

15 April 2019

AIA Engineering

Improving prospects, retaining a Buy

Customers added in the gold, copper and platinum sectors should lead to healthy volume growth for AIA Engineering. A call with an expert affirms stirring prospects for the company in the long term in mining-grinding media. The higher entry barrier (technological advances) and deeper penetration are likely to keep good volume growth at least for the next five years. We expect earnings to clock a 21% CAGR over FY18-21. Thus, we retain our Buy rating, with our target price of ₹2,218, at 27x FY21e earnings.

Key takeaways. AIA Engineering has deepened its penetration and brand recall over the last five years due to technological advancement and better servicing than peers. At present, there is a clear demarcation of market exposure with AIAE's greater concentration on mining juniors (miners with two or three mining operations in remote locations). Forthcoming prospects are likely to provide healthy demand growth for AIAE. Mining liners are also likely to offer strong prospects in coming years.

Profitability likely to improve. Higher entry barriers and technological superiority make the grinding media market less vulnerable to competitive pressure. Per our expert call, price pass-throughs are easy, but only once or twice in a year to avoid volatility. This strengthens our expectation of profitability improving from ₹28 a kg to ~₹32 due to commodity cost pass-through in the next two years.

Valuations. Volume growth and margin expansion would lead to a healthy, 15%, revenue CAGR over FY18-21. With traction from developing countries and expansion by major miners, growth prospects seem appealing. Increasing low-grade, higher-volume ores can further increase growth prospects by ~100,000-150,000 tonnes. We expect a 21% earnings CAGR over FY18-21.

Risks: Volatile currency movements, raw-material prices.

Key financials (YE Mar)	FY17	FY18	FY19e	FY20e	FY21e
Sales (₹ m)	22,460	24,451	30,614	34,886	37,194
Net profit (₹ m)	4,572	4,436	5,063	7,011	7,747
EPS (₹)	48.5	47.0	53.7	74.3	82.1
PE (x)	32.0	30.4	33.5	24.2	21.9
EV / EBITDA (x)	21.3	22.9	23.2	16.8	14.9
PBV (x)	5.4	4.5	5.0	4.3	3.7
RoE (%)	18.1	15.5	15.8	19.0	18.1
RoCE (%)	24.4	19.3	21.4	24.8	23.7
Dividend yield (%)	0.5	0.6	0.5	0.8	0.9
Net debt / equity (x)	-0.4	-0.4	-0.4	-0.4	-0.4

Source: Company, Anand Rathi Research

Anand Rathi Share and Stock Brokers Limited (hereinafter "ARSSBL") is a full-service brokerage and equities-research firm and the views expressed therein are solely of ARSSBL and not of the companies which have been covered in the Research Report. This report is intended for the sole use of the Recipient. Disclosures and analyst certifications are present in the Appendix.

Rating: **Buy**

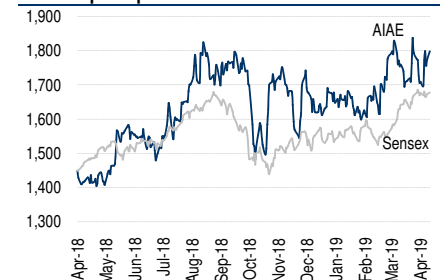
Target Price: ₹2,218

Share Price: ₹1,798

Key data	AIAE IN / AIAE.BO
52-week high / low	₹2026 / 1389
Sensex / Nifty	38767 / 11643
3-m average volume	\$0.7m
Market cap	₹170bn / \$2451m
Shares outstanding	94m

Shareholding pattern (%)	Dec'18	Sept'18	Jun'18
Promoters	58.5	58.5	58.5
- of which, Pledged	-	-	-
Free float	41.5	41.5	41.5
- Foreign institutions	21.6	22.5	23.0
- Domestic institutions	14.5	13.9	13.5
- Public	5.4	5.1	5.0

Relative price performance



Source: Bloomberg

Bhalchandra Shinde

Research Analyst

Riya Mehta

Research Associate

Quick Glance – Consolidated Financials and Valuations

Fig 1 – Income statement (₹ m)

