

BSE SENSEX  
35,930

S&P CNX  
10,792

**CMP: INR302**

**TP: INR366(+21%)**

**Buy**



**Stock Info**

	JSTL IN
Bloomberg	JSTL IN
Equity Shares (m)	2,417
M.Cap.(INRb)/(USDb)	720.5 / 10.1
52-Week Range (INR)	427 / 238
1, 6, 12 Rel. Per (%)	-17/-11/14
12M Avg Val (INR M)	1791
Free float (%)	57.7

**Financials Snapshot (INR b)**

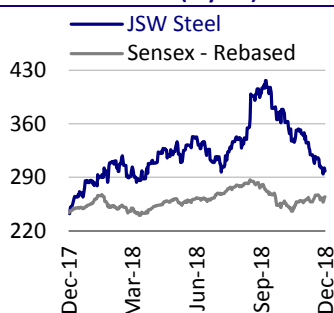
Y/E Mar	2018	2019E	2020E
Net Sales	700.9	881.6	917.7
EBITDA	146.9	201.0	173.3
PAT	56.4	89.5	65.5
EPS (INR)	23.4	37.1	27.2
Gr. (%)	56.9	58.6	-26.8
BV/Sh (INR)	116.2	136.9	159.5
RoE (%)	22.2	29.3	18.3
RoCE (%)	9.6	12.8	9.2
P/E (x)	12.9	8.1	11.1
P/BV (x)	2.6	2.2	1.9

**Shareholding pattern (%)**

As On	Sep-18	Jun-18	Sep-17
Promoter	42.3	41.8	41.6
DII	17.4	18.4	18.3
FII	20.4	20.4	20.3
Others	19.9	19.5	19.8

FII Includes depository receipts

**Stock Performance (1-year)**



**Vijaynagar plant visit: The big getting bigger**

**Overall capacity to increase by 45% at low specific capex of USD700/t**

We visited JSW Steel's (JSTL) Vijaynagar steel plant on 11-12<sup>th</sup> December 2018. This plant is the largest single location steel producing facility in India, accounting for 12mtpa of JSTL's overall capacity of 18mtpa. We note capacity at this plant will increase by 1mtpa to 13mtpa in FY20 as JSTL executes its 6.7mtpa overall expansion plan.

- The plant has the highest labor productivity, zero effluent discharge (95% of process waste is reused) and lower carbon footprint (96% of coke oven gases are recycled).
- Nearly 11mtpa of 'C' category iron ore mines have been allocated through auctions to various steel producers, which has improved ore availability to 39mtpa as against demand of 32-35mtpa.
- We visited corex furnaces, BF4 (blast furnace), HSM2 and interacted with management on day one, and CRM complex, pellet plant site and pipe conveyor on day two. Corex furnaces are operating at optimal capacity, with a total fuel rate of 1,050kg/thm (including coke rate of 180-200kg). BF4 is operating at a total fuel rate of 530kg (including coke rate of 360kg).
- The expansion program encompasses various upstream and downstream projects. Pipe conveyor is under trial run, which will save iron ore transportation cost by INR300/t, implying savings of INR5-6b on an annual basis. All captive mines are expected to be fully operational in FY19, which will save nearly INR10-12/t on an annual basis in transport cost. Although the pellet plant is in early stages of construction, all other projects are moving at a brisk pace. The expansion will increase cold rolling capacities as well, ensuring a similar product mix on higher volumes.
- JSTL will incur capex of INR444b to increase capacity by 6.7mtpa to ~25mtpa over FY18-21. The company has purchased a minority stake in 1.5mtpa Monnet Ispat, which will eventually be merged with the company. Total estimated cost is likely to be INR40b. Thus, at total additional investment of INR485b, the capacity will increase by 8.2mt or by 45% to 26.2mtpa by end-FY21. The specific capex up to hot rolling stage is ~USD700/t only, which includes various cost-saving projects. This is best benchmark in the industry.
- JSTL has also acquired capacities in countries like the US and Italy, which are net importer of steel and net exporter of steel scrap. The acquisition of Acero has come at a very low cost. A turnaround of this asset can create significant value for the company. The stock is trading adjusted EV/EBITDA of 6x (CWIP at book value) and FCF yield (no growth basis) of 13%. JSTL deserves higher EV/EBITDA of 7x for lower volatility in earnings, and regular and consistent value-accretive growth. We value the stock at INR366/share. Reiterate **Buy**.

