Building on heritage

Enriched by a legacy of over a century, Walchandnagar Industries is charting a growth strategy

Aerial view of manufacturing facilities

Walchandnagar Industries Limited (WIL), the engineering major that traces its roots to the visionary industrialist, Walchand Hirachand (1882-1953), is preening itself for a massive revamp. The roadmap for growth it has charted for itself is expected to swell its income almost six-fold over the next five years – from the Rs524.91 crore at present to Rs3,000 crore. "WIL is a brick and mortar engineering enterprise and it was not just liberalisation, but commercial opportunities as well, that opened up our businesses over the years," notes Walchand's grandson and company chairman, Chakor L. Doshi. "Our whole approach now is to move from design engineering and manufacturing to engineering, procurement and construction (EPC)."

With factories now in Walchandnagar and Satara in Maharashtra and in Dharwad in Karnataka, WIL's principal activities are rather diverse. They span engineering, manufacture of machinery for sugar and cement plants, fabrication of boilers and heavy-duty gears and mineral processing. These are grouped under the three divisions of heavy engineering & industrial machinery (in Walchandnagar), foundry and machine shop (in Satara), and precision instruments (in Dharwad).

The sixty-two-year-old Doshi says the intention now is to undertake projects in newer business areas as also to execute projects of much larger sizes compared to the past. "The necessary technology and project management capabilities are being augmented to enable the company to do so," he points out.

To give shape to its aspirations towards developing existing verticals and creating new ones, Walchandnagar is forging technical tie-ups and collaborations with a number of overseas companies. Apart from its partnership with France's Direction des Constructions Navales Services (DCNS: *see box*), it tied up recently with ATEC Austria to enable bidding for larger cement projects and in new geographies. It is in discussion with a foreign company for the new thermal power vertical it is pursuing, where it will notch up to 150 MW capacities. It is also negotiating a technical tie-up with a Brazilian company, collaboration with a US company having a presence in the oil and gas exploration field, and a joint venture with a European company fabricating land rigs. "It is yet too early to discuss at this moment as we are still working out details," explains Doshi's 35-year-old son and managing director Chirag C. Doshi.

Over 90 per cent of his company's revenue comes from heavy engineering that caters primarily to the capital goods segment within diverse fields such as sugar machinery, boilers and power plants, cement machinery and EPC projects. The business of foundry has a share of 7 per cent, and precision instruments the rest. Foundry is divided mainly into the automotive sector (where the division makes dies for the automotive industry) and the wind turbine sector (for which it produces industrial machinery and equipment applications).

It can also execute, on turnkey

basis, integrated sugar plants up to 10,000 tonnes crushing capacity per day, having supplied more than 75 such plants and over 80 major expansion projects. For the cement sector, it can design, manufacture and supply complete projects up to 3 million tonnes per annum capacity on turnkey basis. More than 40 such projects have been completed, including ones in Indonesia, Lebanon, Kuwait, Zambia, Iran, Ghana and Nepal.

"The industrial machinery division, launched in the early 1960s, helped us foray into the high technology-heavy engineering business spanning the country's nuclear, aerospace and naval segments," mentions Chakor Doshi. He had joined the company in 1974 when his cousin Bharat Doshi had been the managing director.

Doshi views WIL and Larsen & Toubro as the two pioneering companies in these fields and the only ones too, though he concedes that the rival company is far larger. So it is. The Rs40,500 crore technology and EPC behemoth was founded as a partnership firm in 1938 by two young Danish engineers, Henning Holck-Larsen and S.K. Toubro, who came to India in the 1930s for business in cement.

Planetary gear box: hi-tech inputs

Chirag Doshi indicates that WIL's order book is currently worth Rs2,500 crore. "We do not give break-ups of individual orders, but our orders are spread across all our business verticals of power, sugar, cement, aerospace, defence and nuclear power," he says. Exports account for Rs449.58 crore of the orders. Last year, they totalled Rs96.92 crore, comprising mainly EPC contracts in Africa. These included a mine backfill plant and waste crushing plant at Zambia's Konkola Copper Mines (KCM) and a 3,500 tonnes per day cement plant for Maweni Limestone Ltd of Tanzania.

WIL also has a letter of intent (LoI) from Tamil Nadu Electricity Board (TNEB) for a Rs1,200 crore contract for providing boilers for 13 co-generation power plants attached to sugar factories and ranging between 10 and 18 MW, totalling 230 MW. The company is capable of manufacturing boilers on turnkey basis of capacities ranging from 10 to 250 tonnes per hour. WIL has a market capitalisation of Rs741.78 crore. The company follows the October-September fiscal year.

