



Boteli Valves: Ready for the global market

Following the dynamic growth of China's economy in recent years, many private valve manufacturers are now trying to rid themselves of the outdated stereotypical image of 20th century Chinese enterprises. This is especially true for companies based in the more developed south-eastern coastal region of the country. Modern production management techniques and a new international perspective have given these companies access to the global marketplace. Boteli Valves, a company which began as a manufacturer of forged steel valves, has now enjoyed 14 years of rapid development to become one of the leading names in the Chinese valve industry. Based on their significant investments in R&D and production, Boteli Valves has achieved good results in both domestic and overseas markets, and also won the recognition of many key end-users both at home and abroad. "Valve World" visited the Boteli Valves corporate headquarters in Wenzhou, China, where we met with company chairman Mr. Huang Shengfeng in order to gain a better understanding of the history of the company and its plans for the future.

By Yuzhong Shen

Company Development

"The Boteli Company was founded in 1998," Mr. Huang tells us in his introduction to the company. "We chose to start our business with API602 forged steel valves, mainly due to the situation within the Chinese domestic market at that time. Many state-owned enterprises had not yet completed their restructuring plans, and there was a gap in the market for the API602 products to fill. A few years later, our products gradually gained acceptance and recognition within the market, and Boteli began expanding its product range to include ball valves, butterfly valves, gate valves, globe valves, check valves and other products. After being qualified as a supplier of choice by such important end-users as PetroChina, Sinopec, CNOOC and other major domestic customers, we were able to establish and develop a successful sales network throughout the country. By 2006,



we had reached an annual output of 350 million yuan, making us one of the fastest growing enterprises in the Chinese valve industry."

In the ensuing years, in spite of the global financial crisis affecting all aspects of the industrial market, Boteli did not slow down its pace of development. On the contrary, the company management committed itself to reaching predetermined targets and embarked on a program of restructuring and upgrading of production, services and other aspects of the business. Mr. Huang said, "Prior to the global economy entering a trough, the company had experienced ten years of rapid development. After reaching a certain size, we also realised that production and management aspects of the company needed to be adjusted and improved upon. At that time, I pointed out during a shareholder meeting that companies do not necessarily need to

pursue constant breakneck development, but rather need to improve their production, testing, quality assurance, logistics, and after-sales capabilities.

After this, we began to carry out some modifications to our product portfolio, engaged in market research, improved our quality assurance systems, and also set up a number of customer service centres. These measures enabled us to enhance our pre- and post-sales service offering, as well as consolidate Boteli's brand name and influence in the market. During the years of the financial crisis, we still maintained an annual growth rate of more than 12%, allowing us to achieve the targets we had set for ourselves. In recent years, our product quality, positive customer feedback and overall market share have all continued to increase and improve, and we are also enjoying a rapid expansion in overseas markets.

Turning to the types of product Boteli manufactures and their areas of application, Mr. Huang said that about 90% of their products are used in the oil & gas industry. In addition to this, there is also a part of the business which requires products featuring special materials and designs for the hydroelectric, paper and other similar industries. "Our current product portfolio includes various types of ball valves, butterfly valves, forged steel valves, and plate valves. In terms of design and quality of domestic products, these all represent the very best available on the market today. For example, our range of side- and top-mounted ball valves, flat gate valves and other products have been used extensively in numerous large-scale projects throughout China, including oil and gas pipelines, oil refineries, water treatment plants, power transmission projects, and various applications in the chemical and petrochemical industries.



In terms of product certification, a number of different standards need to be adhered to in order to gain access to specific international market segments. In addition to the API 6D, API 6A, CE and other standard certifications, we have also received TS certification to enter the South Korean market, relevant certifications for the Russian market, and the United States ABS certification for marine applications. With our ISO and Chinese domestic quality system certifications, our products can now basically be sold in any market throughout the world."

Overseas Markets

Boteli products have a firm foothold in both domestic and overseas markets, with exports accounting for almost 40% of sales. Mr. Huang told us that "the company first entered the overseas market in 2007, in the first instance entirely as an OEM; but according to our figures up to December of last year, export sales of our own brand products had already reached 81%. Even though total exports did not exceed our domestic sales, the relatively high proportion of our own brand sales in the overseas market is nonetheless very satisfying. Through our long-term cooperation with large domestic and foreign end-users, engineering companies, power providers and other customers, we have gained access to and entered the approved vendor lists of a number of key end-users like Petrobras, the Iranian National Gas Company, Russian, South Korean and other oil companies, as well as various overseas engineering companies. Gaining the recognition of these large oil and gas companies proves that our products and technological strengths have been constantly improving. When sold overseas, Boteli products are mostly used in projects run by foreign national oil



companies, including many American gas stations, projects for the Indian national oil company, as well as a number of projects in Saudi Arabia, Oman and other places." From the early days of only servicing the domestic market, through to getting the recognition of overseas customers, Mr. Huang believes that Boteli Valves development has relied on the accumulation of product manufacturing experience and modern processing equipment. "We were the first to enter the international market, mainly with the three product lines of ball, butterfly, and API602 forged steel valves. Many large overseas customers will directly bring a specialist third-party company along with them when conducting factory inspections, and we were able to meet all of their most stringent requirements. At Boteli, all of our production, processing, assembly, and testing are carried out at our own laboratories; these include labs specifically designed for carrying out high temperature, ultra-low temperature, physical shock, external load, and micro-leakage tests. In terms of our quality