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**Investors are advised to refer through important disclosures made at the last page of the Research Report.**

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## Operating and valuation metrics

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E
<b>Standalone</b>															
Crude steel - mt	2.3	2.3	2.4	3.7	6.0	6.4	7.4	8.5	12.2	12.6	12.1	14.8	15.6	16.2	16.5
Steel sales - mt	2.1	2.7	3.4	3.3	5.7	6.1	7.8	8.9	11.9	12.0	12.1	14.8	15.6	16.2	16.5
<b>INR per ton</b>															
Realization	29,174	32,042	33,626	42,681	31,912	38,322	41,109	39,973	38,194	38,279	30,379	35,379	41,509	49,130	47,130
EBITDA	7,951	10,196	9,536	8,343	7,522	7,837	7,197	7,105	7,405	7,368	4,736	7,868	8,728	11,801	9,500
<b>Operating cost</b>															
RM (ex-inventory)	17,155	26,304	23,588	17,484	23,256	28,112	26,683	21,917	21,651	15,781	19,215	23,026	26,224		
Iron ore	2,741	6,076	4,516	3,415	5,773	5,795	6,672	7,249	8,544	4,655					
Coal+Coking		13,396	15,737	10,385	12,966	15,304	12,835	10,518	9,054	7,571					
Others		6,832	3,335	3,684	4,517	7,013	7,176	4,151	4,053	3,555					
Staff	763	1,244	775	609	832	843	792	656	750	792	790	807	890		
Power and Fuel	1,689	2,421	1,807	1,691	1,840	2,373	2,319	2,753	2,752	2,481	2,772	3,054	3,491		
Others	5,779	4,213	4,186	3,468	3,015	4,347	4,661	4,652	4,313	6,590	4,734	5,894	6,723		
<b>Consolidated - INR b</b>															
EBITDA	17	27	32	30	41	49	61	65	92	94	61	123	147	201	173
Capex	-24	-24	-52	-59	-27	-53	-41	-56	-58	-67	-52	-44	-47	-123	-150
Interest	-4	-3	-4	-11	-11	-10	-11	-15	-24	-26	-28	-36	-35	-36	-42
FCF	2	1	-24	-23	-7	-35	-17	-13	-56	-24	-13	-1	41	-26	-43
Net Debt	43	41	141	218	212	213	261	276	430	477	506	522	483	551	603

## Vijaynagar site visit

### Largest site in the country still growing and improving cost structure

We visited JSW Steel's (JSTL) Vijaynagar steel plant on 11-12<sup>th</sup> December 2018. This plant is the largest single location steel producing facility in India, accounting for 12mtpa of JSTL's overall capacity of 18mtpa. The site provides direct employment to ~26,000 people (7,000 permanent + 14,000 contractual + 5,000 project-based). It is located in proximity to Bellary iron ore mining area and has ample scope for future expansion. Expansion plans under execution will increase capacity by 1mtpa to 13mtpa in FY20. The site has key strategic advantages such as:

- Proximity to iron ore mining belt of Bellary
- Availability of low-cost labor
- Connectivity with rail infrastructure and conveyor
- Proximity to market of south India, where there are no major competition from domestic steel producers
- Easy availability of land for growth

