

## AIA Engineering Ltd.

No. of shares (crore)	9.43
Mkt cap (Rs crs)	10639
Current price (FV. 2)	1137
Price target (Rs)	1355
52 week H/L (Rs.)	1238/494
Book Value (Rs.)	184
P/BV (FY15e/16e)	5.1/4.2
P/E (FY15e /16e)	27.2/23.6
BSE Code	532683
NSE Code	AIAENG
Bloomberg	AIAE IN
Daily volume (avg. weekly)	52743

## Shareholding pattern

	%
Promoters	61.65
MFs / Banks / FIs	7.07
Foreign	25.16
Govt. Holding	0.00
Non-Promoter Corp.	2.76
Total Public	3.35
<b>Total</b>	<b>100.00</b>

As on Dec 31, 2014

## Recommendation

**Buy**

## Analyst

**Priyanka Somani**

Phone: + 91 (33) 3027 3043

E- mail: [research@cdequi.com](mailto:research@cdequi.com)

## Company Background

AIA Engineering is an ISO certified 9001 company that specializes in design, development, manufacture, installation and servicing of high chromium wear, corrosion and abrasion resistant castings used in cement, mining and thermal power generation industries.

## Highlights

- AIA specializes in high chromium mill internals that have significant advantages over traditional forged components and are fast replacing the same. These products are used in the mining sector and have a demand of at least 1.2 million tonnes per annum of which only 20% have been catered to. Moreover, replacement demand for high chrome mill internals is estimated to account for 85-90 % of the total demand.
- AIA is the de facto monopoly player in the domestic cement industry and a dominant worldwide player in the mining sector. The company has managed this by creating a competitive advantage for itself in the services that it provides to its customers--high and consistent quality of products, uninterrupted supplies, undertaking mill audits, client specific design, undertaking installation and continued servicing and maintaining well developed relationships with its clients.
- Company expects to end the fiscal with a volume of 2-2.1 lakh tonnes in FY15 (as against 1.8 lakh tonnes in FY14) and about 2.6 lakh tonnes in FY16. The company currently has an order book of Rs 450-500 crore. Capital Expenditure plans of Rs 600 crores for capacity augmentation to 4.4 lakh tones is at its final stages of execution in the light of rising demand (worldwide) from the mining space.
- The stock currently trades at 27.2x FY15e earnings and 23.6x FY16e earnings. We recommend 'Buy' with a target of Rs 1355 based on 28x FY16e earnings within next 9-12 months*

Figures in Rs crs

	FY12	FY13	FY14	FY15e	FY16e
Income from operations	1416.67	1751.31	2080.08	2180.00	2700.00
Other income	13.27	21.32	33.41	85.80	45.00
EBITDA (other income included)	286.57	331.56	535.56	612.07	696.80
Net Profit	180.46	210.82	324.97	394.73	456.46
EPS (F.V.2)	19.13	22.35	34.45	41.85	48.40
EPS growth (%)	-1.6	16.8	54.1	21.5	15.6

## Industry and Company Overview

AIA Engineering manufactures and markets a wide range of high chromium consumable wear parts (mill internals) which are used in the process of crushing/grinding in the cement, mining, thermal power and aggregate industries. These are core industries from an economic stand-point and are the basic drivers of infrastructural development.

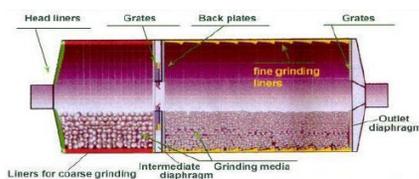
The company employs alloy-casting process for manufacturing of the products, which require designing of alloys in relation to their end application. The casting process is followed by precision heat treatment to develop required end properties.

The company has a global footprint with sales and service support in more than 95 countries. Segmentally, the global cement industry has been undergoing structural issues and virtually all new capacity addition has come to a halt except for a few select countries. Also, capacity utilization in developed countries continues to remain flat. Even in India, the cement industry, having grown its capacity to 300 million tonnes per annum, seems to have entered a phase of consolidation with new capacity additions having slowed down in FY3-14.

