

November 30, 2021

Leading player of mill liner mining consumables....

About the Company: Tega Industries (Tega) is a leading manufacturer of 'critical to operate' mill liner consumables having 55+ product portfolio catering to global mineral beneficiation, mining and bulk solids handling industry.

- Second largest producer of polymer based mill liners and only player providing a 'hybrid liner' across both large SAG mill & ball mills
- Total ~86% of revenue from outside India; repeat orders comprised 74%
- Presence across the value chain of a mineral processing site with wide range of products and solutions

Key triggers/Highlights:

- Demand for copper, gold, iron ore & other metals will drive the growth of the mineral processing equipment industry. EV manufacturing is the top demand driver for copper aluminium and other metals
- Owing to ore grade depletion, miners are required to process more ore to get desired throughput, which will boost demand for processing equipment
- Tega is the only company producing hybrid mill liner (lighter material with high strength) for SAG with diameter of 9.5-12.5-metre range with high presence in large sized mill liners for both ball & SAG mill
- Strong in-house R&D and manufacturing capabilities. Flagship innovation DynaPrime, a composite liner of steel and rubber, has unlocked a new addressable market for Tega. Market leader in polymer-based mill liners
- Operating in a near oligopolistic market structure, with top five producers capturing ~49% of global market share

What should investors do? Tega's strong market position, innovative products and higher entry barriers likely to help maintain its margins while consistent growth with high repeat business (~74%) would augur well in the long run. At the upper end of the price band, it is valued at ~22x P/E for FY21, respectively.

- We assign **SUBSCRIBE** rating to the IPO

Key risk & concerns

- Large dependence on international market (~86% of revenue)
- Loss of repeat customers or significant reduction in repeat orders
- Failure to expand its distribution network
- Foreign exchange rate fluctuations may impact business



IPO Details

Issue Details

Issue Opens	December 01, 2021
Issue Closes	December 03, 2021
Issue Size	~ ₹ 620 crore
Issue Type	Offer for Sale
Price Band	₹ 443 - ₹ 453
No of shares	~ 1.37 crore
Market Lot	33 shares
Face Value	10.0
QIB (%)	50.0
Non-Institutional (%)	15.0
Retail (%)	35.0

Shareholding Pattern

	Pre-offer	Post-offer
Promoter	85.2	79.2
Public	14.8	20.8
Total	100.0	100.0

Objects of issue

Objects of the issue

To achieve the benefits of listing the equity shares which is likely to enhance visibility, brand and liquidity for existing shareholder.

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Key Financial Summary

₹ crore	FY19	FY20	FY21	Q1FY22
Net Sales	633.8	684.8	805.5	173.2
EBITDA	96.7	106.5	187.5	23.5
PAT	32.7	65.5	136.4	11.9
Diluted EPS	4.9	9.8	20.5	1.8
P/E (x)	92.3	46.1	22.1	
EV/EBITDA (x)	32.6	29.0	15.9	
Mcap/Sales (x)	4.8	4.4	3.7	
RoCE (%)	11.1	11.2	24.8	
RoE (%)	8.1	14.2	22.2	

