

Bihar Tubes

BSE code: 590059

CMP: Rs 94
Target: Rs 172
BUY
Suman Memani

(91-22) 6612 4936

suman.memani@religare.in

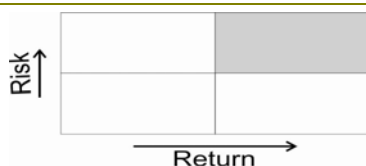
Company data
Particulars

Market cap (Rs mn / US\$ mn)	582.0/14.5
Outstanding equity shares (mn)	6.4
52-week high/low (Rs)	94/23
2-month average daily volume	114,380

Financial snapshot

Particulars	FY07	FY08E	FY09E
Sales (Rs mn)	2,065.1	4,372.8	8,418.3
Growth (%)	41.1	111.7	92.5
Adj net profit (Rs mn)	70.1	148.7	354.1
Growth (%)	401.4	112.2	138.1
EPS (Rs)	21.9	23.2	27.7
Growth (%)	401.4	6.1	19.0
FDEPS (Rs)*	5.5	11.6	27.7
P/E (x)*	17.0	8.1	3.4
RoE (%)	43.9	48.2	32.2

*After considering dilution of warrants in Dec-08

Risk-return profile

Shareholding pattern

(%)	Mar-07	Dec-06
Promoters	58.4	58.4
Banks & FIs	2.3	2.3
Public	39.3	39.3

Stock performance

Returns (%)	CMP	1-mth	3-mth	6-mth
Bihar Tubes	94	11.8	62.3	76.5
Sensex	14,163	1.7	12.9	4.0

Piping hot!

New product forays and backward integration plans to boost earnings

Investment rationale

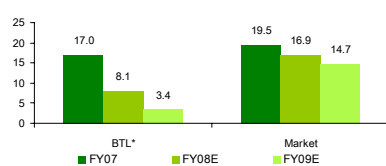
- ❖ Bihar Tubes (BTL) is a direct play on the two most promising sectors in India – agriculture and infrastructure – which are generating strong demand for pipes and tubes
- ❖ BTL has raised cumulative capacity for steel pipes and tubes from 60,000mtpa to 125,000mtpa over FY06-FY07 to meet demand from both domestic and overseas markets
- ❖ Foray into auto tubes and 20"-diameter tubes, along with backward integration for captive inputs, will ramp up turnover and expand margins
- ❖ Apollo Metalx, a 100% subsidiary, with a capacity of 24,000mtpa will supply 85% of its production to BTL, and prove EPS-accretive
- ❖ Technology from Kusakabe, Japan has helped expand product range, scale up production efficiency and enhance quality
- ❖ We expect a revenue CAGR of 101% over FY07-FY09 to Rs 8.4bn with a PAT CAGR of 125% to Rs 354mn

Key concerns

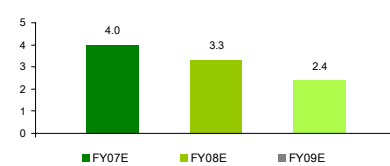
- ❖ Delayed roll-out of expansion programme will adversely affect earnings
- ❖ Free cash flow is grossly negative in initial years due to high capex

Valuation

- ❖ BTL currently trades at a P/E of 4x on FY08E and 3.4 on FY09E pre-diluted EPS. We have an end-FY08 DCF target price of Rs 172, at which the stock would trade at 7.4x on FY08E and 6.2x on FY09E EPS; Our target represents an appreciation of 83%; Buy

P/E multiple (x)


Source: Religare Research * After dilution of warrants

EV/EBITDA multiple (x)


Source: Religare Research

Company profile

Niche player in the steel pipe and tube sector, catering to diverse user industries

Bihar Tubes (BTL), a manufacturer of steel pipes and tubes, was established in 1986 in Sikandarabad, Uttar Pradesh. The company initially catered to the steel industry, but has increased its product range over the years to meet demand from various sectors including infrastructure, agriculture, engineering, and most recently automobiles. BTL currently has four production mills in Sikandarabad with a combined capacity of 125,000mt, and offers pipes up to 12" diameter. The company has an established customer base both in India and international markets, with exports to over 35 countries such as the US, Colombia, Nigeria, Ireland and Germany.