As for the mining business, it seems an era of super-cycle for commodities has come to an end. Capacity addition plans for many companies are being put on hold. But the company's prospects are more closely linked to the capacity utilization of the mines and the subsequent wear part replacement which seems to be holding up well till now.

In India, in addition to the above two industries, AIA is also servicing the replacement and new capital expenditure requirements of coal fired thermal power plants and is thus directly catering to the power sector. India is projected to continue to be power deficit for the foreseeable future and hence a sustained growth in this particular segment in India is predictable.

Industry: Mill Internals



High Chromium wear resistant parts for grinding & crushing equipment

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Industry: Mill Internals (cont'd)



Grinding Media



Liners



Diaphragm



Rollers & Table liners



Blow bars / Hammers



Dipping Tubes



Cement & Mining as key end-user industries

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## Industry Size and Scope

- Global market for Mill Internals for mining and cement sectors estimated at 3mn MT (Rs 125 bn) and growing at 4-5% per annum.
  - Mill Internals and consumables in grinding mills.
  - Their design and properties (abrasion, corrosion, impact resistance) are critical to grinding process efficiency.
- Demand driven by new projects and replacement for wear parts
- Industry moving from cost of parts to total cost of ownership , driving innovation in product innovation in product development and total solutions.
  - Move from forged grinding media to high chrome cast media .
  - Total solutions include design of parts , metallurgy to meet the specific requirement of the material being ground – varies from plant to plant.

## Company description



AIA Engineering Ltd.

Niche player with world wide presence

### Description

- **Core Competence:** Design, develop, manufacture and service impact, abrasion and corrosion resistant castings
- **Focus:**
  - Metallurgy
  - New Product Development
  - Grinding Process Technology
- **Metallurgical Solutions:**
  - Steels and Irons having upto 32% Chrome
  - Ceramic composites with steel or chrome iron base
- **Products:** grinding media, mill liners, diaphragms, vertical mill parts and crusher parts
- **Customers:** Cement, Mining, Thermal Power Plants and Aggregates in more than 90 countries
- **Global Presence:** offices, warehouses, sales network
- **Supply contracts:** global Mining and Cement majors such as Anglo, Rio Tinto, Vale, Arcelor Mittal, Barrick Gold, Holcim, Lafarge, Cemex, etc.
- **OEM supplies:** FLS, ThyssenKrupp, Outotec, Losche, Pfeiffer, etc

### Financials

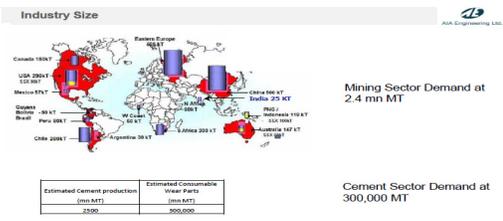
US\$ m	FY11	FY12	FY13	FY14
Sales	256	266	311	336
growth %	4	4	17	8
EBIDTA	62	56	61	84
margin %	24	21	20	25

### Milestones

2001	Exit from JV : Capacity 20,000 Mt
2008	Commissioned 100,000 Mt Grinding Media Plant
2009	Started supply to Mining Companies
2011	Enhanced Capacity to 200,000 Mt
2013	100,000 Mt annual sales to Mining Companies

Source: AIA

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## Investment Rationale

### Growing demand for castings

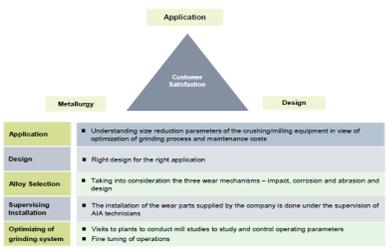
AIA specializes in high chromium mill internals that have significant advantages over traditional forged components. High chrome components are more durable and are more resistant to corrosion. For instance grinders used in zinc mining, the high chrome grinder produces consistent ore particle size which has a higher recovery rate of the metal and reduces wear and tear by as much as 40-50 per cent leading to long term cost savings for the client.



