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MANAGEMENT DISCUSSION AND ANALYSIS

A. INDUSTRY OVERVIEW:

AIA Engineering Limited ("AIA") designs, manufactures and markets a wide range of consumable wear parts (Mill Internals) which are used in the process of Crushing and Grinding in Cement, Mining, Thermal Power and Aggregate industries. AIA partners with customers in these industries in their cost and process optimisation journey, helping them improve operational parameters. The Company employs casting process for the manufacture of the products. We primarily service the Global Cement and Mining Industries, where we offer customised grinding and crushing solutions relating to consumable wear parts which are used in the process of grinding and crushing in cement and mining industries. In India, we are also servicing the Thermal Power Plants by offering similar solutions for grinding/crushing of coal/lignite used in the Boilers. In mining industry the level of penetration of High Chrome wear parts (mainly High Chrome Grinding Media and Mill Liners) is only in the region of around 20-25% thereby leaving a considerable growth opportunity for conversion of the mines from the use of conventional wear parts (mainly Forged Grinding Media) into our High Chrome Grinding Media. Our key focused Industry at present is the Global Mining Industry with our specific focus on Copper, Gold and Iron ore mines across all Geographies of the world, where mining of these ores is happening.

In F.Y. 2022-23 while the world had largely come out of Covid-19 pandemic impact, there were new challenges posed due to geopolitical tensions emanating out of Russia-Ukraine war. Thus, this has more particularly impacted the key economies of North America and Europe owing to severe inflationary pressures witnessed in these markets, thereby impacting the consumption and demand. As a fallout, the overall economic sentiment remained subdued in these markets for major portion of the year. Thus, the prices of major commodities and metals witnessed a continued surge in the first half of the fiscal year 2022-23, but from the second half, the prices started settling down. Another factor which added to the uncertainties was the fact that China continued pursuing "zero Covid" policy and had continued to impose stricter lockdowns till Q3 of fiscal 2023, which also had its own negative impact on the overall global commodity and metal scenario as well as demand supply equations. On the positive side in F.Y. 2022-23, the global supply chain issues have eased out and the shipping rates have also come down significantly as compared to the lifetime highs witnessed in F.Y. 2021-22. Similarly the commodity prices have also started easing out and have reached realistic levels by end F.Y. 2022-23 - though they are still higher than the pre-Covid levels.

Amidst these challenges some of the key economies like India and other East Asian countries have shown strong resilience and have continued to grow due to big Infra push and also strong Capex cycles witnessed on an opportunistic note. The sentiment of "China plus one" has also helped these economies including India to a considerable extent. Thus, if we talk of Indian economy, in F.Y. 2022-23 India has grown at around 6% GDP growth and even higher growth rates are projected for the coming years.

In our view the opportunity in Cement Industry for our products continued to be in the range of around 3 Lakhs - 3.25 Lakhs tons per annum, and excluding China this was around 1.8 Lakhs - 2 Lakhs tons per annum. Again, from a Global Industry perspective, the Cement Industry has practically worldwide converted into the use of High Chrome consumable wear parts. While the overall demand position of Mill Internals in Cement Industry has remained flat, in certain markets particularly markets like India and East Asian markets as well as certain other pockets in Southern Hemisphere, the demand has remained guite strong. We believe that going forward, Cement Industry should continue to grow at a near double digit growth rate in India and in normal single digit growth rate of around 3% to 4% worldwide and matching with this our supplies to the Cement Industry will also therefore grow in tandem, with some additional growth coming from increased market share. However, as compared to Mining, the consumption of wear parts in Cement Industry is much lower and therefore in absolute terms this will imply only some marginal increase in our volumes in this industry.

If we talk of Mining Industry, we believe that the Mining Industry has remained largely unaffected from the disruptive factors which impacted other economies as a fallout of the geopolitical tensions, particularly considering the fact that Mining Industry is concentrated in certain regions like North America, Latin America, Australia, Africa, Far East, China and CIS countries and has a very little presence in Europe. Further, while Copper and Gold have continued to remain extremely bullish, Iron being the base metal has also witnessed a steady growth trend. Particularly if we talk of Copper, its prospects for a sustained growth are extremely bright given the fact that the whole world is now moving towards Renewables/EVs and as a direct fallout the demand for Copper, being the metal of choice for Electrical industry, Copper consumption is expected to grow manifold in the coming years, given the increased focus in the Global markets on Environmental Protection and sustainability.