Entering oil and gas

The firm is building on its abiding association with defence, nuclear energy and aerospace and venturing into the lucrative oil and gas sector as well. Chakor Doshi foresees these verticals strengthening the balance sheet to a great extent.

Anil Kakodkar, former Department of Atomic Energy (DAE) secretary and Atomic Energy Commission (AEC) chairman, says he looks forward to the day Walchandnagar will become a technology donor. "I've been witness to

Chakor Doshi, (extreme left) *with family and colleagues*

the path-breaking developments taking place in WIL in the critical spheres of defence, nuclear energy and aerospace and the spirited striving to accomplish ever more," he had said, while recently inaugurating the Vinod Doshi Technology Centre at Walchandnagar, situated 130 km from Pune. "I ask, 'How does this happen?' and the answer, to my mind, is that the management has created an excellent inter-personal environment for the able team that it has nurtured over the years."

Chakor Doshi says the Vinod Doshi Centre, along with the other, recently started Walchand Technology group in Pune, will focus on R&D and cater to in-house requirements as well as for WIL's foreign and domestic partners. "Not enough attention has been paid to technology development in the engineering industry and this is now the right time to invest time and money in creating intellectual property (IP) from India," he explains.

Over its 35 years of work for the defence ministry, Walchandnagar has fabricated and supplied equipment like combustion chambers, missile and air booster casings, mobile launchers, portable bridges and 'knock down containers' for the

Pioneer through the ages

Walchand Hirachand (Doshi), the legendary industrialist who founded the Walchandnagar group, was often branded a maverick with the penchant to venture into unfamiliar businesses. Others hailed him as a visionary.

Both views were perhaps right, as Walchand pioneered some of the most path-breaking developments in India's corporate history, among them the country's first aviation company that was to become today's Hindustan Aeronautics Ltd (HAL). As early as 1939, he founded a car company with support from M. Visweswarayya, dewan and architect of Mysore state that, as Premier Automobiles Ltd, produced Fiat model cars that flooded Indian roads.

The Scindia Shipyard he established in Visakhapatnam in 1941 was nationalised in 1961 to become Hindustan Shipyard Ltd (HSL). Its maiden vessel, the 8,000-tonne *Jal-Usha*, which was also independent India's first indigenous steamship, was commissioned by Jawaharlal Nehru in March 1948. This formidable yard was transferred last December from the ministry of shipping to the defence ministry for meeting the national security requirements of building strategic vessels for the Indian Navy.

National Maritime Day is celebrated every year on 5 April to commemorate the voyage of the first Indian ship *S.S. Loyalty* from Mumbai to London on 5 April 1919. The ship had been bought by Walchand, at the end of World War I, from the Scindias of Gwalior and was the first acquisition by his company named Scindia Steamship Navigation Company Ltd. Walchand was its chairman from 1929 to 1950, when he retired on health grounds, and at that time, the company had a fleet of 54 steamers. This first *swadeshi* shipping company was referred to widely in Mahatma Gandhi's columns in *Young India* and *Harijan*.

"Seth Walchand Hirachand's greatest contribution, in my view, was in shipping and shipbuilding," notes Prime Minister Manmohan Singh. "He was a visionary in this field. It is indeed, one of the saddest chapters of our industrial policy that we failed to build on the foundation established by him in this area."

Walchand's industrial triumphs were the culmination of his grandfather Nihalchand Bhimji Doshi's migration years earlier to Sholapur in Maharashtra to engage in trading and money lending. The Doshis were Digambar Jains originally settled in Wankaner in Saurashtra.

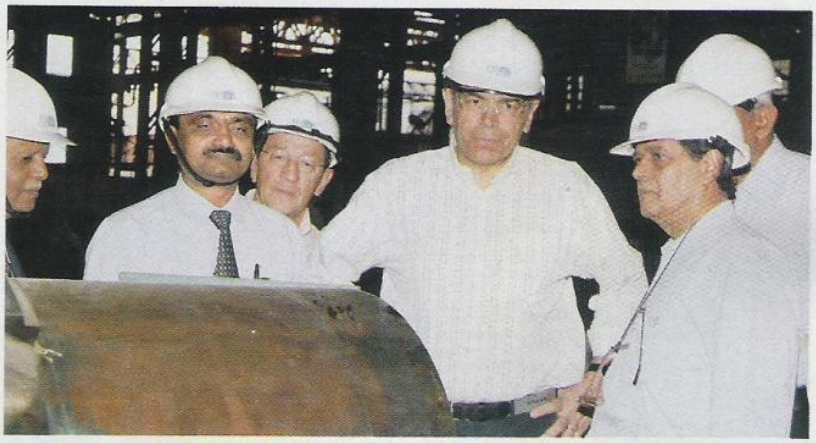
The vintage Walchandnagar Industries Ltd (WIL) of today is chaired by his grandson Chakor Doshi. The enterprise had its seed in the contracting firm, Phatak-Walchand Pvt Ltd that Walchand established in partnership with former railway clerk Laxmanrao Balwant Phatak.