Further, high chrome mill internals are fast replacing the traditional forged internals used in the mining sector which has a demand of at least 1.2 million tonnes per annum. The high chrome mill internals are estimated to have covered only 20 per cent of the mining demand and this could create an additional demand that is four times the cement consumption of high chrome mill internals of 300,000 tonnes per annum.

Moreover, replacement demand for them is estimated to account for around 85-90 per cent of the total demand. The reason why replacement demand remains so high is not reflective of the quality of the internals used, rather it is a function of the process that causes such high degree of wear and tear which makes components to be replaced frequently.

### 3.2 Business Approach : DIFFERENTIATION

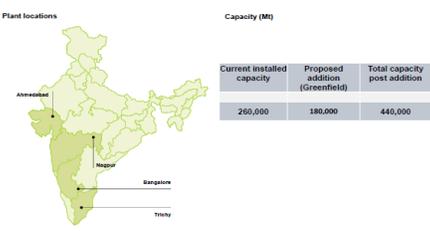


Considering grinding media for instance, it needs to be replaced every 30 days. It accounts for around 80 per cent of the total replacement demand. Such a high degree of demand therefore creates a steady flow of income visibility for players of the sector and AIA in particular.

### Niche player with worldwide presence

High chrome mill internals do not have high entry barriers in terms of technology. In spite of this, AIA has become the de facto monopoly player in the domestic cement industry and a dominant player in the mining sector.

### 3.4 Production capacity



AIA managed this by creating a competitive advantage for itself in the services that it provides to its customers-high and consistent quality of products, uninterrupted supplies, undertaking mill audits, client specific design, undertaking installation and continued servicing and maintaining well developed relationships with its clients.

AIA's clients in the cement sector are Grasim, ACC, Ambuja, Ultratech, Holcim etc. In the mining sector, Hindustan Zinc, Bharat Aluminium, Kudremukh Iron Ore Company Ltd are the company's clients. It also has a worldwide penetration through its subsidiaries (in which it has 100% ownership) as under:

- Vega Industries (Middle East) – Directing markets in Asia (ex-India), Africa and South America.
- Vega Industries (UK) – Directing sales in Europe.
- Vega Industries (USA) – Directing sales in North America and Central America.
- Vega Steel Industries (South Africa) – Directing sales in South Africa.
- Wuxi Weigejia Trade, (China) – Directing sales in China

### Production, Volumes and Capital Expenditure

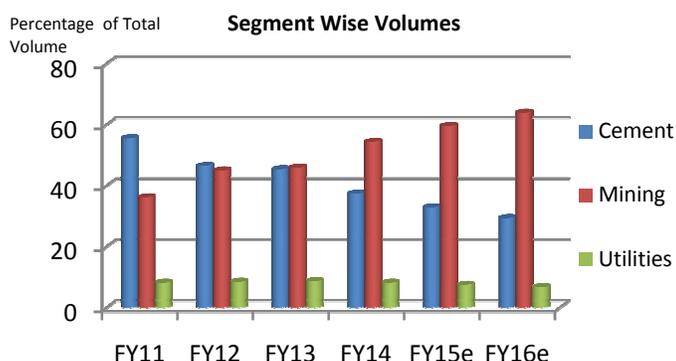
Having clocked a volume of 93000 tonnes in H1FY15 the company expects to end the fiscal with a volume of 200000-210000 tonnes in FY15 and about 260000 tonnes in FY16. The company currently has an order book of Rs 450-500 crore.

Capital expenditure for augmenting the total capacity of the company by 180000 tonne to 440000 tonne is about Rs 600 crore. In first phase the company's capacity will increase by 80000 tonnes and balance 100000 tonnes will come up by March 2016. Of the total capex about Rs 200 crore will be incurred in FY15 and balance will be in FY16.

