

Systematix

Institutional Equities

APL Apollo Tubes

18 December, 2017

Long-term growth prospects intact, maintain Buy

We recently met APL Apollo Tubes' (APAT) management and are reaffirmed with our views on the company's long-term growth prospects and strategic capacity expansion plan. APAT targets to post 25%+ volume growth for the next three years on the back of 1) scheduled capacity expansion (from 1.3mtpa to 2.5mtpa by FY20), 2) shift in capacity to organised players (especially to APAT) led by GST, expressway bill & APAT's aggressive capex plan and 3) increase in revenue from exports market and OEMs (solar industry and PEB), from current 10% to 30% by FY20e, led by the introduction of DFT. Quick ramp-up of recently installed capacity at Raipur (40% capacity utilization) and roll-over of additional DFT line (four to eight lines by FY18) to further improve margins and reduce logistic costs, thereby translating into EBITDA/t of Rs3,514, from Rs3,120/t (in 1HFY18). Post our interaction with the management and noting APAT's robust track record historically, we remain positive on the stock, with a **Buy** rating and a revised target price of Rs2,360.

20% volume CAGR expected during FY18-20e

APAT's capacity and volume clocked a CAGR of 21% and 26% respectively during FY13-17, compared to an industry growth rate of ~9%, thus leading peers like Surya Roshni, Tata Pipes, Rama Steel among others. Management targets to post volumes of ~25%+ CAGR going forward. Currently, APAT holds a domestic market share of ~14%, which management expects to increase to 20%, once the planned capacity expansion comes on stream. Nearly 50% of the market is currently catered by the unorganised segment, and post GST's transition, management expects to increase its market share. Due to timely commissioning of Raipur facility (logistic cost savings), aggressive capacity expansion (24% CAGR over FY17-20e) and installation of DFT lines, we expect APAT's volumes to post 20% CAGR during FY17-20e.

DFT to expand addressable market with better profitability

APAT has commercialised four DFT lines at Hosur and Raipur plants, with plans to install another four lines at Murbad, Secunderabad and Hosur plant by 4QFY18. With the installation of DFT lines, it can cater to many new applications, with an ability to produce different sizes (up to 300*300 dia). With DFT, an entire new export and OEM market has opened to the company, where profitability is higher. Current share from export and OEM is ~10% and is expected to increase to 30% by FY20e. Overall, DFT has expanded the total addressable market with better OPM; EBITDA/t for FY17 was at Rs3,313/t and is expected to increase by 7% to Rs3,514/t by FY20e-end. Until FY20, APAT targets to capture market share by expanding aggressively, post which it will focus on increasing profitability further.

Network expansion and aggressive branding exercise to increase market share from 14% to 20% by FY20e

The government's focus on infrastructure and rapid development of smart cities is expected to aid ERW pipes demand to increase more than 10% for the next four to five years. Being the leader, APAT has distinct advantages of scale, retail network and strong brand. With a network of >600 dealers and strong brand recall, APAT governs 14% market share in Indian ERW pipe industry. Currently, it has 29 warehouses spread across India, which is expected to increase to 100 by FY20e. With an increase in dealer reach, we expect APAT's market share to rise to 20% by FY20e.

Valuation

We estimate APAT's total revenue/PAT to post a CAGR of 21/31% respectively over FY18e-20e, with healthy return ratios and positive FCF. We believe the stock deserves a premium valuation of 10x 1HFY20e EV/EBITDA, and maintain a **Buy** rating with a revised target price of Rs2,360.

COMPANY UPDATE

Sector: Steel Pipes Rating: Buy
CMP: Rs1,890 Target Price: Rs2,360

Stock Info

Stock Info	
Sensex/Nifty	33,601/ 10,388
Bloomberg	APAT IN
Equity shares (mn)	23.4
52-wk High/Low	2,027/ 852
Face value	Rs10
M-Cap	Rs46.4bn/ \$714mn
3-m Avg volume	\$0.78mn

Financial Snanshot (Rs mn)

Financial Snapshot (Rs mn)						
Y/E Mar	FY18e	FY19e	FY20e			
Sales	53,372	63,628	74,488			
EBITDA	3,762	4,617	5,640			
PAT	1,609	2,154	2,818			
EPS (Rs)	68.7	91.9	120.2			
PE (x)	31.6	23.6	17.9			
EV/EBITDA (x)	13.5	11.0	8.9			
P/B (x)	5.4	4.5	3.7			
RoE (%)	19.1	21.4	23.1			
RoCE (%)	21.9	24.0	26.5			

Shareholding pattern (%)

