



impetus advisors

research@impetusadvisors.com

India Research - Engineering

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Voltas Ltd

Huge opportunity in Electro-Mechanical Engineering Projects

Voltas Ltd, post painful restructuring, is now capitalising on construction boom driven mainly by services sectors and tourism in India & Middle East. It is set to capitalise on strong growth opportunities in Electro-Mechanical engineering projects, engineering & capital equipments, and air-conditioning & refrigeration products. Besides strong growth in its businesses, other factors driving its earnings growth will be margin expansion, turn-around in cooling products business and further unlocking of value in real estate holdings.

DCF Value (1-yr out) Rs.95

Current Price Rs.82

+16%

The stock currently trades at 19.6 times and 14 times the estimated EPS for FY08 (Rs.4.20) and FY09 (Rs.5.88) respectively. We expect EPS to grow 54% and 40% in FY08 & FY09. Our one-year out DCF value estimate comes to around Rs.92 (CoE & WACC at 14.6%). We estimate its RoCE and RoE to expand by 10 percentage points to around 36-37% by FY2010.

Key Data

Market Cap	Rs.27.2bn US\$632mn
Shares Outstanding	331 mn
52 week High-Low	Rs.120 / Rs.62
Avg Trading Volume	No. of shares
30 Days	10,79,000
365 Days	11,24,000
BSE Scrip Code	500575
BSE Group	B1

Shareholding % 30 Dec 06

Promoters	27.32
Institutions	49.58
Others	23.10

Multiple Valuation YE Mar-08E

EV/EBITDA	11.7x
EV/ EBIT	12.5x
Market Cap/Sales	0.8x
P/E	19.6x

Products & Services

Electro-Mechanical Projects	Heating, Ventilation, Air-conditioning, Electrical system, Security systems, building mgmt systems of large building complexes
Engineering Products & Services	Mainly distribution of engineering & capital equipments
Unitary Cooling products for comfort & commercial use	Air conditioners and commercial refrigeration products for residential & commercial use
Others	Chemical Trading and leasing out of real estate properties

Key Investment Points

- Voltas has been through a painful restructuring for last few years. Now that it is over, it is ready to focus on growth & profit improvement of core businesses.
- Electro-Mechanical Projects are going to be main growth driver with significant opportunities in Middle East & India driven by huge investments in construction & infrastructure to cater to tourism, retail, hospitality, entertainment, IT/ITES, and healthcare.
- Engineering products & services businesses, which currently contributes over half its profits, to see steady growth
- Unitary cooling products business likely to turnaround
- Margin to expand across business segments. Significant scope for margin expansion in EMP

Value Kickers

- Water management projects & Cold Chain offers exciting opportunities. Voltas is likely to make some inorganic moves here.
- Unlocking of values in real estate in Hyderabad, Mumbai, and Jamshedpur.

Points of Concern

- Shortage of engineering & project management personnel is a challenge particularly in the Middle East.
- Any insurgency in the Middle East can impact existing projects and order flow
- Significant slowdown in economic growth can impact investment in infrastructure, construction, and capex impacting both EMP & Engineering Products businesses.



Introduction

Voltas Ltd is a Tata group company. They held 27.3% stake at end of Dec06. Voltas' main business has been air conditioning and refrigeration. Over the period, it has been transformed into an engineering company with central skill being in the area of air conditioning and refrigeration. Today's Voltas is a global air conditioning & engineering services company. It now has three main business segments:

1. Electro-Mechanical Projects & Services (EMPS)
2. Engineering Products & Services (EPS)
3. Unitary Cooling Products for comfort & commercial use (UCP)