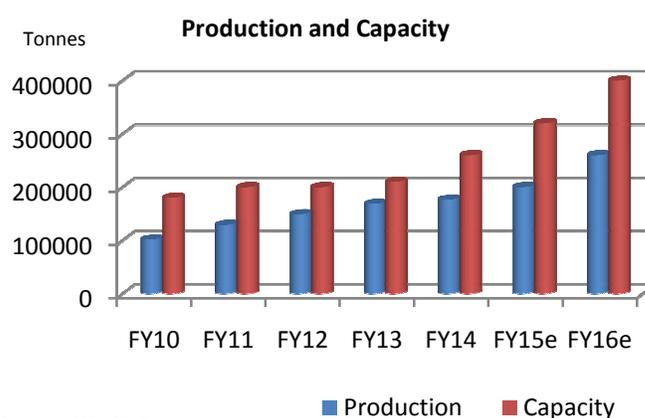
The company successfully completed the brownfield expansion project at its Moraiya plant and is on the path to implement its capex plans for FY 2014-15 and 2015-16. The major expansion in the capacity will be at a new Greenfield site at GIDC Kerala, which is close to the existing Moraiya plant which is expected to be commissioned in phases, partly in FY 2014-15 and partly in FY 2015-16.

### Margins and Realization

The EBITDA margins are expected to stabilize around 25% and the realization per kg is expected to stabilize at Rs 109/kg for FY15 and FY16. ROCE and ROE are expected to increase to 26%-29% and 20% respectively. The net profit margins are expected to increase to 17%.



Source: AIA, CD Research



Source: AIA, CD Research

## Segmental Revenues and Business Prospects

Over last 5 years, there has been a material shift in the segmental revenues from the cement sector to mining sector. While in FY11 cement sector contributed to about 60 % of the revenues and the rest 38% by mining followed by utilities, the trend reversed by FY14 and mining now contributes 60% of the revenues. We expect that going forward bulk of the revenue growth is expected to come from the mining space as well.

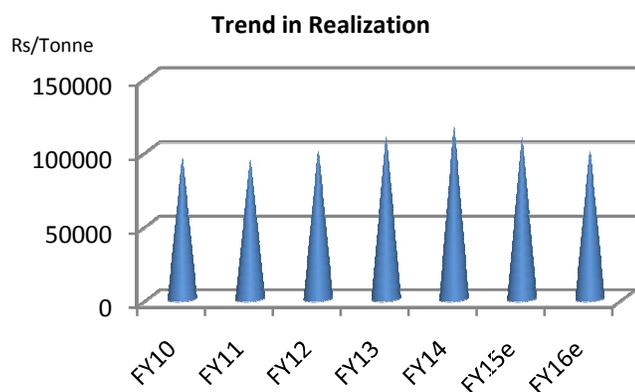
The company continues its pace of customer addition in this business segment. It today services different mineral ores like iron, copper, gold, platinum and zinc for blue chip mining customers in geographies like USA, Canada, Brazil, South Africa, Australia etc. The company relies heavily on its endeavor of replacing its products in place of the conventional forged parts or taking away some market share from its existing key competitor Magotteaux based out of Belgium.

## Risks and Concerns

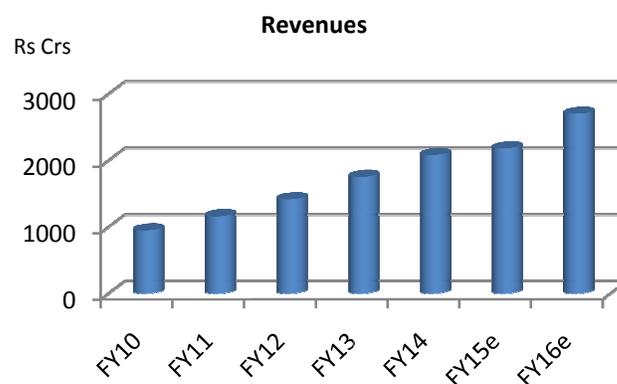
Slowdown in cement and mining is likely to impact growth. Since cement and mining sectors contribute a large part of AIA's revenues, any slowdown in these sectors will adversely impact company's prospects. Revenue growth stuttered to 6.5 per cent during the last recessionary period of FY09-11.