	Sep '17	Jun '17	Mar '17
Promoter	37.5	37.5	37.5
- Pledged	-	-	-
FII	-	-	0.4
DII	14.5	15.2	15.4
Others	48.0	47.3	46.7

Stock Performance (1-year)



Ankit Gor

ankitgor@systematixshares.com +91 22 6704 8028

Prajwal Gote

prajwalgote@systematixshares.com +91 22 6704 8025

FINANCIALS

Profit & Loss Statement

Tront a 2000 Stateme					
YE: Mar (Rs mn)	FY16	FY17	FY18e	FY19e	FY20e
Net revenues	42,136	45,450	53,372	63,628	74,488
Revenue growth (%)	34.3	7.9	17.4	19.2	17.1
- Op. expenses	39,319	42,206	49,610	59,011	68,848
EBIDTA	2,817	3,244	3,762	4,617	5,640
EBITDA margins (%)	6.7	7.1	7.0	7.3	7.6
- Interest expenses	695	683	715	715	715
- Depreciation	341	512	608	772	818
+ Other income	102	38	38	38	38
- Tax	624	627	867	1,013	1,326
Effective tax rate (%)	38.3	30.1	35.0	32.0	32.0
Reported PAT	1,006	1,459	1,609	2,154	2,818
+/- Extraordinary items	(253)	-	-	-	-
+/- Minority interest	-	-	-	-	-
Adjusted PAT	1,260	1,459	1,609	2,154	2,818
EPS (Rs/share)	43	62	69	92	120
EPS growth	58.0	45.0	10.3	33.8	30.9

Source: Company, Systematix Institutional Research

Balance Sheet

FY16	FY17	FY18e	FY19e	FY20e
234	236	236	236	236
5,441	6,967	8,190	9,827	11,969
5,675	7,203	8,426	10,063	12,205
6,505	5,962	5,962	5,962	5,962
859	905	905	905	905
13,039	14,070	15,293	16,930	19,072
6,553	7,901	8,292	10,320	10,203
on 429	670	670	670	670
131	127	127	127	127
-	-	-	-	-
5,914	5,356	5,886	5,468	7,298
14	17	317	343	771
13,039	14,070	15,293	16,930	19,071
6,491	5,945	5,645	5,619	5,190
51	43	40	31	36
242	307	359	429	521
	234 5,441 5,675 6,505 859 13,039 6,553 on 429 131 - 5,914 14 13,039 6,491 51	234 236 5,441 6,967 5,675 7,203 6,505 5,962 859 905 13,039 14,070 6,553 7,901 on 429 670 131 127 - 5,914 5,356 14 17 13,039 14,070 6,491 5,945 51 43	234 236 236 5,441 6,967 8,190 5,675 7,203 8,426 6,505 5,962 5,962 859 905 905 13,039 14,070 15,293 6,553 7,901 8,292 on 429 670 670 131 127 127 5,914 5,356 5,886 14 17 317 13,039 14,070 15,293 6,491 5,945 5,645 51 43 40	234 236 236 236 5,441 6,967 8,190 9,827 5,675 7,203 8,426 10,063 6,505 5,962 5,962 5,962 859 905 905 905 13,039 14,070 15,293 16,930 6,553 7,901 8,292 10,320 on 429 670 670 670 131 127 127 127 - - - - 5,914 5,356 5,886 5,468 14 17 317 343 13,039 14,070 15,293 16,930 6,491 5,945 5,645 5,619 51 43 40 31

Source: Company, Systematix Institutional Research

Cash Flow

YE: Mar (Rs mn)	FY16	FY17	FY18e	FY19e	FY20e
PBT	1,630	2,086	2,476	3,167	4,145
+ Non cash items	1,250	1,254	1,324	1,487	1,533
Cash profit	2,880	3,340	3,799	4,655	5,678
- Incr/(Decr) in WC	-2,335	695	-530	418	-1,830
Operating cash flow	113	3,384	2,402	4,058	2,520
- Capex	-1,108	-1,651	-1,000	-2,800	-700
Free cash flow	-995	1,733	1,402	1,258	1,820
- Dividend	-169	-281	-386	-517	-676
+ Equity raised	0	69	0	0	0
+ Debt raised	1,673	-617	-0	0	0
- Investments	181	15	0	0	0
- Minority Interest	0	0	0	0	0
- Misc Items	-695	-688	-715	-715	-715
Net cash flow	-5	230	300	26	428
+ Opening cash	15	10	17	317	343
Closing cash	10	15	317	343	771

