

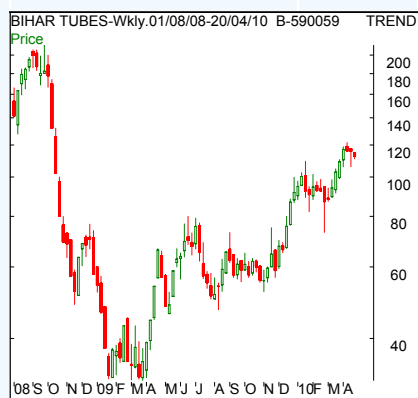


## Industry: Pipes &amp; Tubes

6- 9M Target Price - Rs.133/142

(Buy at CMP &amp; add on dips in the price band of Rs.91- 98)

## Price Chart



## Stock Details

BSE Code	590059
Bloomberg	<b>BTUB IN</b>
Price (Rs) as on April 20, 2010	112.70
Equity Capital (Rs. Cr)	20.29
Face Value (Rs)	10.00
Equity Shares O/s (cr)	2.03
Market Cap (Rs Cr.)	228.67
Book Value (Rs) (FY09)	81.82
Avg Volume (52 Week)	135340
52 wk H/L	121.60/46.05

## Shareholding Pattern

(As on March 31, 2010)	
Indian Promoters	37.9
FII	2.8
Non Institution (incl public & others)	59.3
Total	100.0

## Background

Bihar Tubes Ltd (BTL), a manufacturer of steel pipes and tubes, was established in 1986 in Sikandarabad, Uttar Pradesh. It 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 has 5 tube mills at Unit I – Sikandarabad, UP (installed capacity 1,25,000 MTPA) and 2 mills at Unit II – Hosur, Tamilnadu (installed capacity of 2,00,000 MTPA – First Phase on stream of 48,000 MTPA in March 2010) having total installed capacity of 3,25,000 MTPA. It also has two wholly owned subsidiaries – Apollo Metalex (capacity of 25,000 MTPA) and Shri Lakshmi Metal Udyog Pvt Ltd (capacity of 50,000 MTPA). BTL 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.

It is a leading manufacturer and exporter of Steel Pipes & Tubes, Aluminised Steel Tubes, ERW Black Steel Tubes, Hot Dipped & Pre Galvanised Steel Tubes, Fence Tubes, Structural Steel and Hollow Sections.

It manufactures steel tubes for a range of applications like Mild Steel Tubes for structural purpose and mechanical & general engineering purpose, ERW Pipes for water, gas & sewerage, Steel Tubes for idlers of belt conveyors, water wells and Lancing Pipes for various automotive & industrial applications.

BTL exports its products to various countries and also exploring new destinations with vast export potentials. It has got the certification as Recognised Export House. All its products are BIS marked. It is also enjoying ISO 9002 and ISO 9001 certification for its operations.

## Triggers

- Strong demand from user industries to provide visibility for sales of BTL
- Aggressive capacity expansion being undertaken to double it in the next 6 months and in turn improve volumes by more than 40% in FY11
- Inorganic growth in the past proved successful and contributing well to consolidated financials
- Usage of superior technology gives an edge over competitors
- Low debt equity ratio maintained
- Manufacturing facilities well spread over the country and lead to logistics and operating efficiencies
- Introduction of higher value added products to boost margins marginally in H2FY11
- Diversified customers insulates from revenue and margins volatility
- Only organized player in the pre-galvanised sheet tube segment - an advantage as it is a high margin segment
- Well established branded player

## Consolidated Financials at a Glance

	(Rs. in Cr)				
Particulars	FY07	FY08	FY09	FY10E	FY11E
<b>Net Sales</b>	202.7	273.7	519.3	581.6	840.4
% Growth (y-o-y)	38.6%	35.0%	89.8%	12.0%	44.5%
<b>Operating Profit</b>	14.6	29.6	17.3	55.1	79.0
% Growth (y-o-y)	180.2%	102.6%	-41.4%	218.3%	43.5%
<b>PAT (Adjusted)</b>	6.8	16.1	2.6	28.1	38.7
% Growth (y-o-y)	367.7%	-29.1%	-91.4%	966.1%	37.5%
<b>EPS</b>	21.3	15.1	1.3	13.8	19.0
% Growth (y-o-y)	367.7%	-29.1%	-91.4%	966.1%	37.5%
<b>PE</b>	<b>5.5</b>	<b>7.7</b>	<b>89.2</b>	<b>8.4</b>	<b>6.1</b>

(Source: Company, HDFC Sec Estimates)

## Valuation & Recommendation

BTL is a pure player in the pipes and tubes segment with niche focus on pre-galvanised sheets and coils where it is the only organized player. Its major sales are derived from industries like auto, oil & gas, infrastructure, agriculture, etc, which are currently in a buoyant stage and could contribute to the growth of BTL.

Its distribution network is present in 15 states, where it sells 150+ varieties of tubes and has well reputed companies like BHEL, L&T, UNICEF, Gujarat Gas, IGL, HPCL, Era Infra, etc on its client list. This makes it a strong branded player. It has the latest technology equipped machinery and processes from one of the world leaders in tube mill technology, Kusakabe of Japan. The only other player to have this technology is Tata Steel and this gives it cutting technology edge over other players. Also its products are approved by 150+ agencies in India. All its manufacturing facilities have ISI licenses and are CE and UL certified, which give them the advantage of exporting its products to European countries without any hassle.

With the new plant being set up at Hosur, Tamilnadu, BTL would be able to manufacture API specialized tubes of ½ inch to 12 inch thickness, pipes upto 9mm thickness and also foray into manufacture of seamless pipes of ½ inch to 6 inch thickness. These value added products could give margins of 18-22% and lead to a small rise in the overall margins in FY11.

Inspite of all these strengths in its kitty, BTL faces risks of raw material volatility and competition from big players and some unorganized players. There also could be delay in capacity expansion plans, which could result in delay in growth and in turn impact its earnings.

Despite the negatives, with the user industries on a growing path, capacity expansion plans in place, introduction of value added products and better operating efficiencies expected due to increase in volumes and savings in freight and transport costs, BTL could report 27.2% CAGR over FY09-11 in net sales and 282.1% CAGR over FY09-11 in Net Profit. We expect it to record EPS of Rs.13.8 in FY10 and Rs.19 in FY11.

At the CMP of Rs.112.7, it is trading at 8.1x FY10E EPS and 5.9x FY11E EPS. We feel the stock could be bought at the CMP and add on dips between Rs.91 to Rs.98 for sequential targets of Rs.133 (7x FY11E EPS) and Rs.142 (7.5x FY11E EPS) over the next 2-3 quarters.

## Investment Rationale

### Robust performance of user Industries:

BTL derives its sales from user industries like agriculture, auto, oil and gas, infrastructure and telecom. Its performance in turn depends on the performance of the user industries, which has been robust and continues to grow further.

Agriculture sector: Agriculture represents one of the most critical economy drivers, contributing 18.5% of the national income, about 15% of total exports and supporting two-thirds of the work force. With enhanced government focus on agricultural productivity, this sector will play a pivotal role in driving the national economy.