### Vijaynagar steel plant has the following facilities

- **Iron ore making:** Total hot metal capacity of 11.3mtpa comprises two corex furnaces (0.85x2 = 1.7mtpa) and four blast furnaces (1.7+1.4+3.2+3.3 = 9.6mtpa). There is also a DRI plant of 1.5mtpa.
- **Steel making** facilities comprise an EAF with capacity of 1.5mtpa and 7 BOFs with capacity of 11mtpa.
- **Casting** facilities comprise a 3mtpa billet caster and a 9mtpa slab caster.
- **Hot rolling:** There are two hot strip mills (HSM) with capacity of 4mtpa and 5mtpa for producing hot rolled coil (HRC). Long product segment comprises a 600ktpa wire rod mill (WRM) and a 2.2mtpa rebar mill.
- **Cold rolling:** There are two cold rolling mills (CRM). CRM1 has capacity of 0.85mtpa and a twin-stand reversible cold-rolling mill. CRM2 complex has a 2.3mtpa PLTCM (pickling line with tendon cold rolling mill), two CAL (continuous annealing lines) of 950ktpa each, a 450ktpa CGL (continuous galvanizing line), and a 200kt ACL (annealing and coating line) for producing electrical steel.

We visited corex furnaces, BF4 (blast furnace) and HSM2, and interacted with management. Corex furnaces are operating at optimal capacity, with a total fuel rate of 1,050kg/thm (including coke rate of 180-200kg). BF4 is operating at a total fuel rate of 530kg (including coke rate of 360kg). PCI injection ranges from 150-200kg/thm. Coke rate fluctuates due to variability in iron ore mix for various economic and availability related considerations.

### Key uniqueness of the site

- **High labor productivity:** The site produces 800-plus tonnes per person per annum, making it the most productive steel plant in India.
- It has a **low carbon footprint**, with 96% of coke oven gas for power generation being recycled.
- **Flexibility in use of iron ore:** The plant has ability to process all kinds of iron ore – employs a large-scale, low-grade iron ore beneficiation process.
- It is recognized for its '**zero-effluent discharge**' status; reuses more than 95% of process waste.

**Expansion of capacity from 12mtpa to 13mtpa**

- **Pellet plant:** Third pellet plant with capacity of 8mtpa is under construction. The project involves 56,000 cubic meter of civil work and 27,000 cubic meter of steel structure work. We visited the site and noted that the foundation work has just started. The project is expected to be completed by March 2020.
- **Iron ore conveyor:** A pipe conveyor of 24km will connect the site with Bellary iron ore mining area. This will reduce carbon footprint significantly and lower cost of iron ore transport by INR300/t. The conveyor was under trial run and was visibly complete. The conveyor has capacity of 20mtpa, implying annual savings of INR5-6b.
- **Iron making:** BF3 will be reconstructed to increase capacity from 3.1 to 4.3mtpa. The shutdown will be planned sometime in FY18 depending upon the steel market condition.
- **Steel making:** A zero energy furnace for steel making, a billet caster and WRM will enhance total steel capacity by 1mtpa to 13mtpa by end-FY20.
- **Cold rolling mill complex:** CRM1 will be converted into PLTCM with addition of three more rolling mill stands, which will increase its capacity from 0.85mtpa to 1.8mtpa. The CRM complex is being augmented by addition of two CGLs of 450ktpa each and a color coating line. We visited the sites and noticed brisk activities at CGL 2&3 and 1.2mtpa HRPO (HRC pickled and oiled) line. Majority of equipment has arrived for installation. These projects are expected to be commissioned by December 2019. Total capacity of CRMs will increase from 3mtpa to 4.1mtpa and value addition by CGLs will help in improving utilization of CRMs. Nearly a third of output will be value added at the site itself.

**Iron ore availability has improved**

- Iron ore available capacity has increased by 11mtpa to 39mtpa on auctioning of 'C' grade mines. Total demand in the region is ~32-35mtpa. JSTL itself will control ~5mtpa of capacities, which will help reduce purchases from outside the state, resulting in huge savings of INR10-12b every year.
- Although temporary closure of Donimalai mine of NMDC has impacted some supply, there is ample inventory in the system, while supply is increasing on opening of new mines.