Source: Company, Systematix Institutional Research

Ratios

YE: Mar	FY16	FY17	FY18e	FY19e	FY20e
P/E(x)	17.5	22.6	31.6	23.6	17.9
P/CEPS(x)	9.74	13.73	20.39	15.45	12.44
Mcap/Sales	0.4	0.6	0.8	0.7	0.6
EV/EBIDTA(x)	7.8	10.2	13.5	11.0	8.9
RoE(%)	22.2	20.3	19.1	21.4	23.1
RoCE(%)	20.3	20.7	21.9	24.0	26.5
Fixed Asset Turnover (x)	6.4	5.8	6.4	6.2	7.3
Dividend Yield (%)	1.1	1.0	0.9	1.1	1.5
Dividend Payout (%)	23.3	19.3	20.0	20.0	20.0
Debt/Equity(x)	1.1	0.8	0.7	0.6	0.5
Debtors (days)	15	19	19	18	17
Revenue Growth (%)	34.3	7.9	17.4	19.2	17.1
PAT Growth (%)	58.0	45.0	10.3	33.8	30.9
EBIDTA Growth (%)	55.1	15.1	16.0	22.7	22.2
EPS Growth (%)	58.0	45.0	10.3	33.8	30.9
P/BV (x)	2.7	3.8	5.4	4.5	3.7
C C			,		

APL Apollo Tubes 18 December, 2017

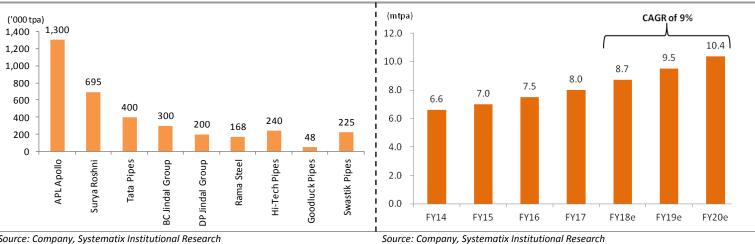
Largest ERW pipe-maker, scale efficiencies to boost profitability

ERW industry clocking 9% CAGR...

Electric Resistance Welded (ERW) pipe industry is witnessing a surge in demand from infrastructure, power and fabrication industries, which is in addition to the demand from traditional usage in water and gas transportation. ERW pipes, a 8mntpa industry, is moving from the unorganised to organised format, as smaller regional players are lagging larger ones in terms of scale, products portfolio and multiple location manufacturing facilities. Market is clocking a CAGR of 9% and is also expected to continue this momentum going forward. The industry is highly fragmented, with few large players holding ~50% of the share. There are over 1,000 SMEs in the unorganised segment operating with smaller capacities and mainly catering to regions within 100kms from their factories. Players have been concentrated in North India, in and around NCR, from where they used to supply to the entire country.

Chart 1: Indias's largest ERW pipe manufacturer

Chart 2: Industry volume growing at CAGR of 9%

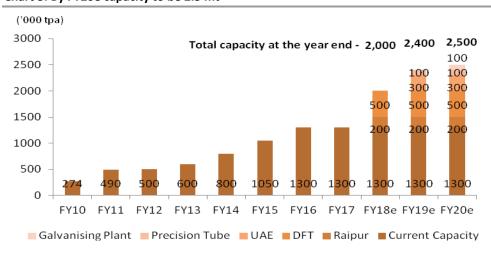


Source: Company, Systematix Institutional Research

...APAT's volumes grew at 26% CAGR during past 5 years...

APAT is the largest ERW pipe manufacturer in India, with 1.3mtpa operational and almost 0.7mtpa under-construction. Company's capacity and volumes have posted a CAGR of 21% and 26% respectively in the last five years, compared to an industry growth rate of 8-9%. Without any inorganic expansion, APAT has grown at a significant rate historically. Manufacturing plants near major demand centres, strong distribution and retail network pan India helped the company to sustain a high growth historically.

Chart 3: By FY20e capacity to be 2.5 mt

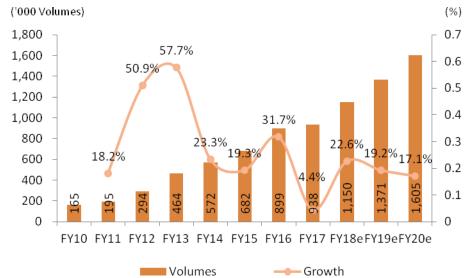




...APAT's volumes expected to grow at 20% CAGR during FY17-20e.

