

STOCK DATA

Market Capitalisation	Rs17.3bn
Book Value per share	Rs101
Eq Shares O/S (F.V. Rs5)	20.9mn
Median Vol. (12 mths)	23,040(BSE+NSE)
52 Week High / Low	Rs1,142/399
BSE Scrip Code	532856
NSE Scrip Code	TIMETECHNO
Bloomberg Code	TIME IN
Reuters Code	TIME.BO

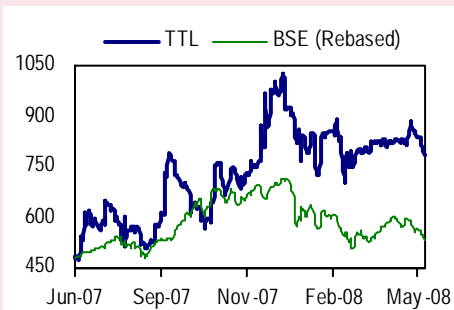
SHAREHOLDING PATTERN (%)

Qtr. Ended	Jun-07	Sep-07	Dec-07
Promoters	62.4	62.4	62.4
MFs/ UTI/ FIs	4.1	4.6	5.6
FIIs/ NRIs/ OCBs	24.5	26.8	28.2
PCBs	3.7	2.8	1.8
Indian Public	5.3	3.4	2.0

STOCK PERFORMANCE (%)

	1M	3M	12M
Absolute	(3.9)	(6.2)	64.0
Relative	9.0	(1.2)	48.1

STOCK PRICE PERFORMANCE



Time Technoplast Ltd. (TTL), founded in '91 by a group of technocrats, commenced operations by manufacturing polymer packaging products. Its tie up with *Mauser AG* of Germany, a global leader in polymer based packaging solutions enabled it to secure state of the art manufacturing technology and launch contemporary products in India.

Over the years, TTL has emerged as a formidable player in the polymer space, with a product repertoire that caters diverse segments like *industrial packaging, lifestyle, healthcare, auto components* and *infrastructure*. Its focus on technology in the polymer space and consistent efforts in developing a broad range of products across multiple verticals has enabled it to straddle a wide spectrum of user industries and thereby reduce dependence on any single product range or user industry.

Its plans to capitalise on its polymer expertise by developing innovative products like *Valve Regulated Lead Acid (VRLA)* batteries, gas cylinders, large diameter-high pressure pipes etc. These products have the potential to tap into large lucrative markets, upon commercialisation.

At the CMP of Rs745, TTL is trading at a P/E of 9.2x and EV/EBITDA of 5.8x its FY10E earnings. The explosive growth potential in its core business viz. packaging; scaling up in other verticals like auto component supply and healthcare products and new ventures like the batteries business inspire confidence in the outlook for TTL. Hence, we initiate coverage with a 'BUY' recommendation and an 18-month price target of Rs1,215.

INVESTMENT RATIONALE

- Unorthodox business model, with high operating leverage and proven technological prowess, offer huge scalability potential for the company with strong visibility of revenues and stability of margins.
- Its consistent de-risking of the business model on most fronts like client, product and facility concentration and efficient operational metrics like asset sweating and receivable control afford it shelter against competitive pressure.
- The addressable markets for products under development is humongous and impart attractive 'Option' value to its business.

KEY FINANCIALS (CONSOLIDATED)					(Rs Mn)		KEY RATIOS						
Yr Ended (March)	Net Sales	YoY Gr (%)	Op Profits	Op Marg (%)	Net Profits	Dil. Eq Capital	Yr Ended (March)	Dil.EPS (Rs.)	ROCE (%)	RONW (%)	P/E (x)	EV/Sales (x)	EV/EBDIT (x)
2006	2,628	-	509	19.4	245	79	2006	11.7	16.7	18.3	23.9	2.6	13.6
2007	3,990	51.8	763	19.1	411	170	2007	19.6	21.2	23.9	30.8	3.5	18.4
2008E	6,617	65.9	1,393	21.1	870	209	2008E	41.6	26.4	27.1	17.9	2.6	12.2
2009E	10,311	52.8	2,188	21.2	1,261	209	2009E	60.3	28.5	25.8	12.4	1.7	7.9
2010E	12,856	24.7	2,811	21.9	1,693	209	2010E	80.9	29.0	27.1	9.2	1.3	5.8

History

Time Technoplast Ltd. (TTL) commenced operations in '91 as an SSI, under the name 'Time Packaging Pvt. Ltd.' and acquired its current name in '06. It initially operated in a single product segment, viz. industrial packaging by manufacturing large volume, polymer based containers and gradually branched out into other verticals such as auto components, healthcare, lifestyle and infrastructure.

Multiple locations boost geographical reach and enable TTL to service a broad range of clientele...

While the company has retained its focus on polymers over the years, it has graduated into the composites space quite smoothly.

Presently, it operates from 17 manufacturing facilities spread across 6 states in India (viz. Daman, Hosur, Baddi, Sahibabad, Mahad & Pantnagar) and 3 overseas locations (viz. Sharjah, Poland & Thailand).

Business Overview

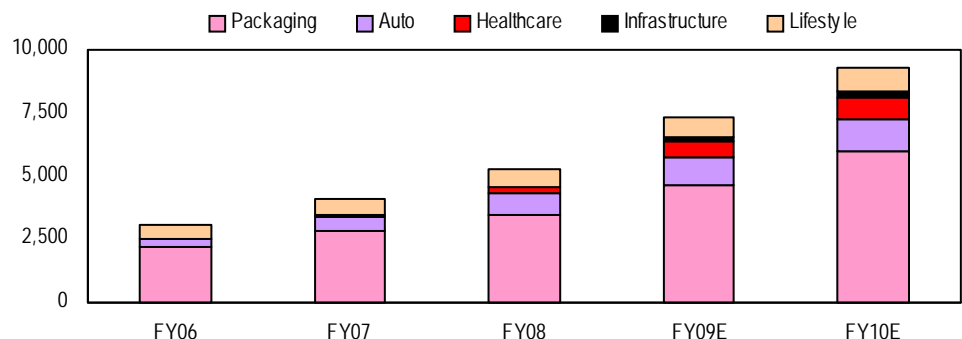
TTL operates through 5 strategic business units viz, industrial packaging, auto components, lifestyle, healthcare & infrastructure products.

Chart 1: TTL Break up (SBU- Products - Application)

SBU	Packaging	Lifestyle	Auto-comp	Healthcare	Construction
Products	Blow moulded drums (200-250lt) Blow moulded Polycans (20-150lt) Conipails PET Sheets	Furniture Turf Matting	Radiator tanks, Fuel Tanks Air ducts, Anti spray devices	Auto disable syringes Auto disable blood sampler Face masks	Safety & warning nets
Usage	Chemical ind, Specialty chemicals Dye intermediaries FMCG, Paints & Inks Pharmaceuticals, Foods	Hotels, malls, ATM's Airports, Multiplexes Hospitals, Households Railways	CV's LCV's HCV's	Hospitals, nursing homes Dispensaries, surgeons, physicians	Construction Co.'s, Infra projects Ports, Airports, Municipalities
Brand	Time Mauser Ecopet Conipails	Meadows Duroturf Durosoft Regal	3S	Genex	Netrix

Source: PINC Research, Company

Revenue contribution from SBUs for TTL (Stand-alone) (Rs mn)



SBU format helps optimise manufacturing operations and focus sales efforts...