Business Segment wise Revenues & Earnings Profile

	FY03	FY04	FY05	FY06	QE Jun06	QE Sep06	QE Dec06
Revenues Rs.mn							
EMPS	7,017	7,342	8,037	11,295	2,485	3,193	3,576
EPS	649	837	1,591	2,528	806	1,034	1,210
UCP	4,561	4,232	4,265	4,723	2,578	1,082	909
Others	224	1,030	521	495	135	102	123
EBIT Rs.mn							
EMPS	314	132	520	695	139	79	183
EPS	216	272	410	698	194	263	249
UCP	(13)	11	(71)	(10)	36	3	(29)
Others	77	384	55	118	27	37	43
Revenue Contribution %							
EMPS	56	55	56	59	41	59	61
EPS	5	6	11	13	13	19	21
UCP	37	32	30	25	43	20	16
Others	2	8	4	3	2	2	2
EBIT Contribution %							
EMPS	53	17	57	46	35	21	41
EPS	36	34	45	46	49	69	56
UCP	-2	1	-8	-1	9	1	-6
Others	13	48	6	8	7	10	10
EBIT Margin %							
EMPS	4.5	1.8	6.5	6.2	5.6	2.5	5.1
EPS	33.3	32.4	25.7	27.6	24.0	25.5	20.6
UCP	-0.3	0.3	-1.7	-0.2	1.4	0.3	-3.1
Others	34.5	37.3	10.5	23.8	19.9	36.3	34.5
Revenue Growth %							
EMPS		5	9	41	15	-3	23
EPS		29	90	59	89	80	76
UCP		-7	1	11	42	38	26
Others		360	-49	-5	30	-17	-25
EBIT Growth %							
EMPS		-58	293	34	-5	-61	-10
EPS		26	51	70	37	63	47
UCP		-	-	-	255	-	-
Others		397	-86	117	8	53	34



Electro-Mechanical Projects & Services (EMPS)

Voltas has been in the business of providing Heating, Ventilation, Central Air-Conditioning & Refrigeration solutions to commercial buildings & complexes. This business is popularly known as HVACR. Lately and especially in the Middle East & South East Asia, it has expanded this business from HVACR to EMPS. Besides HVACR, EMPS also includes providing electrical system, building management system, lift management system, security system, information management system, etc. These solutions are provided on turnkey basis. Voltas manufactures key equipments like Central AC plants, Chillers, Commercial air conditioners & refrigerators required for these projects. Other equipments are procured from outside.

In India, it mainly executes HVACR projects, as EMPS concept has not yet taken off in India. International projects are mainly EMPS projects. It has executed projects in over 30 countries. It's India's largest exporter in the field of Electro-Mechanical. Blue Star, Carrier Aircon, and ETA are major competitors in India. Voltas has 25% market share in the domestic market in this business. For international projects, it competes with many other players. In this business, Voltas is currently executing projects in India and the Middle East with total order book size of Rs.24bn. Its customers are from diverse sectors such as Airports, Malls, Hotels, large commercial and residential projects, IT & ITES, and Hospitals. It also provides maintenance services to smaller projects. Large projects arrange for the maintenance on their own.

Some of the projects that Voltas executed in India are:

- Magarpatta Cybercity, Pune
- Saifee Hospital, Mumbai
- ITC Hotel, Mumbai
- Ambi Mall, delhi
- TCS Office Complex, Hyderabad

Some of its international projects:

- Conference Palace Hotel, Abu Dhabi - EMPS
- Mall of Emirates, Dubai, UAE - HVAC
- New Hong Kong International Airport, World's largest passenger terminal (1995)
- Changi Water Reclamation Project, Singapore – EMPS (completed in QE Mar07)

Engineering Products & Services (EPS)

In this segment, Voltas is largely a distributor of engineering & capital equipments for which it gets sales commission. It also provides repairs & maintenance service in case of major breakdowns. As it is largely a commission & service revenue business, apparent revenues are lower and apparent margins are very high. At present, this segment contributes over half of Voltas' operating profit.

It represents over 40 manufacturers from across the globe for:

- Textile machineries
- Machine tools
- Mining & construction equipments
- Material handling equipments

Voltas offers total solutions from concept to commissioning, training and maintenance. It operates as a product support arm for principal manufacturers.

Textile Machineries

It distributes spinning, knitting, and weaving machineries & accessories. In spinning, it represents LMW group and has over 60% market share. Voltas does 75% of LMW's sales, balance is done by LMW group co Super Sales. Voltas makes 4% commission on these sales. In knitting & weaving, it



represents Terrot, Germany and Heliot, France. Some of its competitors are Kirloskar Toyota (ring frames for spinning) and India Card Clothing (carding equipment for spinning).

Machine tools

It represents 11 manufacturers from India, Germany, Switzerland, and Japan. It is one of the leading machine tools suppliers in India mainly for automotive segment. It recently added food processing equipments in the range.

Mining & construction equipments

Voltas represents seven manufacturers from the US, Switzerland, Australia, the UK, and Korea. Coal India is its major customer for mining equipments. In this business, it competes with companies like BEML, L&T, and Ingersoll Rand. Voltas is market leader in Mobile Crushers for road construction.