APAT has embarked on a massive capacity expansion plan, with an aim to double capacity in five years to ~25lakh tpa, from the current 13lakh tpa, entailing an expenditure of Rs5bn. The additional capex would be used to set up a new plant in Raipur with 3 lakh tpa capacity, a new plant in the UAE with a total capacity of 3 lakh TPA and a green field unit to manufacture precision tubes for automotive applications in Bangalore, with a capacity of 1 lakh TPA. Company also plans to set up an in-line galvanizing plant of 1 lakh TPA capacity in Bangalore. However, the capex plan's highlight is the addition of almost 5 lakh tpa capacity through Direct Forming Technology (DFT). Company's Raipur plant has come on stream and is operating at optimum capacity utilisation. Regarding DFT, nearly four lines have been installed with an aim to install the rest before FY18-end. Backed by recent achievements, we expect company's volumes to post 20% CAGR during FY17-20e.

Chart 4: Volume to grow at CAGR of 20% during FY17-FY20e



Commands premium due to scale, strong brand & widespread network

Despite operating in a fragmented and competitive market of steel tubes and pipes, APAT's products command a premium versus competitors. This is primarily due to a combination of factors like being the pioneer in adapting latest manufacturing technology, strong distribution and warehouse network spread across India coupled with a solid brand.

1) Economies of scale

By not tapping the market of ERW peers like Surya Roshni, Hi-Tech Pipes, Rama Steel and others, APAT expanded aggressively and took over the market share of inefficient and unorganised players. During this period, other organised players were highly comfortable working within their areas of expertise, while APAT gained market share and created a brand name in commoditized industry. In fact, APAT was the first player to replace wood and metal pipes in many applications, and introduce ERW pipes for PEB housing and other infrastructural uses. Hence, APAT is now the largest ERW pipe manufacturer, with the highest EBITDA/tn.

(EBITDA/t)
3,500
3,313
3,000 2,500 2,000 1,500 1,000 500 0

APL Apollo Surva Roshni Rama Steel

Chart 5: Most efficient & profitable ERW pipe player in India

Source: Company, Systematix Institutional Research

The capacity addition spree has come along with an efficient capacity utilisation of over 70% through the period. Despite adding capacities regularly, APAT ensured to boost volumes in tandem to reach an optimum capacity utilisation level in a short span of over three years. With the current mega expansion underway, we expect the company to portray a similar trend with respect to volume pick-up in tandem with capacity expansion. We estimate volumes to post a CAGR of 20% during FY17-20e.

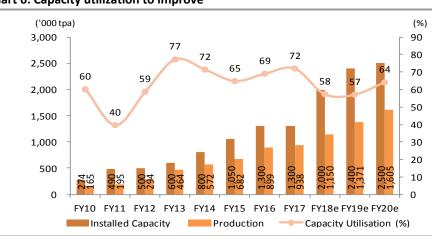


Chart 6: Capacity utilization to improve



2) Strong focus on brand-building

To create an impact on its brand 'APL APOLLO', company has chalked out a multipronged marketing strategy, which includes mass media advertising, experiential marketing techniques, web-based marketing initiatives and community building activities. This year, APAT's major thrust would be on differential marketing mode to popularise its new brand image. In sync with this strategy, company launched a new brand, 'Apollo Coastguard', to tap the growing consumption of galvanized steel tubes in coastal regions. Management highlighted that India's coastal market is witnessing a significant growth in the consumption of galvanized steel pipes, which is primarily used for roofing structures to provide shelter from rains and sunlight.

During the previous quarter, company soft-launched its 'Apollo Fabritech' brand to sell pipes manufactured through DFT medium. Management noted that initial responses from customers are significant and the company is getting repeat orders as well. APAT's hollow section is available in a wide products range. Also, beyond the standard requirements of industry, the company's production units are equipped to customise and deliver any special requirement in terms of sizes, quantity or surface finish as per customers' need. This is APAT's USP to command a premium in the market.

Table 1: One of the few ERW pipe manufacturers to create brand

Brand	Details	
Apollo Coastguard APOLLOI COASTGARD COASTGARD	Manufacturing of galvanized steel tubes for coastal region Specification Range includes products from 1/2" – 8" inchs outer diameter	
Apollo Fabritech APOLLO FABRITECH ANY SIZE TECHNOLOGY	Manufacturing of hollow pipes through DFT route Specification Size - 43 mm x 43 mm 55 mm x 20 mm 75 mm x 70 mm 198 mm x 170 mm 104 mm x 104 mm 195 mm x 195 mm	

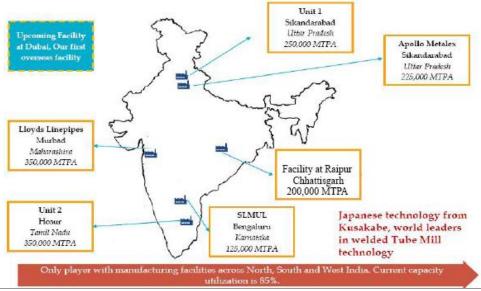
Source: Company, Systematix Institutional Research

Management underscored a strategic "branding campaign" to strengthen the roots of its brands, with an estimated capex of "Rs250-300mn. We believe the mega exercise will aid to outpace competition from unorganised players, thereby helping APAT to reach a market share of "20%, from the current 14%.