Operates in four segments with a focus on pre-galvanised pipes

The company operates in four segments – hollow section (square and rectangular), pre-galvanised, electric resistance welded (ERW) and galvanised tubes and pipes. BTL's current capacity of 125,000mtpa is interchangeable and can be tailored to demand conditions. The product mix is typically as follows – hollow section: 30-35% of the production capacity; galvanised: 20-25%; ERW: 20-22%; and pre-galvanised: 30%. The company is now focusing on raising production of pre-galvanised products since these earn relatively higher realisations.

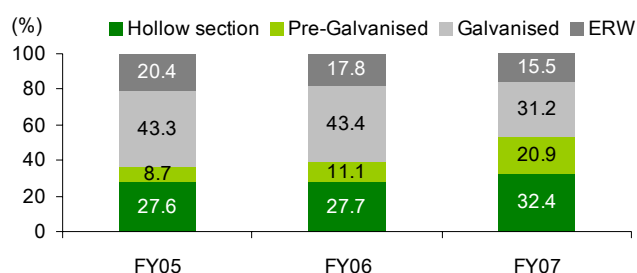
Business segments

Tube and pipe	Size	End-users/use	Major clients
Hollow section	180x180mm square 200x100mm rectangular	Infrastructure, oil & gas, sugar, realty	Suzlon, Jubilent, L&T, Gammon, Adani, Reliance, AAI-Delhi, Delhi Metro, Bajaj Hindustan, Sintex, Parsvanath
Pre-galvanised	Outer diameter (OD): 12.7OD-127.0OD	Basic raw material for galvanised pipes used in fencing, cabling, ducting	Domestic and overseas clients including MIG Steel (USA), Gibny Steel (Ireland), Corom Steel (Germany)
ERW	114.3mm to 323.9mm (OD)	Water, gas and sewerage	IS, Delhi Metro, NTPC, Nicco, Electrotherm
Galvanised	21mm to 166.5mm (OD)	Mechanical and engineering purposes	BSNL, State Agriculture Dept

Source: Company

Segmental revenue contribution

Rising focus on pre-galvanised pipes which earn higher realisations



Source: Company, Religare Research

Industry overview

The pipe industry in India primarily comprises the manufacture of seamless or welded steel pipes & tubes, and ferrous metal pipe & tube fittings. The industry consumes an estimated 14-15% of total steel production. Considering that annual steel production by organised players in India stands at ~45mn tonnes, the production of steel tubes and pipes currently ranges between 6.3mtpa and 6.8mtpa. Of late, some industry segments have witnessed significant consolidation and rationalisation of excess capacity. Also, cost containment and improved quality control measures have led to productivity gains and quality improvements across the entire tube & pipe industry.

Infrastructure boom to drive growth

The building & construction industries along with the oil & gas sector are the major marketplaces for pipes and tubes. India has the least infrastructure for oil and gas pipelines at less than 16,000km, while France (which is roughly one-sixth the size) has about 170,000km of pipelines and the US has 329,600km.

Moreover, with the construction market booming and development of new markets for steel pipes ranging from commercial framing to water pipes, the future of the steel tubing industry looks bright. Considering the demand-supply mismatch and low consumption of tubes and pipes in India, the industry is expected to grow at an annual rate of 30-35% till 2010.