Material handling equipments

It represents three principals from Sweden, Germany, and France and sells mainly to automobile segment. In this business, it also does manufacturing of Forklift Trucks and is now amongst the largest manufacturers of forklift trucks with 36% market share in India. Godrej is a major competitor in Forklifts.

Unitary Cooling Products for comfort & commercial use (UCP)

This business segment involves marketing & distribution of branded air conditioners (Window ACs, Split ACs, Specialized ACs) commercial refrigerators, water coolers, and water dispensers for use in residences, offices and other commercial establishments. It imports some of its products for sale in India and also exports some of the products that it makes here.

Voltas is market leader in water coolers, commercial freezers & coolers. It supplies deep freezers, visi-coolers, chest freezers and other commercial cooling systems under Coldcel brand to customers like Pepsi, Nestle, Cadbury, Mother Dairy, and Amul. It manufactures water coolers, dispensers and commercial refrigerators itself.

It has second highest market share of 16% in Room ACs (Window+splits). LG has the highest market share in RACs. RACs are manufactured by Universal Comfort Products Pvt Ltd, a joint venture between Voltas and Fedders International Inc, USA. The JV is a manufacturing-only JV and entire production is marketed and distributed by Voltas. Fedders International is, however, moving out of small tonnage ACs and therefore there is a possibility of Voltas buying Fedders out in the JV.

RACs business is a seasonal business with most of the sales taking place prior to or during summers. However, the impact of seasonality is diminishing with change in climatic conditions, construction boom, shift from WACs to Splits, and growing share of commercial & office segment.

Voltas had a presence in domestic refrigerators also. It, however, exited this business in Jun-06 by closing down its refrigerator plant at Hyderabad by offering VRS to all the employees there. This plant also used to make commercial refrigerators and water coolers. Voltas has shifted manufacturing of these to a new unit in Pant Nagar, Uttaranchal. Domestic refrigerator business is intensely competitive with huge over capacity. Voltas has been making significant losses in this business.

Its existing cooling products business is also intensely competitive with a large number of competitors like LG, Samsung, TCL, Daikin, Godrej, Onida, Blue Star, Hitachi, Videocon, and ETA General. Very few of these players are making money. What makes so many of them to slug it out in this market is the magnitude of growth opportunity. Penetration level for cooling products is just about 1-2% mainly due to high cost of electricity in India. As cooling products consume significant



electricity, cost and availability of power is a major hindrance for market expansion. Yet the Industry has been growing at around 25% annually.

Indian air conditioning market size is estimated at around Rs.32-35bn and growing at 25% annually. Commercial refrigeration is another Rs.12-15bn market. LG became number one in market share by reducing prices substantially. It has been looking at its losses in India as an Investment to capture the high potential market.

Other businesses

Besides these three main businesses, Voltas has some legacy businesses such as Chemical Trading. It was also present in power driven pumps business and it exited this business in FY06. Currently, besides chemical trading, it leases out or sub-lets various owned/tenancy properties at various places in Mumbai and Jamshedpur. Leasing income contributes about 60-70% of others segment revenues.

Key Investment Arguments

No more restructuring Pains

With the closure of loss making erstwhile Allwyn refrigerator unit at Hyderabad in Jun-06 by offering VRS to all its employees and shifting production of profitable products to a new unit in Pant Nagar, Uttaranchal; Voltas has put an end to all the pains of this loss making domestic refrigerator unit and its restructuring costs. There will be no more closure costs including VRS costs from now on. Earlier losses and then restructuring costs including closure & VRS Costs were impacting profits and cash flows. With the restructuring pains behind it, it can now focus on profitable growth in its core business segments with vigor.

Electro-Mechanical Projects offer huge opportunity

India and the Middle East are witnessing unprecedented boom in construction and infrastructure development. This offers huge multi-year market opportunity in electro-mechanical projects space.

Dubai was the first country in the Middle East to invest significantly in development of infrastructure for tourism development over the last few years. Success of Dubai's investments in tourism infrastructure propelled other Middle Eastern countries, who earlier viewed Dubai's audacious move with skepticism, to follow its path. Now most countries there have lined up mega investments and this entails a multi-year opportunity in EMPS business. Contrary to popular perception, the construction boom in the Middle East is not due to petro-dollars (influx of dollars due to significant rise in crude oil price). Dubai's construction boom started when crude was at \$26. Therefore, even if crude price falls significantly, we do not see any risk to this construction boom there.