As per planning commission investment in irrigation and water management projects is likely to increase to Rs.2,323.1 bn, which constitutes significant portion of \$500 bn worth of investments envisaged in infrastructure development in the 11th Five Year Plan. The government had initiated major schemes such as Accelerated Irrigation Benefit Programme AIBP, Bharat Nirman and Restoration of Water Bodies and Jawaharlal Nehru National Urban Renewal Mission JNNURM to ensure that there is an adequate supply of water for irrigation in order to maximize performance of the agricultural sector. The budgetary allocation has been stepped up significantly for this segment through these schemes.

Given a stable government and better macro-economic environment we expect water supply and irrigation and urban infrastructure to grow at a faster rate compared with overall infrastructure sector. There has been a constant rise in allocation for Jawaharlal JNNURM scheme. The government had allocated Rs.497 bn for phase I of JNNURM

scheme and is planning to launch next phase of the project with about Rs.1,000 bn of planned investments. Government spending on JNNURM scheme has remained same aggregating Rs.1.19 bn in budget 2011.

**Telecom Industry:** India, the second largest mobile market in the world, is also among the fastest growing mobile markets globally. The total number of mobile subscribers in India (i.e., the subscriber base) has increased from 6.4 mn in March 2002 to around 421.8 mn in March 2010, at a compounded annual growth rate (CAGR) of 68.8%. Despite the growth, mobile penetration remains moderate: As on end January 2010, India had a mobile penetration of around 43-44%, which is relatively lower as compared to other countries.

Given the moderate penetration levels at present, mobile growth in India is expected to continue in the short to medium term albeit at a lower level because of the larger base effect. The development of telecom infrastructure is mainly a network coverage play which asks for setting up of more network towers. These towers require round black steel tube, thus in turn propelling the demand for steel tubes.

**Automobile sector:** The Indian automobile industry witnessed an unprecedented boom owing to improving lifestyles of the middleclass and a significant increase in their disposable incomes in FY09. The size of the Indian automotive industry is estimated between US\$120.09 billion and US\$155.12 billion by 2016. The industry is expected to touch the 10-million mark, to which the commercial vehicle segment will be a major contributor. Industry experts peg the Indian automobile sales growth at a CAGR of 9.5%. Steel tubes are used in auto ancillary industry and busbody manufacturing.

**Infrastructure:** India's core sector is expected to attract staggered investments (roads, power, ports, airports, etc) of around US\$340-billion over the next 10 years. Accelerated development of high quality physical infrastructure, such as roads, ports, airports and railways is essential to sustain economic growth. While addressing the policy gaps in this sector, the Finance minister has proposed to maintain the thrust for upgrading infrastructure in both rural and urban areas. In the Budget for 2010-11, Rs.1,73,552 crore has been provided, which accounts for over 46% of the total plan allocations, for infrastructure development in the country. For the year 2010-11, the Finance Minister proposed to provide Rs.66,100 crore for Rural Development. Allocation for road transport increased by over 13 per cent from Rs. 17,520 crore to Rs 19,894 crore. Rs 16,752 crore has been provided for Railways, which is about Rs.950 crore more than last year.

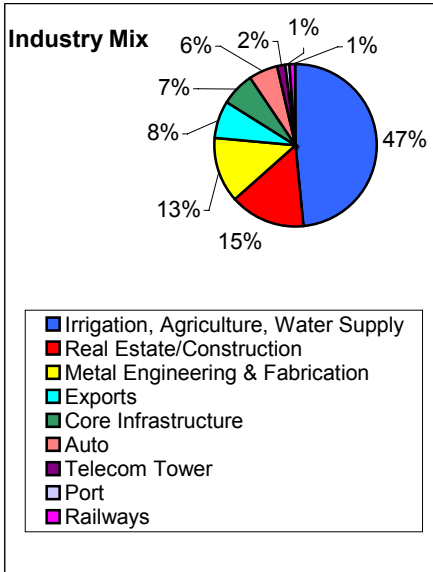
The Government plans for increasing the pace of road building. The plans, with timelines for land acquisition, bidding and building, envision the construction of 127 roads in the coming year, at a cost of Rs.982 bn (about UD\$20 bn).

Infrastructure construction investments are expected to grow at a CAGR of 9% over the next three years. The construction industry growth is expected to drive demand for longsteel products at a CAGR of around 8%.

With the construction market booming and the emergence of new markets for steel pipes, ranging from commercial framing to water pipes, the future of the domestic steel tubing industry looks bright.

**Real Estate:** With great demand for housing for India's huge population and for commercial and industrial premises for its booming economy, large-scale real estate projects were launched across the whole country. This transformed the real estate business into one of the most lucrative sectors in the country that substantially contributes to the gross domestic product of the country. Almost 5 per cent of GDP is contributed by the housing sector and in the next few years it is expected to rise to 6 per cent. Moreover, the construction sector has also been responsible for the development of over 250 ancillary industries such as cement, steel, paints, brick, timber, building materials, etc.

**Metal Engineering and Fabrication:** India's growth story hinges on consumption and investment demand. But the investment demand has slackened in the past few months, but the players are hopeful that 2010 will be a lot better with raining orders. Be it roadways & highways, power equipment or other infrastructure sector, India needs massive investments for years together, to improve its infrastructure, which can facilitate it to become more competitive in the global market.



Order book of the industry players are healthy/ comfortable despite mixed trend in order inflow in last few quarters. Despite healthy order book the conversion of book to revenue has suffered as the players were forced to go slow on execution due to client side uncertainties.

The tightening of monetary policy by China and few other countries and the risks to global economic recovery has lead to much needed correction in the global commodity and equity markets. With various economies timing the withdrawal of economic stimulus, and as risk appetite wanes, there is drain in liquidity in the global financial system. But factoring in the strong growth prospects of China and India, relatively the funds for deserving projects are trickling in. Despite mixed trend in order inflow, the industry players were sitting on comfortable to healthy order book with the delay in delivery/ payment being the concern/thorn. So, the current sluggishness is set to leave way for optimism with increasing order inflows and better order conversion going forward.

Oil and gas: Over the past decade, India's crude oil consumption witnessed a 4.9% CAGR, making it the world's fifth-largest energy consumer. India's crude oil import bill surged over 9.1% to US\$53.3 billion in 2007-08 on the back of rising international prices. At less than 16,000 km, India's oil and gas pipelines network is among the smallest in the world, while France (roughly one-sixth its size) has about 170,000 km of pipelines and the US 329,600 km.

Capacity to double in next 6 months – to grow volumes close to 40%+ in FY11:

BTL has a capacity of 2,00,000 MTPA as of March 2010. It inaugurated a new facility in Hosur, Tamilnadu on January 20, 2010. The facility is the largest in South India. Being built at a capital cost of Rs.100 cr and a capacity of 2,00,000 MTPA (spread over 3 phases), this plant will meet the growing demand for steel tubes in the Southern market. It has launched the first phase with 48,000 MTPA capacity in March 2010 and this has run at ~75% capacity utilisation in the month of March 2010. Second phase would be of 77,000 MTPA and the third phase would be of 75,000 MTPA taking the total capacity to 2,00,000 MTPA. With the completion of the third phase at the Hosur facility, BTL would be the largest producer of steel tubes in the country having total capacity of 4,00,000 MTPA upto a size of 12 inches. The new facility has been built with latest technology and machinery of Kusakabe, Japan producing widest range of steel tubes and hollow sections in galvanised and pre-galvanised. It is working on developing several products catering to newer applications in airports, metro network and green houses.