## Largest steel company still growing rapidly

### Capacity increasing by 45% at low specific capex of USD700/t

JSTL is the largest steel company in the country with total capacity of 18mtpa spread over two states – Karnataka and Maharashtra. It has announced capex of INR444b to increase capacity by 6.7mtpa to ~25mtpa over FY18-21. JSTL has purchased a minority stake in 1.5mtpa Monnet Ispat, which will eventually be merged with the company. Total estimated cost is likely to be INR40b. Thus, with a total additional investment of INR485b, capacity will increase by 8.2mt or by 45% to 26.2mtpa by end-FY21. Capex also includes CRM capex of INR53b, mining capex of INR7b and sustenance capex of INR46b. The specific capex up to hot rolling stage is INR50b for every 1mtpa addition of capacity or ~USD700/t, which includes various cost-saving projects. This is best benchmark in the industry.

Capex is just 5x of expected EBITDA. Hence, CWIP should be valued at least at book value

There is total growth capex of INR440b (including Monnet Ispat acquisition) spread over four years. This is likely to add nearly 7.5mtpa of steel sales and INR68b of EBITDA purely from volume growth (assuming EBITDA/t of INR9,000) and another INR15-18b in cost savings from pipe conveyor and captive mines. Thus, total EBITDA is expected to increase by INR83-86b. The project cost to EBITDA ratio is ~5x. Therefore, we believe that capital work in progress should be valued conservatively at 1x book value.

Valuations multiples are always proportional to quality of earnings (i.e. lower volatility), value-accretive growth and consistency in growth

Most investors agree with us that JSTL has best track record of project execution and its specific capex/opex is lowest in industry – and they fret over valuations. The common point of disagreement is over valuation of CWIP. Most investors ignore valuation of CWIP, which may be fair for a company when it is not growing. However, it is very punishing to a growing company, in our view. On adjusting CWIP, JSTL is trading at EV/EBITDA of ~6x, which is in line with peers. We believe JSTL deserves a higher EV/EBITDA valuation multiple for its ability to re-invest consistently at low cost and regularly. JSTL's operating cash flows have lower volatility relative to peers due to non-integration of operations. Valuations multiples are always proportional to quality of earnings (i.e. lower volatility), value-accretive growth and consistency in growth. JSTL has recorded a CAGR of 18% in volumes, 20% in EBITDA, 21% in PAT and 16% in EPS over 12 years (FY06-18). Growth momentum is likely to continue, with volumes likely to increase at a CAGR of 8-10% and EBITDA at a CAGR of 10-12% over the next five years (FY18-23). Therefore, we value the stock at EV/EBITDA of 7x.

JSTL has also acquired capacities in countries like the US and Italy, which are net importer of steel and net exporter of steel scrap. The acquisition of Acero has come at a very low cost. A turnaround of this asset can create significant value for the company. The stock is trading at adjusted EV/EBITDA of 6x (CWIP at book value) and FCF yield (no growth basis) of 13%. We value the stock at INR366/share based on SOTP and reiterate our **Buy** rating.

**Exhibit 1: Relative valuations**

	Rating	CMP (INR)	MCAP (USD M)	EPS			P/E (x)		EV/EBITDA (x)		P/B(x)	
				FY18E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
<b>Steel</b>												
Tata Steel	Sell	520	7,164	71.9	91.6	66.1	5.7	7.9	5.5	6.8	0.9	0.8
JSW Steel	Buy	302	10,359	23.4	37.1	27.2	8.1	11.1	6.4	7.7	2.2	1.9
JSPL	Buy	156	2,021	-8.5	2.3	-1.2	66.5	-125.6	6.5	6.2	0.5	0.5
SAIL	Neutral	52	3,067	0.3	8.9	5.2	5.9	10.2	5.5	6.4	0.5	0.5
<b>Non-Ferrous</b>												
Hindalco	Buy	221	6,479	18.9	26.6	27.8	8.3	8.0	5.6	5.5	1.2	1.0
Nalco	Buy	64	2,352	5.1	10.2	7.4	6.3	8.6	2.9	4.2	1.1	1.1
Vendanta	Buy	199	8,379	20.4	18.4	25.4	10.9	7.8	5.9	4.6	1.2	1.1
Rain Ind.	Buy	135	642	23.7	27.6	24.4	4.9	5.5	4.8	5.0	1.1	1.0
<b>Mining</b>												
Coal India	Buy	247	22,115	19.2	27.0	30.8	9.2	8.0	4.7	4.2	7.1	6.5
Hindustan Zinc	Neutral	275	16,450	21.1	21.0	27.0	13.1	10.2	8.2	6.2	3.3	2.8
NMDC	Buy	94	5,276	13.1	13.0	14.3	7.2	6.6	3.9	3.6	1.1	1.0