AIA's competitive advantage lies more on the services that it provides than the technology it offers. The durability and dependability of its products and the relationships it has cultivated over the years are its strengths. A bigger competitor Magotteaux (based out of Belgium) has not been able to breach those advantages and it also explains AIA's stronghold in the domestic market. But the company will continuously need to up-the-game for itself.

Given its large exports (around 72% of sales), AIA is exposed to foreign exchange rate fluctuation risk. The company is closely monitoring the currency movements, to mitigate the same. Another major area of risk is with regard to fluctuation in the raw material prices. However, the company has converted major portion of its contracts from fixed price to fluctuating price regime. Again, it is closely monitoring the price movements and is regularly buying the raw materials during low price cycles so as to average out the impact of price fluctuations.



Source: AIA, CD Research



Source: AIA, CD Research

## Financials

### Quarterly Results

	Q2FY15	Q2FY14	% chg.	H1FY15	H1FY14	% chg.
Revenue from Operations	572.40	491.75	16.4	1064.52	977.20	8.9
Other Income	20.07	4.69	327.5	42.90	8.70	393.3
<b>Total Income</b>	<b>592.46</b>	<b>496.45</b>	<b>19.3</b>	<b>1107.42</b>	<b>985.90</b>	<b>12.3</b>
Total Expenditure	424.57	379.01	12.0	789.42	760.54	3.8
<b>EBITDA (other income included)</b>	<b>167.90</b>	<b>117.43</b>	<b>43.0</b>	<b>317.99</b>	<b>225.36</b>	<b>41.1</b>
Interest	1.08	1.94	-44.5	1.38	3.52	-60.8
Depreciation	21.77	9.13	138.4	33.59	18.02	10.8
<b>PBT</b>	<b>145.05</b>	<b>106.36</b>	<b>36.4</b>	<b>283.02</b>	<b>203.82</b>	<b>38.9</b>
Tax	36.77	32.57	12.9	79.39	64.29	23.5
<b>Net Profit</b>	<b>108.28</b>	<b>73.79</b>	<b>46.7</b>	<b>203.63</b>	<b>139.53</b>	<b>45.9</b>
Minority Interest	0.21	0.18	0.0	0.42	0.38	0.0
Associate Profit	0.00	0.00	-	0.00	0.00	-
Net Profit after MI	108.07	73.61	46.8	203.21	139.15	46.0
Extraordinary Item	0.00	0.00	0.0	0.00	0.00	0.0
<b>Adjusted Net Profit</b>	<b>108.07</b>	<b>73.61</b>	<b>46.8</b>	<b>203.21</b>	<b>139.15</b>	<b>46.0</b>
EPS (F.V. 2)	11.46	7.80	46.8	21.54	14.75	46.0

### Income Statement

	FY12	FY13	FY14	FY15e	FY16e
<b>Revenue from Operations</b>	1416.67	1751.31	2080.08	2180.00	2700.00
<i>Growth (%)</i>	22.06	23.62	18.77	4.80	23.85
Other Income	13.27	21.32	33.41	85.80	45.0
<b>Total Income</b>	<b>1429.94</b>	<b>1772.63</b>	<b>2113.49</b>	<b>2265.80</b>	<b>2745.00</b>
Total Expenditure	1143.37	1441.07	1577.93	1653.73	2048.20
<b>EBITDA</b>	<b>286.57</b>	<b>331.56</b>	<b>535.56</b>	<b>612.07</b>	<b>696.80</b>
Interest	4.39	6.34	6.36	5.25	6.00
Depreciation	29.44	34.48	38.14	65.00	66.00
<b>PBT</b>	<b>252.73</b>	<b>290.73</b>	<b>491.05</b>	<b>541.82</b>	<b>624.80</b>
Tax	71.53	79.11	134.22	146.29	167.53
<b>Net Profit</b>	<b>181.20</b>	<b>211.62</b>	<b>356.83</b>	<b>395.53</b>	<b>457.26</b>
Associate Profit	0.00	0.00	0.00	0.00	0.0
Minority Interest	0.75	0.80	0.75	0.80	0.80
Net Profit after MI	180.46	210.82	356.08	394.73	456.46
Extraordinary Item	0.00	0.00	31.11	0.00	0.0
<b>Adjusted Net Profit</b>	<b>180.46</b>	<b>210.82</b>	<b>324.97</b>	<b>394.73</b>	<b>456.46</b>
EPS (F.V.2)	19.13	22.35	34.45	41.85	48.40