The second phase and third phase will be completed by September 2010 and within the next 6 months BTL's capacity will double and this could lead to volumes rising more than 40% in FY11 thereby improving the topline and profitability.

BTL is also planning to later set up a plant in West India, Maharashtra so as to cater to the market there and avail freight and transport cost savings. However, this could take some time.

Hosur Plant Expansion Roadmap

Phase	Capacity (MTPA)	Commissioning Date
Phase I	48000	March-2010
Phase II	77000	June-2010
Phase III	75000	September-2010

(Source: Company)

Installed Capacities at different locations

Units	BTL-SKD (MTPA)	SLMUL (MTPA)	AMPL (MTPA)	Hosur (MTPA)	Maharashtra (proposed)	Total (MTPA)
2009-10	125000	50000	25000			200000
2010-11*	125000	50000	25000	200000		400000

\* Projected, SLMUL – Shri Lakshmi Metal Udyog Pvt Ltd, AMPL – Apollo Metalex Pvt Ltd

(Source: Company)

Inorganic acquisitions in recent past proved successful:

Out of the 4 manufacturing facilities of BTL, 2 have been through acquisitions over the past 2 years.

To curtail input costs, it acquired 100% equity of Apollo Metalex Private Limited (which became a 100% subsidiary) with a sheet galvanising capacity of 24,000 MTPA. Apollo

Metalex Private Limited is engaged in the business of manufacturing and sales of Pre-Galvanised segment i.e. Pre-Galvanised Sheets and Coils and Pre-Galvanised Steel Tubes and Fence Tubes. BTL acquired shares worth Rs.121.1 lakh from Apollo's shareholders, making it the company's 100% subsidiary on June 15, 2007. It funded the acquisition of Apollo Metalex from internal accruals. It infused Rs.6 cr in Apollo Metalex and currently this plant gives the best realizations.

In FY08, BTL acquired Shri Lakshmi Metal Udyog Ltd (SLMUL) located at Bangalore with an installed capacity of 60,000 MTPA, which manufactures ERW black pipe, galvanized pipes, hollow sections and structural tubes. This acquisition was a non-cash share swap deal. It later infused Rs.7.9 cr in the company. For acquisition of 100% equity of SLMUL from its' shareholders, BTL issued 17,98,333 shares of Rs.10 each on a preferential basis on April 28, 2008 to the then shareholders of SLMUL. This acquisition was undertaken so as to extend its brand presence in promising southern markets and to take advantage of the additional installed capacity to meet the increase in demand. Also this would save on freight and transport costs thereby helping BTL in improving their margins. SLMUL currently is the only organised player in South India.

To fund these acquisitions and future expansions, BTL undertook a global GDR offering of US\$20 million in June-July 2008. Since their acquisition, these plants have been manufacturing high quality products running profitably at good capacity utilisation and cater well to the diversified customers requirements.

#### Technological superiority gives an edge in competitive markets:

BTL entered into a technological collaboration with Japanese pipe manufacturer, Kusakabe, in 2002, which has helped it to considerably to expand the range and application of its products. It currently manufactures tubes and pipes from four mills (establishment of the fifth mill at Hosur is being undertaken and first phase has gone on stream), three of which have technology imported from Kusakabe. The Hosur plant also has the technology 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 purchase of technology/equipment is being done through Kusakabe's Indian subsidiary Gallium Industires Ltd.

Kusakabe is part of the Japan-based Kusakabe Group, which has been supplying a full range of tube and pipe mills and associated equipment for all sectors of the pipes and tubes industry since 1959 and had developed stainless steel tube manufacturing lines way back in 1969. Kusakabe equipment has been operating in more than 26 countries.

Kusakabe will provide production know-how, plant operation system and implementation, while BTL will be responsible for market information, customer relationships and sales assistance. Applications for stainless steel pipes and tubes include heat exchangers, boilers, condensers, refrigeration, instrumentation, hydraulics fuel injection, exhaust systems for automobiles, general piping for power plants, space applications and special piping for nuclear applications. BTL's JV with Kusakabe would cover all products, except the automotive market serviced by Kuma Stainless Tubes, the other Indian JV company of Kusakabe.

BTL has become a competitive supplier of high quality tubes for a variety of applications keep its edge over competitors by investing in new technology and processes. With the latest technology BTL is capable of manufacturing pre-galvanized tubes with in-house coil galvanizing facility, opening up new markets for the company. The technology helps it to provide products from 1/2 inch to 12 inches (diameter), addressing the entire range of Indian, American, British, European and Japanese quality specifications. It can manufacture pre-galvanized tubes using 80-100 grams of zinc per square metre as opposed to the global average of 110 grams of zinc per square metre. Similarly, its manufacture of galvanized sheets consumes around 400 grams of zinc per square metre as opposed to the global average of 480 grams. BTL's plant-and-machinery sourced from Kusakabe (Japan) ensures cutting-edge technology leverage. The only other competitor of BTL, which uses Kusakabe's technology is Tata Steel.

#### Debt equity ratio under control:

An advantage enjoyed by BTL is being cash rich company with a huge cash reserve of about Rs.93.8 crs in FY09 and its net debt equity ratio was 0.5% for FY09. Most of the

debt on books is working capital debt with little term loans. The cash per share at Rs.61.3 is attractive from valuation perspective. Its book value per share too is healthy at Rs.81.8 per share in FY09.

With such strong cash balance and debt equity under control, BTL could undertake its expansion plans with ease. Raising GDR funds of US\$20 mn in time helped a lot to achieve this.

Manufacturing facility spread out in North and South India – a geographical and logistical advantage:

BTL has manufacturing facilities spread out in North and South India, which enables it to cater to various markets. It has 2 units in North India, which have a total capacity of 1,50,000 MTPA. Its 2 other units are located at Bangalore and Hosur (under implementation). The first phase of the Hosur plant has been commissioned in March 2010 and would have an installed capacity of 200,000 MTPA by September 2010.

Its state-of-the-art manufacturing facilities are strategically located to leverage on the future opportunities. A manufacturing presence in 4 locations, a direct marketing presence in more than 15 states and vast distributor-network across the country enables BTL to increase its market penetration. This also aids BTL is saving on freight costs and enables it to cater to diversified customer needs spread across the country.

BTL is also planning to later set up a plant at Maharashtra to cater to the demands of the western market. With manufacturing facilities across India, it will have a pan-India presence and cater to the growing demand across the country.

Higher value added products from Hosur could lead to small improvement in margins in H2FY11:

BTL is enhancing its product portfolio by elevating its plants with the facilities necessary to manufacture API Specification Tubes. BTL plans to manufacture API grade pipes (for the oil and gas sector), for which it plans to use the ERW/HFIW technology. The oil and gas sector is undisputedly the largest driver for pipe demand globally, given lower transportation cost vis-à-vis road and rail. If there is one user industry of pipes and tubes, which has the highest visibility and growth potential, it has to be oil and gas.