It was in the construction business (first as a railway contractor and then as a contractor to other government departments) that Phatak-Walchand prospered. It bagged its first contract, worth Rs80,000, in 1904, and four years later, incorporated its business under a company called Marshland Price Company Ltd, which Walchand bought over from the British and which was to be the forerunner of Walchandnagar.

By 1947, when India became independent, WIL had evolved into a multi-divisional multi-location group of companies that counted itself among the 10 largest business houses in the country. "When we celebrate the life of an entrepreneur like Walchand Hirachand, we must draw the correct lessons from his life," mentions Manmohan Singh. "The lesson I draw is that the ultimate spur to growth and development is individual creativity and enterprise; we, in government, can at best create the correct political environment in which that creativity, those animal spirits, can flourish and find expression."

Antarctica expeditions. WIL has been a key contractor for Indian Space Research Organisation's satellite launch vehicle (SLV) programme since inception. "We are a major equipment manufacturer for ISRO and Vikram Sarabhai Space Centre (VSSC)," mentions Chirag Doshi. "We have supplied large number of critical components which include flight motor casings, nozzles and segments, handling rings, heat shield jigs, domes, nose caps etc. for the SLV, Augmented SLV, Geosynchronous SLV and Polar SLV programmes."

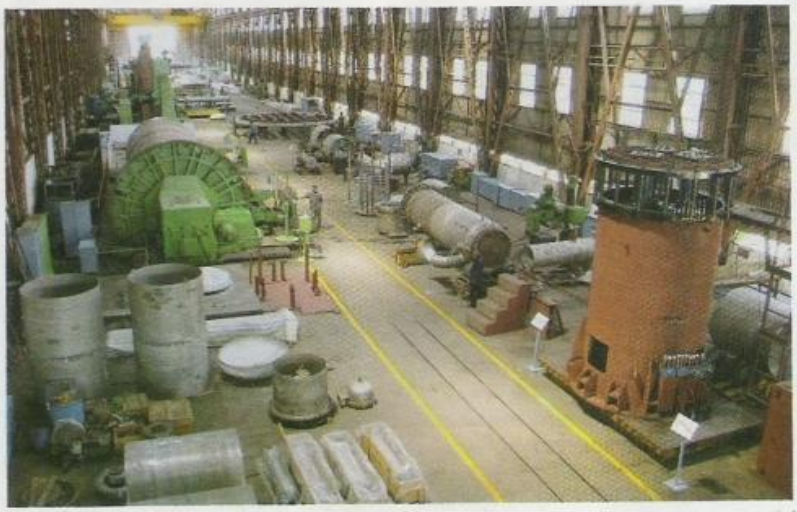
The company worked two years on *Chandrayaan 1* as well. Its foundry division manufactured mould and jig fixtures out of maraging, or low alloy, steel for the axially displaced ellipse (ADE) reflector for this maiden unmanned lunar mission of India, that lasted 10 months till last August. "Maraging steel is made of iron alloys that have superior strength but no less malleability than normal steel," explains Doshi. "This 600 kg casting was a critical component for *Chandrayaan 1*."



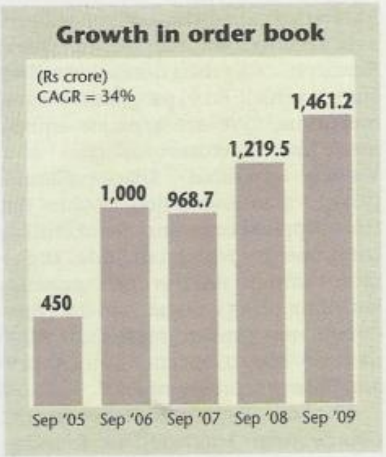
Chairman of DCNS France at Walchandnagar

WIL will be locating its second high-technology heavy fabrication facility after Walchandnagar at an 80-acre waterfront plot it recently acquired in Dahej, near Bharuch. This site will have a heavy engineering workshop for manufacturing oversized structures for the company's future nuclear and oil and gas businesses, says Vice Admiral S.K.K. Krishnan (retd), who, as senior president, WIL, has the prime responsibility of developing the new yard and also a few other aspects of the current business like defence and hydrocarbon segments. "Such items are not easily transportable by road and hence the intention is to transport them by sea by barge," he explains.