Source: PINC Research, Company

Industrial Packaging

Packaging is employed to retain the quality and quantity of a product, until it is delivered to the consumer. Thus, factors like product composition, logistics, legal & regulatory compulsions, end usage, etc. have a high bearing on its composition and design.

An important constituent of packaging is the industrial packaging (IP) segment. This deals with transportation & storage of intermediate products such as chemicals, specialty chemicals, adhesives, paints, pharmaceutical, lube oils, etc. All packaging solutions in this segment can broadly be segregated into the following types viz. flexible packaging, rigid packaging and blister packaging.

TTL has 4 primary products under this vertical viz. HM-HDPE blow moulded drums (Cap: 200lt-250lt), conipails (Cap: 5lt-25lt), HDPE jerry cans (Cap: 20lt-150lt), PET sheets (monolayer & multilayer; 1mm-2mm thickness).

The HM-HDPE drums (200lt-250lt capacity) find application in transportation and storage of specialty chemicals, lubricants, adhesives, lube oil & additives on a bulk basis. These drums necessitate manufacturing on a 'zero-defect basis' as they are used to transport hazardous chemicals.

Over the years, polymer drums have evolved as an effective substitute for metal drums on account of the following reasons:

- 1) Being much lighter than metal drums, they are preferred while handling and transporting bulk materials.
- 2) They are inert to most liquids unlike metal.
- 3) Non corrosion / rusting impart longer usage cycle.
- 4) They can be easily moulded in shapes and sizes as per customer requirements

These drums are manufactured through the *blow moulding process* in various shapes and sizes, as per the specifications of the product, e.g. wide mouth and open top containers for liquid products and narrow mouth drums for viscous products.

Jerrycans and conipails are used for packaging paints, inks & lubricants for sale to end consumers. TTL manufactures plastic pails through *injection moulding*, in different sizes varying from 5lt to 25lt. At present, this product is a small contributor to revenues and the company plans to enhance its market share in this segment, which is serviced by a large number of small sized & unorganised players.

It also manufactures PET sheets of upto 2mm which find application in blister packing in the food & beverage, pharma, FMCG, agriculture industries.



Through its JV with *Mauser*, TTL also supplies IBCs (intermediate bulk containers), which are used for transporting chemicals, additives, lube oils etc. on a large scale. IBCs are HM-HDPE containers (1k lt capacity), with a metal frame for protecting the container during transportation and a pallet (made of metal/ polymer/ wood) attached underneath to complement material handling. The IBC has a nozzle which can be used by the end consumer to extract the chemical rather than decanting it into another container. This product is widely used by companies that have mechanised material handling operations.

Industrial packaging SBU caters to institutional clientele, providing a wide range of packaging solutions...

TTL employs *blow moulding* technology (under license from *Mauser Werke GmbH*, Germany) and *injection moulding* technology to manufacture various products in its IP SBU. Operations are carried out at its facilities in Silvassa, Mahad & Uttarkhand as well as its newly commissioned plant at Sharjah.

TTL has also managed to consolidate its IP operations through its 75% subsidiary, *TPL Plastech Ltd.*, which manufactures large sized drums at Silvassa and has a rated capacity of 9.5k tpa. At present, TTL and its subsidiary have a combined market share of ~76% in the organised large capacity polymer drum market.

TTL & TPL Plastech have a combined market share of ~76% in the organised large capacity polymer drum market...

Through its varied product offerings in the IP space, TTL has the advantage of providing its clients with a wide range of packaging solutions for various materials and purposes. All its sales under this SBU are direct, to institutional clients and are effected through the tendering system or through direct orders . As a result, the debtors cycle for this segment is relatively stable (viz 75-90 days). This, along with its large manufacturing capacities enable it to benefit from economies of scale, as a result of which it maintains ~20% OPM in this SBU.

Break-up of sales based on end-user industry

User Segment	Share of business
Specialty chemicals	31%
FMCG	29%
Paints & Inks	12%
Construction chemicals & Adhesives	13%
Pharmaceuticals & interm.	5%
Lube oil & Additives	5%
Food	3%
Others	2%

Source: Company

Auto Components

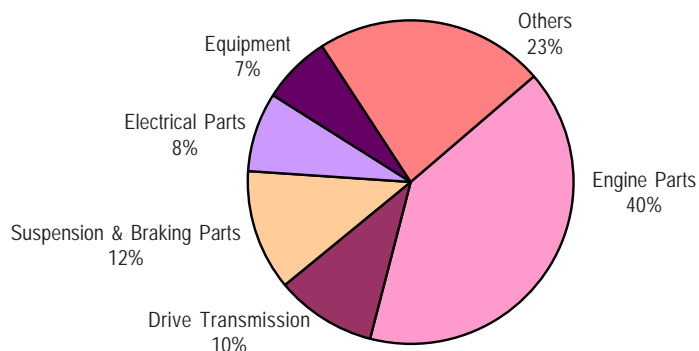
The Indian automobile component (AC) industry can broadly be segregated on the basis of usage patterns across various automobile segments viz. passenger vehicles (PV), commercial vehicles (CV) etc.

Valued at ~USD14bn in terms of turnover in FY07 (Source: *Crisil Research*), the Indian AC industry services Original Equipment Manufacturers (OEMs) along with the replacement and export markets. AC manufacturers perform the vital function of helping OEMs reap benefits from economies of scale and effective working capital management through Just-In-Time (JIT) supplies.

TTL's AC business is currently focussed on the CV segment...

TTL supplies AC products with a specific focus on the CV segment. All its products are polymer based and are designed with an emphasis on optimising vehicular performance while simultaneously conforming to weight, dimensional and fuel efficiency parameters. Currently, its product profile in AC segment consist of anti spray flaps, plastic fuel tanks, air ducts & vents, radiator/deaeration tanks.

Composition of Indian Auto Component Industry



Source: *Crisil Research*

ASF offtake is broadbased, covering most CV OEMs...

1) *Anti Spray Flaps (ASF)*- During monsoons, tyres of CVs pick up huge amounts of water from the road, which splash on the regular mudguard or flaps . This sprays on to the vehicles behind, drastically reducing the visibility for the trailing vehicle while simultaneously affecting rearview visibility of the CV. Studies have conveyed this to be the reason for a large number of road accidents.

In response to this market opportunity, TTL has developed and supplies anti spray flaps to OEMs under the brand of '3S'.

TTL supplies ASFs to all Indian CV manufacturers viz. Tata Motors, Ashok Leyland Ltd. Eicher Motors, Force Motors etc.; with minuscule sales to the replacement market. However, through its newly set up unit in Poland, TTL is targeting the lucrative EU replacement market as most OEMs purchase the product directly from *Solutia Inc*, which is the sole manufacturer in Europe.