We listed some international projects Voltas completed on page3. Voltas currently has an **order book of Rs.18bn for international projects** executable over 2 years. Some of these orders are:

- Jumeirah Beach Residence, Dubai, UAE
- Burj Tower, Dubai, UAE
- Wafi Hotel, Dubai, UAE
- Intercontinental Hotel, Abudhabi,UAE Refurbishment Project
- Bahrain City Centre, Bahrain
- Movenpick Hotel & Centre Residence, Dubai, UAE
- Al-Udeid Defence Project, Qatar
- New Doha International Airport, Qatar
- The Interim Doha Convention Centre, Qatar



While the current order book is mostly from UAE and Qatar, opportunities are emerging in Bahrain, Saudi Arabia, Kuwait, Jordan and even South Africa and South East Asia. China too has been making huge investments in construction and infrastructure. However, Voltas avoided this market due to lack of adequate legal structure there.

Bahrain City Centre and Burj Tower are the two largest projects it currently has with likely revenues of Rs.4.63bn and Rs.3.65bn respectively. These are going to be the largest city centre and tallest building (160/170 floors) anywhere in the world.

In the domestic market, project opportunities are mainly in HVACR. The concept of EMPS is picking up here but not fast enough. Some of the projects that it executed are listed on page 3. It currently has an order book of Rs.6bn for domestic projects. These projects include:

- Hyderabad International Airport Project (Rs.1.65bn)
- Galleria Palm Beach Mall, Navi Mumbai

It is also involved in modernization of Kochi airport and domestic terminal at Mumbai. The expected large EMPS order for Mumbai Airport is far away. For Delhi Airport, L&T is the contractor and it organizes its own electro-mechanical business. Hence, this is unlikely to come to Voltas.

Key growth drivers in domestic market are thrust on airports, infrastructure development, reconstruction, expansion in IT Parks, ITES & Retail malls, multiplexes, healthcare, hospitality, banks, commercial offices, pharma & biotech sectors etc.

Total value of orders (domestic and international) for which it has put bids as of today is Rs.35bn.

Sizeable margin expansion potential in EMPS business

Management is taking some steps specifically targeted at margin expansion in EMPS business. These are:

- Centralized procurement to manage suppliers and control costs
- Centralized design for all projects
- Undertaking more design & build jobs
- Centralized back office processes
- Mechanizing cost centres to increase efficiency and control costs
- Implementing a knowledge management system across projects

Apart from these efforts, margin expansion is likely to take place for following reasons too:

- Huge opportunity in EMPS space and limit on Voltas' ability to take on projects (constraints being manpower availability and risk bearing capacity) implies that it can be choosy about projects and bid for projects at higher margins
- While average margin has been 5-6%, the range of margins has been 3% to 15%. There are various factors that determine the extent of margins in a project. For example, a project that involves lots of designs will have higher margins. Selective bidding for projects with potential of margins at higher end of the range will improve margins.
- In the initial days, Voltas bid for some projects for strategic reasons (to become pre-qualified for certain kind of projects or certain size of projects) at low or no margins. As it has now achieved pre-qualification and confidence to go for projects upto Rs.5bn and across various types of projects, the need to go for low or no margin projects will be minimal. For example, it just completed Changi Water Reclamation Project in Singapore at no margin, as the project was strategic for finding a foothold in Water Management Project space.
- Revenue recognition starts on projects after 10% project completion. Even at this stage, initially costs are recognized conservatively leading to lower margins in early stage of projects. The quarter in which a project is completed sees high residual margins being recognized. In 9 months ended Dec06, margins in EMPS business contracted as some large projects continued to be in



early stages of design and mobilization and this period did not see any major project completion. Voltas completed Changi project in QE Mar07 but it was a no margin project. We estimate that Jumeirah Beach Residence Project at Dubai should be now nearing completion. As large projects enter revenue recognition stage or near completion, margins shoot up. Rs.3.65bn Burj Tower, Voltas' 2nd largest project under execution, entered revenue recognition phase in QE Mar07. We therefore expect EMPS business margins to improve in QE Mar07.

EMPS & EPS are Working Capital Neutral – makes the businesses highly scalable

Both EMPS and EPS businesses are working capital neutral. The company does not require additional net working capital to support growth in these businesses. This makes these businesses highly scaleable. Each of its projects is normally working capital neutral throughout the duration of a project except in no-margin or low-margin projects. Some projects are taken at no/low margin for strategic reasons while some become so due to cost escalation. UCP business is the only business that requires working capital on a regular basis.

