

Microfinish Valves:



Inside the Itigatti one-line facility, where Microfinish valves make their way through carefully laid out stages of production.

With an emphasis on innovation and quality, Microfinish Valves Pvt. Ltd has become an established player in the flow control industry. Over the years they have earned many coveted industry certifications and high-profile contracts, and their focus on research and development is reflected in a varied product line that features ball valves, bellows sealed globe valves, Chlorine globe valves, pneumatic actuators, and a vast array of automated units. Recent milestones include the consolidation of their domestic production in a one-of-a-kind facility at Itigatti in Karnataka, India and the opening of a subsidiary in Houston, Texas. In the coming years, Microfinish leadership is looking to expand their catalog of specialized valves and valves for the energy sector, all while preserving their perfected process of quality, on-time product delivery and dedication to the customer.

By Daniel Sweet

Established in 1971, Microfinish Valves Pvt. Ltd is known globally as a leading manufacturer of valves in India. Their market range is impressive, with participation in oil & gas, fossil fuel, nuclear, and power plants; fertilizers, chemicals, and pharmaceuticals; food, beverage, and biofuels; mining, minerals processing, and steel; pulp and paper mills; and finally, in water and wastewater. In a recent interview, Microfinish co-founder and CEO Mr. Tilak Vikamshi explained how Microfinish came to enjoy a reputation for excellence in flow control across so many industries.

“Customers from every sector recognize our name: for them, Microfinish and its employees are seen as valve specialists. With our 45 years of experience in design and production, customers time and again have come to us with their individual specifications, and

they have relied on us to deliver the high-quality valves they need. We strive to never let them down.”

Mr. Vikamshi went on to explain how Microfinish aimed for quality from the beginning, and he shared some of his own business philosophy that has developed over the years.

Certified Success

From day one, Microfinish leadership understood that quality counts. Mr. Vikamshi said, when the company was founded, “Microfinish targeted the growing chemical industry in India by providing quality stainless steel valves that could withstand highly corrosive fluids better than the competition. As the chemical market waned, the oil & gas market began to expand into India. So we started to sell to oil & gas users. As part of this strategy, we went

after API 6D certification very early. Our focus paid off when we were able to break into the emerging Indian oil & gas networks. We received a large order from the gas authority of India, and we established ourselves as a certified leader in the industry.”

The early API 6D certification was the first of many. Microfinish was one of the first Indian companies to receive the ISO 9001 certificate. In 2002, Microfinish ball valves were certified to PED 97/23/EC (currently PED 2014/68/EU), a stamp of approval that comes with a CE quality mark for all products and that allows Microfinish to sell ball valves in the EU market. The next certification came in 2009, when the company’s ball valves were certified for use in a SIL 3 loop as per IEC 61508-2.

The strategic focus on certifications continues today. In fact, “to my knowl-

edge,” said Mr. Vikamshi, “we are the only Indian valve manufacturer approved by the Department of Atomic Energy in India. We recently received one of the largest orders in the company’s history for nuclear valves, and this speaks volumes about our design team and quality production line, simply because of the critical nature of valves in the nuclear industry.

Innovation

While market certifications and high-quality products would go on to remain a principle of the Microfinish corporate strategy, Mr. Vikamshi mentioned that certifications alone do not lead to success. “I like to emphasize for our customers that when they are dealing with Microfinish, they are dealing directly with the manufacturer. It is one thing to sell certified valves—but we are also making them. We are not intermediaries who trade the valves of one company to another. Instead, we design, test, and manufacture each product in-house—this guarantees quality, and it also gives us the freedom to improve valve design through research and development, giving our customers first access to cutting edge technology. Our high quality and confidence in our valves are reflected in our standard three-year warranty.”

“For example,” Mr. Vikamshi continued, “our R&D team pays special attention to minimizing fugitive emissions in valve stem dynamic seals. When we introduced an advanced ‘cup-and-cone’ stem seal arrangement, customers understood the benefit of dealing with Microfinish. The cup-and-cone system—one of the hallmarks of the Microfinish catalog—was certified to TA-Luft in 2010. This was followed by a successful test with the ISO 15848-1 testing protocol in 2014. Testing to the API 641 standard has been underway for the last 18 months and will continue until we cover our complete product line.”

U.S. Expansion

Always seeking new opportunities for global growth, Microfinish targeted the U.S. market in 2010. “We felt that it would be appropriate to search outside of India for other sources of growth. The process led us to the conclusion that we should open a U.S. office. Out of this, Microfinish Valves, Inc., a wholly owned subsidiary based out of Houston, Texas, was formed. Using the business con-



An aerial overview of the Itigatti facility.