control system, we have developed dedicated quality programs for each product: from the time the raw materials enter the plant, we will begin inspecting their quality, as well as their physical and chemical properties. In each part of the manufacturing process there are specific quality control points, and the subsequent assembly and dispatch stages are also carried out under strict quality control guidelines. When your products can show such superiority in terms of structure, design, processing equipment, precision machining, assembly and testing, gaining the recognition of end users and engineering companies is relatively straightforward. For our butterfly valve products for example, we have been working together for many years now with a well-known enterprise in the United States; a lot of the actual design was done by our company and through our partners' assistance and supervision, we were able to improve the product quality. For example, 1500lbs bidirectional pressure sealing butterfly valves cannot usually be made with a self-tightening

pressure structure. However, with our innovative and advanced processing technology, we can not only achieve this type of structure, but also receive customer recognition for it. Boteli's product line of forged steel valves is also very competitive in the current market. In order to produce high-quality ball valve products, we have introduced new processing equipment from Germany, meaning the proportion of automated production equipment within the entire company has now reached more than 90%, giving an excellent guarantee of machining accuracy."

In addition, Mr. Huang believes the service capabilities of their technical team are also a major factor in attracting overseas customers to Boteli. He explained: "Our big advantage is that we can produce tailor-made valves based on customers' processes and requirements. Starting from the design itself, we have done all we can to shorten the design cycle, improve design quality, and sort out any potential problems we may face in the early design verification. Our technical team is very happy to communicate with customers, and strives to be highly responsive when customers encounter problems of an engineering or technical nature. Our team will work with them together to resolve any issues, and this also helps to give customers more trust in our services and products. Of course, the most important thing is the quality of the product and its low failure rate. If a valve brand wants to gain genuine customer acceptance, it can take five or even ten years of hard work and dedication. In our overseas offices, by virtue of our expertise in valve technology, we not only provide service for our own products, but also other any assistance according to customer demands. This might include providing technical consulting services for customer projects





based on pipeline diameter and pressure parameters for example, or arranging for different engineers to provide solutions according to specific application areas. At the moment, we have direct service centres in both Dubai and South Korea, and in the future, we will continue to expand our service network."

Strategy for the Future

When asked about his views on the valve market, Mr. Huang revealed some of the company's expansion and investment plans: "Boteli have their own offices in Malaysia, Southeast Asia, Eastern Europe, and South America. Although we have only been around for 14 years so far, our product manufacturing and market understanding have matured considerably in this time. Our next goal is to develop the market for large oil companies and power companies in Europe and the United States. Globally speaking, the market in the Middle East has always been relatively large, while emerging markets such as South America and Africa all offer significant potential. We have to keep up with the emerging trends, and continue

to work in close cooperation with major engineering firms to exploit these markets." In addition to the current production facilities at the company headquarters, Boteli is also setting up a new site a few kilometres away from the existing HQ. This will feature a production area of 79,000 square metres and is scheduled for completion by the end of next year, at which point the new plant will begin trial production. "This plant will be used for the production of large valves and smaller finished products, including the large flat valves for use in oil depots, large ball valves for gas pipelines, as well as digesters for use in paper mills. These products are very rarely seen in the domestic market. At the same time we will set up a steel foundry - its production capacity will not be very large, as it will focus mainly on the manufacture of ancillary products for a portion of our product range. In order to improve R & D efficiency and product quality, in the future we will also introduce software for 3-D design, PDM, CAPP, fluid analysis and stress analysis. Using such modern design systems, we have already accumulated a lot of success stories. For example, we have developed some butterfly valve products together with customers for use in a number of military installations; some of our LNG valves have been used at a natural gas terminal

in Nanjing; also, some 2500 pound ball valves were installed in a gas compression station in Louisiana. All these products we can produce in dimensions beyond the standard 16 inches, right up to 24 inches in size. Using the CAPP, ERP and other systems, our research and development cycle can be greatly shortened, as can delivery time. Customers can also check the production schedule of their products at any time, and see how far along the processing cycle we have come. These innovations are our basis for a rapid response time."

"Chinese-made valves have gradually begun to gain recognition from global oil & gas and power enterprises, but the majority of these valves used are still conventional products," Mr. Huang said in closing. "For a lot of the more specific type of valves, gaining the same level of recognition will still require some work to be done. We will continue to invest in research and development, including product design and materials. Boteli can boast state-of-the-art production equipment, an advanced quality assurance system, as well as advanced testing and laboratory equipment, all of which should help to reassure our overseas customers. As such, we have sufficient confidence in our abilities to expand our international market share."

Boteli Valve Group in short

Company Name:	Boteli Valve Group Co. Ltd.
Established:	November 1998
Key markets	Petroleum, chemical, natural gas, electricity, water conservancy
Specialty products:	Forged steel valves, ball valves, butterfly valves, gate valves
Number of employees:	489
Sales:	RMB 52 million
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