2) *Polymer Fuel Tanks & Radiator/deaeration Tanks* - Till recently, these were used only in tractors and were ~5% costlier than metal tanks. However, due to the surge in metal costs, the cost differential has become negligible. Polymer tanks impart valuable advantages to vehicles vis-a-vis safety, efficiency and overall operational/ running cost. These are a viable alternative to conventional metal tanks due to the following reasons:

- i) Metal fuel tanks are susceptible to corrosion on account of continued exposure to mud, humidity etc. which leads to fuel contamination.
- ii) In case of fire, metal tanks are likely to explode whereas plastic tanks don't. This enhances the safety feature of the vehicle.
- iii) Plastic tanks offer huge flexibility in dimensional design and allow greater freedom in vehicular design.
- iv) They have high impact resistance and are thereby safer in crashes.
- v) Being lighter than metal tanks, there is improvement in fuel efficiency.

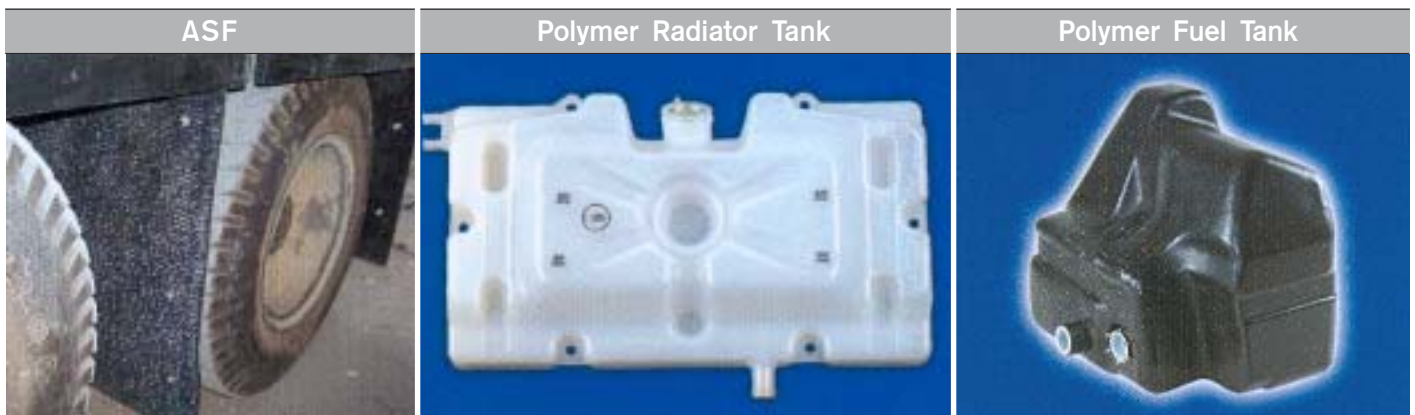
Polymer tanks finding wider acceptance amongst OEMs on account of cost and operational benefits...

An additional benefit of plastic radiator tanks is their transparency, which makes it easy to ascertaining the level in the tank.

TTL sells its radiator product to Ashok Leyland at present and is in talks with other OEMs to customise the product for their platforms. Fuels tanks are presently sold to Tata Motors for its *ACE* platform and going forward, we expect the same to translate into offtake for the *Tata Magic*. The company is aggressively pursuing approvals for this product line for various vehicle platforms with OEMs like Ashok Leyland, Tata Motors, Force Motors etc. and is confident of commercialising production for the same in FY09-10.

3) *Air Ducts & Vents* - These are used to compliment the cooling systems in vehicles. They serve as a passage for air, to and from the air conditioner. They are hollow, light and moulded in complicated shapes. This product can also be made from metal but is disadvantageous in terms of weight, restricted to simple geometries and prone to rust.

As for air ducts and vents, Ashok Leyland is TTL's only customer at the moment and the company is in talks with some more CV manufacturers to expand its customer base.



All of TTL's sales from its auto component SBU are to institutional clients, with debtor's cycle being ~90 days. The company maintains an inventory of 90 days for this vertical, to guard against margin erosion arising on account of escalation in polymer prices. TTL's OPM in this vertical is ~23% .

Auto components: products, clients, process

Product	Client	Process	Raw Material
Fuel Tanks	TATA Motors, Ashok Leyland	Blow moulding	HDPE/LDPE
Radiator tanks	TATA Motors, Ashok Leyland	Blow moulding	HDPE/LDPE
Air ducts & vents	Ashok Leyland	Blow moulding	HDPE/LDPE
Anti spray flaps	TATA Motors, Ashok Leyland, Eicher Motors, Force Motors	Extrusion + Injection moulding	HDPE/LDPE

Source: Company

Broadbased clientele opens up avenues to cross-sell products of AC SBU...

Healthcare

The Indian healthcare industry (i.e. healthcare delivery, pharmaceuticals, medical & diagnostic equipment) is estimated to be ~USD34.2bn in terms of revenues, of which ~6% is accounted for by medical consumables viz. syringes, gloves, face masks and other disposable items. (Source: E&Y Survey, Jun'07).

TTL has recently forayed into this market with the following product offerings:

i) Face Masks: TTL manufactures multi-purpose masks (2 layer) & chamber masks (3 layer), using the *extrusion* process. While the former are used in operation theaters, critical care departments & quarantine areas , the latter are used to protect against bacteria in airborne environments and from blood or body fluid splash and are also used to protect against airborne infections in OPD (Out Patient Department) wards, fumigation and cleaning areas, laboratories & clinics.

ii) Auto disable blood sampler: This device is used for drawing blood, after which the piston breaks (to disable multiple use) and the device is capped for storage and centrifuge testing. This unique product offers users the convenience of safe storage, preservation, dispensing and testing of blood samples all at once and eliminates the lengthy process of using different devices for drawing and testing blood viz. syringe, decanter, test tube, pipet, glass slide etc. This minimises chances of contamination at every step and simultaneously saves costs. TTL has invented and patented the design of this device which it manufactures in 3 different sizes (2ml, 3ml, 5ml).

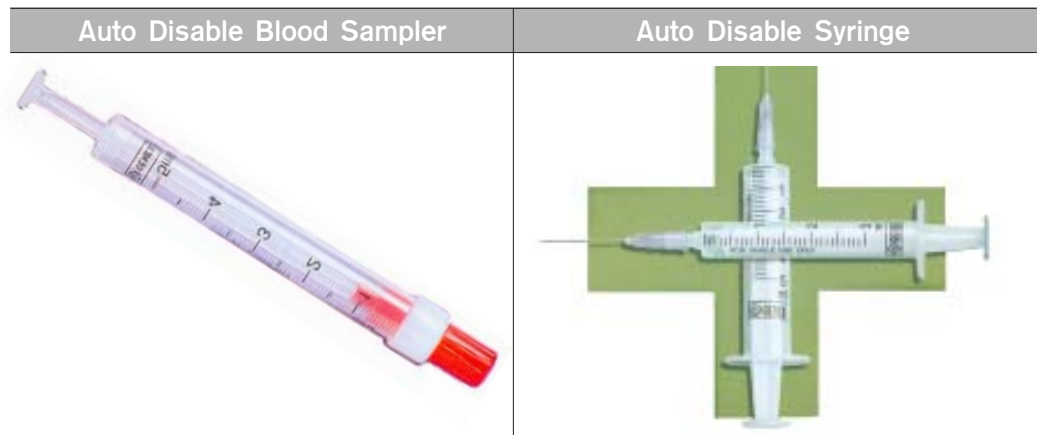
iii) Auto disable syringe: TTL also makes auto disable syringes that are designed specifically for single use in 3 sizes (2ml,3ml & 5ml). These syringes have to be disposed off after the first use as the plunger gets locked once pushed into the syringe. These devices are pre-sterilized thereby eliminating the need to carry around bulky sterilisation equipment, thus making for considerable logistical ease while in the field.