3) Shorter delivery time led by pan India manufacturing and distribution network

Company has created manufacturing capacities near major demand centres across India. Moreover, through its industry-leading distributor and warehouse network of >600 and 29 respectively, APAT is able to offer >400 products to endpoint customers in a shortest span of time (average 10 days). This also saves logistic cost, as it is $^{\sim}4\%$ of the product cost. Through DFT, it expects to increase the products variety from the current basket, including sizes that were not easily available earlier to end-point customers.

Chart 7: Manufacturing facilities spread across India



Source: Company, Systematix Institutional Research

Chart 8: B2C - supply chain

Direct, 20%

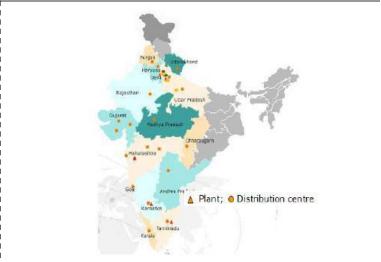
State wise Wholesalers

Distributors
, 80%

Distributors
Distributors

Retailers

Chart 9: Distribution network



Source: Company, Systematix Institutional Research Source: Company, Systematix Institutional Research

Value addition through DFT, to pave the way for export & OEM market

About DFT: After establishing in the competitive yet fragmented market of steel tubes and pipes, company forayed into the next phase of growth, led by installation of automated and globally accepted technology to manufacture hollow pipes through the DFT route. Unlike traditional technology, where round pipes were formed first and then converted to square or rectangular, DFT technology enables direct formation of hollow pipes of various size and shapes, thereby leading to cost saving. Hollow sections are formed directly through high-speed welding.

Chart 8: Direct Forming Technology



Source: Company, Systematix Institutional Research

Benefits of DFT: It will help in material saving of ~3%, as the new product will have sharper edges and material will not reside in corners, as it happens with the traditional technology -- sections are converted from round tubes. Company will also be able to produce pipes in smaller batches and take customised orders with higher margin. This brings certain advantages: the line can produce even smaller order sizes of 10-20 tonnes unlike traditional technology wherein larger batches of 400-500 tonnes had to be run before any change could be done. Also, products will be made to precision, with sharper edges and no bulges at ends. It will also help in the production of large-size tubes (200mmx200mm or 300mmx300mm), which are required by various equipment or bus body manufacturers and are largely imported currently.

DFT is strongly preferred in advanced countries due to economies of scale associated with its implementation, mainly reduction of roll-over time, less storage space and production of pipes with greater accuracy in terms of breadth and height. Pipes manufactured through DFT route command a premium versus conventional pipes and find international market due to the wide acceptance. APAT has recently commissioned four lines of DFT and plans to install further four lines by 4QFY18. It is operating at a run-rate of 8,000-10,000tpm and has plans to increase it to 15,000-20,000tpm going forward.

Access to global markets and OEM: DFT opened the door for the company to overseas market due to its acceptance among advanced countries and OEMs. In the OEM category, it is catering to companies operating in solar and PEB space. Management noted that DFT has started to gain momentum, with encouraging response from customers due to its superior quality. Currently, company is selling this product at par to its conventional product with a strategy to increase the price going forward, post acceptability among customers. In a short time span, APAT fetched nearly 8% of the consolidated revenue from overseas market and sales to OEM grew at 107% (due to a lower base). Management expects this to grow multifold, led by inherent advantages listed above.

Our view: Management noted it is witnessing EBITDA/tn exceeding >Rs4,000/tn for DFT-based products v/s ~Rs3,321/tn currently for customised products, while EBITDA/tn for standardised products remains same. We believe these levels of EBITDA/tn are substantially higher both on absolute and relative basis for a company operating in the ERW segment. Thus, we are not revising the EBITDA/tn estimate as of now but will revisit the numbers in FY19, once the entire DFT comes on-stream.