Source: MOSL

**Exhibit 2: Target price calculations**

Y/E March	2017	2018	2019E	2020E
A. S/A volumes	14.8	15.6	16.2	16.5
B. EBITDA per ton	7,868	8,728	11,801	9,500
C. S/A EBITDA (AxB)	116,288	136,330	191,064	156,750
D. Sub. EBITDA	6,310	10,530	9,901	16,507
E. Cons. EBITDA (C+D)	122,598	146,860	200,965	173,257
F. Target EV/EBITDA (x)				7.0
G. Target EV (FxG)				1,212,796
less: Net Debt (Rs m)	522,350	482,720	550,787	602,549
add: CWIP	43,630	59,500	152,632	272,632
Equity value				882,878
No. of shares		2,410	2,410	2,410
<b>Equity value /sh.</b>				<b>366</b>

Source: MOSL, Company

## Financials and Valuations

Income Statement							(INR Million)	
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
<b>Net Sales</b>	<b>382,097</b>	<b>512,197</b>	<b>529,715</b>	<b>418,789</b>	<b>556,046</b>	<b>700,870</b>	<b>881,587</b>	<b>917,671</b>
Change (%)	11.2	34.0	3.4	-20.9	32.8	26.0	25.8	4.1
<b>EBITDA</b>	<b>65,039</b>	<b>91,655</b>	<b>94,023</b>	<b>60,730</b>	<b>122,598</b>	<b>146,860</b>	<b>200,965</b>	<b>173,257</b>
EBITDA Margin (%)	17.0	17.9	17.7	14.5	22.0	21.0	22.8	18.9
Depreciation	22,375	31,826	34,345	31,879	35,154	33,870	36,328	37,418
<b>EBIT</b>	<b>42,664</b>	<b>59,829</b>	<b>59,678</b>	<b>28,851</b>	<b>87,444</b>	<b>112,990</b>	<b>164,637</b>	<b>135,839</b>
Interest	19,675	30,479	34,930	33,027	37,681	37,010	35,681	41,828
Other Income	697	858	1,114	1,682	1,521	1,670	699	706
Extraordinary items	-4,302	-17,128	-471	-21,254	0	0	0	0
<b>PBT</b>	<b>19,385</b>	<b>13,081</b>	<b>25,391</b>	<b>-23,748</b>	<b>51,284</b>	<b>77,650</b>	<b>129,654</b>	<b>94,717</b>
Tax	8,453	9,201	8,194	-15,241	16,743	22,670	42,208	31,257
Tax Rate (%)	43.6	70.3	32.3	64.2	32.6	29.2	32.6	33.0
Min. Int. & Assoc. Share	-343	504	748	950	64	990	1,624	1,624
<b>Reported PAT</b>	<b>9,352</b>	<b>3,232</b>	<b>16,191</b>	<b>-9,599</b>	<b>35,670</b>	<b>54,410</b>	<b>86,203</b>	<b>62,217</b>
<b>Adjusted PAT</b>	<b>11,091</b>	<b>9,322</b>	<b>18,006</b>	<b>-84</b>	<b>35,798</b>	<b>56,390</b>	<b>89,451</b>	<b>65,464</b>
Change (%)	-25.3	-16.0	93.2	-100.5	-42,485.0	57.5	58.6	-26.8