WIL entered the petroleum sector in 1997 by manufacturing high pressure, high temperature resistant



A nuclear manufacturing bay: geared to cater to the atomic sector



WIL follows September year end

equipment for such customers as Indian Oil Corporation in Haldia, Gandhar Petrochemicals Complex, in Dahej, ONGC Hazira Phase III A, and Numaligarh Refinery Ltd, Assam. "The confidence and experience gained over the years has encouraged us to enter into other areas of offshore structural fabrication, on-shore drilling rigs, aluminium structures, new drilling technology by using aluminium alloy drill pipes and tubings and equipment for exploration, drilling, production and processing," remarks Chakor Doshi. His company's oil & gas division has been set up in Navi Mumbai.

Asked if WIL was considering any acquisitions, either in India or overseas, he retorts, "We are constantly on the lookout for good companies, both overseas and domestically, that can offer design and technology to complement Walchandnagar's manufacturing expertise." Though they have not narrowed on a particular company to acquire as of now, they have been evaluating a few opportunities and will continue to do so, he says. Despite the expanding business, a Follow on Public Offering (FPO) is, however, not under consideration, he adds.

WIL fell to Chakor Doshi when the Walchand empire splintered in 1994 owing to family division. He weathered the debacle, though he had resigned then as managing director, before becoming chairman in 1998. "When I took over, we were raring to go, because I had wanted to professionalise since 1986-87," he recalls. The Doshi family has now been operating in its own respective niches for the past 16 years since split. He says he personally misses being together, but is not brooding about it, as he sees advantages on being on one's own, as all family members have done well independently.

One of the group's more profitable companies, Hindustan Construction Company, went to Ajit Gulabchand, Walchand Hirachand's nephew, who was the largest shareholder among the Gulabchands. His elder brother, Bahubali, had been the last chairman of the unified Walchand group. His

The nuclear connection

The Vinod Doshi centre is named after Chakor's elder brother and chairman emeritus of Walchandnagar Industries and chairman of Premier Ltd, who passed away in October 2008. WIL's increasing involvement with India's atomic sector has led to Chakor Doshi's recent appointment to the board of trustees of the Indian Nuclear Society (INS). With India's atomic energy sector poised for massive growth, following the Indo-US civil nuclear energy agreement, WIL is eager to capitalise on its over four decades of association with the DAE. Over the years, it has supplied calandrias for the 235 MW pressurised heavy water reactors (PHWRs) at Rawatbhatta, Kaiga, Kakrapar and Narora. A calandria is the heart of the reactor – a vessel where the nuclear reaction takes place.

WIL also makes end-shields for calandrias and fuelling machines for the reactors, apart from sodium pumps, thermal shields, pressure vessels, heat exchangers and distillation columns. Its involvement with India's nuclear establishment led to WIL being placed under US export administration regulations (EAR) sanctions, following the 1998 nuclear tests, though the moratorium was withdrawn in November 2001.

The company has been awarded an EPC piping contract for Nuclear Power Corporation's first indigenous 700 MW PHWR at Kakrapar in Gujarat that will be commissioned in 2015. "All major foreign players in the nuclear business like France's Areva, Nippo-Japan's Toshiba-Westinghouse and GE-Hitachi, and Russia's Atomstroyexport have visited us," mentions Chirag Doshi, who joined WIL 12 years ago and became MD in November 2007 after his BA in Economics from Michigan University and MBA from Paris' INSEAD Institute.

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Providential tie-up

Walchandnagar Industries has been associated with the Indian Navy since 1967, helping the service indigenise critical equipment required for various warship projects. Its involvement extended to India's first indigenously built nuclear powered submarine, *Arihant*, for which it supplied the steam turbine integrated with the 85 MW pressurised water reactor on board. WIL has been designing, manufacturing and supplying gearboxes for the navy's Leander class frigates, survey vessels, aircraft carrier, corvettes, and fleet tankers, with horse power of upto 24,000.

The company was hence a natural partner that France's DCNS was scouting for in its €2.4 billion contract for the construction of its Scorpène class submarines for the Indian Navy. DCNS signed an MoU with WIL in February for the manufacture of critical components for the Scorpène contract, termed Project 75 by the Indian Navy. The MoU was forged into a formal agreement on 30 March during the visit of DCNS chairman and CEO Patrick Boissier to the 50-acre factory at the Walchandnagar township, which straddles 157 acres of land, some 130 km from Pune.