Source: RHP, ICICI Direct Research

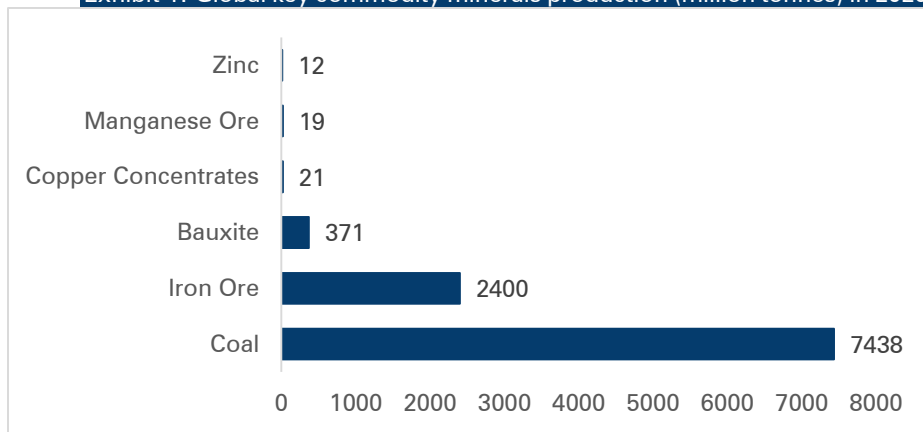
Industry Background

Global mining industry

In 2020, Asia-Pacific accounted for 71% of the global mining industry, followed by North America with 9%. The mining market consists of companies (organisations, sole dealers and partnerships) that harvest rocks, commodities, and other useful resources (ferrous and nonferrous metals, sand and gravel, coal, and so on) from the earth's crust. BHP Billiton, Glencore Plc, Vale SA, Rio Tinto Group and CRH Plc are the leading players in the mining industry.

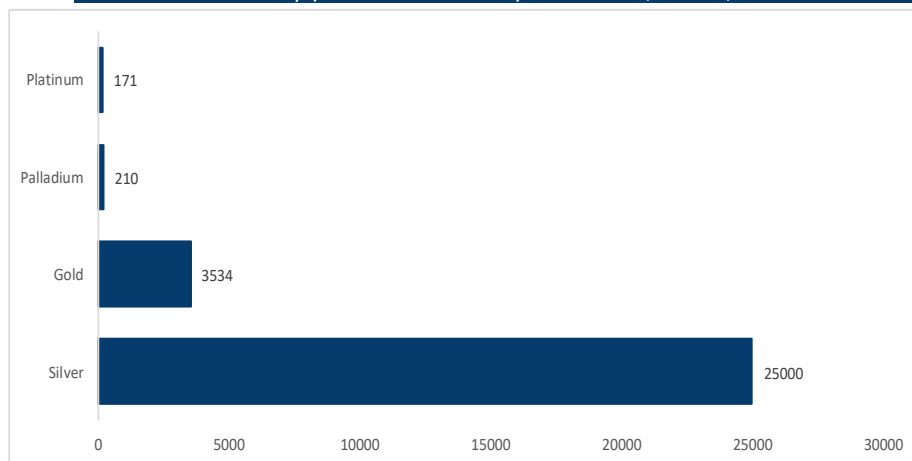
Global commodity mineral production during 2020 was 10.2 billion tonnes, with coal and iron ore (two largest minerals mined worldwide) accounting for 96% of total production. Silver is the most mined precious metal accounting for 86% of total precious metal mined and is found close to zinc deposits while gold is found mostly near copper mines.

Exhibit 1: Global key commodity minerals production (million tonnes) in 2020



Source: RHP, Industry, ICICI Direct Research

Exhibit 2: Global key precious minerals production (tonnes) in 2020



Source: RHP, Industry, ICICI Direct Research

Key trends in mining sector related to copper, gold mining industries

Demand side drivers

- Growing global shift toward renewables to drive demand:** While the shift toward renewables has been gaining momentum over the last few years, efforts to reduce emissions appear to have gathered pace following the outbreak of the pandemic. This growing shift toward renewables will boost the global demand for copper
- US electric vehicle policies to drive copper demand:** Higher electric vehicle (EV) production will boost the demand for metals used in EVs, primarily copper. Mines that yield EV metals may not be subject to the strict standards applicable to other mines

- **South Africa gold mining industry benefitting from safe-haven demand, higher metal prices:** Gold mining in South Africa, after a long period of decline, has benefitted from the pandemic-driven increase in gold prices. The demand for gold, a safe-haven investment amid global turmoil, helped lift prices

Supply side drivers

- **Long-term gold price rise driven by production shortages; near-term copper prices rise:** Frost & Sullivan expects gold prices to rise to \$2,500 to \$2,800 by 2030, with expected deficiencies in production. Reduced production from South Africa, in particular, will be a key contributor to the forecast period price rise. Copper prices are expected see growth in post-pandemic 2021 and 2022 with expected stabilisation thereafter
- **Declining Ore Grades:** Miners have to engage in mining activities to locate concentrates, as ore grades are declining, particularly copper. Lower ore grades are expected to drive higher capex investments within the industry
- **Extension of decline in Chilean copper production into Q1 2021:** Amid the pandemic, Chile, the world's largest copper producer, witnessed a decline in copper production for a tenth straight month in March 2021. Maintenance activities and weaker ore grades also contributed to the decline
- **Proposed royalty on Chile copper, lithium sales:** The Congress in Chile had been discussing a proposed flat 3% royalty on copper and lithium sales, with eventual discussions on additional marginal tax rates of 15–75%, depending on higher copper prices