Year-end: Mar	FY17	FY18	FY19e	FY20e	FY21e
Volumes (tonnes)	214,477	228,020	258,020	293,020	313,020
Net revenues	22,460	24,451	30,614	34,886	37,194
Growth (%)	7.0	8.9	25.2	14.0	6.6
Material cost	9,564	11,970	15,705	16,396	17,481
Employee, other expenses	6,550	7,124	8,114	9,244	9,544
EBITDA	6,346	5,357	6,796	9,246	10,169
EBITDA margins (%)	28.3	21.9	22.2	26.5	27.3
- Depreciation	725	656	752	915	1,145
Other income	1,044	1,218	1,277	1,364	1,643
Interest expenses	45	69	69	69	69
PBT	6,620	5,850	7,252	9,626	10,598
Effective tax rate (%)	30.9	24.2	30.2	27.2	26.9
+ Associates / (Minorities)	-	-	-	-	-
Net income	4,572	4,436	5,063	7,011	7,747
Adjusted income	4,572	4,436	5,063	7,011	7,747
WANS	94	94	94	94	94
FDEPS (₹ / sh)	48.5	47.0	53.7	74.3	82.1
EPS growth (%)	0.1	-3.0	14.1	38.5	10.5

Fig 3 – Cash-flow statement (₹ m)

Year-end: Mar	FY17	FY18	FY19e	FY20e	FY21e
PBT	6,620	5,850	7,252	9,626	10,598
+ Non-cash items	-269	-246	116	232	307
Oper. prof. before WC	6,352	5,604	7,368	9,857	10,905
- Incr. / (decr.) in WC	1,957	725	3,623	2,057	1,042
Others incl. taxes	1,665	2,316	2,162	2,467	2,769
Operating cash-flow	2,730	2,562	1,582	5,333	7,094
- Capex (tang. + intang.)	-751	-1,205	-2,207	-2,473	-2,473
Free cash-flow	1,979	1,358	-625	2,860	4,621
Acquisitions	-	-	-	-	-
- Div. (incl. buyback & taxes)	755	886	1,063	1,472	1,627
+ Equity raised	-1	21	-	-	-
+ Debt raised	-348	73	-	-	-
- Fin investments	-580	718	109	-79	3,199
- Misc. (CFI + CFF)	220	-324	-822	11	-11
Net cash-flow	1,236	172	-974	1,456	-194

Source: Company, Anand Rathi Research

Fig 5 – Price movement



Source: Bloomberg

Fig 2 – Balance sheet (₹ m)

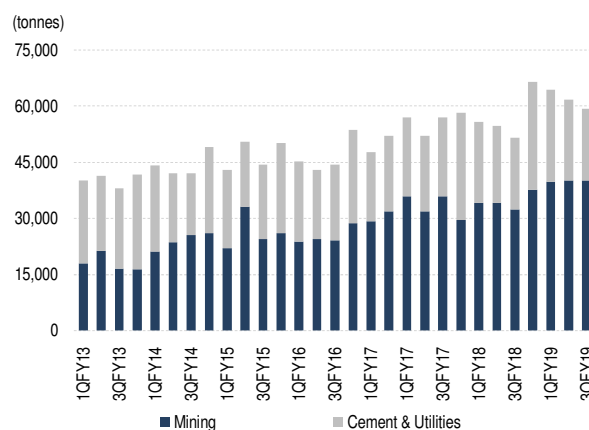
Year-end: Mar	FY17	FY18	FY19e	FY20e	FY21e
Share capital	189	189	189	189	189
Net worth	27,173	30,093	34,093	39,631	45,751
Debt	1,158	1,231	1,231	1,231	1,231
Minority interest	80	89	89	89	89
DTL / (Assets)	712	735	761	909	991
Capital employed	29,123	32,149	36,174	41,861	48,063
Net tangible assets	6,482	6,492	7,923	9,491	10,829
Net intangible assets	218	219	213	207	200
Goodwill	-	-	-	-	-
CWIP (tang. & intang.)	426	968	1,000	1,000	1,000
Investments (strategic)	10	9	9	9	9
Investments (financial)	9,586	10,910	11,652	12,249	16,263
Current assets (ex cash)	12,701	14,338	17,852	20,381	21,738
Cash	2,478	2,650	1,675	3,131	2,938
Current liabilities	2,778	3,437	4,149	4,607	4,914
Working capital	9,923	10,902	13,702	15,774	16,824
Capital deployed	29,123	32,149	36,174	41,861	48,063
Contingent liabilities	3,273	3,678	-	-	-