No more capital expenditure for the time being

Voltas is through with its capex program by incurring Rs.500mn in FY07. No capex is required over the next 3-4 years to support the growth assumed by us in our financial model. Capex will take place either for inorganic moves or for backward integration in Engineering Products assembly or manufacturing. We have not built any of these in our financial and valuation model.

Water Management & Treatment Projects – Significant Opportunity

Voltas is a turnkey solution provider for pumping projects, water, effluent, sewage treatment and water pollution control projects. It recently completed Rs.3.5bn order from Changi Water Reclamation plant in Singapore. This was a strategic project for Voltas. Voltas has not made any profit on this project but successful completion of the project has given it pre-qualification to bid for similar projects coming up in the Middle East and India.

Voltas is likely to acquire one or more companies in water management space. These companies will bring in process knowledge and expertise in this field. The acquired company is likely to be a small to mid sized company vis-à-vis Voltas. Benefit of any such acquisition will flow in FY09 and onwards.

Cold Chain – Another exciting opportunity waiting in the wings

Cold chain comprises of cold storage equipments at farm end, refrigerated transportation equipments, and cold storage equipments at retail end. Voltas currently has presence in cold storage equipments for farm end and retail end. It does not have presence in refrigerated transport as yet. It is looking at acquiring suitable technology for entering this area. Once done, it will be in a position to offer complete cold chain solution.

APMC Act currently prohibits /restricts movement of goods across states leading to huge wastage and suboptimal use of agriculture produce. APMC Act is in the process of being amended to allow free movement of agri-produce across India. This will open up huge demand for farm-to-store cold chain. It is estimated that 5mn sq ft real estate is required just for backend storage for retailers.

In Aug-06, Voltas entered into a strategic partnership with Besseling group of Netherlands for cold storage equipments at farm-end. It will deliver turnkey solutions in Controlled Atmosphere or Ultra Low Oxygen storage technology for long term storage of fruits and vegetables as sole selling agent for India. It bagged several projects including Adani Farm Fresh, International Flower Auction sector at Bangalore, Abhirami at Chennai, Jaya Cold Storage in Tamilnadu. Going forward, Voltas can manufacture Besseling range of products here. Government has announced interest and capital subsidy for cold storage facilities. Reliance, Godrej and Bharti groups are likely to make significant investments in cold chain.



High Margin Engineering Products & Services business to grow steadily

This business segment has seen revenues grow at 81% YoY and EBIT grow at 50% YoY in nine months ended Dec06. This follows very robust growth during FY04-FY06. Going forward, we estimate growth to slow down in this business segment to around 25%.

Forklifts, a material handling equipment, saw about 60% volume growth in FY07 driving on capex boom. If rising interest rates play spoil sport for capex boom, then Forklift volume growth can slowdown substantially to about 30% this year. Capital investment in industrial sectors, retail and growth in port traffic are key growth drivers for material handling equipments.

Growth in mining equipments has not been as anticipated by management. Growth depends on mining allotments by government. Allotment of mines to POSCO may bring in substantial business.

Large investments in infrastructure, particularly in road construction, will drive demand for construction equipments.

Textile machinery business saw a huge 90% growth in FY07 driven by government incentive of 5% interest subsidy and excise reductions. LMW's products are major contributors to this segment and its order book is full for two years. LMW gave 30% growth guidance for its business. With the dismantling of textile export quotas, substantial capacity expansion is taking place in spinning, weaving and knitting.

Machine tools sales growth may witness slowdown in line with slowdown in automobile sector. However, food processing equipments, a recent addition to product portfolio, should add to growth here. Pick up in defense spending can add growth here.

The burden of growth will be entirely on textiles machineries & construction equipments in the near term, as growth outlook for other machineries has sobered lately.

Assembly/Manufacturing of Engineering Products to capture greater share of value chain

As part of its strategy to expand operating profit margin, Voltas is looking for opportunity to assemble or make some of the equipments or machineries. This will be a backward integration for Voltas, which is mainly into distribution and servicing of engineering equipments. Forklifts, a material handling equipment, are the only equipments it makes currently. It may shortly get into assembly of some mining and construction equipment. Given its strength in engineering and servicing of wide variety of industrial equipments, it is well placed to backward integrate into high volume products that it distributes.

Sowing seeds for further growth in EPS Business

It is also exploring other value addition areas like complete machining centres in machine tools, offering even post-spinning machineries in textiles, offering integrated warehousing and not just forklift trucks in material handling. It is also looking at offering complete solution to textile industry including textile equipments, HAVAC, EMPS, Material handling equipments and chemicals.