BTL's mega project at Hosur will have the facility to produce API Specification Tubes, which will enable it to cater to the rising demand of the oil and gas sector. Also, it is looking at enhancing its product portfolio at Unit-I, Sikandrabad, U.P by elevating the plant with the facility necessary to manufacture API Specification Tubes. This will facilitate the company to increase its market position in the steel tube industry. This will diversify its product portfolio and will enable it to be amongst the selected few manufacturers of API pipes in the tube industry in India.

With presence in API tubes, BTL would be vying for a pie of this high potential segment. For the purpose of executing this project, BTL has already recruited key people with relevant expertise and more senior people are expected to join once financial closure for the project is achieved. With the Hosur plant to be fully commissioned by September 2010, from H2FY11 onwards, operating margins could improve.

Good mix of customer base insulates from revenue and margin volatility:

BTL's customer segment includes diversified users of Steel Pipes for carrying water and gas; for boilers, heat exchangers, submersible pumps (even cut to 3 meter lengths); and also for Bore well, Casing pipes, scaffoldings, conveyor idlers, structural tubes (Tubular, Square & Rectangular Pipes). Drill rod pipes etc., used in the fields such as agriculture and irrigation. The customers segment also extends to various industrial sectors such as automobiles (including chassis manufacturing), housing, furniture, structurals, container making, railway electrification, electric poles, telecommunication, power stations, handling equipments, electrostatic precipitators etc.

PRODUCT	END USER / USE	MAJOR CLIENTS
Hot dipped Galvanized	Water, Gas, Oil transportation & Fire Fighting	BSNL, State Agriculture Department and Water Utilities, BHEL, UNICEF, UP Jal Nigam, Gujarat Gas, IGL, Firepro, HPCL, Era Infra
Pre Galvanized	Fencing, Cabling and Ducting, Automotive	Tata Marcopolo, Ashok Leyland, ACGL,



	(Bus body) & Greenhouses	Netafim, Jain Irrigation; US/Europe buyers of fencing, greenhouse tubes
ERW Black	Fire fighting, conveyor systems, scaffolding, transmission towers, power projects and industrial uses.	Turbo Scaffolding, DMRC, BMRC, BHEL, HPCL, BPCL, MECON, L&T, Gammon, B.L.Kashyap, Afcons, Firepro, Airtel
Hollow Section	40X20 – 300X200 mm rectangular	Infrastructure, Metro, Airports, Stadiums, Prefab and industrial applications.

(Source: Company Presentation)

Its export markets include customers in United Kingdom, Germany, West Indies, Nigeria, Mauritius, Maldives, Bangladesh, Sri Lanka, Bahrain, United Arab Emirates, Qatar, Jamaica, Guyana, West African Countries, USA, South Africa, France, Australia, etc.

BTL's all user segments have been doing well and are expected to do well to provide scalable and de-risked growth profile in future. Over the years, exports have grown and account for nearly 24% of net sales in FY09. These sales are not concentrated in any single country, but are spread over 35 countries.

Only organised player in Pre-Galvanised Steel Tube segment:

BTL is the first and only company in the organized sector to produce pre-galvanised tubes. This product is also exported to Africa, Trinidad and Tobago, Barbados, Jamaica and Sri Lanka, among others.

It enjoys a virtual monopoly in this segment in the domestic market due to the absence of credible organized players. It commenced the manufacture of pre-galvanized tubes in 2003 with applications in fencing, cabling, electrical conduits, arches and sheds for nursery plants and greenhouse structures. Following the acquisition of Apollo Metalex Pvt. Ltd. in 2007, possessing its own galvanized sheet manufacturing facility, it strengthened its competitiveness and industry position.

Its acquired company (Apollo Metalex), located close to the existing plant of Bihar Tubes in Sikandrabad, serves as a backward integration initiative (24,000-MTPA sheet galvanising capacity) through the supply of galvanized sheets. It possesses the single largest pre-galvanized pipes and tubes unit in northern India, enhancing economies of scale.

Pre-galvanized tubes have similar lifespan as galvanized tubes in spite of being much cheaper to produce due to lower zinc coating requirement (80- 120gm/mt v/s 400gm/mt for galvanized tubes). Lower consumption of zinc makes the product less sensitive to zinc prices, which have historically being very volatile.

Pre-galvanized tubes are a replacement for current uses of galvanized tubes and therefore, in a sense, the entire market for galvanized tubes is available for BTL to exploit. Although BTL is the only organized player to manufacture pre-galvanized tubes in India, these have been around for quite sometime in the US and European markets, indicating immense potential.

BTL caters to various industrial projects to supply pre-galvanized tubes. The rapid telecom growth and a consequent demand for pre-galvanized tubes enable it to enter into agreements with telecom companies to suffice their demand.

Branded Player:

BTL sells its products under the brand 'APL Apollo'. It has gained popularity and respect for the 'APL Apollo' brand name and the standing for the product and service integrity has increased. BTL claims that it is the first choice for the entire spectrum of steel tube users. It is the only organized player in the high-margin pre-galvanized sheet and tubes segment.

BTL has a network of 50 distributors throughout the country with a strong presence in North and South India. It 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 24% of net sales in FY09.

## Industry Outlook

### Overview

The Indian Steel Tube industry is among the top three manufacturing hubs after Japan and Europe. However, the penetration level of pipelines in oil and gas transportation is low at 32% in India as compared to 59% in USA and 79% globally. Of 140 million hectares of cultivable land in India, only 40% of the land is irrigated. The low penetration levels in these areas represent huge scope of growth for the steel tube industry.

Footprints of the modern 'Indian Steel Tubes and Pipe Manufacturing Industry' are found almost one century ago. Last two decades have been very crucial and decisive for the Industry. Post liberalization scenario has helped the Indian steel industry to integrate with the global economy and adopt world-class production technology to produce high-quality products. Consequently, the Indian industry became capable of producing international standard products of almost all grades/varieties and has been a net exporter, indicating increasing acceptance of its products in the international market.

The industry went through a turbulent phase between 1997 and 2001 when there was a downturn in the global steel industry. The progress of the industry in terms of capacity additions, production, consumption, exports, and profitability plateaued off during this phase. But the industry recovered in 2005 and is currently on sturdy footing given the strong domestic economic growth and revival of demand in global markets.

### Market size and structure

The steel pipe industry has shown robust growth on account of strong demand from domestic and export market. The domestic pipe industry at 1.53 million tonnes is valued at Rs 92.1 billion in 2008-09. Oil and gas along with water supply and sanitation constitute for significant portion of the total steel pipe demand.

Apart from domestic demand, international market is witnessing sharp rise in supply of pipes. The export market has surpassed the domestic market size for steel pipes and is estimated at around 1.95 million tonne and is valued at Rs 116.9 billion in 2008-09.

The industry is fairly consolidated with five major players accounting to more than 80% of the total capacity.