WIL is already a subcontractor of Mazagon Dock Ltd for some high-end structural requirement of Scorpène. Its partnership with DCNS puts it in a prominent position in the manufacture of some of the main equipment for the Scorpène. DCNS is already working with WIL for manufacturing complex cradle-gearbox for the navy's first anti-submarine warfare (ASW) corvette Project 28 being executed by the Kolkata-based Defence Public Sector Undertaking (DPSU), Garden Reach Shipbuilders and Engineers (GRSE). The partnership is likely to extend to other projects in DCNS' naval business from Indian or even overseas markets.

The €2.8 billion DCNS group is a leading European contractor for naval defence systems, and employs 13,000 people. To expand its presence in India, it set up a subsidiary in Mumbai called DCNS India, which Boissier inaugurated in March 2009. Boissier recalls that his company's team in India has for years been working with the navy, MDL and various industry organisations to identify potential industrial partners for DCNS as well as its European equipment suppliers involved in the Scorpène programme. "WIL came quickly up to the front, being already a subcontractor of DCNS for the Indian corvette propulsion contract and of Mazagon Dock for some specific works on Scorpène," he says. "My group wishes to capitalise on this proven cooperation and reinforce it for its joint future in India."

Drawing attention to Walchandnagar's long history of fabrication of large and high quality welded and machined equipment for naval and nuclear industries, Boissier pointed out during his visit to the company that he was impressed by its variety of complex operations and the way it was organised. "WIL's top management has a long term vision for its development, compatible with DCNS' ambitions in India," he noted.

Vice Admiral S.K.K. Krishnan (retd), senior president, WIL, who was previously chairman and managing director, MDL, indicates that the partnership with DCNS will help indigenise a variety of mechanical parts required for the Scorpène. He says it will also enable Walchandnagar to supply similar parts for other constructions that DCNS may undertake globally.

DCNS India managing director Xavier Marchal mentions that though WIL is the main Indian partner identified by his company, it is still evaluating some potential vendors for electric and electronic components and cabinet and in prospective phase for valves and fluid circuit component. "It is also to be observed that suppliers of Scorpène parts from Europe, other than DCNS, are themselves identifying suppliers/vendors in India," he adds. The objective is to source to the maximum level in India, he mentions.

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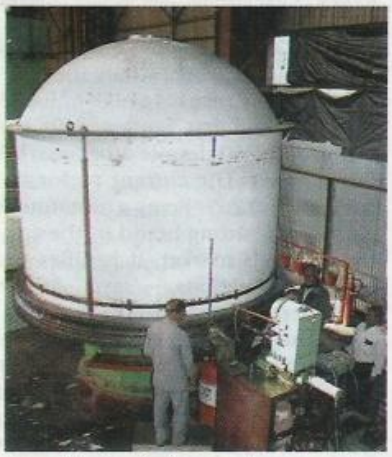
cousin, Rajas, got Indian Hume Pipe, while another cousin, Harshvardhan, was allotted Ravalgaon Sugar Farms, and the late Vinod Doshi, Premier Automobiles.

Terming it 'our family restructuring', Vinod Doshi's son, Maitreya Doshi, who is now CMD, Premier Ltd, deems it inappropriate to comment on this issue as it involves other members of the family and also because it took place years ago. "Since then," he, however, mentions, "all the erstwhile group companies have grown in terms of revenue and profitability."

Chakor Doshi indicates that his plan for Walchandnagar has always been to consolidate and grow, but not venture wildly into new business terrain. "We are pursuing the Toyota corporate philosophy, that is, to be the third player in new territories," he observes. "So, while we will not have the first mover advantage, we will at least be growing in familiar terrain."



Consolidation: in the aerospace segment

Saying he is greatly impressed by the levels of quality and technology that WIL has attained, DCNS chairman and CEO Patrick Boissier says, "It is evident that WIL recognises that its workers, its human capital, are its best resource." The company's 1,866 managerial and skilled workers, including 800 engineers, are a testimony to this.

"Once a Walchand family member, always a Walchand family member," notes 75-year-old A.G. Pradhan, who joined the firm in 1964, but even after retiring as general manager (special assignment), he now officiates as a director or trustee in various social projects of the company. He finds agreement from S.S. Gangawati (who joined as special trainee 45 years ago and is now president, strategic planning & market research) and V.M. Deshmukh (who has been in Walchandnagar and the Pune office for the past 43 years).

• SAROSH BANA