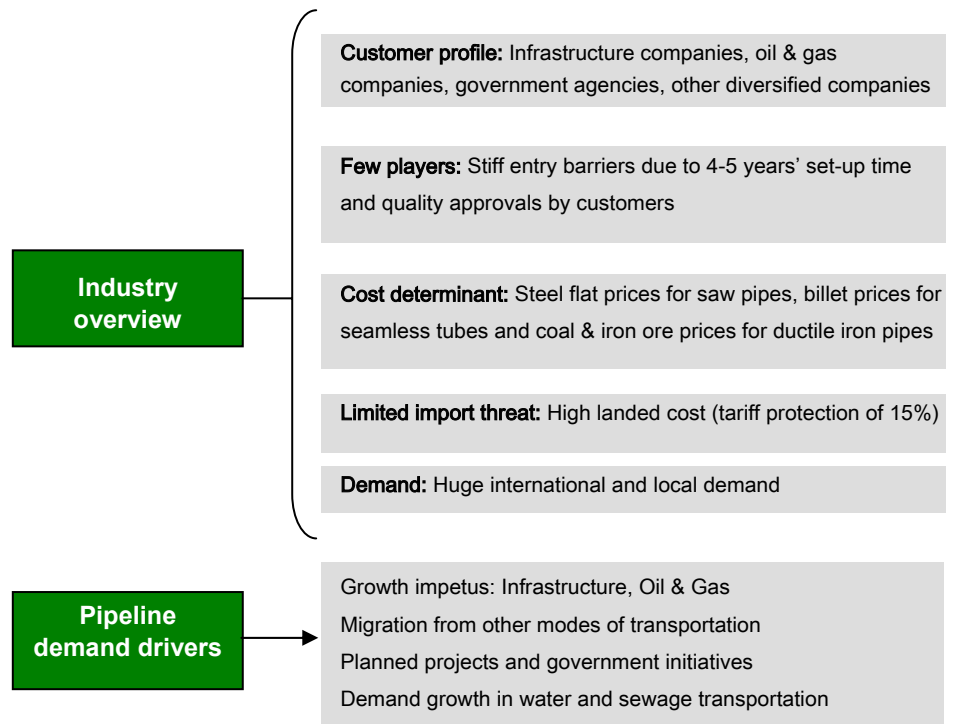
Strong position in export market

The global export market for steel pipes is close to US\$ 27bn a year with the US, western Europe, Australia and Japan being the biggest importers. India is one of the major exporting nations apart from Indonesia, Malaysia and Thailand.

Sector to grow at 30-35% till 2010 led by infrastructure and construction demand

Sector snapshot

High entry barriers in terms of gestation period and requisite client approvals



Source: Company, Religare Research

Investment rationale

Large-scale capacity expansion

BTL has increased its overall capacity of steel pipes and tubes from 60,000mtpa to 125,000mtpa during FY06-FY07 at a capital expenditure of Rs 65mn. With increased capacity it can now generate a turnover from Rs 3.5bn-Rs 4bn on the current gross block.

Scaling up the value chain

- ❖ **Foray into high-end automobile tubing products:** BTL is foraying into the automobile sector by creating a 35,000mtpa capacity in Sikandarabad for boiler tubes, air heated and shock absorber tubes. The project entails a capex of Rs 100mn and will be funded via internal accruals. Land for the new facility has already been acquired and work is expected to commence from December 2007. The company is in the final stage of talks with automobile companies for the off-take of its products. We expect this division to contribute to revenues from FY09 onwards.
- ❖ **Manufacture of 20"-diameter tubes:** BTL currently manufactures tubes up to 12" diameter. The company is now looking to scale further up the value chain via the manufacture of 20"-diameter tubes and is setting up a tube mill for this purpose. This will enable BTL to compete with players like SAW Pipes, MAN Industries and Welspun Gujarat.

Backward integration to assure cost-effective input supply

Raw material accounts for as much as 80-85% of the cost of finished goods. With a view to lowering input costs, the company is undertaking backward integration via the set up of a fully integrated 100,000mtpa HR skelp plant at Sikandarabad. The capex towards this plant will total Rs 500mn to be partially financed by a warrants issue at Rs 70/ share (after bonus), amounting to Rs 450mn.