India's pipe industry primarily comprises of the manufacture of seamless or welded steel pipes/tubes and ferrous metal pipes/tube fittings. Nearly 14-15% of India's steel production is consumed by the steel tube and pipe industry. The industry is expected to grow at 30-35% till end of CY10, expanding its user industries beyond construction, agriculture, irrigation, oil and gas sectors.

### Future growth

After slowdown in 2008-09, the domestic pipe industry is expected to witness strong growth due to huge investments in oil and gas in India. The government's thrust on water supply and irrigation is also expected to contribute to the domestic demand.

The demand from oil and gas segment is expected to grow by CAGR of 9-10 over the next 5 years driving the overall demand in India to grow at a CAGR of 8-9%.

With an established track record, proximity to key markets like the Middle East and rising international client accreditations, the industry is increasing its presence in the global market. Exports are expected to grow at compounded rate of 8-9% over the next 5 years. The export opportunity could be further propelled by the expected emergence of replacement demand from the US and Russia.

Led by domestic and export growth, domestic production of steel pipes is expected to exhibit robust growth of 8-9% (CAGR) from 2008-09 to 2013-14.

### Investment outlook

The steel pipe industry has significantly added capacities during the last 1-2 years. Hence, it is expected that the industry would add only around 1 million tonnes during 2009-10 and 2013-14. Accordingly, an investment of Rs 14-17 billion is expected in the industry over this 5 year period.

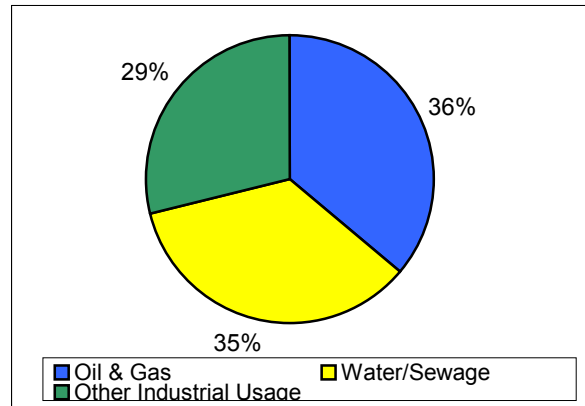


The large portion of this investment is expected to be funded through own funds. However, with lower profitability expected during medium term (on account of slowdown in investment) the industry is expected to raise debt to part fund the investment. As the industry is operating at low financial leverage, the expected increase in borrowings is unlikely to affect the financial flexibility significantly.

### **Domestic Demand**

Domestic demand for steel pipes is driven by large investments in the energy sector for the transportation of oil and gas. This coupled with investments in segments like water supply, sanitation and irrigation contribute to the total demand for steel pipes. In 2008-09, steel pipes demand is estimated at around 1.53 million tonnes in volume terms and Rs 92.1 billion by value.

Segment-wise domestic demand for steel pipes in 2008-09 (total: 1.53 million tonnes)



### **Company Background & Business Profile**

Incorporated in 1986, BTL has carved a position in the domestic/global market catering to its clients with premium quality pipes & tubes. Primarily, it is a leading manufacturer and exporter of Steel Pipes & Tubes, Aluminised Steel Tubes, Black Steel Tubes, Hot Dipped & Pre Galvanised Steel Tubes, Fence Tubes, Structural Steel.

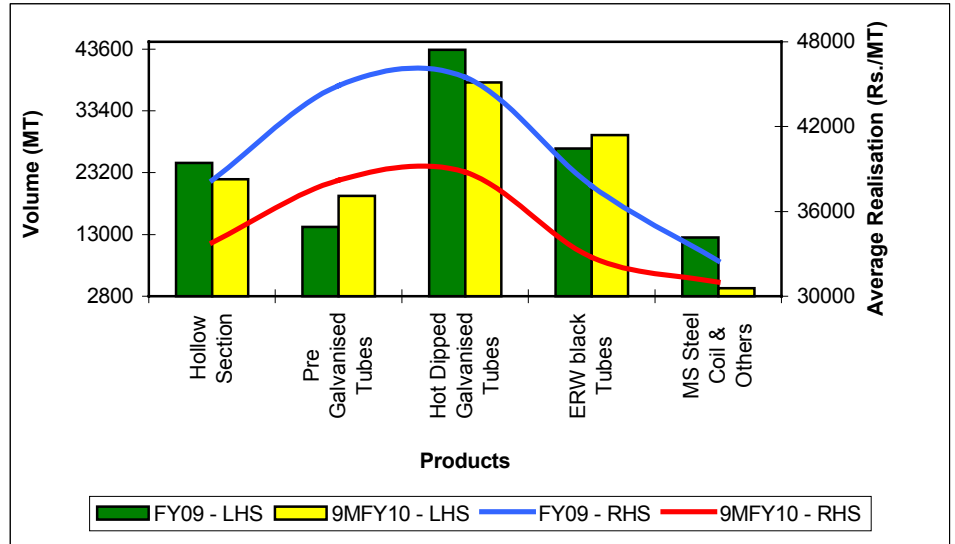
### **Volume Split**

Product	FY09		FY08		FY07	
	Volume	% of Total	Volume	% of Total	Volume	% of Total
Hollow Section	24,797	20.28%	25,288	35.49%	16,167	30.26%
Pre Galvanised Tubes	14,264	11.67%	13,724	15.25%	9,236	17.29%
Hot Dipped Galvanised Tubes	43,503	35.58%	20,738	29.10%	16,540	30.95%
ERW Black Round Tubes	27,199	22.25%	11,507	16.15%	11,490	21.50%
MS Steel Coil	12,495	10.22%	2,854	4.01%		
<b>Total</b>	<b>122,258</b>		<b>74,111</b>		<b>53,433</b>	

(Source: Company Annual Report)



Volume and realization trend in different products



(Source: Company)

BTL has large scale units engaged in manufacturing and exporting galvanized steel tubes, galvanized steel pipes and welded black pipes/tubes. It manufactures steel tubes for a range of applications like Mild Steel Tubes for structural purpose and mechanical & general engineering purpose, ERW Pipes for water, gas & sewerage, Steel Tubes for idlers of belt conveyors, water wells and Lancing Pipes for various automotive & industrial applications.

BTL markets its products through following segments such as:

- Dealer network
- Original Equipment Manufacturers and Projects
- Government Contracts & Rate Contracts
- Exports

**Product Certifications**

- IS 1239: Water, Oil and Gas Lines
- IS 1161: Construction
- IS 3601: General Engineering
- IS 3589: Casing Pipes, Boring applications
- IS 4270: Deep Boring Belt Systems
- IS 4923: Structural Tubes for Infra purpose
- IS 9295: Idlers Conveyors

**Manufacturing Facilities**

BTL has 4 manufacturing facilities located in North and South India. These facilities run on the latest technology provided by Kusakabe of Japan. Kusakabe is the world leader in Welded Tube Technology. It purchases the machinery and technology from Kusakabe's Indian subsidiary Gallium Industries Ltd. It installed its first Gallium tube mill with the latest technology from Kusakabe in 2002. Its global technology edge has resulted in enhanced production and quality compliance.