Unitary Cooling Products business on the verge of turning around

UCP business, which contributes a quarter of Voltas' revenues, makes marginal operating loss at present. This is likely to change. Voltas may post 1-2% operating margins from FY08 and these margins may improve going forward. We elaborate below what will cause margin improvements.

Given the miniscule penetration of 1-2% in cooling products, there is a huge market to be tapped. The major factor holding the product category back is availability & cost of power to operate these



energy guzzlers. While this is unlikely to change in the short to medium term, there have been other factors driving demand in the meanwhile. Rising middle income population, improving lifestyles, increasing number of SOHOs, product price reductions are driving demand growth for RACs.

Commercial refrigeration products demand is being driven by growth in food processing sector (largely branded dairy products, ice creams, soft drinks, bottled water, seafood and processed meat), hotels, restaurants, and retailing industry (super markets and shopping malls). Water coolers & dispensers have been growing due to increasing consciousness towards water purity, growth in high footfall offices and areas like malls, retail, call centres, etc.

Cooling products market have been growing at 25% and Voltas has outgrown the market in FY07 leading to market share gain. Its strategy of introducing products at various price points, especially lower unit price products (e.g. 0.6 Ton AC at Rs.10,000), paid handsomely in the price-sensitive Indian market.

Cut-throat price competition in this intensely competitive market has subsided. It appears that the market leader LG has stopped cutting prices further to gain market share. It has been incurring losses and viewing them as investments to corner a slice of high potential high growth Indian market. While price reduction has stopped, raising price is still difficult. Voltas had to roll back its price increase resorted to in FY07. Carrier had managed to raise prices by 4-5% in residential and light commercial ACs in early Nov-06 primarily to pass on increase in costs of inputs like copper. An attempt to raise prices successfully or otherwise indicates that players are maturing on pricing front.

Universal Comfort Products, a JV with Fedders, that manufactures cooling products like RACs for Voltas, commissioned a new unit at Pant Nagar, Uttaranchal in Mar-07 with capacity of 325,000 units. The JV already has a unit at Dadra, Silvassa for 250,000 units. In Jul-06, Voltas had commenced its own unit at Pant Nagar for Water coolers, commercial refrigerators and specialty ACs.

Cost of production is likely to be significantly lower here due to significantly less number of manpower, lower manpower cost/person, lower power cost and excise exemption (inputs are available locally so that modvat benefit is not lost). As most of its competitors were already operating in excise-free zones, Voltas' move there levels the playing field on this front. The lower cost of production and stable prices should lead to margin improvement. There is also income tax exemption at new units but given the low margin of the business, income tax exemption will not have major impact.

Voltas is now focusing more on B2B segment rather than retail customers. Margins are better in B2B as advertising costs and trade margins are saved.

AC market is now shifting preference towards split ACs from Window ACs (WACs). Voltas has been making loss only on WACs and not on other products. With the improvement in product mix away from WACs, margins will improve further.

Value unlocking from Real Estate Properties

In Mar-07, Voltas sold its wholly owned subsidiary Simtools Ltd holding real estate, to Lodha Builders for Rs.784.4mn. Voltas' investment in Simtools Ltd was equity Rs.3.7mn and advances Rs.28.8mn at end FY06.

With the closure of Hyderabad unit, Voltas has 34 acres of idle land there. This land is in the heart of the city at Sanath Nagar, which is about 3Km from Begum pet airport. At present, this land can fetch



Rs.1.7bn @ Rs.50mn/acre, which is Rs.5 per share of Voltas. We have included this in our fair value estimate.

Besides this, Voltas has properties at Ballard Estate & Chinchpokli in Mumbai and at Jamshedpur. These properties have been given on lease. For example, surplus real estate adjacent to its corporate office at Chinchpokli, Mumbai has been given on lease to Tata Teleservices. The company can unlock values in these properties as and when required. We have not ascribed any value to these properties in our fair value estimate.

Besides real estate, Voltas had significant unrealized gain of Rs.1.3bn (Rs.4/share of Voltas) on long term trade investments in LMW and Tata group company like Tata Chemicals at end FY06. We have not considered this unrealized gain in our fair value estimate, as these are unlikely to be realized in short to medium term.

