



Virgo Engineers Group: Paving the way for a bright future

Two years ago Valve World visited Virgo Engineers in Pune, India, to find out the secret behind the company's phenomenal success in ball valves and valve automation systems, success that had led it to become one of the fastest growing valve companies in the past decade. What was striking then was the exemplary nature of this company, its vision, the motivation of its staff and its endeavour to be better than its peers by constantly enhancing its capabilities to address evolving customer requirements. With Virgo's sales tipping 155 million US dollars in FY 2009, Valve World returned in January 2010 to talk about the continued success story with Mr. Jagdish Desai, Company President, Mr. Paresch Rajda, Head - Corporate Finance and HR and Mr. V.R. Jayaraman, Head - Technology & New Projects.

By John Butterfield

Factors behind success – Constantly investing in the future

So how has the company maintained its growth and managed to be in forefront in difficult global economic conditions?

"By constantly investing in new products, technologies, people and infrastructure" says Mr. Desai. "In the past 24 months, Virgo has created a management leadership team with top industry names. Bill Neimann, Silvano Calciolari and Marvin Beasley have joined Virgo Group after decades of experience with global majors. This has given Virgo Group an edge not only in access to technology but also in stronger customer relationships." Over 50% of the new employees hired by Virgo in the past 24 months have been in its Group companies in US and Europe. "It is this professional engagement of international talent that has made Virgo a serious player in the industry" Mr. Desai continues.

In the past 24 months, Virgo Group has expanded its Ball Valve range to include Cryogenic valves, Top-Entry valves and fully welded valves. Virgo Europe can

deliver 60" Ball Valves from its Vanzagello, Milan plant. "However recognizing the market trends, we launched 2 new lines that now complement our products offering, - Severe Service Ball valves and Triple Offset Valves." says Mr. Desai. Virgo's EVS Series Severe Service Ball Valve range can deliver integrally seated Metal Seated Ball Valves for elevated temperatures and abrasive services. EVS valves are made in Virgo's modern 70,000 sq ft plant at Stafford, Texas, USA. Adds Mr. Desai "Marvin Beasley, President of EVS Valves Inc. is a pioneer in Severe Service valve technology and has spent over 2 decades providing solutions for severe service applications to Power, Mining and Hydrocarbon industry all over the world. Global investments in Power and challenges faced by Oil and Mining industry to extract natural resources from difficult locations offer many opportunities for the EVS product line"

Virgo also launched its TriTork range of Triple Offset valves that are being manufactured in Virgo's Milan and Indian plants. Virgo currently offers valves up to



Virgo's TriTork Triple Offset valves

48" size and in 3 versions, wafer, lug and double flanged (including Gate Valve face to face).

In December 2008, Virgo acquired 100% ownership of RIFOX GmbH, Germany's leading manufacturer of high-end Steam traps and accessories. RIFOX has 60 years of rich history of developing products for European industry. Mr. Desai again – "RIFOX allows Virgo an opportunity to diversify from its focus on Oil & Gas sector and provides us a vehicle to enter the Steam control markets in rest of the world."

Investing in infrastructure

At a time when many global valve companies may be shrinking their businesses by reducing people and operating locations, Virgo has once again been swimming against the tide. Mr. Jayaraman says "Our peers in the Western World have been aggressively outsourcing everything they can from low cost sources. We believe it is unwise to do so. Conceding control over technology and critical processes can hurt the company in the long run."

Mr. Jayaraman adds "We have made several investments in-house to equip Virgo meet the newest customer demands. In the past 24 months, Virgo has invested in a production line of Metal seated ball valves, including robotized HVOF spraying facility and a complete range of lapping/grinding facilities. Our investment decision was amply validated when over 10% of all the valves we shipped last year were Metal Seated." Similarly, the company has installed Weld Overlay facility in its Pune plants to meet valve specifications demanding exotic material overlays. It is this constant focus on managing infrastructural needs that has made Virgo invest in new manufacturing facilities all over the world. Virgo started a 100,000 square feet facility on 23 acres of land in Coimbatore, India. This plant which went on stream in January 2009 employs 80 people and has eased supply pressures on the Pune plants. Virgo Milan plant recently invested significant amount to install lines of machines and testing equipment. Vintrol facility in Oklahoma USA now produces valves up to 12" 600 class in-house, thus reducing its dependence on supply lines overseas. "With such strong growth and constant demand on the plants to meet

customer deliveries, Virgo plants were always too busy to implement best practices." says Mr. Rajda "This started becoming an important issue with system overload and employee stress becoming acute. In June 2009, we launched company-wide Operational Excellence initiatives directly supervised by the CEO and in just eight months, we are doing many things differently. We have begun to see the benefits already, with superior quality, lower costs and reduced employee stress."