Bihar Tubes Limited Unit-I

BTL Unit-I, Sikandrabad, U.P. is the source of growth of Bihar Tubes Limited. It was established in 1987 with an initial capacity of 6,000 MTPA and currently stands at 125,000 MTPA capacity. The world class manufacturing facility propels production of high quality standard products. It manufactures ERW Black Steel Tubes, Hot Dipped & Pre Galvanized Steel Tubes, Fence Tubes and Structural Tubes.

Apollo Metalex Pvt. Ltd.

Apollo Metalex is amongst one of the top players in the pregalvanized segment. It is the wholly owned subsidiary of Bihar Tubes Limited. BTL acquired 100% equity of Apollo Metalex Private Limited (which became a 100% subsidiary) with a sheet galvanising capacity of 25,000 MTPA. It is located at Sikandrabad, U.P. at a distance of one km from

its holding company's Unit I. It has two manufacturing lines with the installed capacity of 25,000 MTPA each for pre - galvanized sheets & coils, pre-galvanized steel tubes and fence tubes.

#### Shri Lakshmi Metal Udyog Limited (SLMUL)

SLMUL is located at Attibele, Bengaluru. It is just 20 kms away from BTL Unit-II, Hosur. It is an amalgamation of innovation, technology and human proficiency. It was strategically acquired by Bihar Tubes to expand geographically in FY08. SLMUL has an installed capacity of 50,000 MTPA for the manufacture of ERW Black Tube, Galvanized Tubes, Pre-Galvanized Tubes, Hollow Sections and Structural Tubes.

#### Bihar Tubes Limited Unit-II

BTL Unit-II, Hosur, Tamil Nadu is a mega project of BTL spread over 24 acres. Phase 1 of the plant has been commissioned in March 2010, which has a capacity of 48,000 MTPA. Phase 2 will go on stream in June 2010 with a capacity of 77,000 MTPA and the final phase would be commissioned by September 2010. The total capacity of the plant would pan out to be 2,00,000 MTPA. The unit will also have the facility to manufacture API Specification Tubes, which will make BTL one of key players in this segment of the steel tube industry.

### Shareholding Pattern

Particulars	% of Holding	% of Holding	% of Holding	% of Holding	% of Holding
	31/03/2009	31/06/2009	30/09/2009	31/12/2009	31/03/2010
Indian Promoters	27.1	32.1	32.1	32.1	37.9
FII	9.0	0.5	0.0	1.1	2.8
Custodians	29.0	29.0	29.0	1.6	0.0
Bodies Corporate	10.7	18.8	16.5	35.7	33.3
Public and Others	24.2	19.7	22.4	29.5	26.0
Totals	100.0	100.0	100.0	100.0	100.0

(Source: Capitaline Database)

The promoters upped their stake in the company by 5% in the June 2009 quarter and in the current fiscal have begun to make creeping acquisitions by buying shares from the market in April 2010. In April 2010 till date, its group company APL Infrastructure has acquired 305,000 shares from the open market.

### Peer Comparison

Company	FY09									
	Sales (Rs. cr)	OPM (%)	NPM (%)	EPS (Rs.)	CMP (Rs.)	P/E	BV	P/BV	Mkt. Cap (Rs. cr)	Mkt. Cap/Sales (x)
Surya Roshni	1474.9	6.6%	1.5%	7.4	90.3	12.2	75.9	1.2	243.4	0.2
<b>BTL</b>	<b>519.3</b>	<b>3.3%</b>	<b>0.5%</b>	<b>1.3</b>	<b>112.7</b>	<b>86.6</b>	<b>81.8</b>	<b>1.4</b>	<b>228.7</b>	<b>0.4</b>

(Source: Capitaline Database, Company)

Company	FY10E									
	Sales (Rs. cr)	OPM (%)	NPM (%)	EPS (Rs.)	CMP (Rs.)	P/E	BV	P/BV	Mkt. Cap (Rs. cr)	Mkt. Cap/Sales (x)
Surya Roshni*	1913.4	5.6%	1.1%	8.3	90.3	10.9	88.2	1.0	243.4	0.1
<b>BTL</b>	<b>581.6</b>	<b>9.5%</b>	<b>4.8%</b>	<b>13.8</b>	<b>112.7</b>	<b>8.1</b>	<b>86.7</b>	<b>1.3</b>	<b>228.7</b>	<b>0.4</b>

\*=numbers calculated on annualized basis

(Source: Capitaline Database, HDFC Sec Estimates)

\*\*=Surya Roshni derived 73% of its sales from steel products in FY09

For FY10(E), BTL has a higher OPM and NPM than Surya and its P/E is lesser.

### Risks and Concerns

- **Delay in expansion schedule:** BTL is undergoing Rs.100 cr capex by end of Q2FY11 at its new plant at Hosur, Tamilnadu for entering into the manufacture of auto and high-diameter tubes. Any delay in the expansion schedule could affect its earnings growth.

- **Competition from big players:** BTL faces competition from big players like Tata Steel, Jindal Pipes, TTK Swastik and Surya Roshni in various product categories. It also faces competition from some unorganized players in ERW Black Pipes segment.

Product	Competition from
ERW Black Pipes	Tata Steel, Jindal Pipes, TTK Swastik, Surya Roshni and other unorganised players
Hot Dipped Galvanised Pipes	Tata Steel, Jindal Pipes, TTK Swastik, Surya Roshni
Hollow Section Pipes	Tata Steel
Pre-Galvanised Pipes	No organized player

(Source: Company)

- **Volatility in raw material prices:** BTL faces risk of volatility in raw material prices, which could impact its margins. BTL supplies its products to dealers (~50%), Government (~15%), OEMs and Projects (~25%) and balance to export markets. BTL at times may not be able to pass on the full rise in raw material prices to OEM/Projects customers, as the contract does not include 100% price escalation clause. This could lead to volatility in earnings.
- **Slowdown in capacity utilization:** Any slowdown in capacity utilization could lead to fall in volumes thereby affecting its profitability.
- **Forex fluctuations could hit BTL adversely:** BTL was a net exporter in FY09 to the extent of Rs.46.3 cr and hence an appreciation in the Rupee could impact its revenues and margins.

### Results Update – 9MFY10 Consolidated

BTL on a consolidated basis reported 13.7% growth in revenues in 9MFY10 to Rs.407.1 cr on the back highest ever production achieved of 119,500 tons as against 81,600 tons in 9MFY09. In Q3FY10, it has reported higher supply of hollow sections to automotive sector like new variety low floor buses. Prices of steel pipes and tubes which remained subdued till second quarter stabilized during the third quarter. An upward movement has been observed in the prices from December 2009.

BTL added a lot of clients in 9MFY10 namely; Ashok Leyland, Tata Marcopolo, Delhi Airport (supplied through L&T and Alupro), Gujarat Gas, Mundra Port SEZ, Automobile Corporation of Goa Ltd, Bina Oman Refinery, HPCL and IRCON International.

Operating margins have expanded by 370 bps to 9.6% in 9MFY10 on the back of reduced purchase of traded goods, fall in other expenditure and raw materials as a percentage of sales. Raw materials as a percentage of net sales have dipped by 300 bps while other expenditure has contracted by 100 bps.