Table 2: Quarterly financial statement

Particulars	2QFY18	2QFY17	yoy	1QFY18	qoq
Income Statement	2QFY18	2QFY17	YoY	1QFY17	QoQ
Net Sales	13,454	9,555	41%	11,556	16%
Operating Expenses	12,441	8,733	42%	10,769	16%
EBITDA	1,013	822	23%	787	29%
Depreciation	124	168	-27%	122	1%
EBIT	889	653	36%	665	34%
Interest	208	160	30%	177	17%
Other Income	-55	21		95	
PBT	626	514	22%	584	7%
Taxes	219	177	24%	195	13%
Reported PAT	407	337	21%	389	5%
PAT Margin	3.0	3.5	(0.5)bps	3.4	(0.3)bps
EBITDA Margin	7.5	8.6	(1.1)bps	6.8	0.7bps

Source: Company, Systematix Institutional Research

Table 3: Volumes

Particulars	2QFY18	2QFY17	yoy	1QFY18	qoq
Black Pipes	1,94,036	1,59,904	21%	1,76,187	10%
GI Pipes	29,020	28,940	0%	29,066	0%
GP pipes	59,753	46,588	28%	59,902	0%
Coils & Others	14,050	10,458	34%	13,016	8%
Total	2,96,859	2,45,890	21%	2,78,171	7%

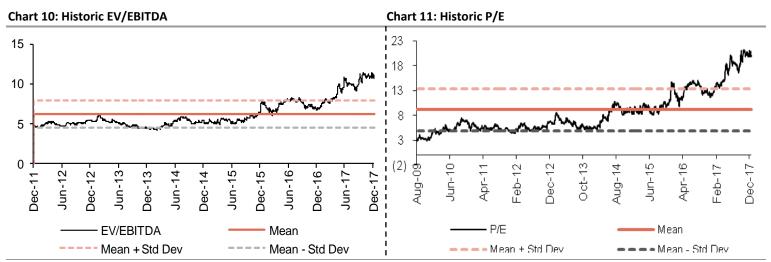
Source: Company, Systematix Institutional Research

2QFY18 results highlight

APAT reported good numbers for 2QFY18, wherein revenue increased by 41/16% on a yoy/qoq basis to Rs13,454mn, mainly led by a combination of higher volumes (up by 20% yoy), realisation (up by 16% yoy) and new clients-win in the OEM segment. Total volumes for the quarter stood at 296,859mt, an increase of 20% on a yoy basis, due to higher sales of hollow & pre-galvanised tubes (up 22/30% yoy). EBITDA/t for 2Q rose to Rs3,410/t, from Rs2,829/t in 1QFY18. We expect APAT's growth to continue aided by a volume pick-up in the recently-commissioned Raipur plant coupled with DFT installation.

Valuation and view – deserves a premium valuation

We expect APAT to deserve premium valuation as compared to its peers basically led by 1) market leading position in the overall fragmented market of ERW pipes and expanding capacity at 24% CAGR during FY17-20e 2) most efficient players in the market with EBITDA/t exceeding Rs3000 historically and is expected to further sincrease led by various developments highlighted above in the report 3) pioneer in adopting latest manufacturing technology and 4) pan India distribution reach. We apply 10x multiple on 1HFY20e EBITDA to arrive at a target price of Rs2,360.