Fig 4 – Ratio analysis

Year-end: Mar	FY17	FY18	FY19e	FY20e	FY21e
P/E (x)	32.0	30.4	33.5	24.2	21.9
EV / EBITDA (x)	21.3	22.9	23.2	16.8	14.9
EV / Sales (x)	6.0	5.0	5.1	4.5	4.1
P/B (x)	5.4	4.5	5.0	4.3	3.7
RoE (%)	18.1	15.5	15.8	19.0	18.1
RoCE (%) - after tax	24.4	19.3	21.4	24.8	23.7
RoIC (%) - after tax	28.9	25.1	24.6	28.6	28.1
DPS (₹ / sh)	8.0	8.0	9.9	14.2	15.9
Dividend yield (%)	0.5	0.6	0.5	0.8	0.9
Dividend payout (%) - incl. DDT	16.5	20.0	21.0	21.0	21.0
Net debt / equity (x)	-0.4	-0.4	-0.4	-0.4	-0.4
Receivables (days)	80	90	88	88	88
Inventory (days)	87	83	83	83	83
Payables (days)	17	22	24	23	25
CFO : PAT %	59.7	57.8	31.3	76.1	91.6

Source: Company, Anand Rathi Research

Fig 6 – Mining vs. cement & aggregate volume trends



Source: Company

Expert Call Highlights

Quality over pricing

- The operational performance of grinding media depends on its hardness, level of customisation, corrosiveness, lower contamination, the right chemical composition and the amount of impurities.
- Price hikes are easily accepted once quality parameters have been ensured. Optimising the recovery and minimizing impurities are priorities for customers than low-cost procurement.
- At the entry point, usually 8% (mining majors) and 15% (mining juniors) discounts are given to compensate for structural shifts to high-chrome grinding media
- Anti-dumping duties are in place in Brazil and are expected in South-East Asia and Australia. However, no significant impact would be seen on demand for unique and critical products with high quality standards.
- Due to the main focus on effectiveness and efficiency, pricing and payment terms do not lead to changes in decision-making of customers.

Penetration of high-chrome grinding media

- In developed countries ~30% of the market has already seen a structural shift toward high-chrome grinding media; in developing markets this is still a new concept. The market is faced with challenges in developing countries due to supply-chain management issues. The expert we spoke to expects this space to show visible growth potential in the near future.
- In mining (for gold, platinum and copper), due to the abundance of higher-volume and lower-grade ores, the trend in developed countries such as North America and Australia is shifting toward high-chrome grinding media (as the focus is more on improvements in recovery).
- A higher percentage of recovery, an improved consumption rate (of ~30-40%), savings in energy cost and overall process optimisation are a few of the major benefits.
- In cement, there is a lower penetration of high-chrome grinding media.
- The shift from forged grinding media to high-chrome grinding media takes 12-18 months depending upon percentage of integration. If individual operations are shifted, 3-6 months are required. For a larger impact in switching over 1–1.5 years is the ideal time.
- AIA provides extensive trial runs, consultations and tests at various levels in order to induce customers to convert to high-chrome grinding media.
- Due to the focus on higher recovery levels (ie, from 92% to 97%), a deeper penetration of high-chrome grinding media is likely in Africa and the US.

Competitive context

- Magotteaux with its ~ 650,000-tonne capacity leads the market in higher grades and bulk orders. It caters to mining majors who can

afford its high-cost, premium products.

- Molycop deals in its niche variety of premium segment products. It has developed new products recently and is incurring capex in many regions to increase capacity. However, it operates in the higher premium segments, which are costlier than AIA.
- Both the companies have business models of catering to mining majors who work in cluster (like Anglo-American, Rio Tinto). AIA focuses more on mining juniors, who are in remote regions.
- For mining majors, it is quite rare to see changes in past suppliers.
- The quality of Chinese manufacturers, even with lower realisations, does not meet industry requirements.