Compared to its peers of similar size, Virgo has always been ahead when it comes to investing in information technology. Virgo was first among Valve companies of its size to go live on BaaN ERP software, way back in 1999. In April 2009, Virgo upgraded to ERP-LN, a leader among manufacturing focused ERP software in the world.

Virgo is currently installing Product Life-cycle Management (PLM) software in its plants. This is expected to improve specification control, drawing preparation and documentation management at both the pre and after-sales stage. "The system will allow customers to log in and access documentation any time they wish," explains Mr. Jayaraman.



EVS Severe service Valve manufacturing facility at Stafford, Texas, US



Large Bore valve manufactured at Virgo Europe for a LNG project



ViNtrol Inc. Factory in Oklahoma, USA

Customer Approvals

A key factor that has contributed to Virgo's success story is the wide variety of international quality certifications (see box). This has led to an impressive array of audits and approvals from Oil & Gas companies such as Exxon Mobil, Chevron, Shell, Saudi Aramco, British Gas, GASCO Abu Dhabi, Kuwait Oil Company, PDO Oman, ONGC India, Petrobras, Reliance Petroleum and more. Virgo is also an approved supplier to leading engineering companies such as Bechtel, Chiyoda, Saipem, Aker Kvaerner, CB&I, CCC, JGC, Samsung, SNC Lavalin, Petrofac and Hyundai.

People – Virgo's biggest assets

Right from its inception, Virgo's biggest assets have been its people. "We are proud that we have managed to remain people centric despite our phenomenal growth in the past ten years" says Mr. Rajda, "Company's commitment to honesty, values and transparent management style makes Virgo a unique place to work with. We at Virgo give a lot of importance to employee training and development. Most of our top and middle level managers are home-grown and have often moved laterally to departments that are not where they came from." He adds "This has resulted in our people functioning with a strong sense of ownership."

Virgo has recognized this and has offered company ownership to over fifty employees through its Employee Stock Option plan first introduced ten years ago. "This has made it possible for employees to create personal wealth while they strive to grow the company" says Mr. Desai. Virgo's sense of commitment is not restricted to its employees alone. "We are very conscious of our responsibility to the society in general and have started several programs to give back to the society we live in." says Mr. Rajda. Virgo supports a tribal school near its Pune plant. Virgo also works closely with a non-profit hospital in Pune where it provides 100% financial aid to any child in the paediatric ward whose parents do not have resources to pay for treatment. "Every summer since 2008, we sponsor travel and stay for 4 undergraduate students from Rice University in Houston USA to India so as to expose them to Indian way of life." says Mr. Desai.

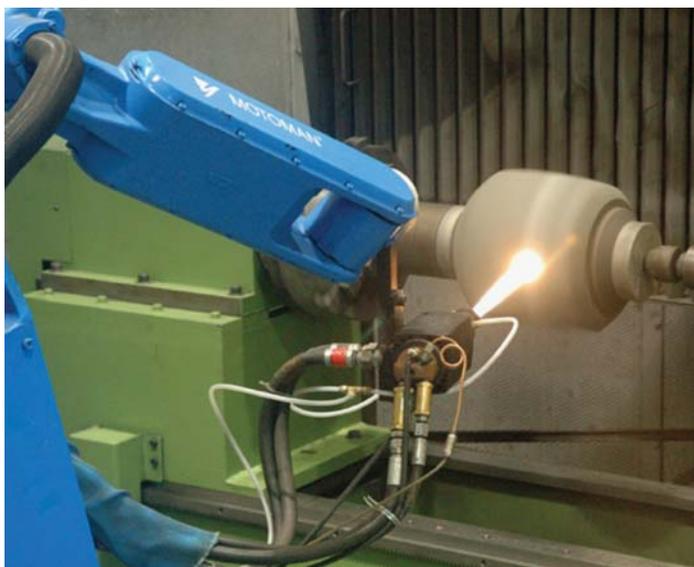
Striving for Customer Satisfaction

"Everything we do in Virgo must add value to our customers. Our investment decisions are indications of a company that is striving to serve the customers better. Each of the above investments will help Virgo attain customer satisfaction and appreciation" says Mr. Desai. This is the Virgo DNA, something