Source: Company, Systematix Institutional Research

Institutional Equities Team

Nikhil Khandelwal	Managing Director	+91-22-6704 8001	nikhil@systematixgroup.in
Equity Research			
Analysts	Industry Sectors	Desk-Phone	E-mail
Jaspreet Singh Arora - Head of Research	Cement, Building Material, Construction	+91-22-6704 8062	jaspreet@systematixshares.com
Priya Ranjan	Auto & Auto Ancs	+91-22-6704 8067	priyaranjan@systematixshares.com
Sohail Halai	BFSI	+91-22-6704 8066	sohailhalai@systematixshares.com
Himanshu Nayyar	Consumer, Agri, Logistics	+91-22-6704 8064	himanshunayyar@systematixshares.com
T. Ranvir Singh	Pharma, Healthcare, Agrochem	+91-22-6704 8016	ranvirsingh@systematixshares.com
Ankit Gor	Mid Caps	+91-22-6704 8028	ankitgor@systematixshares.com
Divyata Dalal	Construction, Infra	+91-22-6704 8059	divyatadalal@systematixshares.com
Poorvi Khandelwal	Consumer	+91-22-6704 8046	poorvikhandelwal@systematixshares.com
Naushad Chaudhary	Mid Caps	+91-22-6704 8036	naushadchaudhary@systematixshares.com
Prajwal Gote	Mid Caps	+91-22-6704 8025	prajwalgote@systematixshares.com
Mitesh Nandlaskar	Construction, Infra	+91-22-6704 8128	miteshnandlaskar@systematixshares.com
Apoorva Patil	Auto & Auto Ancs	+91-22-6704 8068	apoorvapatil@systematixshares.com
Pragnesh Jain	Technical Research	+91-22-6704 8024	pragneshjain@systematixshares.com
Equity Sales & Trading			
Name		Desk-Phone	E-mail
Pankaj Karde	Head - Institutional Sales & Sales Trading	+91-22-6704 8061	pankajkarde@systematixshares.com
Shraddha Shrikhande	Sales	+91-22-6704 8085	shraddha@systematixshares.com
Dinesh Bajaj	Sales	+91-22-6704 8065	dineshbajaj@systematixshares.com
Jigar Kamdar	Sales	+91-22-6704 8060	jigarkamdar@systematixshares.com
Venkat Ramesh Babu	Sales	+91-22-6704 8090	venkat@systematixshares.com
Sandesh Sawant	Sales	+91-22-6704 8045	sandes h saw ant @systematix shares. com
Harsh Biyani	Derivatives	+91-22-6704 8097	harshbiyani@systematixshares.com
Bhavik Shah	Sales Trading	+91-22-6704 8053	bhavikshah@systematixshares.com
Vinod Bhuwad	Sales Trading	+91-22-6704 8051	vinodbhuwad@systematixshares.com
Amit Sawant	Dealer	+91-22-6704 8054	amitsawant@systematixshares.com
Paras Shah	Dealer	+91-22-6704 8047	parasshah@systematixshares.com
Sachin Malusare	Sr. Manager	+91-22-6704 8055	sach in malus are @systematix shares. com
Sugandha Rane	Assistant Manager	+91-22-6704 8056	sugandha@systematixshares.com
Pramod Gauda	Assistant Manager	+91-22-6704 8049	pramodgauda@systematixshares.com
Corporate Access			
Jyoti Mishra	Assistant Vice President	+91-22-6704 8091	jyotimishra@systematixshares.com
Mehek Talreja	Manager	+91-22-6704 8078	me hek bisht@systematix shares.com
Production			
Ramesh Nair	Editor	+91-22-6704 8071	rameshnair@systematixshares.com

DISCLOSURES/ APPENDIX

I. ANALYST CERTIFICATION

I, Ankit Gor, Prajwal Gote; hereby certify (1) that the views expressed in this research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this research report, (2) No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report by Systematix Shares & Stocks (I) Limited or its Group/associates companies. (3) has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Disclosure of Interest Statement	Update
Analyst holding in the stock	No
Served as an officer, director or employee	No

II. ISSUER SPECIFIC REGULATORY DISCLOSURES, Unless specifically mentioned in Point No. 9 below:

- 1. The Research Analyst(s), Systematix Shares & Stocks(I) Limited (SSSIL), Associate of Analyst or his relative does not have any financial interest in the company(ies) covered in this report.
- 2. The Research Analyst, SSSIL or its associates or relatives of the Research Analyst affiliates collectively do not hold more than 1% of the securities of the company (ies) covered in this report as of the end of the month immediately preceding the distribution of the research report.
- 3. The Research Analyst, his associate, his relative and SSSIL do not have any other material conflict of interest at the time of publication of this research report.
- 4. The Research Analyst, SSSIL and its associates have not received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in this report, in the past twelve months.
- 5. The Research Analyst, SSSIL or its associates have not managed or co-managed in the previous twelve months, a private or public offering of securities for the company (ies) covered in this report.
- 6. SSSIL or its associates have not received compensation or other benefits from the company(ies) covered in this report or from any third party, in connection with the research report.
- 7. The Research Analyst has not served as an Officer, Director or employee of the company (ies) covered in the Research report.
- 3. The Research Analyst and SSSIL has not been engaged in market making activity for the company(ies) covered in the Research report.
- 9. Details SSSIL, Research Analyst and its associates pertaining to the companies covered in the Research report:

Sr. No.	Particulars	Yes / No.
1	Whether compensation has been received from the company(ies) covered in the Research report in the past 12 months for investment banking transaction by SSSIL	No
2	Whether Research Analyst, SSSIL or its associates or relatives of the Research Analyst affiliates collectively hold more than 1% of the company(ies) covered in the Research report	No
3	Whether compensation has been received by SSSIL or its associates from the company(ies) covered in the Research report	No
4	SSSIL or its affiliates have managed or co-managed in the previous twelve months a private or public offering of securities for the company(ies) covered in the Research report	No
5	Research Analyst, his associate, SSSIL or its associates have received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in the Research report, in the last twelve month	No

10. There are no material disciplinary action that been taken by any regulatory authority impacting equity research analysis activities.