Competitive Advantage of AIA

- With its ~340,000-tonne capacity, AIA has good customer relations, a design and development team, high standards and better servicing. It also caters to high quality quench and heat-resistant treatments.
- It is ranked as the best grinding media for stronger resistance to wear and abrasion by various Universities (Australia, Canada, South Africa). It is weaker than other competitors in corrosion optimisation.
- Its quality has significantly improved over time (the last 5-6 years) ie, improved efficiency and reduced contamination. It caters to customer requirements and achieves flexibility in hardness, chemical composition, reduction in levels of impurities, etc. For example, earlier, it manufactured products with less than 10% chrome; now in the Philippines, it has reached ~30-40% and in South Africa, up to 70-80%.
- It deals in lower grade bulk orders and has realisations lower than Magotteaux and Molycop.
- It has established itself in the Middle East, the UAE, South-East Asia, and the Philippines. However, it is underpenetrated in Africa (Central and the Ghana regions), Australia and USA, where other local manufacturers have gained market share.
- As per expert, AIA can easily increase volumes, by ~100,000-150,000 tonnes without much competitive pressure.
- Single-plant sourcing gives it a competitive advantage in the Middle East, Africa and Asia, while local bases are still advantageous in Australia and North America due to mining activities in cluster.
- Generally, the hardness required is 50-60%, sometimes 70-75%. AIA Engineering focuses on ~60% hardness.
- As per expert, vulnerability to volumes in AIA is high due to greater exposure to mining juniors. However, slower commodity cycle is expected to lead to better volumes at lower realizations.

Customer loyalty

- The customers loyalty depends on quality delivered.
- It is easy to change if the ore body is generic. But, if the ore body requires customisation it is difficult to switch because of specific metallurgy requirement.
- Mining majors tend to renew vendors (global supply agreements) every three years. However, it is very rare to see a change in past

suppliers. Mining juniors have annual contracts (to protect from volatility in prices).

- In critical parts of processing, premium products are used as long as they are reliable, achieve efficiency in power consumption and don't break down.

Mining Liners

- In 2017, AIA had ventured into mining liners. However, due to some constraints, it could not cater to high quality standards. Later, this was rectified and it offered discounts of up to ~50% to re-gain market share and prove its quality improvisation.

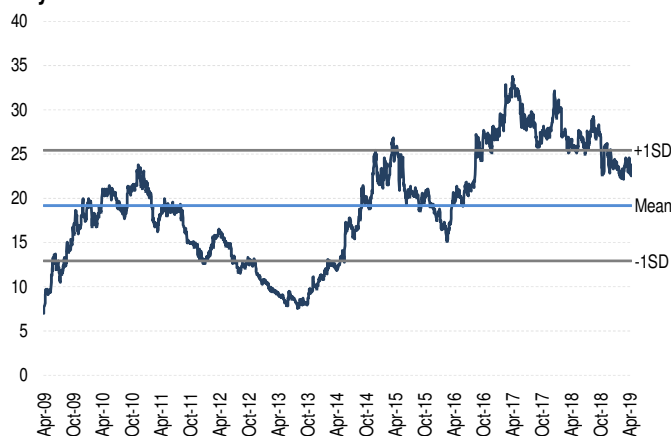
Other points

- Grinding media is ordered in a specific batch of ~1,000 tonnes, generally one tonne of steel is required for 20 tonnes of ore.
- Even in times of commodity pressures, the focus would be to maintain a higher level of recoveries to maintain profitability. This would encourage shifts toward high-chrome grinding media even in times of commodity pressures.
- Mining majors are likely to provide opportunities in new areas. It is not necessary to give contracts to the original vendor. This would increase AIA's chances.
- Catering to large mining companies is easier due to the involvement of consultants.

Valuation

A call with an expert affirms stirring prospects for the company in the long term in mining-grinding media. Volume growth and margin expansion would lead to a healthy, 15%, revenue CAGR over FY18-21. With traction from developing countries and expansion by major miners, growth prospects seem appealing. Increasing low-grade, higher-volume ores can further increase growth prospects by ~100,000-150,000 tonnes. We expect a 21% earnings CAGR over FY18-21. Hence, we maintain our Buy rating, with a target price of ₹2,218 (27x FY21e earnings).