## Balance Sheet

	FY12	FY13	FY14	FY15e	FY16e
<b>SOURCES OF FUNDS</b>					
Share Capital	18.86	18.86	18.86	18.86	18.86
Reserves	1216.65	1398.94	1719.98	2114.70	2571.17
<b>Total Shareholder's Funds</b>	<b>1235.51</b>	<b>1417.80</b>	<b>1738.84</b>	<b>2133.56</b>	<b>2590.03</b>
Minority Interest	4.38	8.08	7.81	8.20	9.00
Long Term Borrowings	7.12	106.33	86.72	75.00	100.00
Long Term Provisions	4.30	5.90	6.46	6.66	6.77
<b>Total Liabilities</b>	<b>1251.33</b>	<b>1538.11</b>	<b>1839.83</b>	<b>2223.42</b>	<b>2705.80</b>
<b>APPLICATION OF FUNDS</b>					
<b>Fixed Assets</b>	<b>374.15</b>	<b>408.74</b>	<b>488.41</b>	<b>734.00</b>	<b>848.00</b>
Tangible Asset	339.79	360.50	365.15	530.00	673.00
Intangible Asset	16.28	16.67	23.50	24.00	25.00
Capital Work in progress	18.08	31.57	99.76	180.00	150.00
Long Term Loans and Advances	17.98	16.46	21.18	40.00	52.00
Non Current Investments	0.01	7.40	0.01	0.02	0.02
<b>Current Assets, Loans &amp; Advances</b>					
Inventory	301.09	402.98	350.77	399.00	450.00
Trade Receivables	371.73	340.07	431.48	452.21	560.07
Cash and Bank	149.64	279.14	219.76	76.00	265.51
Current Investments	140.26	186.70	529.09	623.00	620.00
Short term loans and advances	125.84	198.37	190.88	184.00	193.00
Other Current Assets	3.36	1.07	0.32	0.18	0.30
<b>Total CA &amp; LA</b>	<b>1091.91</b>	<b>1408.33</b>	<b>1722.31</b>	<b>1734.39</b>	<b>2088.88</b>
Current liabilities	172.83	218.30	252.26	142.10	138.11
Provisions	50.33	75.04	120.85	123.20	125.00
<b>Total Current Liabilities</b>	<b>223.15</b>	<b>293.34</b>	<b>373.11</b>	<b>265.30</b>	<b>263.11</b>
<b>Net Current Assets</b>	<b>1260.91</b>	<b>1547.59</b>	<b>1858.80</b>	<b>2243.11</b>	<b>2725.80</b>
Net Deferred Tax	-15.77	-13.21	-19.96	-21.00	-22.00
Other Assets (Net Of Liabilities)	6.19	3.73	0.98	1.50	2.00
<b>Total Assets</b>	<b>1251.33</b>	<b>1538.11</b>	<b>1839.83</b>	<b>2223.42</b>	<b>2705.80</b>