Within Mining, conversion of conventional Forged Grinding Media to High Chrome Grinding Media remains the largest growth opportunity, and we have also started aggressively pushing the Metal Mining Liners as another focused area of growth. If we talk of size of the opportunity for our products in Mining Industry, the consumption of Grinding Media would be in the region of around 3 million tons per annum while that of Metal Mill Liners would be in the region of around 3 Lakhs tons per annum. Further, if we specifically talk of the three metals on which we are concentrating - i.e. Copper, Gold and Iron Ore, then the addressable markets for us would be around 2.5 million tons par annum for the Grinding Media against which the present penetration of High Chrome Grinding Media is quite low in the region of 20% to 25%, which leaves a significant headroom for us for conversion from the use of conventional Forged Grinding Media into our High Chrome Grinding Media. Similarly, In Mill Liner space, we believe that we have a very unique solution for the SAG Mills, based on our unique patented Mill Liner technology which we have in licensed on an exclusive basis, whereby we are in a position to offer distinct advantages in the form of increased throughput, improved grinding efficiency and reduced power costs.

Globally the Mining Industry is growing at the rate of around 3% to 4% per annum. While this helps us in increasing the size of the opportunity, from a strategic standpoint considering the huge headroom of conversion available with us, we are largely agnostic to Mining Industry Cycles in the sense that even if theoretically for some reason there is no growth at all in the Mining Industry space or even if there is some de-growth owing to fall in demand for commodities and metal in near term, we still feel that given the considerable headroom available for us for conversion of Mines to High Chrome use, a Zero or even a negative growth in the mining should not have any material adverse impact on our growth plans.

B. SEGMENTWISE PERFORMANCE:

The Company primarily operates in only one Segment i.e. Manufacturing of High Chrome Mill Internals. In Fiscal Year 2022-23, 72.93% of its Total Sales came from outside India while balance 27.07 % came from within India.

C. OUTLOOK AND PROSPECTS:

Company's prospects are linked to activity in basic industries of Mining, Cement and Thermal Power generation.

Company's focus is to provide comprehensive solutions which are aimed at not only reducing the cost of consumable wear parts which are used in the process of grinding and crushing in the above industries through reduced wear rates but also to focus on reducing the overall cost of ownership in the hands of the customer by increasing the grinding efficiency, increasing the throughputs and reducing other operating expenses by customising tailor made solutions to suit the requirement of a given customer.

In Cement Industry, since the entire Cement Industry has largely converted into High Chrome Mill Internals use, Company's growth is linked mainly to the overall growth of the Industry and also to gaining higher market share. Further, the cost of consumable wear parts in Cement Industry is in the region of around 1% to 2% of the total cement production cost and the size of the industry is also relatively smaller at around 3 Lakhs MT (around 1.80 Lakhs MT ex-China). Ex-China (where the Grinding Media requirements are largely serviced by local Chinese players who are operating on different business dynamics) the Company today enjoys around 35% market share having presence in more than 125 countries. In India, Company continues to enjoy a dominant market share of over 95% consistently since it became an independent entity. Company continues to enjoy a dominant position in this industry and is confident of maintaining this position going forward.

Major growth driver for Company continues to be the huge conversion opportunity available in the Mining Industry space. As elaborated under the Industry Section, the addressable market opportunity is around 2 – 2.5 million tons for the three ores on which the Company is focused upon viz. Gold, Copper and Iron Ore. The level of penetration of High Chrome Grinding Media is limited in the range of 20%-25%, which offers a significant opportunity for growth through conversion of the Mines from Forged Grinding Media to High Chrome Grinding Media.

Further, in addition to Grinding Media as the main product supplied to the Mining Industry, Company is also very bullish on the prospects for growth in the Mill Liner Segment where the Company is manufacturing and supplying Metal Liners based on unique patented Mill Liner design licensed by the Company, which helps the Company in offering multiple advantages including improved throughputs and reduced power costs.

Company is addressing the mining opportunity of conversion through a combination of solutions based on the requirement of a mining customer. This includes cost savings through lower wear rates and lower consumptions owing to the High Chrome advantage; Down process related benefits in the form of reduction in the cost of other expensive reagents/improvement of recoveries by use of High Chrome Grinding Media; and lastly unique Mill Lining solutions having the effect of increasing the throughput and reduction in the power cost. Company is also offering unique Mill Liners to

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the mining market and widening its wallet share and value addition with customers. Company's dedicated greenfield Mining Liner plant has been commissioned in Quarter 2 of F.Y. 2022-23 is helping the Company in taking incremental market share in this segment, as well as offer higher cross selling opportunities for Grinding Media.