Fig 7 – One-year-forward PER



Source: Company, Anand Rathi Research

Key risks

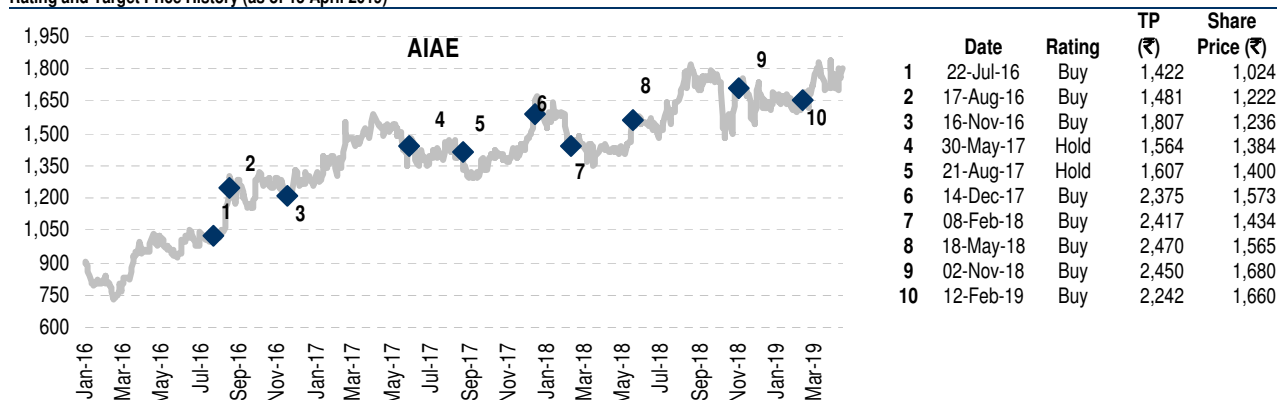
- Volatility in currency movements and in raw-material prices:** Of the company's raw-material requirement, 25% (by sales value) is imported. 75% of its sales are exports. Hence, a net 50% of sales is exposed to currency volatility. To alleviate the currency risk, the company hedges short-term quarterly sales.
- On higher returns, keener competition:** Higher return ratios in mining-grinding media would lead to keener competition and, hence, might cut into profitability.

Appendix

Analyst Certification

The views expressed in this Research Report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. The research analysts are bound by stringent internal regulations and also legal and statutory requirements of the Securities and Exchange Board of India (hereinafter "SEBI") and the analysts' compensation are completely delinked from all the other companies and/or entities of Anand Rathi, and have no bearing whatsoever on any recommendation that they have given in the Research Report.

Important Disclosures on subject companies Rating and Target Price History (as of 15 April 2019)



Anand Rathi Ratings Definitions

Analysts' ratings and the corresponding expected returns take into account our definitions of Large Caps (>US\$1bn) and Mid/Small Caps (<US\$1bn) as described in the Ratings Table below:

Ratings Guide (12 months)

	Buy	Hold	Sell
Large Caps (>US\$1bn)	>15%	5-15%	<5%
Mid/Small Caps (<US\$1bn)	>25%	5-25%	<5%

Research Disclaimer and Disclosure inter-alia as required under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) (Research Entity) is a subsidiary of Anand Rathi Financial Services Ltd. ARSSBL is a corporate trading and clearing member of Bombay Stock Exchange Ltd, National Stock Exchange of India Ltd. (NSEIL), Multi Stock Exchange of India Ltd (MCX-SX) and also depository participant with National Securities Depository Ltd (NSDL) and Central Depository Services Ltd. ARSSBL is engaged in the business of Stock Broking, Depository Participant and Mutual Fund distributor.

The research analysts, strategists, or research associates principally responsible for the preparation of Anand Rathi research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

General Disclaimer: This Research Report (hereinafter called "Report") is meant solely for use by the recipient and is not for circulation. This Report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. The recommendations, if any, made herein are expression of views and/or opinions and should not be deemed or construed to be neither advice for the purpose of purchase or sale of any security, derivatives or any other security through ARSSBL nor any solicitation or offering of any investment/trading opportunity on behalf of the issuer(s) of the respective security (ies) referred to herein. These information / opinions / views are not meant to serve as a professional investment guide for the readers. No action is solicited based upon the information provided herein. Recipients of this Report should rely on information/data arising out of their own investigations. Readers are advised to seek independent professional advice and arrive at an informed trading/investment decision before executing any trades or making any investments. This Report has been prepared on the basis of publicly available information, internally developed data and other sources believed by ARSSBL to be reliable. ARSSBL or its directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information / opinions / views. While due care has been taken to ensure that the disclosures and opinions given are fair and reasonable, none of the directors, employees, affiliates or representatives of ARSSBL shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way whatsoever from the information / opinions / views contained in this Report. The price and value of the investments referred to in this Report and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance. ARSSBL does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding taxation aspects of any potential investment.