Global mill liner industry

Copper and gold together accounted for 75% of mill liner market share during 2020, followed by iron ore and other (cement and aggregates) with 25%. The global mill liner market was estimated at \$1.73 billion in 2020. The market was oligopolistic in nature with top five producers capturing a global market share of 49% namely Metso-Outotec, Me Elecmetal, Bradken, PT Growth and Tega Industries.

Demand is primarily driven by Latin American countries, which account for 40% of the 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%. Tega has been servicing most of the regional mines of the major market participants. The mill liner market has declined continuously in the last two years due to industry slowdown (-3% YoY) in 2019 and with Covid-19 (-4% YoY) in 2020. Pent-up demand is likely to ensure a rebound (at 17% YoY) in 2021 and reach \$2.03 billion.

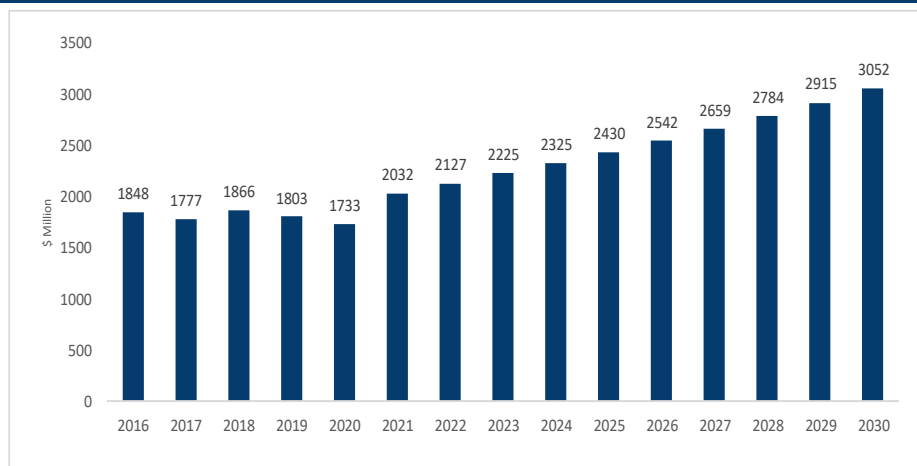
The demand for mill liner is repeating in nature largely due to wear of mill liners. Demand of mill liners is higher in replacement against newly installed grinding machine with mill liner in a year. The ratio is expected to be about 70-80% from replacement and 20-30% are in the new installed machines. Ratio of replacement varies with the amount of capex spent in a particular year.

Since mill liner demand in the past has been primarily dependent on copper and gold mining, the mill liner market growth will be a direct derivative of the same. Further, since depleting ore grades would require higher ore beneficiation and hence higher replacement demand, the mill liner market is forecast to grow faster at 5.8% in 2020-30.

Factors such as rising copper annual capacity in renewable energy, growing **use of copper in smart home appliances, expansion of construction industry, increasing manufacturing of electrical equipment and growth in scrap copper supply would drive the growth of the industry.**

However, growth would be challenged by the decline in ore grades. **Miners will have to process more ore to produce required concentrate. This will, in turn, boost consumables such as mill liners growth in the mineral processing industry.** Key end use sector for gold are jewellery, investment, and in industries. The advent of 'nanotechnology' is driving new uses in medicine, engineering and environmental management. Gold nanoparticles find its applications in medicines, renewable energy, engineering and aerospace as well as new technologies such as stretchable electronics.

Exhibit 3: Future & current mill liner demand forecast



Source: RHP, ICICI Direct Research

In the medium term, copper and gold production is expected to see healthy growth, driven by increasing mining activities in LatAm countries and growing shift towards electric & hybrid vehicles. Accordingly, copper production is expected to grow at 3.7% CAGR in 2020-30 while gold is expected to witness a CAGR of 4.3% in the stated period.