Approximately 75-80% of production from the skelp plant is expected to be utilised for captive consumption while the surplus will be sold. This will assure BTL of an uninterrupted supply of raw material at a discount to market price, thus strengthening margins. The project is scheduled for commissioning in December 2008 and hence we expect the benefits to flow in from H2FY09 onwards.

Subsidiary to be EPS-accretive

BTL's 100% subsidiary – Apollo Metalx – has a 24,000mtpa capacity for galvanised sheets. The subsidiary supplies 85% of its production to BTL and sells the balance in the market. Its capacity is booked for the next year and it is also planning to ramp up capacity, going ahead. We expect this subsidiary to add significantly to BTL's bottomline and prove EPS-accretive.

Imported Japanese technology ensures superior product range and quality

BTL entered into a technological collaboration with Japanese pipe manufacturer, Kusakabe, in the year 2002, which has helped it to considerably expand the range and application of its products. The company currently manufactures tubes and pipes from four mills, three of which have technology imported from Kusakabe. BTL is currently one of the few domestic players with the capability to manufacture ½" – 2½" diameter products at a speed of 150mt/minute, which has greatly enhanced its production capacity. The technical know-how for the new auto tube project will also be obtained from the Japanese partner.

New 35,000mtpa capacity for auto tubes to be commissioned in December 2007

Capacity post-expansion

Segment	Capacity (mtpa)	Date of commissioning
Hollow section, galvanised, pre-galvanised and ERW	125,000	Already commenced
Auto tubes	35,000	Dec-07
Backward integration (skelp mill)	100,000	Dec-08
20" diameter tube mill	NA	July-09

Source: Company, Religare Research

Technical specifications

Tube mills	Outer diameter	Speed (mt/min)	Width (mm)
1	½" to 2 ½"	100	0.8- 3.5
2	1" to 4"	70	1.2-6.0
3	3" to 8"	24	2.5-6.0
4	½" to 2 ½"	150	0.7-3.5

Source: Company, Religare Research

Pre-galvanised tube production being raised from 12,000mtpa to 20,000mtpa in FY08

Plans to raise exports from 11% of revenues to 15%

Margins to expand significantly

We expect the margins both at operating and net levels to improve primarily because of - a) the company's focus on pre-galvanised pipes, and b) its backward and forward integration efforts.

- ❖ **Cost savings from pre-galvanised pipe manufacture:** BTL is one of the few manufacturers of pre-galvanised pipes and tubes in India, and is thus able to command higher prices for its products. This segment has posted a 118% revenue CAGR over FY05-FY07, the highest among BTL's four product categories. Pre-galvanised tubes are comparable to galvanised tubes in terms of lifespan, while being cheaper to produce because of the lower zinc coating requirement (80-120gm/mt versus 400gm/mt for galvanised tubes). In order to leverage the cost advantage, BTL is raising production of pre-galvanised tubes from 12,000mtpa to 20,000mtpa in FY08, which will lend a fillip to margins. We expect sales of this segment to show a CAGR of 55.3% over FY07-FY09.
- ❖ **Benefits of backward and forward integration:** The foray into auto tubes where margins are higher in comparison to existing products, and the planned HR skelp mill for cost-effective raw material procurement will also result in significant margin growth.

Expansion via inorganic route

In order to meet the rising demand, BTL is looking to expand capacities in existing segments and also enter into higher-specification products (½" to 20") via an acquisition (expected to be in the range of Rs 200mn-250mn). The company is eyeing players in western India for its inorganic growth plans. This will strengthen its marketing and distribution reach in the region and also reduce freight cost.

Extensive network and strong brand equity; Export market – a big opportunity

BTL has a network of 50 distributors throughout the country with a strong presence in North and South India where it markets products under the popular 'APL Apollo' brand name. The company is working on expanding its footprint in the western states as well.