Opinions expressed are our current opinions as of the date appearing on this Research only. We do not undertake to advise you as to any change of our views expressed in this Report. Research Report may differ between ARSSBL's RAs and/ or ARSSBL's associate companies on account of differences in research methodology, personal judgment and difference in time horizons for which recommendations are made. User should keep this risk in mind and not hold ARSSBL, its employees and associates responsible for any losses, damages of any type whatsoever.

ARSSBL and its associates or employees may; (a) from time to time, have long or short positions in, and buy or sell the investments in/ security of company (ies) mentioned herein or (b) be engaged in any other transaction involving such investments/ securities of company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) these and other activities of ARSSBL and its associates or employees may not be construed as potential conflict of interest with respect to any recommendation and related information and opinions. Without limiting any of the foregoing, in no event shall ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind.

Details of Associates of ARSSBL and Brief History of Disciplinary action by regulatory authorities & its associates are available on our website i.e. www.rathionline.com

Disclaimers in respect of jurisdiction: This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject ARSSBL to any registration or licensing requirement within such jurisdiction(s). No action has been or will be taken by ARSSBL in any jurisdiction (other than India), where any action for such purpose(s) is required. Accordingly, this Report shall not be possessed, circulated and/or distributed in any such country or jurisdiction unless such action is in compliance with all applicable laws and regulations of such country or jurisdiction. ARSSBL requires such recipient to inform himself about and to observe any restrictions at his own expense, without any liability to ARSSBL. Any dispute arising out of this Report shall be subject to the exclusive jurisdiction of the Courts in India.

Statements on ownership and material conflicts of interest, compensation - ARSSBL and Associates

Answers to the Best of the knowledge and belief of ARSSBL/ its Associates/ Research Analyst who is preparing this report

Research analyst or research entity or his associate or his relative has any financial interest in the subject company and the nature of such financial interest.	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company	No
ARSSBL/its Associates/ Research Analyst/ his Relative have any other material conflict of interest at the time of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have managed or co-managed public offering of securities for the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation or other benefits from the subject company or third party in connection with the research report	No
ARSSBL/its Associates/ Research Analyst/ his Relative have served as an officer, director or employee of the subject company.	No

Other Disclosures pertaining to distribution of research in the United States of America

This research report is a product of ARSSBL, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by ARSSBL only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, ARSSBL has entered into an agreement with a U.S. registered broker-dealer, Cabrera Capital Markets. ("Cabrera"). Transactions in securities discussed in this research report should be effected through Cabrera or another U.S. registered broker dealer.

1. ARSSBL or its Affiliates may or may not have been beneficial owners of the securities mentioned in this report.
2. ARSSBL or its affiliates may have or not managed or co-managed a public offering of the securities mentioned in the report in the past 12 months.
3. ARSSBL or its affiliates may have or not received compensation for investment banking services from the issuer of these securities in the past 12 months and do not expect to receive compensation for investment banking services from the issuer of these securities within the next three months.
4. However, one or more of ARSSBL or its Affiliates may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon, either on their own account or on behalf of their clients.
5. As of the publication of this report, ARSSBL does not make a market in the subject securities.
6. ARSSBL or its Affiliates may or may not, to the extent permitted by law, act upon or use the above material or the conclusions stated above, or the research or analysis on which they are based before the material is published to recipients and from time to time, provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this report.

© 2019. This report is strictly confidential and is being furnished to you solely for your information. All material presented in this report, unless specifically indicated otherwise, is under copyright to ARSSBL. None of the material, its content, or any copy of such material or content, may be altered in any way, transmitted, copied or reproduced (in whole or in part) or redistributed in any form to any other party, without the prior express written permission of ARSSBL. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of ARSSBL or its affiliates, unless specifically mentioned otherwise.

Additional information on recommended securities/instruments is available on request.

ARSSBL registered address: 4th Floor, Silver Metropolis, Jaicoach Compound, Opposite Bimbisar Nagar, Goregaon (East), Mumbai - 400 063.
Tel No: +91 22 4001 3700 | Fax No: +91 22 4001 3770 | CIN: U67120MH1991PLC064106.