Balance Sheet							(INR Million)	
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Share Capital	2,231	2,417	2,417	2,417	2,400	2,410	2,410	2,410
Reserves	168,416	209,322	220,479	185,032	224,070	277,570	327,439	381,878
<b>Net Worth</b>	<b>170,647</b>	<b>211,739</b>	<b>222,896</b>	<b>187,449</b>	<b>226,470</b>	<b>279,980</b>	<b>329,849</b>	<b>384,287</b>
Debt	293,909	436,858	496,419	513,038	540,200	496,470	557,704	607,704
Deferred Tax	32,720	21,234	28,894	39,123	29,900	25,560	41,837	54,150
<b>Total Capital Employed</b>	<b>499,248</b>	<b>671,502</b>	<b>749,186</b>	<b>739,678</b>	<b>794,110</b>	<b>797,370</b>	<b>924,750</b>	<b>1,041,502</b>
Gross Fixed Assets	458,676	612,979	701,889	789,575	663,830	688,170	718,170	748,170
Less: Acc Depreciation	111,508	142,520	180,126	226,239	76,530	109,690	146,018	183,436
<b>Net Fixed Assets</b>	<b>347,168</b>	<b>470,459</b>	<b>521,763</b>	<b>563,336</b>	<b>587,300</b>	<b>578,480</b>	<b>572,152</b>	<b>564,734</b>
Capital WIP	58,979	93,998	82,653	69,040	43,630	59,500	152,632	272,632
Investments	16,064	5,947	5,990	6,184	10,660	11,570	16,570	16,570
<b>Current Assets</b>	<b>152,917</b>	<b>205,995</b>	<b>246,134</b>	<b>207,727</b>	<b>238,460</b>	<b>270,150</b>	<b>319,792</b>	<b>327,422</b>
Inventory	54,952	81,551	110,090	84,034	113,950	125,940	169,072	175,992
Debtors	21,063	22,924	24,998	28,016	41,490	47,040	60,383	62,854
Cash & Bank	17,969	7,310	19,136	7,340	17,850	13,750	6,918	5,156
Loans & Adv, Others	58,933	94,209	91,910	88,337	65,170	83,420	83,420	83,420
<b>Curr Liabs &amp; Provns</b>	<b>75,880</b>	<b>104,897</b>	<b>107,353</b>	<b>106,610</b>	<b>85,940</b>	<b>122,330</b>	<b>136,396</b>	<b>139,856</b>
Curr. Liabilities	30,858	44,501	39,560	44,051	39,010	70,470	84,536	87,996
Provisions	45,022	60,397	67,794	62,558	46,930	51,860	51,860	51,860
<b>Net Current Assets</b>	<b>77,037</b>	<b>101,097</b>	<b>138,781</b>	<b>101,117</b>	<b>152,520</b>	<b>147,820</b>	<b>183,396</b>	<b>187,566</b>
<b>Total Assets</b>	<b>499,248</b>	<b>671,502</b>	<b>749,186</b>	<b>739,678</b>	<b>794,110</b>	<b>797,370</b>	<b>924,750</b>	<b>1,041,502</b>