These products are manufactured using the *injection moulding* process and currently bulk of the produce (~85%) is being sold in northern India, with particular emphasis on retail distribution channels. A small portion of these products (~15%) is sold to directly to institutional clients viz. hospital chains like Apollo Hospitals, Escort Hospitals etc. and private clinics.

Currently, this SBU contributes to less than 5% of TTL's revenues (on a stand-alone basis). However, on account of the attractive margins (~22%) of the business, we expect a sharp ramp up in the same over the next 2 years.

Healthcare products designed to target markets with potential of mass and sustainable consumption...

Majority of sales of healthcare products effected through retail distribution channels...



Lifestyle: TTL's lifestyle SBU has 2 primary products viz. garden furniture and artificial turfs & entrance matting.

1) *Garden Furniture:* TTL offers its products under the brand '*Regal*'. Manufactured through the injection moulding process, TTL's product profile includes different kinds of chairs (mono block chair, baby chairs, executive chairs, etc.), tables, trolleys, shoe-racks etc.

2) *Turf and Entrance matting:* TTL is India's only manufacturers of artificial turf, which it sells under the brand of '*Meadows*'. These are used for beautification of amusement parks, terrace gardens, drive ways, sidewalks, airports etc. The application of this product is on the rise since it has good aesthetics, can be laid out easily and is maintenance free. TTL sells entrance matting under the brand names of '*Duroturf*' & '*Durosoft*'. This product is manufactured through a combination of *injection* and *extrusion* moulding and is sold in the form of rolls, and other standard sizes and colours.

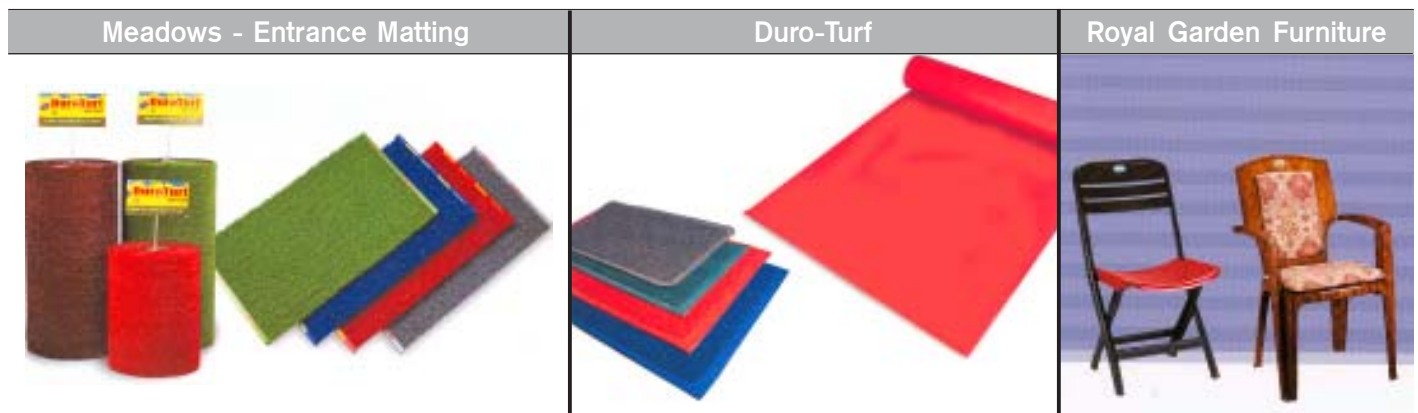
TTL effects sales via distributors and directly to clients in the ratio of 75:25. As a result, the debtors cycle for this SBU is slightly favourable vis-a-vis the IP SBU, at ~70 days.

However, margins in this SBU are capped at ~14-15% on account of the following reasons:

- i) The market for furniture products is competitive due to poor product differentiation and presence of multiple, localised players, especially in the unorganised sector.
- ii) The market for turf & entrance matting is nascent and TTL is deliberately pricing the product attractively in order to seed the market.

Going forward, TTL plans to focus its attention only on developing the market for its turf & entrance matting products, while maintaining the current level of operations for its garden furniture line.

Developing the market for artificial turf and matting to be focus of lifestyle SBU...



Scope of applications of 'Netrix' is vast, on account of versatility of product...

Infrastructure: The housing and infrastructure sectors have witnessed an upswing in activity, on back of investments of over Rs6.1k bn and Rs10.2k bn over the past 5 years. (Source: Crisil Research). The development of numerous residential, commercial & industrial projects and vital infrastructure such as highways, dams, power projects etc.; has boosted the demand for primary raw materials viz. cement, steel etc. as well as facilitating materials & equipment viz. glass, plastics.

In order to tap the opportunity presented by the burgeoning demand in this sector, TTL has ventured into production of polymer based restraining nets, through its brand 'Netrix'. These serve various purposes viz. cordoning off construction sites, as barriers between layers of a construction slab etc and also find application in the agricultural sector, for fencing, crop protection and prevention of soil erosion.

'Netrix'



Source: Company

At present, the entire offtake of these products is accounted for by construction and real estate companies such as L&T, HDIL etc as a result of which margins are attractive (~27%). At present, this SBU contributes less than 1% to TTL's revenues (stand-alone) and we expect the same to be 2-3% by FY10 on account of the specialised nature of the products.

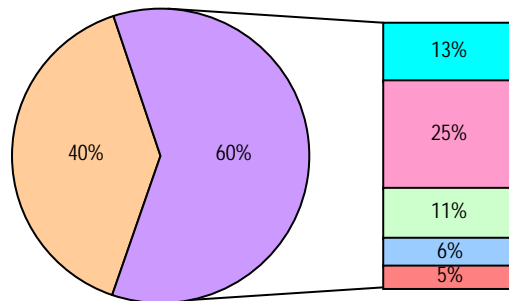
Batteries

The battery market in India is currently estimated at ~Rs40bn, with industrial batteries accounting for ~60% of the offtake and the automobile sector accounting for the remainder. A detailed classification of the battery market in India is provided below.

As can be made out from the above chart, the highest application in industrial batteries is in the telecom space. Batteries are utilised to ensure continuous operations of networks. In case of electrical outage or failure, batteries intervene to provide power till the time regular supply is not restored.

Battery market segmentation in India

Automotive Batteries UPS Telecom Power Railways Others



Telecom sector accounts for highest consumption of batteries in the industrial sector...

Source: Crisil Research, PINC Research

Business Overview

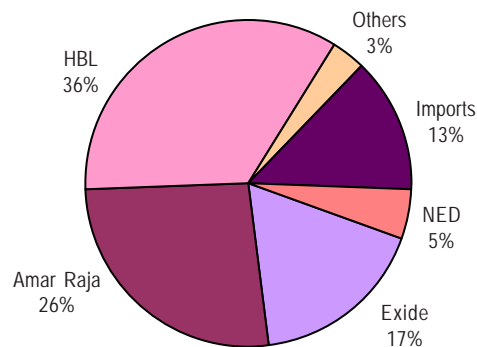
The most widely used batteries in the telecom industry today are VRLA (Valve Regulated Lead Acid) batteries. These are preferred over other conventional batteries such as tubular flooded acid batteries due to the following reasons:

- i) They have a much longer life cycle, and can last upto 5 years.
- ii) They offer stackability and hence save on space requirements.
- iii) They can be placed in the same room as the other equipment and transmission system, as there is no release of harmful gases.
- iv) They do not spill or leak during transportation.