Mill liners can be metallic, rubber or composite materials. The type of grinding media as well as the desired output of media is an important consideration in selecting the type of mill liners. Mill liners primarily have a life of six months to two years, depending on the hardness of the ore. Mill liners fundamentally protect mills from the wear that comes with grinding harsh raw materials.

Grinding mills

A ball mill is used for fine grinding in the horizontal and vertical positions. The mill is filled with steel balls, manganese balls, or ceramic balls. Highly suitable for dry grinding, this machine is used to crush aggregates in the cement industry.

Autogenous mill (AG) and semi-autogenous grinding (SAG) mill combine two processes, crushing and grinding; the mills use materials themselves as grinding medium; the mutual contact progressively reduces material sizes. AG and SAG are used in both dry and wet grinding applications in either mineral processing or ore beneficiation process.

Mill liners are a low cost component in mill's operations, constituting about 3-15% of mill's operating cost. As per one of the past studies, based on Morila gold mine in Mali, the average yield of gold was 9 gm/tonne and the average mill tonnage 293 tonnes per hour. With the price of gold at \$66 per gram the overall opportunity cost per hour of downtime cost per hour could go up to as high as \$174,042. To avoid such a high down time, the quality of mill liners is very important.

Exhibit 4: Opportunity lost per unit of downtime

Average Mill tonnage (A)	Average Gold grade per ton (B)	Price per gram (C)	Opportunity Cost per hour of downtime (A)X(B)X(C)
293 tons per hour	9 gms/ton	\$ 66/ gms	\$174,042

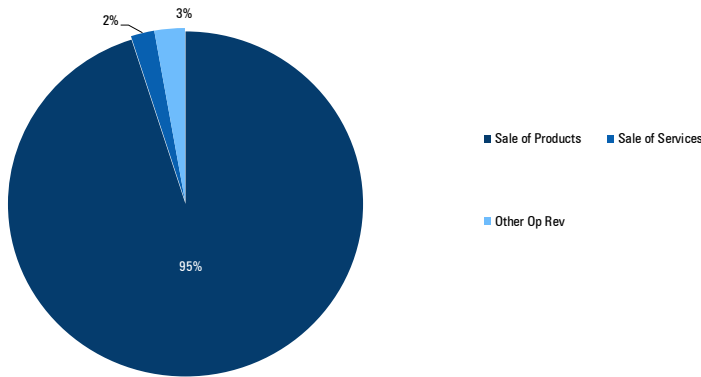
Source: RHP, ICICI Direct Research

Company Background

Incorporated in 1978, 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, Tega Industries is the second largest producer of polymer-based mill liners in terms of revenue.

Its product portfolio comprises more than 55+ mineral processing and material handling products. The company offers comprehensive solutions to marquee global clients in the mineral beneficiation, mining and bulk solids handling industry, through there wide product portfolio of specialised abrasion and wear-resistant rubber, polyurethane, steel and ceramic based lining components, used by their 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, which are regular operating expenses for their customers.

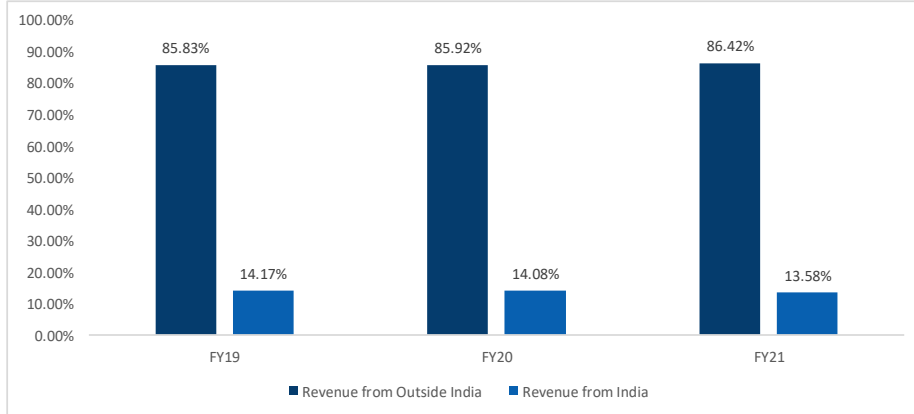
Exhibit 5: Product/ services contribution (%) in Revenue mix