BTL also exports its products to over 35 countries and has a distribution network in overseas markets like Colombia, Dubai, Ireland, Germany and France. Exports currently account for 11% of total revenues, which the company aims to raise to 15% going ahead.

Key concerns

Delay in expansion schedule

The company has planned large capital expenditure over the next two years, both for the expansion of its existing segments and also for entering into the manufacture of auto and high-diameter tubes. Any delay in the expansion schedule is likely to affect earnings.

Negative cash flow

BTL's huge capex plans have resulted in a grossly negative free cash flow (FCF). However, its average working capital days is low at 30-35 vis-à-vis the industry average of 60-80 days as the company sells 70-80% of its products to OEMs and in trade manufacturers where the payment terms are pre-agreed.

SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> ❖ In-house HR coil galvanising plant (Apollo Metalx) ❖ Best quality tubes with affordable prices ❖ One of the few players in pre-galvanised tubes and pipes ❖ Strong sales team ❖ Increased capacity to 125,000mtpa with technology from Japan ❖ Largest variety in Hollow section 	<ul style="list-style-type: none"> ❖ Freight cost is high on account of concentration of mills in a single location ❖ Rise in interest rates
Opportunities	Threats
<ul style="list-style-type: none"> ❖ Increased market penetration in western and eastern India through acquisition route ❖ Planned foray into 20" tubes ❖ Proposed entry in speciality tube segments with high thickness and low diameter, which is to be used as a replacement for seamless tubes 	<ul style="list-style-type: none"> ❖ Delay in capacity augmentation may affect financials ❖ Competition from unorganised sectors ❖ PVC tubes are entering the agriculture sector as a replacement for galvanised pipes

Source: Religare Research

Financial review and outlook

Q4FY07 results

(Rs mn)	Q4FY07	Q4FY06	% chg YoY	FY07	FY06	% chg
Sales	571.5	375.2	52.3	2065.3	1462.8	41.2
Other income	0.0	0.0		0.0	0.0	
EBIDTA	69.1	14.8	366.9	148.3	52.0	185.2
Operating margin (%)	12.1	3.9	206.5	7.2	3.6	102.0
Interest	12.4	6.0	106.7	35.9	23.9	50.2
Depreciation	2.2	1.3	69.2	7.5	5.5	36.4
PBT	54.5	7.5	626.7	104.9	22.6	364.2
Tax	17.7	1.9	831.6	34.8	8.6	304.7
PAT	36.8	5.6	557.1	70.1	14.0	400.7
Equity capital	5.9	0.9	557.1	11.2	2.2	400.7

Source: Company, Religare Research

Revenues up 52% due to higher pre-galvanised production

EBITDA margin improved significantly led by higher pre-galvanised tube production

During Q4FY07, revenue increased by 52.3% YoY to Rs 571.5mn against Rs 375mn in the same year-ago period. The operating margin improved to 12.1% in Q4FY07 as against 3.9% in Q4FY06 mainly on account of increased production of pre-galvanised tubes from 16-17% of total capacity to 20-25%, and productivity gains from Japanese technology imports. Net profit logged a 557% growth YoY to Rs 36.8mn. During FY07, sales increased by 41.2% to Rs 2.1bn while the EBITDA margin expanded 360bps to 7.2%. Net profit increased by 400% to Rs 70.1mn against Rs 14mn in FY06.

Enhanced capacities and new products to fuel 101% revenue CAGR over FY07–FY09

Expect revenue to log 101% CAGR over FY07–FY09

BTL has witnessed a revenue CAGR of 36% over FY05–FY07. Going forward, we expect the company to clock a revenue CAGR of 101% over FY07–FY09 largely driven by the enhanced capacities and new product forays. Further, we expect the operating margin to rise from 7.2% in FY07 to 8.1% in FY09 on account of the forward and backward integration efforts and favourable product mix.