TTL's subsidiary, NED Energy supplies VRLA batteries to the telecom sector...

TTL has ventured into the telecom VRLA battery space through its subsidiary, *NED Energy (NED)*. Albeit with a small production base of 100mn Ampere Hours (AH), NED is currently supplying batteries to telecom players like Bharti Airtel, BSNL, Idea Cellular, Nokia, Ericsson etc.

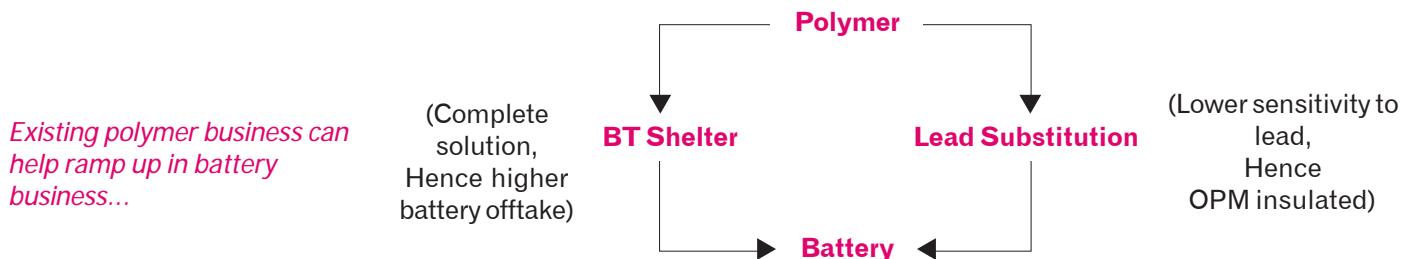
Market share of telecom batteries



Source: PINC Research

TTL plans to leverage its expertise in polymers and composites by substituting the non-essential content of lead in the electrode grid with conductive polymer. This will help the company cut down its sensitivity to volatile lead prices and maintain relatively stable margins.

Synergies Between TTL's Battery & Polymers SBU



While the product has been operationalised, the company is refining it and plans to commercialise the same by FY10. In the meantime, NED will continue to sell its conventional VRLA batteries.

Subsidiaries

TTL's subsidiaries help in extending and consolidating reach...

1) *TPL Plastech Ltd.*: Earlier known as *Tainwala Polycontainers Ltd.*, TTL acquired a 75% stake in it in FY06 for a consideration of ~Rs680mn. *TPL Plastech* is engaged in the manufacturing of industrial packaging drums (200lt-250lt) capacity and jerrycans (20lt-60lt) capacity.

It presently operates with an installed capacity of 9.5k tpa at Silvassa and has outlined an expansion of 3k tpa to manufacture large size polymer drums at an outlay of Rs120mn in Jammu (J&K), which is expected to come on stream by Sep'08.

2) *NED Energy Ltd (Hyderabad)*: TTL acquired a 71% stake in *NED Energy Ltd. (NED)* in FY07 for a consideration of Rs503mn. This company produces VRLA batteries with a capacity of 100mn AH and caters solely to the telecom sector.

NED recently acquired 100% of *Gulf Powerbeat WLL, Bahrain (GPW)*, a manufacturer of VRLA batteries for a sum of USD10mn, thereby obtaining a ready capacity of 400mn AH. This was a strategic acquisition on account of GPW's ready to use capacity and locational advantage for sourcing lead. TTL intends to service the Indian and the M.Eastern markets through these acquisitions.

It has outlined capex of Rs270mn for NED by augmenting its current capacity from 100mn AH to 300mn AH. This would be achieved by setting up a greenfield plant in Jammu (J&K) and would impart benefits like close proximity to raw material suppliers (i.e. lead) and sales and income tax holidays.

3) *ELAN Incorporated F.Z.E. (Sharjah)*: Commissioned in Nov'07, TTL set up this 100% subsidiary in Sharjah at an investment of Rs275mn. It has an installed capacity of 4.8k tpa and manufactures industrial packaging products (drums, jerry cans, conipails) and lifestyle products (garden furniture).

Through this subsidiary, TTL intends to diversify its geographical reach and tap the M. Eastern markets with products established in India. An added advantage of Sharjah is the absence of incidence of income tax on profits.

4) *NOVO TECH Spz o.o.(Poland)*: This 100% subsidiary of TTL commenced operations in Jan'08. Set up at an outlay of Rs121mn, it manufactures auto components viz ASF & lifestyle products (turf) and has a rated capacity of 4.2k tpa.

Poland's membership of the EU will enable TTL to tap lucrative markets in western and eastern Europe. Additionally, Poland is also a low cost manufacturing location, thereby affording the company operating efficiencies. TTL has also entered into a marketing tie-up with a UK based company to tap the replacement market for ASF. As mentioned earlier, most OEMs purchase the product directly from *Solutia Inc*, which is the only manufacturer of the product in Europe.

Joint Ventures

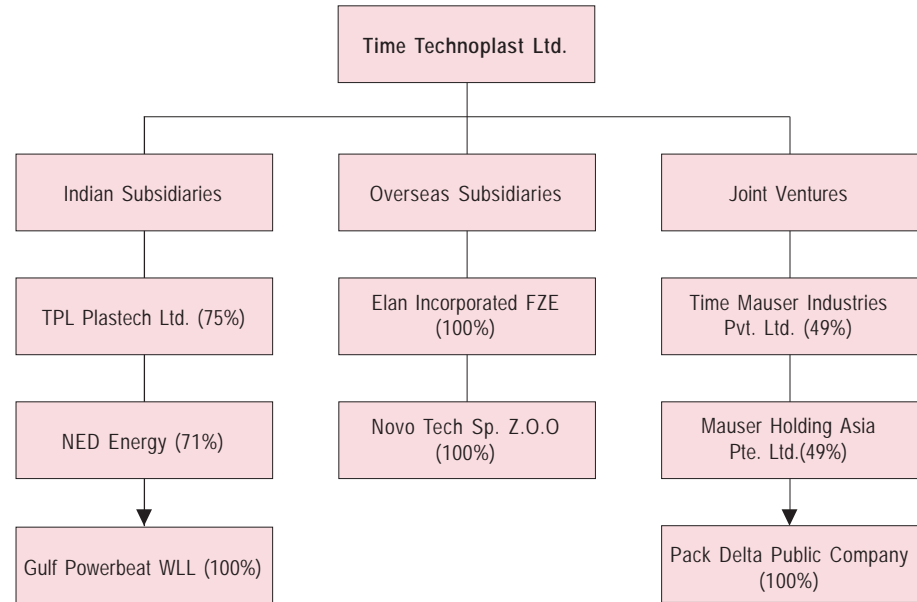
TTL's JVs have strategic significance in terms of tapping markets with niche products...

1) *Time Mauser Industries Pvt. Ltd.*: This joint venture company is a tie-up between TTL and *Mauser*, Germany, with TTL holding 49%. As mentioned previously, this JV manufactures IBCs and has a rated capacity of 90k units p.a.