Source: RHP, ICICI Direct Research

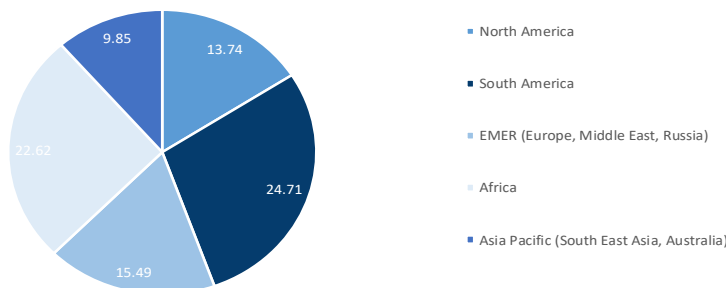
More than 85% of Tega Industries’ revenue comes from outside India.

Exhibit 6: Region-wise revenue break-up



Source: RHP, ICICI Direct Research

Exhibit 7: Revenue geographical break-up



Source: RHP, ICICI Direct Research

Tega Industries have six manufacturing sites, including three in India, at Dahej in Gujarat and at Samali and Kalyani in West Bengal, and three sites in major mining hubs of Chile, South Africa and Australia, with a total built-up area of 74,255 square metre (sq m). The company’s facilities in India caters to domestic and overseas markets across mineral processing and materials handling industries, while its facilities in Chile, South Africa and Australia caters to their respective local and regional mineral processing and materials handling industries. Additionally, Tega’s joint venture in India with UK branch of Hosch Group, Germany is engaged in precision conveyer belt cleaning and caters to various industries in India. It also has 18 global and 14 domestic sales offices located close to its key customers and mining sites.

Exhibit 8: Manufacturing facilities

S. No.	Facility location	Capabilities/ Products manufactured	Leased/owned	Year of Commissioning/ Acquisition
A. Domestic Facilities				
1.	Dahej, Gujarat	Mill liners, Wear products, Screens and Trommels	Leased	2013
2.	Samali, West Bengal	Mill liners, Wear products, Hydrocyclones, Screens, Trommels and Conveyor products	Owned	1985
3.	Kalyani, West Bengal	Mill liners (except DynaPrime), Conveyor products, Chute liners and pump liners, Hydrocyclones	Leased	1978
B. Overseas Facilities				
4.	Chile	Mill liners, Trommels, Chute liners, Screens, Pipe and pipe repair and spools	Leased	2011
5.	South Africa	Mill liners (except DynaPrime), Spillex, Screen Panel, Chute liners	Owned	2006
6.	Australia	Chute liners and Trommels	Leased	2010

Source: RHP, ICICI Direct Research

Tega Industries’ products offering 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, its products include chutes and its liners, grinding mill liners, trommels and screens, hydro cyclones, pumps and flotation parts and conveyor products. Its product range is engineered with a combination of mineral processing engineering, mechanical engineering and material sciences, while utilising its expertise in tribology.

Below is a diagrammatic representation of the company’s product range used in the mineral processing and material handling industry value chain.