Risks / Concerns

Growth linked to Economic & Industrial growth in India

A sustained & significant slowdown in Indian economic & industrial growth may adversely impact construction boom in India in sectors like Retail, Multiplex, Hospitals, Hotels, etc affecting growth of HVACR project business. A consequent slowdown in industrial capex growth will impact growth in its Engineering Products business and cooling products sales to commercial and industrial customers.

Insurgency in the Middle East

Any insurgency or flare-ups in the Middle East, a la Iraq or very recently in Iran or for that matter in Thailand last year, may jeopardize its projects, if any in the region. This also has implication for order book and future growth, as Voltas is betting big on the Middle East driving its EMPS business growth. A sustained tense environment can adversely impact growth in tourism, the nucleus of construction boom there.

Shortage of skilled manpower in the Middle East

The Middle East is facing significant shortage of skilled manpower specially experienced people in procurement and project management. This makes it imperative for a project bidder to be restrained in accepting large amount of orders, as it may not get enough manpower to execute them leading to liquidated damages. Voltas has been cautious and selective in accepting orders largely on this count. This caps order book and revenue growth. The continued shortage may lead to rise in manpower costs and may put pressure on margins of projects already bid for. Voltas so far did not have to pay liquidated damages for any of its projects. Even projects currently under execution are unlikely to be delayed beyond outer time limit for completion.

Cost escalation risk in turnkey projects

EMPS turnkey projects are all fixed cost contracts. As per the industry practice, these contracts do not carry any cost escalation clauses. Though Voltas makes back-to-back tie up for inputs for 60-70% of costs, escalation risk remains open on balance. Even for the back-to-back component, risk remains open between the time of making the bid and that of placement of purchase orders. This time duration is normally 8-9 months. There have been cases in the past where cost escalation ate away its margins.

Forex Risk

In most of its international turnkey projects, revenues and costs are denominated in local currencies, which are linked to USD. Therefore, Voltas is exposed to the risk of INR appreciation vis-à-vis USD, though only to the extent of project net profit. Temporary rupee appreciation can be taken care of by postponing repatriation till exchange rate becomes favorable. However, a sustained rupee appreciation can dent its profits.



Direct Entry by its agency business Principals in India

India presents a large market and significant growth. Given this, some of its principals for which it does distribution in India, may decide to enter India on their own leading to loss of business for Voltas. Currently, however, no one is known to be actively considering an India entry strategy. It has 50 years' relationship with LMW renewable every five years. Its agreement with LMW was renewed last year only.

High volatility in quarterly earnings

Voltas' growth and margins have been volatile from quarter to quarter due to lumpiness of project revenues (despite percentage completion method of revenue recognition), back ended profit booking on projects, and seasonality in cooling products business, where most of the sales takes place prior to and during summers. Start of Project revenue recognition take anywhere from 3 months to 15 months during which a project do not contribute to revenues or profits.

Valuation and key underlying assumptions

Absolute Valuation

We estimate one-year out fair value per share in the range of Rs.82-Rs.114 (point estimate: Rs.95) using the discounted free cash flows methodology. Key assumptions for the valuation are 6% terminal growth rate in NOPLAT, 3% terminal ROIC spread over WACC, Cost of equity at 14.6% based on beta of 0.83, risk free rate of 8% and market risk premium of 8%. Fair value range is based on extreme assumptions on key variables like revenue growth in each of its segments, and operating margins in each of its segments. We have taken into account the value of sale of Simtools Ltd (Rs.784.4mn in Mar07) and an estimated value of 34 acres of land at Sanathnagar, Hyderabad at Rs.50mn per acre. Unrealized gain on investments in Tata group companies and other trade investments (Rs.4/share) has not been included in the valuation, as these are unlikely to be sold and realized in short to medium term.

At the current price of Rs.82, the stock trades at 30.1 times FY07 expected EPS of Rs.2.73. It trades at 19.6x and 14x expected EPS for FY08 and FY09 respectively. The company has no net debt and is cash positive.

Relative Valuation

Company	CY06 Adj PAT Rs.mn	MCap Rs.mn	RoE %	P/E X	Business Segments
Voltas	873	27,199	34.5	26.0	Electro-Mechanical Projects Cooling products Engineering products Distribution
Blue Star	626	18,383	36.2	29.4	HVAC Projects Cooling Products Electronics products Distribution
Lloyd Electric	420	3,716	19.6	7.9	Air conditioners Components of ACs
Hitachi Home	184	1,814	29.7	9.9	Cooling Products
Fedders Lloyd	160	3,775	18.8	23.6	Cooling Products Real Estate

Blue Star is the only comparable company in the entire listed universe. Carrier Aircon, with presence in HVAC Projects and cooling products, is another company that has similar business profile but is no longer listed.