Projected revenue growth

Segment (Rs mn)	FY07	FY08E	FY09E
Hollow section	565.0	822.5	1,152.0
Pre-galvanised	364.6	747.5	876.1
Galvanised	544.9	900.0	1,060.0
ERW	270.0	349.8	470.7
Total	1,744.5	2,819.8	3,558.8

Source: Religare Research

BTL merits a premium to pure steel players; Expect a positive re-rating

BTL currently trades at a P/E of 4x on FY08E and 3.4x on FY09E pre-diluted EPS. On an EV/EBITDA basis, the stock is trading at 3.3x on FY08E and 2.4x on FY09E, which is highly attractive. From the table below, we see that the company currently quotes at a significant discount to Welspun Gujarat and Technocraft Industries on FY09 P/E valuation. Other peers trade within a P/E band of 7–10x on FY08E.

BTL caters to high-growth segments; Expect a re-rating of the stock

Pure steel companies are typically valued at a P/E of 4x–7x on 1-year forward earnings. However, we believe BTL deserves a premium to pure steel players since it is catering to sectors like infrastructure, agriculture, and oil & gas, which are showing extremely robust growth. In our view, BTL will witness a positive re-rating in the coming year.

Comparative valuation

	CMP	Sales (Rs mn)			EBITDA Margin (%)			EPS (Rs)			P/E (x)		
		FY07	FY08E	FY09E	FY07	FY08E	FY09E	FY07	FY08E	FY09E	FY07	FY08E	FY09E
BTL	94	2,065.1	4,372.8	8,418.3	7.2	7.6	8.2	21.9	23.2	27.7	4.3	4.0	3.4
Technocraft	82	2,993.1	4,200.1	5,300.3	16.3	16.5	16.8	12.4	16.0	21.0	6.6	5.1	3.9
Welspun Gujarat	180	26,785.0	35,319.3	38,327.4	12.5	11.4	13.4	10.2	11.0	15.0	17.7	16.0	12.0

Source: Religare Research

DCF assumptions

Particulars	Assumption
Risk Free rate (%)	8.0
Market Return (%)	7.0
Beta	1.1
Cost of Equity (%)	16.0
Debt adjusted tax (%)	9.0
WACC (%)	13.0
Terminal growth rate (%)	3.0

Source: Religare Research

Target of Rs 172 represents 83% upside; Initiate coverage with Buy

We have valued the company using a discounted cash flow (DCF) approach, and accordingly have a target of Rs 172 for the scrip. At our target price the stock will be available at 7.4x and 6.2x on FY08E and FY09E earnings of Rs 23.2 and Rs 27.7 respectively. Our target represents an 83% upside from the current level. We initiate coverage with a Buy recommendation.

Financials

Profit and Loss statement

(Rs mn)	FY06	FY07	FY08E	FY09E
Revenues	1,464.0	2,065.1	4,372.8	8,418.3
Growth (%)	30.3	41.1	111.7	92.5
EBITDA	52.0	148.3	327.9	684.1
Growth (%)	51.3	185.1	121.1	108.7
Depreciation	5.5	7.5	30.0	70.0
EBIT	46.5	140.8	297.9	614.1
Growth (%)	52.2	202.9	111.6	106.2
Interest	23.9	35.9	74.2	100.0
Other income	-	-	-	-
EBT	22.6	104.9	223.7	514.1
Growth (%)	35.3	364.1	113.3	129.9
Tax	8.3	34.8	74.9	160.0
Effective tax rate	36.8	33.2	33.5	31.1
Adj net income	14.3	70.1	148.7	354.1
Growth (%)	13.1	401.4	112.2	138.1
Shares outstanding (mn)	3.1	3.1	6.2	12.5
EPS (Rs)	4.4	21.9	23.2	27.7
DPS (Rs)	-	1.0	1.5	2.0
CEPS (Rs)	6.3	24.9	28.7	34.0