Interest and depreciation charges have gone up by 27.3% and 45.9% respectively. During Q3FY10, BTL has partly commissioned the new facility at Hosur, Tamilnadu. The facility with a capacity of 2,00,000 MTPA and cost of Rs.100 cr is expected to be fully commissioned during the Q2FY11 and would result in savings in transportation cost.

Effective tax rate for 9MFY10 dipped to 22%. Higher sales and better operating efficiencies led to sharp rise in Net Profit margins by 380 bps from 2.6% in 9MFY09 to 6.4% in 9MFY10.

Its thrust on new market segments has started paying off well. Supply of ready size steel hollow sections to automotive segments namely low floor bus manufacturers has grown further in 9MFY10.

BTL earned EPS of Rs.13.1 in 9MFY10 vis-à-vis Rs.4.8 in 9MFY09. It declared an interim dividend of Re.1. While it could continue to perform well in Q4, additional tax provision by way of deferred tax could bring down its PAT for that quarter.

## Conclusion

BTL is a pure player in the pipes and tubes segment with niche focus on pre-galvanised sheets and coils where it is the only organized player. Its major sales are derived from industries like auto, oil & gas, infrastructure, agriculture, etc, which are currently in a buoyant stage and could contribute to the growth of BTL. BTL rewarded its investors by declaring interim dividend of Rs.1 in January 2010 after a period of three years.

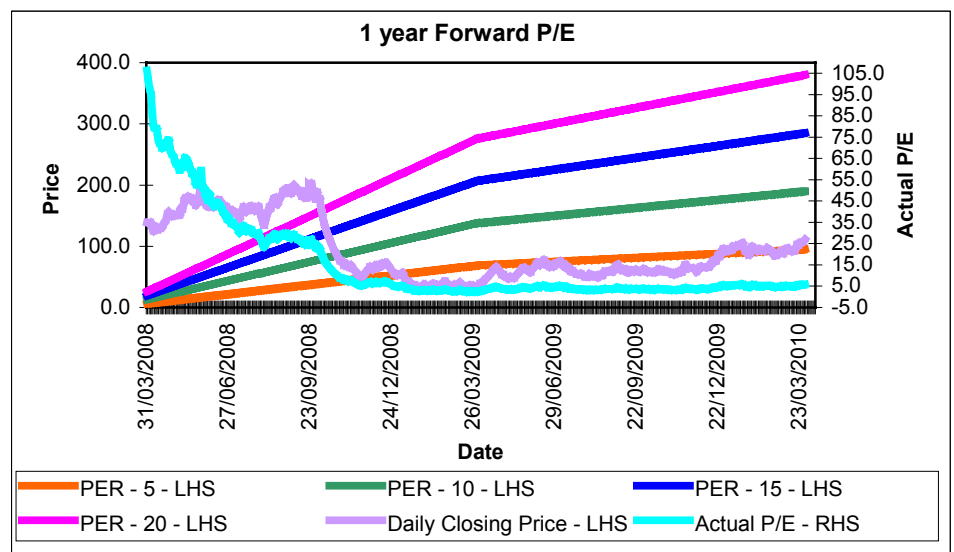
Its distribution network is present in 15 states, where it sells 150+ varieties of tubes and has well reputed companies like BHEL, L&T, UNICEF, Gujarat Gas, IGL, HPCL, Era Infra, etc on its client list. This makes it a strong branded player. It has the latest technology equipped machinery and processes from one of the world leaders in tube mill technology, Kusakabe of Japan. The only other player to have this technology is Tata Steel and this gives it cutting technology edge over other players. Also its products are approved by 150+ agencies in India. All its manufacturing facilities have ISI licenses and are CE and UL certified, which give them the advantage of exporting its products to European countries without any hassle.

With the new plant being set up at Hosur, Tamilnadu, BTL would be able to manufacture API specialized tubes of ½ inch to 12 inch thickness, pipes upto 9mm thickness and also foray into manufacture of seamless pipes of ½ inch to 6 inch thickness. These value added products could give margins of 18-22% and lead to a marginal rise in the overall margins in FY11.

Inspite of all these strengths to its kitty, BTL faces risks of raw material volatility and competition from big players and some unorganized players. There also could be delay in capacity expansion plans, which could result in delay in growth and in turn impact its earnings.

Despite the negatives, with the user industries on a growing path, capacity expansion plans in place, introduction of value added products and better operating efficiencies expected due to increase in volumes and savings in freight and transport costs, BTL could report 27.2% CAGR over FY09-11 in net sales and 282.1% CAGR over FY09-11 in Net Profit. We expect it to record EPS of Rs.13.8 in FY10 and Rs.19 in FY11.

At the CMP of Rs.112.7, it is trading at 8.1x FY10E EPS and 5.9x FY11E EPS. We feel the stock could be bought at the CMP and add on dips between Rs.91 to Rs.98 for sequential targets of Rs.133 (7x FY11E EPS) and Rs.142 (7.5x FY11E EPS) over the next 2-3 quarters.



**Quarterly Financial Performance:****Consolidated:**

(Rs. In Cr)

Particulars	Q3FY10	Q3FY09	% Chg	Q2FY10	% Chg	9MFY10	9MFY09	% Chg
Net Sales: Manufacturing Goods	141.2	100.4	40.6%	140.8	0.2%	407.1	358.0	13.7%
Net Sales: Trading Goods	3.2	0.7	327.0%	1.9	64.6%	9.6	19.4	-50.8%
Other Operating Income	1.1	0.9	22.7%	1.5	-26.0%	3.0	5.6	-47.2%
Total Operating Income	145.4	102.0	42.5%	144.2	0.8%	419.6	383.0	9.6%
<b>Expenditure</b>								
Stock Adjustment	-4.2	10.1	-141.3%	-11.28	-63.0%	-14.4	-9.6	49.8%
Raw Materials consumed	121.0	90.1	34.3%	126.9	-4.6%	352.4	320.6	9.9%
Purchase of traded goods	3.1	0.7	328.8%	1.9	63.9%	9.5	19.4	-51.1%
Staff Cost	1.4	0.8	77.8%	1.4	0.7%	4.0	2.2	84.3%
Other Expenditure	10.0	8.1	23.3%	11.7	-14.4%	28.3	28.4	-0.5%
Total Operating Expenditure	131.4	109.9	19.6%	130.6	0.6%	379.7	360.9	5.2%
<b>Operating Profit</b>	<b>14.0</b>	<b>-7.9</b>	<b>-277.6%</b>	<b>13.5</b>	<b>3.1%</b>	<b>40.0</b>	<b>22.1</b>	<b>80.7%</b>
OPM %	9.7%	-7.8%		9.5%		9.6%	5.9%	
Other Income	0.0	0.2	-100.0%	0.1	-100.0%	0.2	0.3	-36.0%
Interest Expenses	2.3	2.2	7.9%	2.8	-17.4%	7.5	5.9	27.3%
Depreciation	0.9	0.5	61.1%	0.8	14.5%	2.3	1.6	45.9%
PBT	10.8	-10.4	-203.8%	10.1	6.5%	33.9	14.9	127.9%
Tax	2.3	-2.9	-179.6%	2.1	14.1%	7.5	5.3	41.6%
Effective Tax Rate %	21.7%	28.3%		20.3%		22.0%	35.3%	
<b>PAT</b>	<b>8.4</b>	<b>-7.4</b>	<b>-213.3%</b>	<b>8.1</b>	<b>4.6%</b>	<b>26.5</b>	<b>9.6</b>	<b>175.1%</b>
PATM %	5.8%	-7.4%		5.6%		6.4%	2.6%	
Equity Capital	20.3	19.9	1.9%	20.3	0.0%	20.3	19.9	1.9%
<b>EPS</b>	<b>4.2</b>	<b>-3.7</b>	<b>-211.2%</b>	<b>4.0</b>	<b>4.6%</b>	<b>13.1</b>	<b>4.8</b>	<b>170.1%</b>