While the Company was fully geared to address the huge opportunity available for growth in Mining Segment, the progress was stifled during F.Y. 2020-21 and also for a large part of the F.Y. 2021-22 predominantly owing to the fact that our sales and business development teams could not travel due to Covid related restrictions and further there were also multiple headwinds in the form of highly volatile and continuously increasing shipping rates and supply chain challenges. However, in spite of all these challenges, the Company was in a position to maintain its supplies to all its key customers and also show a respectable growth in F.Y. 2021-22 considering the fact that there was in fact a volume de-growth in F.Y. 2021-22 due to loss of sales in Canada and South Africa due to anti-dumping/trade barriers imposed in these geographies, which were compensated by new business conversions.

However, in F.Y. 2022-23 with normalcy having returned in major relevant markets, Company has once again resumed the process of new customer acquisitions, resulting into an increase in the sales volumes in F.Y. 2022-23. Further, the Company is quite confident to deliver an incremental volume growth of at least 25,000 tons to 30,000 tons year over year, which would be largely coming from the Mining Segment.

Going forward, Company continues to build on its competencies to offer material value addition to its customers in form of increase in throughput, increase in yield of gold and copper ores and reduction in operating costs in terms of wear costs, power costs and reagent consumption. This value addition is offered by continuous and direct engagement with operations personnel at plants in different countries and ensuring that a custom designed solution is offered to meet their specific objectives and engage with them on a continuous improvement journey to measure and ensure the benefits accrue over the lifetime of our solution. A Continued volatility in the prices of major raw materials viz. Scrap and Ferro Chromium is now becoming a rule rather than exception. Thus, in F.Y. 2022-23 at least for first half the Ferro Chromium prices continued to rise whereas in the third quarter there was a dip while again in the fourth quarter the prices started rising. However, the Company has demonstrated its ability of passing over this increase cost of raw materials consistently year over year over a lag of anywhere between 3 and 6 months. Again in the past we have also demonstrated

our ability to pass over the increase in the freight rates. This also demonstrates the resilience of our business model.

The Company is extremely confident of the long term prospects of sustained growth through new customer acquisitions in the Mining Segment. Further, while the Company continues to face competition from one dominant global player in High Chrome Segment and also a few more players in the Mill Lining Segment, it believes that it has certain distinct competitive advantages given its unique product offerings coupled with highly efficient plants in India, duly supported by a strong global sales force and support infrastructure in the form of Company's global offices and warehouse infrastructure and continued developmental efforts aimed at making its solutions very potent - all these factors are giving the Company the confidence that it should emerge as a dominant supplier of Mill Internals in the Mining space as well.

Company continues to maintain our position of dominance as a supplier of large castings to the Thermal Power Plant Industry in India. Although this is relatively a smaller business, it is still an important business for it and the Company is also confident of maintaining a dominant position in this industry which is largely confined to the domestic market only.

D. CAPEX PLAN:

The Company's current capacity stands at 4,40,000 MT Per Annum, after considering the implementation of the recently commissioned Greenfield facility at Kerala GIDC near Ahmedabad to manufacture 50,000 MT of Mill Linings.

The Company is also in the process of implementing the second phase of Grinding Media Greenfield expansion project with a capacity of 80,000 MT at Kerala GIDC near Ahmedabad and expected to come in production by December 2024, at an estimated Capex of ₹ 250 Crores.

The Company has a plant cluster in Odhav in Ahmedabad primarily for production of parts other than grinding media. For this cluster, Company has now undertaken a one-time upgradation project which will include some capacity de-bottlenecking and restructuring, creation of warehouse space, pattern storage facilities and related infrastructure investment at an estimated cost of ₹ 200 Crores. While the project will continue in phases over next 2 years but will see capacity addition of 20,000 MT of castings by December 2024.

The Company further plans to invest in Renewable Energy Projects (including Solar and Wind) by investing ₹ 60.00 Crores in the F.Y. 2023-24. The Company plans to fund all above Capex from its internal cash accruals.







E. RISKS AND CONCERNS:

The Company is a Manufacturing Concern with facilities in 4 Cities in India and with sales and distribution spread across the world. The Company is exposed to certain operating business risks, similar to most manufacturing companies, which is mitigated by regular monitoring and corrective actions.

Key risks that the Company faces are around stability in the mining market, foreign exchange rate fluctuation, fluctuation in raw material prices, debtor defaults, disruption in supply chain and disruption and uncertainty in business due to Ukraine Crisis.

Currency Fluctuation: On account of high exchange volatility, there is possibility of big exchange fluctuation due to higher export in turnover and import of raw material. Proactive and Adoptive Hedging Policy which is aligned with market best practices and Dynamic Pricing Mechanism are in place to limit impact of exchange volatility on receivables and forecasted revenue.

