Delivering safety

One need only enter the portals of Eureka Forbes to realise that water purification is a high technology enterprise

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Goklaney says EFL is currently working on a revolutionary technology for rural areas

Driven by its credo of 'a happy, healthy, safe and pollution-free environment, built on trust and lasting relationships with customers', Eureka Forbes Ltd (EFL) has inducted technologies that enhance water quality to exceptional levels. In the process, this company of the Shapoorji Pallonji (SP) group's Forbes Gokak Ltd has succeeded in making its centrepiece 'Aquaguard' brand synonymous with home water purification. Over 71 million litres of Aquaguard water are consumed daily across the country, the model also being the only water purifier to be endorsed by the Indian Medical Association. Besides, EFL has introduced the world's first universal water purifier, Aquaguard Total Sensa, which auto senses and selects the optimum purification technology.

Though they present a Rs1,200 crore market set to grow 10-12 per cent annually, water purifiers are not the sole offerings of Eureka Forbes. The Rs1,107 crore (unaudited gross turnover for 2008-09) company, that operates through almost 10,000 dealers and distributors across 600 cities and towns, was also the first to introduce vacuum cleaners to India in the 1980s.

It has expanded its portfolio with security solutions, including home security, intrusion alarm, access control, fire alarm and surveillance systems. The company additionally offers industrial solutions, such as industrial water purifiers, commercial and industrial vacuum cleaners, hard floor cleaning and maintenance machines, high pressure cleaners, and cleaning and hygiene products.

EFL was founded in 1982 as a joint venture between Tata Sons' Forbes Gokak and Sweden's Electrolux. The SP group, however, fully acquired the company in 2002-03 when it bought out the Tatas' holding in Forbes Gokak and subsequently, Electrolux's in the joint venture. EFL has outpaced its parent, which logged a gross turnover of Rs320 crore in comparison in 2008-09. Last year, EFL's profit before tax (PBT) rose to Rs60 crore (provisional) from Rs41.81 crore in 2007-08. Earnings per share (EPS) has risen from Rs90 to Rs98 in this period.

Venkatesh says EFL's Dehra Dun facility will now be the company's technical headquarters

The company is now poised to revolutionise water potability in the country. "We are working on a path-breaking technology that will make drinking water safe and affordable for villagers at 10 paise a litre," says Suresh Goklaney, vice-chairman and managing director, EFL, who has been associated with the company for 22 of its 27 years. "When commercially available two years from now, this innovation will safeguard consumers from gastro-enteritis, hepatitis, polio and viral diarrhoea, that have been the scourge of rural India," says Goklaney.

Robust focus on R&D

Lead and pesticides are extensive water contaminants in India, indicates Raman Venkatesh, senior vice president, technology & corporate development, EFL. His office in Dehra Dun in Uttarakhand is now being made the company's technical headquarters, which had hitherto been in Bangalore. "Water as a resource should be delivered in as hygienic and safe form as possible, if we are to contain the huge costs to society on health and consequent fall in productivity," points out Venkatesh. "In India, access to water is as much a problem as its poor quality, with water being the carrier for over 80 per cent of communicable diseases."

According to Venkatesh, EFL products cleanse water to levels obtained from putting it on boil for over 20 minutes, complying with the World Health Organisation (WHO) guideline for water purification.

Eureka Forbes has secured five patents and has 30 pending patent applications, 38 design registrations and 216 trademark applications, covering a range of technologies, products and components. It also sponsors the NDTV news channel's daily 'Pollution Watch' across metros. Hence, R&D holds the key to company growth. While 18 technical personnel are involved in core R&D, six of them PhDs and the rest post-graduates and engineers, there are plans to enlist 20-25 more over the next one year.

R&D has helped maintain his company's market leadership through the absorption of latest technologies in the areas of floor care products, water purifiers and domestic appliances, says Venkatesh. EFL pioneered this market when there was hardly any public consciousness about water contamination. This, he says, was either because the public deemed clean water supply the government's responsibility or because the most dangerous pollutants, pathogens, are invisible to the naked eye.

EFL is by far the most dominant

Technology strides

EFL has under development a number of products, process improvements and accessories in the field of water and air purifiers, vacuum cleaners and eco-friendly chemical cleaning solutions. These will be available at various price points to cater to different market segments.

The company has devised contaminant-specific technologies, whereby it customises products through 'water quality mapping and survey' to diagnose variations in quality from region to region. Daily, 22 technical staff, 17 of them post-graduates, monitor water quality through 18 water laboratories, termed 'Aquacheks', across India.

For instance, the company does not market water purifiers using the reverse osmosis (RO) process in regions where total dissolved solids (TDS) in water are less than 300 mg per litre. As dissolved mineral salts are beneficial to health, any further depletion by the RO process can prove counter-productive.