2) *Mauser Holding Asia Pte Ltd. (MHAPL)*: MHAPL is a JV company promoted by *Mauser* and TTL and is registered in Singapore. MHAPL holds 100% stake in *Pack Delta Public Company* (Thailand), which is engaged in the manufacturing of blow moulded polymer drums (rated capacity of 5.4k tpa) and IBCs (rated capacity of 72k units p.a.).

A chart of TTL's holdings is enclosed overleaf.

Holding Structure



Source: Company

TTL has lined up a slew of new product launches, with a focus on high performance areas. At present, the pipeline of the company consists of the following offerings-

1) *Prefabricated Structures (Prefabs) & Base Transmission (BT) Shelters*: TTL intends to manufacture 'Prefabs' which are used for setting up low cost mobile offices, housing, school classrooms, warehouses etc. BT shelters find wide application in the telecom space and are used to house equipment for telecom towers installed in remote locations.

Slated for launch in FY10, the company intends to differentiate its product from those of its peers viz. *Zeppelin, Acme, Devi* etc by virtue of using high performance composites to achieve interior temperature stabilisation while simultaneously coping with extreme temperatures and climatic conditions.

Considering the extensive investment that has been lined up in the social and telecom infrastructure sectors and the opportunity to cross-sell this product with its batteries, we believe that significant synergies can be generated. We anticipate TTL to integrate its shelters & batteries business and provide comprehensive solutions to telecom service providers, in terms of a complete package viz. BT shelter, battery and other associated electrical equipment.

2) *Polymer CNG & LPG cylinders*: The company is currently developing a polymer based CNG / LPG cylinder for commercialisation in FY10, whereby the core cylinder would be made from special composites and have high pressure bearing capacity.

The addressable market size for this product would consist of process industries, households, the transportation sector, which is currently served by players such as '*Everest Kanto Cylinders Ltd*' & '*Bhiwadi Cylinders Pvt Ltd.*' who manufacture metal cylinders.

The company is banking on the cylinder's light weight, safety features and cost benefits (vis-a-vis metal cylinders) to capture significant market share.

3) *Water Management Systems*: In order to cater to the demand generated by the water and waste handling activities in SEZs and similar facilities viz. IT Parks, housing complexes etc, TTL is designing large diameter composite pipes, which would be capable of transporting water/ effluents under high pressure.

In light of spiralling prices of steel and the ripple effect on the prices of large-dia metal pipes, the company is hopeful of healthy offtake for this product line in the near future.

Prefab structures and batteries to be bundled together in the near future...

Polymer based cylinders offer advantages over metal cylinders, in terms of weight and safety ...



Capex

TTL has lined up capex on Rs2.5bn over FY08-10 with the following objectives in mind:

- 1) Maintain benefits accruing from economies of scale.
- 2) Foray into niche products and garner revenue visibility and margin safety.
- 3) Widen geographical reach.

The company has indicated deployment of the funds in the following manner

Capex (Rs mn)				
Vertical	FY08	FY09	FY10	Total
Industrial packaging	200	200	150	550
Auto-components	150	100	100	350
Lifestyle	-	-	-	-
Healthcare	350	-	-	350
Infrastructure	250	450	150	850
Overseas	400	-	-	400
Total	1,350	750	400	2,500

Capex to be funded through a judicious mix of debt & internal accruals...

Source: PINC Research, Company

SWOT Analysis

Strengths

Unique business model: TTL has a track record of developing and commercialising niche products with high growth potential. This affords it an invaluable first-mover advantage and margin safety by virtue of being the dominant supplier of the product.

Large manufacturing capacities offer margin protection: Due to its large capacity and high levels of CUF, TTL enjoys benefits of concessional rates while procuring raw materials (on account of bulk offtake.) Also, high levels of capacity utilisation across most verticals generate economies of scale, buffering margins in case of pressure on realisations.

Association with Mauser: The association with *Mauser* has dual benefits of helping in client acquisition and retention, as well as while importing raw materials.

Pan India presence: TTL's manufacturing facilities are strategically located across 6 locations, enabling it to engage in JIT supplies to its clients, thereby benefitting from short lead times to market and servicing various catchment areas. (Note: Drums are voluminous and it isn't economically viable to transport beyond a radius of 300km)

Wide range of product solutions: The company's practice of offering a range of product solutions through a diverse portfolio of packaging products has given it a reputation of a 'One Stop Shop' for rigid packaging solutions.

Presence across different verticals: Through operations across 5 different verticals, TTL is moving towards insulating itself from the cyclical downturns in any of its end-user industries viz. FMCG, construction etc.

Weakness

Lead prices: Till it commercialises its new technology for batteries (with lesser lead content) NED will be susceptible to adverse fluctuations in lead prices.

Bulk of revenues come from packaging: The IP division currently contributes ~65% of TTL's revenues and the emergence of a cost-competitive substitute product could impact revenues and profits.

Profitability of international operations: While operations in Sharjah and Poland are still to commence in right earnest, profitability in *Pack Delta*, Thailand remains a concern and mediocre performance from all 3 entities put together could restrict growth in the company's overall profitability.

Opportunities

Spiralling price of metal: In light of the soaring prices of steel, the rising price of steel drums & jerrycans is bound to result in a switch to polymer containers, by price sensitive end-user industries.

Bright prospects of end-user segments: Sectors like telecom, chemicals, automobiles etc are set to witness a surge in capex over the next 3-4 years. This should culminate in higher output in these sectors, thereby generating significant demand for products such as batteries, high volume polymer containers, fuel/ radiator tanks etc respectively.

Capacity addition in feedstock sector: With significant polymer capacity addition in the M.East over the next 2 years, lower utilisation rates in this industry are expected to translate into lower polymer prices. This should help lower raw material costs; while simultaneously boosting cost competitiveness vis-a-vis products manufactured from substitute materials such as metal.

Threats

Entire manufacturing capacity is polymer based: Most of TTL's products are polymer based. Any untoward hike in prices of key raw materials (i.e. HM-HDPE, LDPE, LLDPE), can dent its cost-competitiveness and margins.

Elongation of working capital cycle: As TTL enhances its scale of operations, the scope and duration of working capital will go up. This will strain the company's resources and any slip-up in working capital management could result in a drop in profitability of operations.

INVESTMENT ARGUMENT

From a pure play as a packaging company, TTL has continuously diversified its operations and de-risked its revenues. This has paid dividends in the form of synergies across product lines, as it utilises similar technology platforms viz. *blow, extrusion & injection* moulding, for all its products, enabling it to focus its R&D efforts on developing products instead of manufacturing technology.

Its focus on the polymer space coupled with large multi-locational operations afford it preferential terms while sourcing raw materials. This not only insulates the company's margins but also deters potential new entrants in its various product segments.

Mindful of its extensive repertoire of products and diverse end user segments, we have listed our outlook on TTL with reference to its various SBUs.

Industrial Packaging: Almost 60% of TTL's IP products are consumed by FMCG and chemicals companies. The upswing in economic activity over the last 4-5 years has resulted in higher income levels, changing lifestyles and subsequently, an increase in discretionary spending. This, in turn, has boosted demand for consumables, which has resulted in robust offtake for the FMCG and specialty chemicals industries.