STOCK RATINGS

BUY (B): The stock's total return is expected to exceed 20% over the next 12 months.

ACCUMULATE (A): The stock's total return is expected to be within 10-20% over the next 12 months.

HOLD (H): The stock's total return is expected to be within 0-10% over the next 12 months.

SELL (S): The stock's total return is expected to give negative returns over the next 12 months.

NOT RATED (NR): The analyst has no recommendation on the stock under review.

INDUSTRY VIEWS

ATTRACTIVE (AT): Fundamentals/Valuations of the sector are expected to be attractive over the next 12-18 months.

NEUTRAL (NL): Fundamentals/Valuations of the sector are expected to neither improve nor deteriorate over the next 12-18 months.

CAUTIOUS (CS): Fundamentals/Valuations of the sector are expected to deteriorate over the next 12-18 months.

III. DISCLAIMER

The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy completeness or correctness.

This document is for information purposes only. This report is based on information that we consider reliable, but we do not represent that it is accurate or complete, and one should exercise due caution while acting on it. Descriptions of any company or companies or their securities mentioned herein are not complete and this document is not, and should not be construed as an offer or solicitation of an offer to buy or sell any securities or other financial instruments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. All opinions, projections and estimates constitute the judgment of the author as on the date of the report and these, plus any other information contained in the report, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. This report is intended for distribution to institutional investors.



This report is not directed to or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject to SSSIL or its affiliates to any registration or licensing requirement within such jurisdiction. If this report is inadvertently send or has reached any individual in such country, especially, USA, the same may be ignored and brought to the attention of the sender. Neither this document nor any copy of it may be taken or transmitted into the United State (to U.S.Persons), Canada, or Japan or distributed, directly or indirectly, in the United States or Canada or distributed or redistributed in Japan or to any resident thereof. Any unauthorized use, duplication redistribution or disclosure of this report including, but not limited to, redistribution by electronic mail, posting of the report on a website or page, and/or providing to a third party a link, is prohibited by law and will result in prosecution. The information contained in the Report is intended solely for the recipient and may not be further distributed by the recipient to any third party.

SSSIL generally prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, SSSIL generally prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover. Our salespeople, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein. Our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. The views expressed in this research report reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. The compensation of the analyst who prepared this document is determined exclusively by SSSIL however, compensation may relate to the revenues of the Systematix Group as a whole, of which investment banking, sales and trading are a part. Research analysts and sales persons of SSSIL may provide important inputs to its affiliated company(ies).

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk. SSSIL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report including but not restricted to fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc

SSSIL and its affiliates, officers, directors, and employees subject to the information given in the disclosures may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation (financial interest) or act as a market maker in the financial instruments of the company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential material conflict of interest with respect to any recommendation and related information and opinions. The views expressed are those of the analyst and the Company may or may not subscribe to the views expressed therein.

SSSIL, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall SSSIL, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. The Company accepts no liability whatsoever for the actions of third parties. The Report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Report refers to website material of the Company, the Company has not reviewed the linked site. Accessing such website or following such link through the report or the website of the Company shall be at your own risk and the Company shall have no liability arising out of, or in connection with, any such referenced website

SSSIL shall not be liable for any delay or any other interruption which may occur in presenting the data due to any technical glitch to present the data. In no event shall the SSSIL be liable for any damages, including without limitation, direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with the data presented by SSSIL through this presentation.

Neither SSSIL, nor any of its other group companies or associates, shall be responsible for any decisions taken on the basis of this report. Investors are advised to consult their Investment and Tax consultants before taking any investment decisions based on this report.





Systematix Shares & Stocks (I) Ltd. CIN: U65993MH1995PLC268414 BSE SEBI Reg. No.: INB/F011132736 (Member Code: 182) | NSE SEBI Reg. No.: INB/F/E231132730 (Member Code: 1327) | MCX-SX SEBI Reg. No.: INB/F261132733 (Member Code: 17560) | Depository Participant: IN-DP-CDSL-246-2004 (DP Id: 34600) | PMS: INP000002692 | AMFI: ARN -64917 | Research Analyst: INH200000840

Regd. office address: 2nd floor, J. K. Somani Bldg, British Hotel Lane, Fort, Mumbai - 400001 Corporate office address: A 603-606, The Capital, BKC, Bandra (E), Mumbai, India - 400051