Raw Material Fluctuation: The Company engages with the customers and is able to pass through most of the raw material changes – either through price pass clauses if there are longer tenure contracts or by repricing new offers. The Company is closely monitoring raw material price movements and is regularly buying the raw materials during low price cycles so as to average out the impact of price fluctuations.

Debtor Defaults: Company has taken up comprehensive credit insurance policy to mitigate risks around financial conditions of export customers.

Disruption in Supply Chain: Due to Ukraine Crisis, there is possibility of disruption in export and import Supply Chain. This may result in jump in overall outward freight cost. It may result in higher working capital because of increase in transit inventory and increase in inventory at Customer place to meet timely delivery. It may also put pressure on margin because of volatile freight cost. To mitigate disruption in supply chain, Company is planning production well in advance to compensate delay in logistic, maintaining higher inventory at warehouse of country having disrupted supply chain. Logistic team is putting efforts on midterm contract with shipping line to keep cost under cap. Sales team is also working with Customers to fix contract on FOB Plus Actual Freight.

F. INTERNAL CONTROL SYSTEM AND THE ADEQUACY:

The Company's Internal Control Systems are commensurate with the size and nature of its operations, aimed at achieving efficiency in operations, optimum utilisation of resources, reliable financial reporting and compliances with all applicable laws and regulations. Talati and Talati LLP, Chartered Accountants is the Internal Auditor of the Company. It carries out extensive internal audit throughout the year across all functional areas and submits Quarterly Reports to the Management and Audit Committee. The recommendations from Internal Auditors and follow up actions for improvements of the business processes and controls are also periodically reviewed and monitored by the Audit Committee.

G. FINANCIAL PERFORMANCE REVIEW:

The financial performance of the Company as a whole (on Consolidated basis) is as under:-

I. Consolidated Performance:

An analysis of the Consolidated performance of the Company is given below:

• Physical Production:

The production achieved is as under:

		(Qty in M.T.)
Product	2022-23	2021-22
High Chrome	2,88,088	2,78,590
Mill Internals		

Sales Turnover:

The Comparative position of Sales Turnover achieved by the Company is as under:

		(₹ in Lakhs)
Particulars	2022-23	2021-22
Sales in India (27.07%) (P.Y. 21.12%)	1,30,943.36	74,230.94
Sales Outside India (72.93%) (P.Y. 78.88%)	3,52,859.12	2,77,215.81
Total	4,83,802.48	3,51,446.75



• Key Performance Indicators :

An analysis of the key indicators as percentage to Revenue is given below:

			(₹ in Lakhs)
Pai	rticulars	2022-23	2021-22
1	Revenue from Operations	4,90,876.87	3,56,654.73
2	Cost of Materials Consumed (Including change in Inventories)	2,06,582.02	1,47,109.37
	- % of revenue from operations	42.08%	41.25%
3	Employee Benefit Expense	15,190.16	13,936.66
	- % of revenue from operations	3.09%	3.91%
4	Other Expenses	1,45,040.61	1,23,514.19
	- % of revenue from operations	29.55%	34.63%
5	EBIDTA	1,47,518.02	87,723.52
	- % of revenue from operations	30.05%	24.60%
6	Finance Costs	2,010.39	385.04
	- % of revenue from operations	0.41%	0.11%
7	Depreciation and Amortisation Expense	9,304.01	9,211.63
	- % of revenue from operations	1.90%	2.58%
8	Profit Before Tax	1,36,203.62	78,126.85
	- % of revenue from operations	27.75%	21.91%
9	Profit After Tax (Including Other Comprehensive Income and after Minority Interest)	1,02,165.98	59,544.52
	- % of revenue from operations	20.81%	16.70%

II Standalone Performance

The analysis of Standalone performance of the Company is given below:

• Sales Turnover :

The Comparative position of Sales Turnover achieved by the Company is as under:

		(₹ in Lakhs)
Particulars	2022-23	2021-22
Sales in India (30.71%) (P.Y. 22.35%)	1,22,046.82	
Sales Outside India (69.29%) (P.Y. 77.65%)	2,75,384.06	2,35,241.37
Total		3,02,949.05

• Key performance indicators:

An analysis of the key indicators as percentage to Revenue is given below:

2 Cost of Materials Consumed (including change in inventories and purchase of stock in trade) - % of revenue from operations		(₹ in Lakhs)
2 Cost of Materials Consumed (including change in inventories and purchase of stock in trade) - % of revenue from operations	2022-23	2021-22
(including change in inventories and purchase of stock in trade) - % of revenue from operations	4,04,476.35	3,08,157.03
· · · · · ·	2,01,130.16	1,63,544.35
3 Employee Benefit Expense	49.73%	53.07%
	11,040.39	10,302.79
- % of revenue from operations	2.73%	3.34%
4 Other Expenses	86,910.71	76,686.84
- % of revenue from operations	21.49%	24.89%
5 EBIDTA	1,37,669.05	84,591.86
- % of revenue from operations	34.04%	27.45%
6 Finance Costs	1,845.36	363.24
- % of revenue from operations	0.46%	0.12%





			(₹ in Lakhs)
Pai	ticulars	2022-23	2021-22
7	Depreciation and Amortisation Expense	9,115.33	8,983.90
	- % of revenue from operations	2.25%	2.92%
8	Profit Before Tax	1,26,708.36	75,244.72
	- % of revenue from operations	31.33%	24.42%
9	Profit After Tax (Including Other Comprehensive Income)	96,301.22	58,535.19
	- % of revenue from operations	23.81%	19.00%

H. DETAILS OF SIGNIFICANT CHANGES IN THE KEY FINANCIAL RATIOS & RETURN ON NET WORTH

Pursuant to amendment made in Schedule V to the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 details of significant changes (i.e. change of 25% or more as compared to the immediately previous Financial Year) in Key Financial Ratios and any changes in Return on Net Worth of the Company including explanations therefor are given below:

Sr.	Particulars	2022-23	2021-22	Change	Change	Explanations
No.					in %	
1	Debtors Turnover (Days)	132.59	156.69	(24.10)	(15.38%)	
2	Inventory Turnover (Days)	57.67	63.10	(5.43)	(8.61%)	
3	Interest Coverage Ratio	69.66	208.15	(138.49)	(66.53%)	Due to availment of Short Term Borrowings during the year
4	Current Ratio	6.51	17.11	(10.60)	(61.97%)	Due to availment of Short Term Borrowings of ₹ 49,600 Lakhs
5	Debt Equity Ratio	0.09	-	(0.09)	100.00%	Due to availment of Short Term Borrowings of ₹ 49,600 Lakhs
6	Operating Profit Margin (%)	24.23%	16.06%	8.17	50.89%	Increase on account of increase in Net Profit
7	Net Profit Margin (%)	24.38%	19.29%	5.09	26.35%	Increase on account of increase in Net Profit due to increase in revenue from operations.
8	Return on Networth (%)	19.25%	13.45%	4.98	39.16%	Increase on account of increase in Net Profit

Standalone

Consolidated

Sr.	Particulars	2022-23	2021-22	Change	Change	Explanations
No.					in %	
1	Debtors Turnover (Days)	64.95	83.66	(18.71)	(22.36%)	
2	Inventory Turnover (Days)	92.19	102.86	(10.67)	(10.37%)	
3	Interest Coverage Ratio	68.75	203.91	(135.16)	(66.28%)	Due to availment of Short Term Borrowings during the year
4	Current Ratio	6.07	12.26	(6.16)	(50.37%)	Due to availment of Short Term Borrowings of ₹ 49,600 Lakhs
5	Debt Equity Ratio	0.09	-	0.09	100.00%	Due to availment of Short Term Borrowings of ₹ 49,600 Lakhs
6	Operating Profit Margin (%)	23.72	17.89 %	5.83	32.57%	Due to increased Net Profit
7	Net Profit Margin (%)	21.83	17.63 %	4.20	23.78%	
8	Return on Networth (%)	20.22	13.77 %	6.45	46.80%	Increase on account in increase in Net Profit



I. INDUSTRIAL RELATIONS AND HUMAN RESOURCE MANAGEMENT:

The Company believes that human resource is the most important asset of the organisation. During the year under review, your Company continued its efforts to improve HR related processes, practices and systems to align these to the organisational objectives. Training and development of its employees is ensured through on the job and outside training programmes and workshop. The Company continues to attract excellent talent to further its business interests. Industrial Relations continue to be cordial.

CAUTIONARY STATEMENT:

Statements made in the Management Discussion & Analysis describing the Company's objectives, projections, estimates, expectations may be "Forward-looking statements" within the meaning of applicable Securities, Laws & Regulations. Actual results could differ from those expressed or implied. Important factors that could make a difference to the Company's operations include economic conditions affecting demand supply and price conditions in the domestic & overseas markets in which the Company operates, changes in the Government Regulations, Tax Laws & other statutes & other incidental factors.