## Financial Ratios

	FY12	FY13	FY14	FY15e	FY16e
<b>Growth Ratios</b>					
Revenue (%)	20.6	24.0	19.2	7.2	21.1
EBIDTA (%)	4.6	15.7	61.5	14.3	13.8
Net Profit (%)	-1.6	16.8	54.1	21.5	15.6
EPS (%)	-1.6	16.8	54.1	21.5	15.6
<b>Margins</b>					
Operating Profit Margin (%)	20.2	18.9	25.3	27.0	25.4
Net Profit Margin (%)	12.6	11.9	16.8	17.4	16.6
<b>Return</b>					
ROCE (%)	21.9	21.1	29.2	26.7	25.4
ROE (%)	15.8	15.9	20.6	20.4	19.3
<b>Valuations</b>					
Market Cap / Sales	2.4	1.7	2.5	5.0	4.0
EV/EBIDTA	12.3	9.6	10.2	18.1	15.9
P / E	19.0	14.2	16.2	27.2	23.6
P / BV	2.8	2.1	3.0	5.1	4.2
<b>Other Ratios</b>					
Debt-Equity Ratio	0.1	0.1	0.1	0.1	0.1
Current Ratio	4.9	4.8	4.6	6.5	7.9
Interest Cover Ratio	58.5	46.9	78.2	104.2	105.1
<b>Turnover Ratios</b>					
Fixed Asset Turnover	4.7	5.1	5.8	5.1	4.6
Total Asset Turnover	1.0	1.1	1.0	1.0	1.0
Debtors Turnover	3.8	5.1	4.8	4.8	4.8
Inventory Turnover	4.7	4.3	5.9	5.5	6.0
Creditors Turnover	11.6	12.8	11.9	12.5	12.5
<b>WC Ratios</b>					
Debtor days	95.8	70.9	75.7	75.7	75.7
Inventory days	77.6	84.0	61.6	66.8	60.8
Creditor days	31.5	28.5	30.7	29.2	29.2
Cash conversion cycle	141.9	126.3	106.5	113.3	107.3

## Recommendation

AIA Engineering expects to further increase its market share in the mining space in FY16 by targeting increased business from existing customers as well as addition of new customers. In the cement market, the company will continue to focus on countries with high growth potential. In the utility market in India, there is a lot of optimism in relation to the planned commissioning of coal fired thermal power stations in the country and the company will continue to benefit from its strong presence in this market.

Within the cement space there are certain specific markets in Asia, Africa and South America that continue to add capacity and/or have increased capacity utilization. In China, AIA currently has a limited presence in form of a certain variety of products. China continues to remain a major market and the company will continue to invest resources and strategy for a bigger market share there. In India while new capacities were created the pace has distinctively slowed down. Nevertheless India's cement production has increased by around 8% to 10% in FY 2013-14 and on a matching basis the company has maintained a similar growth in the cement replacement market in India.

In the mining industry the company is predominantly focused on four major metal ore types viz. iron, platinum, gold and copper with emphasis on the replacement market. The growth prospects are primarily emanating out of the large annual replacement market in this industry. The addressable market opportunity relating to wear parts are estimated in the range of 1.5 to 2.0 million tons per annum. Out of this less than 20% requirement is converted into high chrome which implies the opportunity of conversion of the balance requirements into high chrome products. While the company began its foray into mining space with concentration on grinding media, it has now successfully developed mining liners also.

Even within grinding media, AIA has developed certain specialized applications. Now it is positioned as perhaps the only company in the world offering the complete range of mining high- chrome consumables including grinding media products as well as mining liners made out of chrome alloys. This positioning is unique to the company and augurs well for its consistent and steady growth in this industry over the medium to long term. AIA has steadily increased its market presence in the major mining groups across the globe with particularly strong focus on major mining centers like Australia, Africa, and North America etc.

The stock currently trades at 27.2x FY15e earnings and 23.6x FY16e earnings. We recommend 'Buy' with a target of Rs 1355 based on 28x FY16e earnings within next 9- 12 months.

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CD Equisearch Pvt. Ltd. 10, Vaswani Mansion, 2nd Floor, Dinshaw Wachha Road, Churchgate Mumbai – 400 020. Phone: +91(22) 2283 0652 / 0653, Fax +91 (22) 2283 2276, Email: [research@cdequi.com](mailto:research@cdequi.com) Website: [www.cdequi.com](http://www.cdequi.com).