Going forward, we believe that in spite of a moderation in economic growth estimates, the demand drivers for TTL remain intact. The chemicals sector is expected to register a growth rate of ~8.5% on back of the expected upswing in end-user industries such as textiles, paper, detergent, rubber, agro chemicals, oil & gas etc. Also, given the gradual emergence of India as an export hub for chemicals (on account of increased sourcing

Core packaging business stream hold promise of sustainable growth...

by international chemical giants such as *ICI, Dow Chemicals, Rohm& Haas* etc), offtake for TTL's IP division is bound to pick up steadily. This is on account of its affiliation with international packaging giant *Mauser*, whereby all of the latter's clients would automatically translate into a ready customer base for TTL in India.

The FMCG industry, another key end-user of TTL's products, is also expected to register steady growth on account of a robust economic scenario. Efforts by FMCG companies to improve penetration in the hinterland of the country while simultaneously broadening product portfolios should boost demand for rigid materials (viz. polyethylene, polypropylene, polystyrene etc).

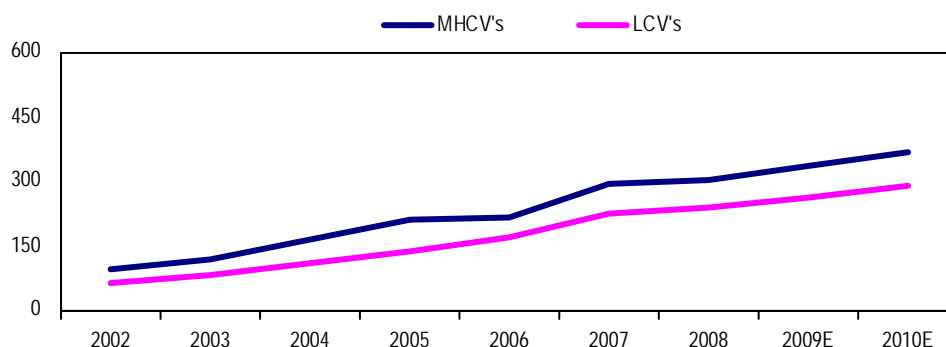
The growth outlook for the paints and inks industry, which is another large consumer of TTL's IP division, is moderate. The industry is expected to register a CAGR of 14% (FY06-12) (Source: *Crisil Research*) on account of the growing demand for real estate (both residential and commercial), as well the increase in sales of automobiles, consumer durables etc. This bodes well for TTL, since a significant portion of its conipails are used for packaging paints and emulsions.

All of the above mentioned drivers have significant implications in the backdrop of low base of plastic usage for rigid packaging in India. Only 14% of plastic consumed in the country is for rigid packaging (v/s global average of 24%) (Source: *KPMG Report on Indian Chemical Industry, 2004*). Hence, the increasing penetration of rigid packaging products would ensure offtake growth in excess of end-user industry growth. Given its vast repertoire of packaging products, we expect a sustainable growth in TTL's offtake and revenues. This, in conjunction with improvement in the capacity utilisation in the vertical (at ~80%) should buttress profitability.

As a result, we are bullish on the revenue growth of this vertical and expect TTL to register a CAGR of ~30% p.a. in income over the next 2 years.

Increasing penetration of polymer packaging to drive incremental growth in volumes...

MHCV & LCV Sales ('000 units)



Source: ACMA Estimates, PINC Research

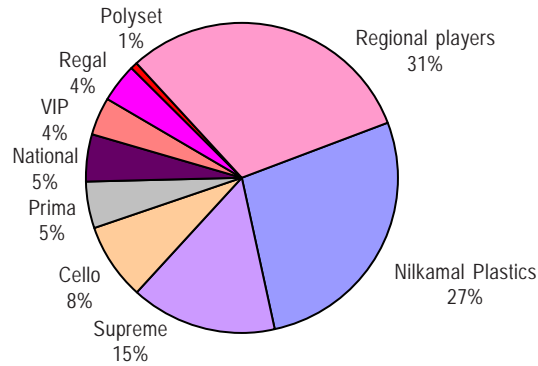
Auto: As per the current guidelines of the Min. of Surface Transport, it is mandatory for CVs exceeding gross weight of 7.5mt, manufactured after Apr'05 to have ASF. At Rs2.5k/ set of ASF for MHCVs and average annual sales of ~270k vehicles, the addressable market for TTL stands at Rs687mn p.a. from new vehicles alone.

With regards to demand for polymer tanks (radiator and fuel varieties) from new vehicles, while the CV segment has recently been experiencing some stagnation in terms of offtake, the outlook going forward is positive.

On back of predictions of robust economic growth and healthy transporter margins, demand for CVs is expected to register a CAGR of 10% till FY15 (Source: *ACMA, Crisil Research*). Additional kickers for rising CV demand are the improving infrastructure in terms of new highways being constructed and relatively stable diesel prices. Lastly, in the backdrop of the recent surge in sheet metal prices, the cost and design benefits of polymer tanks have become more apparent. We expect all these factors to add up to robust demand for TTL's polymer tank product line in the near future.

Cost & design benefits vis-a-vis metal to boost polymer usage in auto sector...

Market Scenario in Plastic Furniture



Source: Industry

Healthcare: In the near term, demand for single use, auto disable disposable syringes and blood samplers is expected to rise due to recommendations by organisations like WHO, UNICEF & UNFPA that all member countries (incl. India) use-only auto disable syringes in immunisation programmes starting from CY06. The Min. of Health & Family Welfare, GoI has already made the use of these syringes mandatory in such exercises and we expect the same to translate into improved offtake and profitability for TTL.

Going forward, the Indian healthcare industry is expected to register a CAGR of ~8% till CY11, achieving a size of USD50bn, due to an increase in public expenditure (as a % of GDP) from the current levels of 0.9% to 2% by CY11. With particular emphasis on immunisation drives (polio, MMR etc) and growth in pathological/ clinical research, preventive and tertiary healthcare, we anticipate a significant jump in the demand for single use and auto disable disposable syringes and blood samplers, which in turn should translate into substantial and sustainable offtake for TTL's products in this vertical.

Lifestyle business to experience sedate growth on account of crowded marketplace and commoditised products...

Lifestyle: While the growth in personal disposable income over the next few years is expected to boost higher discretionary spending and fuel migration towards consumption of sophisticated lifestyle goods, we do not expect significant impact of the same on TTL's lifestyle business.

The cluttered nature of the furniture products space and stiff competition from the unorganised sector will restrict TTL's offtake and margins in this product line. On the other hand, we expect the entrance and turf matting product line to experience moderate growth in offtake over the next couple of years on account of product utility and novelty factor attached to it.

Infrastructure: The infrastructure products vertical presently contributes to less than 1% of TTL's total revenues at present. With the current momentum in infrastructure development and construction activities expected to continue over the next 3-4 years, we expect demand for TTL's infrastructure products to be robust. Simultaneously, changes in the agriculture sector on account of practices such as floriculture, horticulture, corporate farming etc, should unlock the nascent demand from the sector, thereby giving a fillip to offtake from the SBU.

Telecom battery business to propel growth in revenues and profits...

Telecom Batteries: The telecom tower industry in India is experiencing high growth as independent tower companies viz. *Quipo, Essar & GTL Infra* and integrated cellular service operators like *Bharti Infratel & Reliance Telecom Infrastructure Ltd* in capex mode. This is on the back of efforts by cellular service operators to build the user base by increasing areas under coverage while simultaneously lowering usage charges.