## Financials and Valuations

### Ratios

Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
<b>Basic (INR)</b>								
EPS	5.0	3.9	7.4	0.0	14.9	23.4	37.1	27.2
Cash EPS	14.9	14.8	21.3	9.7	29.0	36.9	51.4	41.9
Book Value	76.5	87.6	92.2	77.5	94.4	116.2	136.9	159.5
DPS	1.0	1.1	1.1	1.1	0.8	2.3	3.2	4.0
<b>Valuation(x)</b>								
P/E	60.8	78.3	40.5	-8643.2	20.2	12.9	8.1	11.1
Cash P/E	20.2	20.4	14.2	31.2	10.4	8.2	5.9	7.2
Price / Book Value	3.9	3.4	3.3	3.9	3.2	2.6	2.2	1.9
EV/Sales	2.5	2.3	2.3	3.0	2.2	1.7	1.5	1.4
EV/EBITDA	14.6	12.7	12.8	20.3	10.2	8.2	6.4	7.7
EV/ton	1,964	1,615	1,642	1,560	1,257	1,202	1,118	1,141
Dividend Yield (%)	0.3	0.4	0.4	0.4	0.2	0.7	1.1	1.3
<b>Profitability Ratios (%)</b>								
RoE	6.6	4.7	8.3	0.0	17.4	22.2	29.3	18.3
RoCE	5.7	6.9	5.7	2.7	7.9	9.6	12.8	9.2
RoIC	7	8	7	3	8	11	15	12
<b>Turnover Ratios (%)</b>								
Asset Turnover (x)	0.8	0.8	0.7	0.6	0.7	0.9	1.0	0.9
Inventory (No. of Days)	52	58	76	73	75	66	70	70
Debtors (No. of Days)	20	16	17	24	27	24	25	25
<b>Leverage Ratios (%)</b>								
Net Debt/Equity (x)	1.6	2.0	2.1	2.7	2.3	1.7	1.7	1.6

### Cash Flow Statement

(INR Million)

Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Adjusted EBITDA	65,039	91,655	94,023	60,730	122,598	146,860	200,965	173,257
Non cash opr. exp (inc)	-7,379	-26,487	-5,522	2,172	-2,658	2,340	0	0
(Inc)/Dec in Wkg. Cap.	5,888	-35,195	-11,748	6,189	-38,690	-11,010	-42,408	-5,932
Tax Paid	-5,105	-4,038	-7,728	-2,055	-2,370	-14,400	-25,931	-18,943
Other operating activities	0	0	0	0	0	0	0	0
<b>CF from Op. Activity</b>	<b>58,442</b>	<b>25,935</b>	<b>69,025</b>	<b>67,035</b>	<b>78,880</b>	<b>123,790</b>	<b>132,625</b>	<b>148,381</b>
(Inc)/Dec in FA & CWIP	-56,301	-57,629	-67,206	-51,787	-44,350	-47,360	-123,132	-150,000
<b>Free cash flows</b>	<b>2,142</b>	<b>-31,693</b>	<b>1,819</b>	<b>15,249</b>	<b>34,530</b>	<b>76,430</b>	<b>9,493</b>	<b>-1,619</b>
(Pur)/Sale of Invt	774	176	702	-1	-2,940	90	0	0
Others	-9,547	-12,146	10,996	709	6,020	1,230	-4,301	706
<b>CF from Inv. Activity</b>	<b>-65,074</b>	<b>-69,599</b>	<b>-55,509</b>	<b>-51,079</b>	<b>-41,270</b>	<b>-46,040</b>	<b>-127,433</b>	<b>-149,294</b>
Inc/(Dec) in Net Worth	0	0	0	0	20	-270	0	0
Inc / (Dec) in Debt	9,546	60,290	27,373	3,781	10,750	-39,920	30,000	50,000
Interest Paid	-15,186	-24,131	-25,626	-27,997	-35,690	-35,110	-35,681	-41,828
Divd Paid (incl Tax) & Others	-2,269	-3,155	-3,437	-3,536	-2,180	-6,550	-6,344	-9,022
<b>CF from Fin. Activity</b>	<b>-7,909</b>	<b>33,005</b>	<b>-1,691</b>	<b>-27,752</b>	<b>-27,100</b>	<b>-81,850</b>	<b>-12,025</b>	<b>-850</b>
<b>Inc/(Dec) in Cash</b>	<b>-14,541</b>	<b>-10,659</b>	<b>11,826</b>	<b>-11,796</b>	<b>10,510</b>	<b>-4,100</b>	<b>-6,832</b>	<b>-1,762</b>
Add: Opening Balance	32,510	17,969	7,310	19,136	7,340	17,850	13,750	6,918
<b>Closing Balance</b>	<b>17,969</b>	<b>7,310</b>	<b>19,136</b>	<b>7,340</b>	<b>17,850</b>	<b>13,750</b>	<b>6,918</b>	<b>5,156</b>



Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

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