API 6D Stainless Steel Ball Valves stocked up to 30" size in Houston sales & distribution center.

Excellence in Engineering



Staged shipment for large Salt Water Disposal project.

tacts I had established over my time in India, I began making inquiries. In June of 2010 we opened the company in a 13,500 sq. ft. warehouse and started to build our local inventory and introduce our products to the Americas market. By 2016, our business in the Americas had grown considerably and we expanded again, moving into a new building in Houston, this site 26,500 sq. feet, with space to expand our inventory and our test and modification center."

Reflecting on his experience in the United States, Mr. Vikamshi noted, "I try to go at minimum four times a year—once a quarter. That is because I have learned something important in business: the owner should always show their commitment to the customer in person—it really makes a difference. I go every quarter because I always want to meet our customers, and of course to check in with my Houston employees. An employer should always foster personal relationships, with clients and with employees. It is one of my keys to success and core values."

Microfinish's US business services the entire region of the Americas and is led by two established valve industry professionals, Leonard Fruci, President, and Bob Hohos, VP of Sales & Operations. They have built up a great team of people who focus on providing their customers with fast and accurate application support and quick response time on quotations and order fulfillment. They have built their business by focusing on underserved markets in North America which include API 6D ball and swing check valves in stainless steel and higher alloys for Produced Water and Salt Water Disposal services, low temperature ball valves for LPG services and full cryogenic service ball valves for gas plant and LNG services. As a private company they have more

flexibility to invest in inventory. If they feel there is a good business opportunity, the company is willing to take on the risk in an effort to better serve their customers. This has been a great asset for Microfinish Valves, Inc. in servicing the short lead time requirements which are routinely required in the active Oil & Gas markets of West Texas and Eastern New Mexico. Their quick response time from both the distribution center in Houston and the main facility in India has been a major factor in establishing Microfinish as a leading brand in stainless steel and higher alloys and in securing AML approvals which are vital to expanding their customer base. Microfinish's quick response capability was instrumental in one of their first major successes in the US in 2014 when the company won an order in partnership with one of their major distributors for nearly USD \$4 million for an LPG export facility in Corpus Christi based on their ability to meet the tight delivery schedule. The shipments started in 10 weeks and were completed in 21 weeks! They built upon this success and have won



LNG valves await shipment.

■ A STRING OF FIRSTS

Microfinish embodies the core values of the men who founded it: innovative thinking, energy, a capacity for hard work, and a spirit of enterprise. The result? A long list of technical achievements in valve production.

Microfinish was the first to develop in India:

- Digester blow valve for pulp mill application
- Chlorine globe valve to reduce leakage through gland packing
- Forged bellows sealed globe valves in exotic materials for nuclear applications
- Single and two-piece ball valve designs
- Fire-safe ball valves for oil & gas services
- Metal to metal seated ball valves for high temperature applications
- Pipeline ball valve for oil & gas transportation.



30" 150# API 6D SSTMV Installed in CO2 Recovery Unit.

seal design as standard and pass the stringent ISO 15848 and API 641 emission testing standards. The stem seal is live loaded and externally adjustable while in service which provides the user with the ability to adjust the stem seal in the field if leakage were to occur over time. To insure they start with high quality castings and forgings in their higher pressure class valves, they X-Ray or Ultrasonically examine every casting or forging in 600# and higher pressure class before any machining is started.

Microfinish has a long history of supplying Cryogenic valves. With in-house testing capability to -321°F per BS6364. Microfinish cryogenic ball valves perform consistently and provide reliability under the harshest environments of temperatures ranging from -58°F to -452°F . Their specially designed bonnet extension results in optimum heat transfer and minimum energy loss. The company has initiated a cryogenic valve stocking program in their Houston distribution center to enable them to provide reduced lead times for MRO replacement valve opportunities.

One-line Design

The Microfinish facility in Itigatti, India is one of a kind. Mr. Vikamshi describes it as, "a one-line facility, or a manufacturing plant in which the entire life-cycle of valve production takes place in one space. The raw materials arrive at one end of the facility and the final product is shipped out the other. There are a dedicated number of bays, depending on product specifications, for each one of our valves to make its way across the floor, but no matter what valve is being produced, it moves straight down the line of our facility. In this way, we are unique. When people come to visit our plant, they all say they have seen very few facilities of this kind in valve manufacturing anywhere else in the world."

"Of course, a lot of planning was required to make the facility as functional as it is. We are producing 110,000-115,000 valves a year, with a full capacity of 150,000, and that kind of output is difficult to achieve in just one location. When the plant was completed—in a record time of around nine months—productivity rose quite dramatically."

The views and opinions expressed in this article are those of the profiled company and do not reflect the position of Valve World Americas.