Exhibit 9: Mineral processing and material handling industry value chain

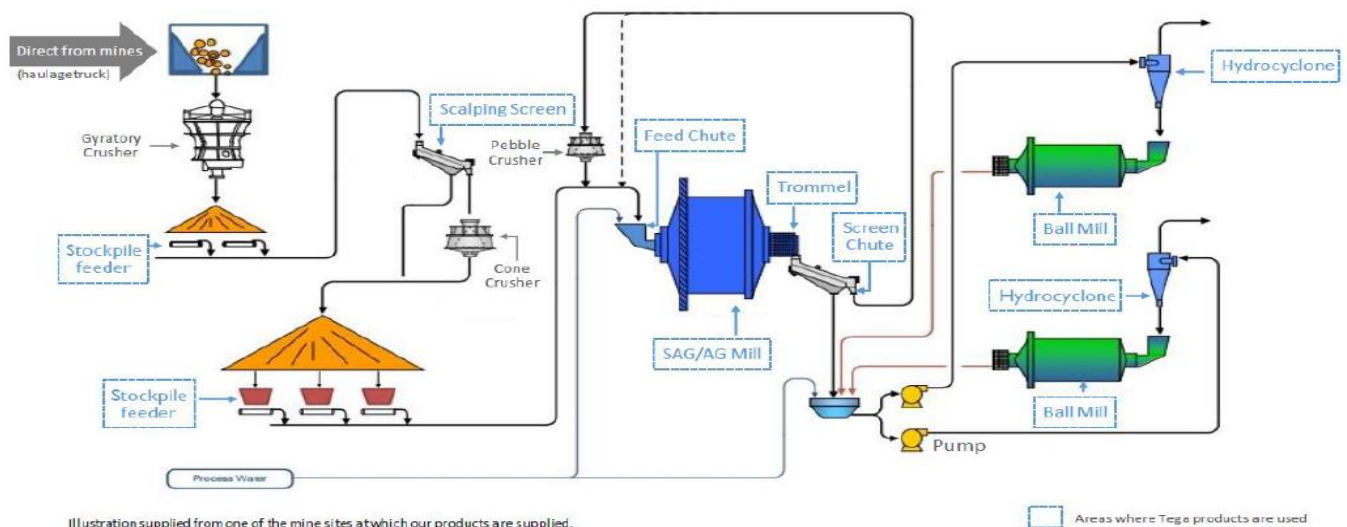


Illustration supplied from one of the mine sites at which our products are supplied.

Source: Company, ICICI Direct Research

Investment Rationale

Leading producer of specialised, “critical to operate” products, with high barriers to replacement or substitution

Globally, Tega Industries is the second largest producers of polymer-based mill liners in terms of revenues as of June 30, 2021, in a near oligopolistic market structure. (Source: F&S Report) They are present across the value chain of a mineral processing site, providing a wide range of products and solutions for processing across different stages of mineral processing. The company's products are critical to the overall productivity of a mineral processing site. They play a critical role in determining a unit's productivity, in terms of throughput, lower grinding media consumption, lower energy consumption and lower downtime, leading to lower operating costs for their customers. Downtime can be expensive for their customers at the mining sites, which leads to substantial losses to them.

Insulated from mining capex cycles, as Tega's products cater to after-market spends, providing recurring revenues

Tega's products cater to the after-market spend of a mining processing unit. After-market spend is typically three times the upfront capex spends over the lifecycle of a mill, and is a recurring cost for miners. After-market spend for a mining processing unit comprises regular operating expenses, which include costs of wear and separation parts, grinding media, power consumption, liners and other regular operating expenses. Tega's focus end-customers are mineral processing sites involved in gold and copper ore beneficiation accounting for 34.92% and 27.25% respectively, of Tega's revenue from sale of products. Despite some volatility in capital expenditure cycles for gold and copper mining sites, the company's business was not impacted, as a majority of its products were linked to the operating expenditure budget of a mining site and not capital expenditure.

Long standing market player with marquee global customer base, strong global manufacturing and sales capabilities

The company commenced operations with a foreign collaboration with Skega AB, Sweden in 1978. Over time, they have diversified their capabilities by expanding their product portfolio and augmenting their technical capabilities. Tega has a track-record of servicing leading global mining companies for a long period of time and in several cases, their relationships with key customers span more than 10 years, leading to high repeat revenues for them. Moreover, their deep relationships with some of the world's largest senior miners and a robust order book of ₹ 316.1 crore as of June 30, 2021 allow them significant visibility to plan for future growth. Tega have a customer base of 513 as on FY21, that consists of 258 overseas and 255 domestic customers.

High value add, technology intensive products, backed by strong R&D, focus on quality control

Tega's in-house R&D and manufacturing capabilities, including design, process engineering and manufacturing facilities, allow them to turn around customised designs in a short time frame, offer comprehensive solutions and better service standards to their customers and cross sell multiple products to the customers. The company designs and customises their products uniquely for each customer site, taking into account multiple characteristics of the application including type of ore, ore size, tonnage, breakage rate, power or rotational speed, pH, temperature, humidity, size, distribution and trajectory, sound levels, health and safety standards.