Compare & Contrast

Blue Star	Voltas
Blue Star has so far been mainly into HVAC but is now moving into EMP. Blue Star has largely been domestic focused but is now looking at the Middle East market as well.	Voltas is well entrenched in both EMP and the Middle East.
Blue Star is into cooling products with focus on commercial customers.	Voltas is now focusing more on commercial customers.
Blue star does distribution of electronic products.	Voltas does distribution of engineering and capital equipments.

Though proportionate size of each business segment differs for both the companies, the real big opportunity space for both of them is HVAC & EMP. On a relative valuation, Voltas is available at about 12% discount to blue Star's valuation.

Lloyd Electric and Hitachi Home have significantly low valuations as compared to Voltas and Blue Star, as the former two are mainly into intensely competitive cooling products business. Lloyd Electric's high profitability is due to its backward integration into components. Hitachi's high profitability is due to the fact that it operates at premium end of energy efficient cooling products. Fedders Lloyd's significantly high valuation, despite its presence in only cooling products, is due to its diversification into real estate development.

A comparison with other pure engineering & pure capital goods firms is not meaningful, as business dynamics differ substantially.



Income Statement

Rs. Mn.	Mar-07E	Mar-08P	Mar-09P
Revenues	24,758	33,383	43,687
EBIT	1,387	1,979	2,733
PBT	2,174	2,001	2,804
PAT	1,705	1,389	1,944
Adj. PAT	902	1,389	1,944
EPS Rupees	2.73	4.20	5.88

Ratios

	Mar-07E	Mar-08P	Mar-09P
Revenue Gr %	28.2	34.8	30.9
EPS Growth %	0.1	54.0	40.0
RoE %	27.6	31.0	34.5
D/E x	-	-	-
Receivable days	74	74	74
L&A/Revenues%	5.7	5.7	5.7
Credit days	118	118	118

Balance Sheets

Rs. Mn.	Mar-07E	Mar-08P	Mar-09P
Assets			
Net Block	1726	1726	1726
Net Curr. Assets	1351	1881	2488
Excess Cash	38	401	1031
Def Tax Assets	237	213	194
Liabilities			
Equity Capital	331	331	331
Reserves	3460	4329	5546
Debt	-	-	-

Interim Performance

Rs. Mn. Months	Jun-06 3	Sep-06 3	Dec-06 3	Mar-07E 3
Revenues	5993	5407	5809	7127
EBITDA	258	196	269	363
EBIT	223	168	240	335
PBT	323	305	311	406
PAT	217	241	181	269
ExtraOrd Inc	1	9	13	781
Rep PAT	218	250	194	1050
Eq Capital	331	331	331	331
Ann EPS Rs.	2.63	2.92	2.19	3.26
EBIT Margin	3.8%	3.2%	4.2%	4.8%
Other income/PBT	31.8%	50.1%	27.3%	20.9%
Tax/PBT	32.7%	20.9%	41.7%	33.7%

Multiple Valuation

	Mar-07E	Mar-08P	Mar-09P
EV/EBITDA x	15.7	11.2	8.3
EV/EBIT x	17.1	12.0	8.7
Mkt. Cap/Sales x	1.1	0.8	0.6
P/E x	30.1	19.6	14.0
Price/Book x	7.2	5.8	4.6

Free Cash Flow

Rs. Mn.	Mar-07E	Mar-08P	Mar-09P
NOPLAT	914	1374	1895
Change in Net Working Capital	530	721	814
Operating Cash Flows	530	721	814
Net Capex & others	348	(24)	(19)
Free Cash Flow	37	677	1100
Non-opr. Cash flow	810	15	50
Cash Flow to Investors	847	692	1149

Financing Cash Flow

Rs. Mn	Mar-07E	Mar-08P	Mar-09P
Post-tax Interest	19	-	-
Repayment/ (issue) of Debt	734	-	-
Equity Share Dividend	226	329	520
Inc / (Dec) in surplus cash/Investments	(134)	364	630
Financing Cash Flow	846	692	1149

DCF Valuation

Key Assumptions	Rs. Mn.	%
Terminal Growth Rate		6.0
WACC		14.6
Cost of Equity		14.6
Terminal ROIC		17.6
		WACC+3%
Fair Value Range (Rs.)	82-114	
Per share Value (Rs.)	95	1-yr out



Important Disclosure

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