Source: Company, Religare Research

Cashflow statement

(Rs mn)	FY06	FY07	FY08E	FY09E
Net income	22.6	104.9	223.7	514.1
Depreciation	5.5	7.5	30.0	70.0
Other adjustments	23.3	27.2	44.8	18.0
Changes in WC	(91.1)	(42.1)	(74.5)	(452.5)
Operating cash flow	(39.7)	97.5	223.9	149.6
Capital expenditure	(13.3)	(65.0)	(346.0)	(433.0)
Investments	-	-	-	-
Other investing inc/(exp)	-	-	-	-
Investing cash flow	(13.3)	(65.0)	(346.0)	(433.0)
Free cash flow	(52.9)	32.5	(122.1)	(283.4)
Issue of equity	-	-	45.0	407.4
Issue/repay debt	62.9	37.0	145.0	15.0
Dividends paid	-	(3.6)	(10.8)	(28.7)
Others	(23.9)	(35.9)	(74.2)	(100.0)
Financing cash flow	39.0	(2.5)	105.0	293.7
Beg. cash & cash eq	(13.9)	30.0	(17.0)	10.3
Chg in cash & cash eq	20.8	6.9	37.0	20.0
Closing cash & cash eq	6.9	37.0	20.0	30.3

Source: Company, Religare Research

Recommendation history

Date	Event	Target (Rs)	Reco
18-Jun-07	Initiating Coverage	172	Buy

Source: Religare Research

Balance sheet

(Rs mn)	FY06	FY07	FY08E	FY09E
Cash and cash eq	6.9	37.0	20.0	30.3
Accounts receivable	145.6	196.4	401.8	631.4
Inventories	191.7	230.0	400.0	713.0
Others current assets	64.5	75.0	20.0	30.0
Current assets	408.6	538.4	841.8	1,404.7
LT investments	-	-	-	-
Net fixed assets	95.2	152.7	467.7	829.7
CWIP	-	-	-	-
Total assets	503.8	691.1	1,309.5	2,234.4
Payables	112.7	179.5	425.4	525.5
Others	16.2	30.0	68.0	140.0
Current liabilities	128.9	209.5	493.4	665.5
LT debt	270.0	307.0	497.0	467.0
Other liabilities	15.3	18.5	25.0	30.0
Equity capital	31.2	31.2	62.4	124.7
Reserves	58.4	124.9	231.6	947.1
Net Worth	89.5	156.0	294.0	1,071.8
Total liabilities	503.8	691.1	1,309.5	2,234.4
BVPS (Rs)	28.7	50.0	47.1	85.9

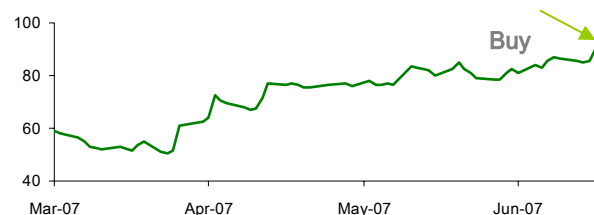
Source: Company, Religare Research

Financial ratios

	FY06	FY07	FY08E	FY09E
EBITDA margin (%)	3.6	7.2	7.5	8.1
EBIT margin (%)	3.2	6.8	6.8	7.3
Net profit margin (%)	1.0	3.4	3.4	4.2
EPS growth (%)	13.1	401.4	6.1	19.0
Receivables (days)	36.3	34.7	33.5	27.4
Inventory (days)	41.9	42.6	29.9	27.2
Payables (days)	30.2	31.4	30.6	24.6
Current ratio (x)	3.2	2.6	1.7	2.1
Interest coverage (x)	2.2	4.1	4.4	6.8
Debt/equity ratio (x)	3.0	2.0	1.7	0.4
ROE (%)	15.6	44.9	50.6	33.0
ROCE (%)	14.5	32.0	41.5	44.5
ROAE (%)	2.8	10.1	11.4	15.8
EV/Sales (x)	0.4	0.3	0.2	0.2
EV/EBITDA (x)	10.8	4.0	3.3	2.4
P/E (x)	21.5	4.3	4.0	3.4
P/BV (x)	3.3	1.9	2.0	1.1
P/CEPS (x)	15.0	3.8	3.3	2.8