With the Central Government having targeted a base of ~500mn wireless subscribers by FY10 (v/s ~ 250mn subscribers in FY08), industry players estimate the addition of ~410k towers to service this incremental user base. At a conservative cost of Rs0.1mn/ battery set/ tower, the addressable market for company stands at Rs45bn.

Planned addition of Telecom towers

Company (no. of units)	FY07	FY08	FY09E	FY10E
Bharti	34,000	65,000	90,000	105,000
RCOM	14,000	40,000	65,000	85,000
Vodafone	20,000	25,915	31,945	36,985
BSNL	25,000	35,553	46,353	58,503
Idea	7,500	11,886	16,986	21,786
Tata Tele	6,010	8,313	10,938	13,563
Other wireless service providers	6,201	9,151	12,511	18,371
GIL	1,200	6,500	12,000	18,000
Quipo	1,000	6,000	12,000	18,000
Other independent towercos	1,000	14,000	24,000	32,000
Total	115,911	222,318	321,733	407,208

Source: COAI, AUSPI, Media reports, Industry estimates

TTL's foray into the battery business will leverage its expertise in polymers, in the following manner:

- i. By benefiting from improved offtake, since TTL would be offering complete tower solutions in the form of BT Shelter, VRLA battery and electrical components like generator, air-conditioning unit (all outsourced) etc.
- ii. Substitution of lead would imply lower sensitivity to volatile lead prices and a relatively stable OPM. However, we expect this to fructify only in FY10-11.

We believe that an established brand viz. 'MaxLife' and enhanced base of production will enable TTL to milch the opportunity presented by incremental demand over the next 2-3 years.

VALUATIONS & RECOMMENDATION

TTL's business model is extremely scalable on account of the high growth potential of its target markets. Also, efficient management of its working capital cycle, coupled with a stable debt scenario and adequate capex have the potential to generate operating leverage and improve asset turnover ratio. Lastly, its superior technology platform and proven track record serve as effective entry barriers, thereby insulating it from competition.

We estimate TTL's net sales (consolidated) to clock a CAGR of 47% (FY07-FY10) to ~Rs13bn in FY10. Improving capacity utilisation and the resultant economies of scale coupled with profitable operations of its various subsidiaries should enable the company to sustain an OPM of ~21% from FY08-10. We expect it to notch up profits of Rs870mn in FY08, Rs1.3bn in FY09 & Rs1.7bn in FY10 resp.

At the CMP of Rs745, it trades at a P/E and EV/EBITDA of 9.2x & 5.8x resp of its FY10E earnings. We initiate coverage on the company with a 'BUY' recommendation and a price target of Rs1,215 with an investment perspective of 18 months.

We initiate coverage with a 'BUY' recommendation and price target of Rs1,215...

Income Statement	2006	2007	2008E	2009E	2010E
Revenues	2,628	3,990	6,617	10,311	12,856
<i>Growth (%)</i>	-	51.8	65.9	55.8	24.7
Total Expenditure	2,118	3,226	5,224	8,122	10,044
Operating Profit	509	763	1,393	2,188	2,811
Interest & dividend income	0	4	25	25	25
EBIDT	510	768	1,419	2,214	2,837
(-) Interest	111	134	152	195	197
(-) Depreciation	101	144	199	275	336
PBT & extraordinary items	298	489	1,067	1,743	2,304
(-) Goodwill w/o & other adj.	-	-	-	135	135
(-) Tax provision	53	77	205	350	480
PAT	245	412	861	1,258	1,688
(-) Minority Interest	-	7	12	46	86
(+) Sh. In Profits of JV	-	5	21	49	91
Net Profits	245	411	870	1,261	1,693
<i>Growth (%)</i>	-	68.1	108.9	46.1	34.2
Fully diluted Eq. sh. O/s (mn no)	7.9	17.0	20.9	20.9	20.9
Book Value (Rs)	170	124	203	263	334
Basic EPS (Rs)	31.2	24.2	41.6	60.3	80.9
Diluted EPS (Rs)	11.7	19.6	41.6	60.3	80.9

Balance Sheet	2006	2007	2008E	2009E	2010E
<i>Equity Share Capital</i>	79	170	209	209	209
<i>Reserves & Surplus</i>	1,260	1,938	4,036	5,285	6,774
Net worth	1,339	2,108	4,245	5,494	6,983
Total Debt	1,449	1,627	2,242	2,518	2,463
Minority Interest	-	30	117	196	282
Capital Employed	2,787	3,766	6,604	8,208	9,728
Fixed Assets	1,177	1,726	3,138	3,402	3,438
Net current assets	1,658	1,817	2,840	4,282	5,837
Deferred Tax Asset	(94)	(114)	(128)	(144)	(170)
Investments	41	66	5	54	145
Goodwill on consolidation	-	251	675	540	405
Misc exp.	4	20	74	74	74
Total Assets	2,787	3,766	6,604	8,208	9,728

Cash Flow Statement	2006	2007	2008E	2009E	2010E
PBT & Extraord. items	298	489	1,067	1,743	2,304
Depreciation	101	144	199	275	336
Interest paid	111	134	152	195	197
Other adjustments	4	7	(503)	(25)	(25)
Tax paid	(20)	(65)	(192)	(334)	(454)
Minority Interest in sub.	-	30	-	-	-
(Inc)/Dec in working capital	(159)	(375)	(612)	(1,149)	(536)
Cash from operations	334	365	112	705	1,821
Net capital expenditure	(621)	(703)	(1,612)	(540)	(372)
Net investments	(7)	(18)	61	(49)	(91)
Other Income	-	(251)	25	74	116
Deferred Rev. expenditure	-	(18)	-	-	-
Cash from investing activities	(628)	(991)	(1,526)	(515)	(347)
Issue of eq. shares	-	92	39	-	-
Share premium	-	296	1,377	-	-
Change in debt	(111)	(134)	(152)	(195)	(197)
Dividend paid	(37)	(30)	(150)	(180)	(204)
Interest paid	773	179	615	276	(55)
Cash from financing activities	625	402	1,729	(99)	(456)
Inc/Dec. in cash	332	(224)	315	91	1,018

Key Ratios	2006	2007	2008E	2009E	2010E
OPM (%)	19.4	19.1	21.1	21.2	21.9
ROACE (%)	16.7	21.2	26.4	28.5	29.0
ROANW (%)	18.3	23.9	27.1	25.8	27.1
Sales/Total Assets (x)	0.9	1.1	1.0	1.3	1.3
Sales/Net Block (x)	3.1	2.9	2.8	3.4	4.1
Debt:Equity (times)	1.1	0.8	0.5	0.5	0.4
Current Ratio (times)	7.0	4.9	4.6	3.5	3.7
Interest Cover (times)	3.7	4.7	8.0	9.9	12.7
Debtors (days)	97	93	82	80	80
Inventory (days)	123	94	81	76	74
Net working capital (days)	227	164	155	150	163
EV/Sales (x)	2.6	3.5	2.6	1.7	1.3
EV/EBIDT (x)	13.6	18.4	12.2	7.9	5.8
P/E (x)	23.9	30.8	17.9	12.4	9.2
P/BV (x)	4.4	6.0	3.7	2.8	2.2

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