everyone at Virgo understands. The company's focus is not just on making good quality valves. "Customer satisfaction is achieved only when we meet his expectations on a wide range of support services, including pre and after-sales support, documentation needs and application engineering. Every effort is made to meet customer deadlines and provide shorter delivery periods. We understand there will be some last minute changes, additions, deletions and even specification changes. We are not rigid when it comes to dealing with customers. We in fact adapt ourselves to suit his needs" says Mr. Jayaraman.

Future goals

Virgo's dual strategy is to expand the product portfolio for existing customers and gain new customers by diversifying into newer industrial sectors. An example of this can be seen in the production of TriTork triple offset valves in India and Italy. This high-integrity product with engineered triple eccentric geometry offers excellent flow control and isolation solutions for a variety of applications in oil & gas, LNG, power, steam distribution, mining, chemicals and petrochemical industries. Virgo has also been investing in providing a complete range of Ball valves with complex automation systems like ESDVs, pneumatic, hydraulic, gas over oil and motor-



In-house Robotized HVOF coating facility for Metal Seated valves



EVS team discussing severe service design

operated valves from Virgo's valve automation facilities in India, Italy and the UAE. As Mr. Desai reminds us, "Virgo actually started out as a company producing valve automation systems in early 90s. Today, looking back, we can state that we have more than 20 years' knowledge and experience in this industry."

Virgo is aware that there are markets where it has not made inroads yet. "We are working to be approved by some global Oil Companies and this presents us opportunities to expand to newer markets. South America, Far Eastern countries including China, and some North Sea customers are examples," says Mr. Desai.

Why choose Virgo?

"Because" says Mr. Desai, "We provide excellent quality for a competitive price. We can make the right product at the right place and with the same service level at all our locations. At the local level, we also provide excellent after-sales services and support and can respond quickly to customer needs, delivering valves faster and including any last-minute changes. Finally, we are one of the few companies that maintain a large stock of valves, worth 24 million USD at three locations in the world, so we can meet quick delivery needs or project top-offs from our stock." In the past 24 months, Virgo has

experienced a significant shift in Customer demand in the new project market. Newer processes are specified and more stringent testing and performance standards are demanded. Virgo has moved quickly to equip itself to meet this changing scenario.

Conclusion

Whether meeting customer demands or gearing up to changing industry or

economic realities, Virgo has proved itself to be a smart and nimble player. Mr. Desai concludes "We have embraced new situations by being flexible and have done so without compromising on our core values and beliefs. Virgo team relishes the challenges presented to us by the changing world and is looking forward to the future with great enthusiasm."

Virgo Engineers Group: basic facts

Founded	1986
Core activity	Manufacture and sales of automated and manually operated quarter-turn valves.
Brands	Virgo Ball Valves, ViNtrol, EVS, TriTork, RIFOX.
Markets	Oil and gas, Refining, LNG, Chemical/petrochemical, Power, Mining and Metal processing,
Performance	Sales rose from 10 million to 100 million USD between 2000 and 2007. Sales were 155 million USD in FY 2009. Customers in over 60 countries.
Assets	800 employees; valve stock worth 24 million USD; manufacturing facilities in Germany, India, Italy, USA; Sales and Service personnel in Europe (Milan), India (Mumbai, Pune, New Delhi, Baroda, Chennai, Kolkata), USA (Houston, Oklahoma City), Middle East (Dubai, Abu Dhabi, Saudi Arabia), Far East (Kuala Lumpur).
Certification	ISO 9001-2000, API 6D & 6A, SIL3 safety integrity levels; CE markings as per PED 97/23/EC; GOST, ATEX, OHSAS 18001.