Source: Company, Religare Research

Stock performance



Source: Religare Research

RELIGARE RESEARCH

Fundamental Research

Amitabh Chakraborty, CFA, FRM	President - Equity	amitabh.chakraborty@religare.in
Piyush Parag	Auto, Auto Ancillaries, Shipping	piyush.parag@religare.in
Abhishek Agarwal	Bank, Agri-Commodities	abhishek.a@religare.in
Dinesh Shukla	Bank, Agri-Commodities	dinesh.shukla@religare.in
Ashish Kila	Capital Goods, Engineering, Power	ashish.kila@religare.in
Ronald Siyoni	Capital Goods, Engineering, Power	ronald.siyoni@religare.in
Dalpat Mehta	Cement, Textiles	dalpat.mehta@religare.in
Anurag Purohit	Information Technology, Telecom	anurag.purohit@religare.in
Hitesh Punjabi	Information Technology, Telecom	hitesh.punjabi@religare.in
Ram Patnaik	Media, FMCG	ram.patnaik@religare.in
Reema Deshkar	Media, FMCG	reema.deshkar@religare.in
Suman Memani	Mid-caps, Construction, Realty	suman.memani@religare.in
Sudeep Anand	Oil & Gas, Chemicals	sudeep.anand@religare.in
Bhawana Verma	Oil & Gas, Chemicals	bhawana.verma@religare.in
Alok Dalal	Pharmaceuticals	alok.dalal@religare.in

Derivatives Research

Anil Gupta	anil.g@religare.in
Samir Badami	samir.badami@religare.in
Somendra Agarwal	somendra.agarwal@religare.in

Production

Anisha deSa	anisha.desa@religare.in
R Murali	r.murali@religare.in
Rajesh Mhatre	rajesh.mhatre@religare.in

Administration

Shraddha Hosalkar	shraddha.hosalkar@religare.in
-------------------	-------------------------------

Religare Securities Limited

Mumbai: 3rd Floor, Dheeraj Arma, Anant Kanekar Marg, Bandra (East), Mumbai-400 051. Phone: +91 22 66124600 Fax- 66124781

New Delhi: 19, Nehru Place, New Delhi - 110019, Phone: +91 11 30815100.

Disclaimer: This document has been prepared by Religare Securities Limited (Religare). This is not an offer to buy or sell or the solicitation of an offer to buy or sell any security or to participate in any particular trading strategy or as an official confirmation of any transaction. The views expressed are those of analyst. The information contained herein is from publicly available data or other sources believed to be reliable or developed through analysis. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. Religare accepts no obligation to correct or update the information or opinions in it. Religare may discontinue research coverage of a subject company or change the opinion(s) without notice. The investment discussed or views expressed may not be suitable for all investors and certain investors may not be eligible to purchase or participate in some or all of them. Religare recommends that investors independently evaluate particular investments and strategies. The user assumes the entire risk of any use made of this information. Neither Religare nor any of its affiliates, directors, employees, agents or representatives shall be liable for any damages whether direct, indirect, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. Religare and its affiliates, officers, directors, and employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or act as advisor or lender / borrower to such company (ies) or have other potential conflict or interest with respect to any recommendation and related information and opinions. The recipient should take this into account before interpreting the document. This report is not directed or intended for distribution, publication, availability 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 regulation or which would subject Religare and affiliates to any registration or licensing requirements within such jurisdiction, persons in whose possession this document comes, should inform themselves about and observe, any such restrictions. **Copyright in this document vests exclusively with Religare.** This information should not be reproduced or redistributed or passed on directly or indirectly in any form to any other person or published, copied, in whole or in part, for any purpose, without prior written permission from Religare. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person.