• The RO process is capable of removing 90 per cent of TDS and all bacteria through the use of a semi-permeable membrane that separates and removes dissolved solids, organics, pyrogens, viruses and bacteria. It is termed 'reverse' osmosis, as it requires pressure to force pure water across a membrane, leaving the impurities behind.

• Commercial production of membranes began last fortnight at Eureka Forbes' year-old joint venture with General Electric Water and Process Technologies. Called Infinite Water Solutions, the joint venture operates out of EFL's new environment-friendly premises in Dehra Dun, Uttarakhand. Apart from manufacturing membranes, Infinite aims to provide clean drinking water solutions for large commercial and residential projects. Its products, based on the RO process, are Aquaguard Total RO, Aquaguard Total Reviva and AquaSure Spring Fresh.

The manufacturing team at Dehra Dun consists of over 400 workers, of which, 120 are specialised and skilled

player in India's water purifier market, despite competition from other players like Kent, Veolia, Usha Brita, Ion Exchange, Kenstar, Alfa, HUL, Polar Industries and Pentair Water India. It enjoys a 70 per cent share in the ultra violet (UV) segment, 45 per cent in reverse osmosis (RO) and 30 per cent in gravity-based systems. "We also have a 75 per cent share in the vacuum cleaner segment, despite the presence of competitors like LG and Philips," says Goklaney. "And we have a formidable hold on the security systems business as well, owing to our tie-ups with companies like Honeywell, Tyco, Bosch and Notifier."

The largest direct sales network in Asia	
Sales personnel ('EuroChamps')	6,000
Households visited each year by EFL salesmen (million)	60
Demonstrations of products their visits result in (million)	4
Customer response centres	210
Franchise direct operators	419
After sales service partners	1,075
Service technicians	5,800
Water laboratories (Aquacheks)	18
Distribution network (retail)	
Dealers	9,041
Distributors	385
Distributors (institutional)	90

New factories

Two new vacuum cleaner factories were set up in 2007-08 in Bhimtal (in Uttarakhand) and Chennai by Forbes Aquamall Ltd, a 100 per cent subsidiary which, in turn, is a wholly-owned subsidiary of SP group's Aquamall Water Solutions Ltd. "When the company started out in introducing these previously unfamiliar products at a time when nationwide commercial campaigns were unknown, it had to invent a direct selling approach that resulted in the unique doorstep contact model," Goklaney recalls.

This concept led to the creation of the corps of suit-clad Eureka Forbes salesmen, which was the first such in the country and which became a rousing success. These 6,000 sales personnel, nicknamed 'EuroChamps', are now Asia's largest direct sales network, visiting some 60 million Indian homes every year and adding 1,500 customers daily.

This marketing success has been the subject of a case study by Harvard Business School. The July 2005 report highlights how Goklaney imbued the sales force with his 'friend for life' vision. "He wanted sales reps to build bridges with customers even when they didn't have anything to sell," say the authors Das Narayandas, professor, and Kerry Herman, senior researcher. "Goklaney wanted his firm to emphasise customer retention and referrals over customer acquisition through hard selling," they add.

A long-time brand manager, Goklaney has a free hand in shaping the fortunes of his company, which is chaired by Forbes Gokak chairman Shapoor Pallonji Mistry, son of group chairman Pallonji Shapoorji Mistry.

"Many of our salespersons, who come from humble backgrounds, have risen high in our organisation," mentions Goklaney. "Our company has understandably been ranked as India's best to work for four years in a row by Great Place to Work

workers. They, in turn, are supported and guided by 43 managers and 52 executives – nine post-graduates in microbiology and three with doctorates.

• S.K. Sankar, the senior project manager, Infinite Water Solutions, cites 'nano-filtration' (NF) as another innovation of his unit. "It is the same as RO in concept and operation, but can work with low TDS water, even 100 mg per litre," he explains. The technology has yielded the Aquaguard Total NF model.

• Yet another technology, the ultra filtration membrane filter, is capable of separating dissolved molecules through an infinitesimally fine filter that can effectively remove all particles, pyrogens, microorganisms and colloids. "Our model, Aquaguard Ultra, is ideal for areas with high turbidity and no electricity, and its running cost is often lower than buying unsafe packaged water," maintains Sankar.

• EFL also promotes a range of water purifiers based on ultra violet (UV) technology that include Aquaguard Classic, Aquaguard Total Gold Nova (for lead and pesticide removal), Aquaguard Booster (that requires no running water), and the commercial Aquaguard 600. "UV rays damage cell walls, inactivating micro-organisms like bacteria, virus and protozoa, including cysts," notes Sankar. "They, however, do not alter the taste, odour or colour of the water, impart no toxic by-products and their running costs are often lower than those of a household light bulb."

Sankar says EFL customises its products for varying water quality from region to region

• EFL's resin-based disinfection system is one of the 'gravity dependent' products that do not require electricity to function. Resin, too, attacks cell walls of micro-organisms, its effectiveness dependent on its concentration, water temperature and duration of contact.

