAG mills will dominate the market at a CAGR of 6% until CY30. AG mills, meanwhile, will be the fastest growing mill segment at a CAGR of 6.8%.
- The metallic liner has a relatively lower presence in a smaller mill, moderate presence in mid-size mill segments, and relatively higher presence in bigger mills.
- Tega, Metso and Wier closely compete with each other in composite mill liners under the SAG mill category. But Tega is the only company producing hybrid mill liner for SAG mill with diameter over 9.5 to 12.5-meter range.
- In ball mill, Tega is one among the leading global competitors in rubber and composite mill liners and is one of top manufacturers of hybrid type mill liners in the segment range of 5.5 to 8.5 meter, competing with Metso and Siom.
- Tega largely focuses on, and has a strong presence in large mill liners with metallic segment for both Ball and SAG mill.

Global Mill Liner Market Size by Industry

Mill liner demand in gold mining is expected to grow at a CAGR of 6.1% by 2030, while the demand for copper mines will grow at a CAGR of 6.4%. Mill liner demand in the iron ore industry is expected to grow at a CAGR of 6.7% due to the growing demand for ore beneficiation. Mill liner applications in the gold and copper industry will be the top driver.

Exhibit 13: Profit and Loss Statement - Consolidated

(₹ mn)	FY20	FY21	FY22	FY23E	FY24E
Total Income	6,848	8,055	9,518	11,017	12,642
Raw material Cost	2,738	3,238	4,026	4,605	5,284
Employee Cost	1,153	1,227	1,434	1,664	1,896
Other expenses	1,878	1,716	2,229	2,501	2,781
Total operating Expenses	**5,770**	**6,181**	**7,689**	**8,769**	**9,962**
EBITDA	**1,078**	**1,875**	**1,828**	**2,247**	**2,680**
EBITDA Margins(%)	16	23	19	20	21
Depreciation & Amortisation	384	402	387	488	582
EBIT	**695**	**1,473**	**1,441**	**1,760**	**2,098**
Interest	228	173	162	175	149
Other Income	107	512	242	131	153
Recurring PBT	574	1,812	1,521	1,716	2,102
Add: Extraordinaries	-	-	-	-	-
PBT	**574**	**1,812**	**1,521**	**1,716**	**2,102**
Less: Taxes	(63)	475	381	432	529
Adjusted Net Income	**655**	**1,364**	**1,169**	**1,313**	**1,613**

Source: Company, LKP Research

Exhibit 14: Balance Sheet

(₹ mn)	FY20	FY21	FY22	FY23E	FY24E
Assets					
Total Current Assets	4,242	4,884	6,591	7,561	8,740
of which cash & cash eqv.	369	484	402	503	822
Total Current Liabilities & Provisions	1,859	2,296	2,334	2,804	3,294
Net Current Assets	2,383	2,588	4,258	4,758	5,446
Investments	1,611	2,051	2,026	2,127	2,234
Net Fixed Assets	2,626	2,923	2,983	3,495	3,913
Capital Work-in-Progress	86	69	102	102	102
Goodwill	-	-	-	-	-
Total Assets	**6,706**	**7,631**	**9,368**	**10,482**	**11,695**
Liabilities					
Borrowings	2,321	1,663	2,149	1,949	1,549
Deferred Tax Liability	(240)	(169)	(142)	(142)	(142)
Minority Interest	-	-	-	-	-
Equity Share Capital	663	663	663	663	663
Face Value per share (₹)	10.0	10.0	10.0	10.0	10.0
Reserves & Surplus	3,961	5,474	6,697	8,011	9,624
Net Worth	4,625	6,137	7,361	8,674	10,287
Total Liabilities	**6,706**	**7,631**	**9,368**	**10,482**	**11,695**

Source: Company, LKP Research

Exhibit 15: Cash Flow Statement

(₹ mn)	FY20	FY21	FY22	FY23E	FY24E
PBT	592	1,839	1,550	1,716	2,102
Depreciation	384	402	387	488	582
Chng in working capital	120	(385)	(1,464)	(399)	(370)
Cash flow from operations (a)	1,284	1,702	137	1,548	1,934
Capital expenditure	(143)	(710)	(480)	(1,000)	(1,000)
Free cash flow	1,141	992	(343)	548	934
Chng in investments	(202)	(318)	80	(101)	(106)
Other investing activities	(811)	(479)	(336)	(1,000)	(1,000)
Cash flow from investing (b)	(1,013)	(797)	(256)	(1,101)	(1,106)
Dividend paid (incl. tax)	-	-	-	-	-
Interest paid	(194)	(137)	(108)	(175)	(149)
Others	102	(653)	138	(158)	(355)
Cash flow from financing (c)	(92)	(790)	31	(333)	(504)
Net chng in cash (a+b+c)	179	115	(88)	113	324
Closing cash & cash equivalents	369	479	395	503	822

Source: Company, LKP Research

Exhibit 16: Key Ratios

Y/E Mar	FY20	FY21	FY22	FY23E	FY24E
Per Share Data (in ₹)					
AEPS	11.4	24.1	19.7	19.4	23.7
CEPS	15.4	26.2	23.0	26.7	32.5
BVPS	69.8	92.5	111.0	130.8	155.1
DPS	-	-	-	-	-
Growth Ratios (%)					
Total Revenues	8.1	17.6	18.2	15.8	14.8
EBITDA	9.9	73.8	(2.5)	22.9	19.3
PAT	100.5	108.2	(14.3)	12.4	22.8
AEPS	100.5	108.2	(14.3)	12.4	22.8
CEPS	48.7	70.3	(12.1)	16.0	21.6
Valuation Ratios					
P/E	41.4	19.5	23.9	24.3	19.9
P/CEPS	30.6	18.0	20.5	17.6	14.5
P/BV	6.8	5.1	4.2	3.6	3.0
EV / EBITDA	30.8	17.3	18.0	14.5	11.9
EV / Sales	4.8	4.0	3.5	3.0	2.5
Operating Ratio					
Raw Material/Sales (%)	41.6	40.7	42.4	41.5	41.5
Other exp/Sales (%)	27.4	21.3	23.4	22.7	22.0
Effective Tax Rate (%)	(10.9)	26.2	25.0	25.2	25.2
NWC / Total Assets (%)	30.0	27.6	41.2	40.6	39.5
Inventory Turnover (days)	70.7	71.9	96.7	95.0	90.0
Receivables (days)	98.7	100.1	106.0	100.0	100.0
Payables (days)	37.4	33.5	29.2	30.0	30.0
D/E Ratio (x)	0.4	0.2	0.2	0.2	0.1
Return/Profitability Ratio (%)					
RoCE	10.1	27.7	19.8	19.1	20.3
RoNW	9.6	25.3	17.3	16.4	17.0
Dividend Payout Ratio	0.0	0.0	0.0	0.0	0.0
Dividend Yield	0.0	0.0	0.0	0.0	0.0
PAT Margins	9.6	16.9	12.3	11.9	12.8
EBITDA Margins	15.7	23.3	19.2	20.4	21.2

Source: Company, LKP Research

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