(Source: Company)

**Financials and Projections****Profit & Loss A/c (Consolidated)**

(Rs. In Cr)

YE March	FY07	FY08	FY09	FY10E	FY11E
Net sales	202.7	273.7	519.3	581.6	840.4
Variation in Stock	7.8	14.0	-6.2	4.2	5.2
Raw materials consumed	178.9	231.6	448.1	480.4	694.1
Manufacturing Expenses	5.0	5.1	13.5	14.6	17.5
Excise duty on increase/decrease in stock	0.4	3.0	-3.2	-3.4	3.7
Power & Fuel cost	2.8	4.7	8.7	9.0	10.8
Administrative Expenses	1.2	1.8	5.2	5.5	7.1
Selling & Other Expenses	8.3	11.7	17.9	18.8	27.2
Loss on sale of fixed assets	0.0	0.0	0.0	0.0	0.0
Miscellaneous Exp	0.0	0.1	5.6	5.8	6.1
Total Operating Expenses	196.6	258.1	495.8	530.7	766.6
EBITDA	14.6	29.6	17.3	55.1	79.0
Other Income	0.0	3.0	11.3	0.4	0.0
Interest	3.6	6.6	18.6	11.3	17.3
Depreciation	0.7	1.1	2.1	4.0	6.4
Profit Before Tax	10.3	24.9	7.8	40.2	55.3
Tax (including FBT & DT)	2.7	2.5	0.5	12.1	16.6
<b>Profit After Tax</b>	<b>6.8</b>	<b>16.1</b>	<b>2.6</b>	<b>28.1</b>	<b>38.7</b>

(Source: Company, HDFC Sec Estimates)

Balance Sheet (Consolidated)

(Rs. In Cr)

YE March	FY07	FY08	FY09	FY10E	FY11E
Share Capital	3.2	10.7	20.3	20.3	20.3
Share Warrants	0.0	6.4	0.0	0.0	0.0
Reserves & Surplus	12.3	50.9	145.7	155.7	169.7
Shareholders Funds	15.5	68.0	166.0	176.0	190.0
Secured Loans	40.5	66.2	178.9	203.9	223.9
Unsecured Loans	4.8	13.1	0.0	0.0	0.0
Deferred Tax Liability	1.7	2.5	5.7	7.7	10.1
<b>Capital Employed</b>	<b>62.6</b>	<b>149.7</b>	<b>350.6</b>	<b>387.5</b>	<b>423.9</b>
Gross Block	20.1	34.8	72.0	129.0	190.0
Less: Depreciation	3.0	4.1	7.0	11.0	17.4
Net Block	17.1	30.7	64.9	117.9	172.5
Investments	0.0	1.8	2.0	0.0	0.0
Inventories	32.4	59.4	44.4	48.8	53.7
Sundry Debtors	1.7	41.3	72.7	81.4	89.6
Cash & Bank	20.7	5.0	93.8	105.6	121.6
Loans & Advances	8.5	42.0	93.0	97.6	102.5
Total Current Assets	63.3	147.8	303.8	333.5	367.4
Current Liabilities & Provisions	17.8	30.5	20.2	63.9	116.0
Working Capital	45.5	117.3	283.6	269.6	251.4
Miscellaneous Expenditure	0.0	0.0	0.0	0.0	0.0
<b>Capital Deployed</b>	<b>62.6</b>	<b>149.7</b>	<b>350.6</b>	<b>387.5</b>	<b>423.9</b>

(Source: Company, HDFC Sec Estimates)

Ratio Analysis

YE March	FY07	FY08	FY09	FY10E	FY11E
EPS (Rs.)	21.3	15.1	1.3	13.9	19.1
PE (x)	5.3	7.5	86.6	8.1	5.9
FD Book Value (Rs.)	48.6	63.7	81.8	86.7	93.6
P/BV (x)	2.3	1.8	1.4	1.3	1.2
EBIDTA (%)	7.2	10.8	3.3	9.5	9.4
PBT (%)	5.1	9.1	1.5	6.9	6.6
NPM (%)	3.4	5.9	0.5	4.8	4.6
ROCE (%)	22.2	19.0	4.3	13.2	17.1
RONW (%)	3.7	38.6	2.3	16.5	21.1
Debt-Equity	2.9	1.2	1.1	1.2	1.2
Current Ratio	3.5	4.8	15.0	5.2	3.2
Mcap/Sales (x)	1.1	0.8	0.4	0.4	0.3
EV/EBITDA	14.2	7.6	7.8	2.2	1.4

(Source: Company, HDFC Sec Estimates)

Cash Flow Statement

(Rs. In Cr)

YE March	FY07	FY08	FY09	FY10E	FY11E
Profit Before Tax	10.3	24.9	7.8	40.2	55.3
Net Opt Cash Flow	14.5	-64.9	-50.2	70.9	99.0
Net Cash from Inv. Activities	7.8	11.8	48.4	-56.6	-61.0
Net Cash from fin. Activities	-68.4	34.8	90.6	-54.5	-22.0
Cash & Cash Equiv.	17.2	2.3	94.0	53.6	121.6
Net Inc/(Dec) in Cash	-46.1	-18.4	88.9	-40.2	16.0

(Source: Company, HDFC Sec Estimates)



Analyst: Sneha Venkatraman ([sneha.venkatraman@hdfcsec.com](mailto:sneha.venkatraman@hdfcsec.com))

**RETAIL RESEARCH Tel: (022) 3075 3400 Fax: (022) 3075 3475 Corporate Office**

HDFC Securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 3075 3475 Website: [www.hdfcsec.com](http://www.hdfcsec.com)  
Email: [hdfcsecretailresearch@hdfcsec.com](mailto:hdfcsecretailresearch@hdfcsec.com)

**Disclaimer:** This document has been prepared by HDFC Securities Limited and is meant for sole use by the recipient and not for circulation. This document is not to be reported or copied or made available to others. It should not be considered to be taken as an offer to sell or a solicitation to buy any security. The information contained herein is from sources believed reliable. We do not represent that it is accurate or complete and it should not be relied upon as such. We may have from time to time positions or options on, and buy and sell securities referred to herein. We may from time to time solicit from, or perform investment banking, or other services for, any company mentioned in this document. **This report is intended for Retail Clients only and not for any other category of clients, including, but not limited to, Institutional Clients**