• To customise its de-polluting solutions, EFL's products are at times based on a combination of technologies. For example, some AquaSure models combine both UV and RO, while Aquaguard Total Sensa senses the TDS level in the input water and auto selects either UV or RO as the mode of water purification. Aquaguard Integra HI LIFE is a blend of UV, RO and NF nestled in a magnetising chamber.

• Other solutions are customised for softening water and for removing heavy metals, iron and even arsenic. The prices thus, ranges from the bottom of the pyramid Rs1,800 for the AquaSure gravity-fed systems to the Rs17,900 commanded by Aquaguard Total Sensa.

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This *dosti* is forever

Forbes Gokak's subsidiaries Eureka Forbes and Aquamall Water Solutions have a new base in Dehra Dun, the capital of Uttarakhand. Vijay Kumar Raman, director and CEO, Aquamall Water Solutions, says the environment-friendly facility, opened on 29 November 2007, is the world's largest ultra-violet (UV) based water purification manufacturing unit and India's first 'green' plant in the sector.

"Even its inception was remarkable," says Raman. According to him, while the factory's opening was imminent, a company franchisee saw a service technician from Eureka Forbes lying grievously injured on the road in the dead of night, evidently the victim of a hit-and-run mishap. He rushed the wounded man to hospital where, as they prepared for blood transfusion, he was found to have the rare blood group 'O negative'.

The franchisee reached out to his contacts in the region and managed to garner three bottles of this required group blood. The technician's life was saved and, after recuperation, he was able to resume work with EFL. "When we held the function to inaugurate the new office and factory premises, Suresh Goklaney, vice chairman and MD, EFL, asked that the opening be performed by these two persons rather than by anyone else," recalls Raman. "And drawing on the episode that had brought the two men together, he suggested that the facility be christened *Dosti* (friendship)."

Raman says relationships have always been the key to EFL's growth

The sprawling office and factory complex bears testimony to this relationship between the franchisee and the service technician, as also to EFL's thrust towards environment-friendliness across all its business practices and processes. The Dehra Dun project was, hence, designed as a landmark one to neutralise its carbon profile.

- The office building is, for instance, served by a geo-thermal air ventilation system. The rooftop turbo ventilators are cost-effective and conduct conditioned air without any energy requirement. The turbo vents are worked by natural convection by the hot air rising from within the building. The building has also been designed with 90 per cent daylight view and adequate daylight harvesting in the factory area, saving energy even further.
- Fly-ash based bricks, cement and concrete blocks have been used in construction as they provide better thermal insulation.
- Water-efficient gadgets with preset flow and timers have been fitted, conserving up to 70 per cent on usage. The system of reed-bed waste water treatment provides economic and eco-friendly treatment of domestic sewage. The water so treated is recycled or reused for watering the landscape gardens.
- Rain water harvesting has also been resorted to, with excess used for bore-well recharge.
- Photovoltaic cells power exterior lighting. EFL also uses eco-friendly components, products and packaging across all its product lines. It also takes back old *Aquaguard*s from customers and appropriately disposes of their non-recyclable contents.

Raman indicates that access to purified water on tap can help save energy on boiling and prevent the proliferation of plastic water bottles. "As much as 222 gm of carbon dioxide is emitted and four litres of water wasted in the manufacture of just one such bottle of 54 gm," he says. Transporting bottled water additionally increases the burden on the environment, he adds.

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Institute, in partnership with *The Economic Times*." It has been variously ranked by other surveys as among the 50 best companies to work for worldwide, the most admired knowledge enterprise, seventh amongst Asia's best employers, and the foremost in the consumer durables industry.

EFL rewards around 200 of its most competent salespersons each year with incentive travel overseas. It last year commenced E4 Development and Coaching Ltd to train 'hard-core sales personnel' for various industries, both national and international. The company advertises on television as well as vends its products online, enabling purchases of water purifiers on the net. Its entire retail effort is supported by call centres, customer care representatives and mobile service vans.

Testifying to EFL's deep penetration of the market, a water purifier dealer in Mumbai says that while some 250,000 of its RO-based units are sold nationwide, in contrast, Kent sells only 120,000.

Eureka Forbes has a charitable bent too, its corporate social responsibility extending to donating its water purifiers to schools, including institutes for the visually and physically challenged, and to NGOs working for slum and village communities. During the tsunami disaster of December 2004, it had set up a 'safe water helpline' for the affected people.

"While our company's liquidity is an asset and does not oblige us to go in for a listing, EFL will forge on with its business, both on its own and in strategic alliances with others, some of which are imminent," mentions Goklaney.

For instance, EFL will be collaborating with the $3 billion Pentair group, a leading US-based water treatment solutions provider with a manufacturing facility in Goa, to market some EFL products in America.

◆ SAROSH BANA