Key Risk

Largely dependent on international markets

As 85% of Tega's revenue comes from outside India, that expose them to the risks of doing business in foreign countries, which may adversely affect their business, financial condition and results of operations. The company has substantial global operations, which are undertaken through their 13 foreign subsidiaries (including subsidiaries of their subsidiaries) and 18 global sales offices in several foreign countries. Social, political, geopolitical conditions and adverse weather conditions, such as natural disasters, civil disturbance, terrorist attacks, war or other military action would affect their business and operations.

Failure to expand sales, distribution network

The company operates on a direct sales model and currently have an in-house sales and distribution network of 18 global and 14 domestic sales offices close to key customers. Tega depends on their regional sales and marketing teams to interact with potential customers, develop an understanding of their operations, facilitate development of suitable customised products and over time establish an on-going relationship with them. The company cannot assure their sales and marketing teams will be able to identify and successfully add new customers or identify additional needs of their existing customers, or effectively manage their existing sales network. Tega's competitors may engage more dealers and distributors compared to its employees or have better penetration in the relevant local markets, thereby limiting its ability to expand its network.

Foreign exchange rate fluctuations may impact business

The company is exposed to foreign currency as its revenues, operating expenses and finance costs are influenced by the currencies of those countries where it manufactures and/or sells its products. The exchange rate between the rupee and these currencies, primarily the US\$ has fluctuated in the past and the company's results of operations have been impacted by such fluctuations in the past and may be impacted by such fluctuations in the future. Though Tega primarily uses derivatives to hedge its risk against foreign currency balances of borrowings, trade payables and trade receivables and contract assets.

Loss of any long-term marquee customers or significant reduction in repeat orders from such marquee customers

The company is dependent on the long-term relationships that they have established with their customers, specially their marquee customers, as they primarily cater to the after-market products and services needs of their customers, who are typically in the mining beneficiation industry. The after-market spend for a mining mill comprises expenses including costs of wear and separation parts, grinding media, power consumption, liners and other regular operating expenses, which leads to recurring demand and repeat revenues for the company. Tega Industries gets ~75% revenues from repeat orders of spares. If the company is unable to maintain constant dialogue with its customers or may be unable to retain relationship they may lose their repeat orders. Any significant loss of their repeat orders will impact the company's order book and limit its ability to accurately forecast the demand for its products and services

Financial summary

Exhibit 10: Profit and loss statement				₹ crore
(Year-end March)	FY19	FY20	FY21	Q1FY22
Net Sales	633.8	684.8	805.5	173.2
Growth (%)	-	8.1	17.6	-
Total Raw Material Cost	257.4	273.8	323.8	68.5
Gross Margins (%)	59.4	60.0	59.8	60.4
Employee Expenses	111.4	115.3	122.7	35.0
% to sales	17.6	16.8	15.2	20.2
Other Expenses	168.2	189.1	171.6	46.1
% to sales	26.5	27.6	21.3	26.6
Total Operating Expenditure	537.0	578.3	618.0	149.7
EBITDA	96.7	106.5	187.5	23.5
EBITDA Margin (%)	15.3	15.6	23.3	13.6
Interest	23.6	21.4	17.3	3.6
Depreciation	37.8	38.4	40.2	10.5
Other Income	9.3	10.7	51.2	6.2
Exceptional Expense	-	-	-	-
PBT	44.6	57.4	181.2	15.6
Profit from JV	1.8	1.8	2.7	0.6
PBT after JV	46.5	59.2	183.9	16.2
Total Tax	13.8	(6.3)	47.5	4.3
Profit After Tax	32.7	65.5	136.4	11.9

Source: RHP, ICICI Direct Research

Exhibit 12: Balance sheet				₹ crore
(Year-end March)	FY19	FY20	FY21	Q1FY22
Equity Capital	57.6	57.6	57.6	57.6
Preference shares	8.7	8.7	8.7	8.7
Reserve and Surplus	334.8	396.2	547.4	564.9
Total Shareholders funds	401.1	462.5	613.7	631.2
Minority interest	-	-	-	-
Total Debt	212.7	243.9	187.8	184.2
Non Current Liabilities	39.3	54.1	49.6	49.5
Source of Funds	653.1	760.5	851.1	864.9
Net Fixed Assets	185.3	169.1	169.2	169.3
Investment Property	3.7	3.3	3.8	4.1
Capital WIP	1.6	6.2	6.9	7.1
Intangible assets	58.9	55.3	64.0	65.2
Right of use assets	38.6	40.6	59.1	60.8
Investments & bank balance	53.8	133.4	174.9	188.9
Inventory	121.1	132.6	158.6	207.9
Cash	19.3	36.9	47.9	64.6
Debtors	210.3	185.2	220.9	169.8
Loans & Advances & Other CA	48.6	47.8	38.6	41.1
Total Current Assets	399.2	402.5	466.0	483.4
Creditors	80.7	65.3	98.7	117.4
Provisions & Other CL	56.5	61.5	68.6	73.8
Total Current Liabilities	137.1	126.8	167.3	191.3
Net Current Assets	262.1	275.8	298.7	292.1
LT L&A, Other Assets	49.2	76.9	74.4	77.5
Other Assets	-	-	-	-
Application of Funds	653.1	760.5	851.1	864.9

Source: RHP, ICICI Direct Research

Exhibit 11: Cash flow statement				₹ crore
(Year-end March)	FY19	FY20	FY21	Q1FY22
Profit Before Tax	46.5	59.2	183.9	16.2
Add: Depreciation	37.8	38.4	40.2	10.5
Add: Finance Cost	22.5	19.5	13.9	2.9
Others	10.2	18.8	1.1	-0.5
Net (Increase)/decrease in WC	-33.6	12.0	-38.5	25.4
Tax paid	14.6	19.5	30.3	5.2
CF from operating activities	68.7	128.4	170.2	49.2
(Inc)/dec in Fixed Assets	-26.2	-27.8	-48.6	-9.3
Others	12.7	-73.5	-31.1	-11.3
CF from investing activities	-13.42	-101.3	-79.7	-20.6
Inc / (Dec) in Equity/preference sl	0.0	0.0	0.0	0.0
Inc / (Dec) in Borrowings	-65.7	17.9	-5.3	-5.6
Others	-27.5	-27.1	-73.7	-6.3
CF from financing activities	-93.2	-9.2	-79.0	-11.9
Net Cash flow	-38.0	17.8	11.5	16.8
Opening Cash	57.7	19.3	36.9	47.9
Closing Cash	19.3	36.9	47.9	64.6

Source: RHP, ICICI Direct Research

Exhibit 13: Key ratios				
(Year-end March)	FY19	FY20	FY21	Q1FY22
Per share data (₹)				
Diluted EPS	4.9	9.8	20.5	1.8
Cash EPS	10.6	15.6	26.5	3.4
BV	60.2	69.4	92.2	94.8
Cash Per Share	11.0	25.6	33.5	38.1
Operating Ratios (%)				
EBITDA margins	15.3	15.6	23.3	13.6
PBT margins	7.0	8.4	22.5	9.0
Net Profit margins	5.2	9.6	16.9	6.9
Inventory days	172	177	179	
Debtor days	121	99	100	
Creditor days	114	87	111	
Return Ratios (%)				
RoE	8.1	14.2	22.2	
RoCE	11.1	11.2	24.8	
Valuation Ratios (x)				
P/E	92.3	46.1	22.1	
EV / EBITDA	32.6	29.0	15.9	
EV / Sales	5.0	4.5	3.7	
MCap / Sales	4.8	4.4	3.7	
Price to Book Value	7.5	6.5	4.9	
Solvency Ratios				
Debt / Equity	0.5	0.5	0.3	
Debt/EBITDA	2.2	2.3	1.0	
Current Ratio	2.9	3.2	2.8	
Quick Ratio	2.0	2.1	1.8	

Source: RHP, ICICI Direct Research

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Avoid: Do not apply for the IPO

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