

their degree of commitment to quality and the overall philosophy of continued improvement. Walworth's employees have a vast amount of experiences and dedication. The company's personnel have served to keep the company at the leading edge of design and innovation since its foundation. Company management believes that their best asset is their people whose expertise is forging a bright and solid future for the company.

Satisfaction through service

Walworth's commitment to customer needs and expectations is best described in one word, which is at the core of their operating philosophy: service. "Walworth is growing to not only consider the valve as a product - more than the valve itself, we are providing valuable service. We are focusing on everything around the product from cost to sales to service - paying attention to any needs or inquiries the customer may have," revealed Hernandez. "If they need technical information, we have people who are always willing to attend to any needs, offer information and share their expertise. The industry is always facing new challenges and service is the most important thing we can offer our customers. Working together with our customers through focusing on providing service throughout the purchasing process is the best way for us to attend to the needs of the market."

Investments in inventory

Walworth is known for its expedient delivery times, relying on large inventories, strong foundry network and in-house machining capabilities that allow for 24-hour order turnaround and reduced lead times. With facilities in Mexico, the United States and China, Walworth has all parts of the world within its reach, in order to meet customer supply and demand in a timely manner.

"Quality will always be the most important factor. The issue is how to be competitive with a quality product, and for us the key factor is volume. We are producing over 5000 valves per month in our different product lines. That is a significant volume of products and tonnage being handled every month. We are handling over USD\$70 million in inventories, in all production lines in our facilities in Mexico and Houston. That is separate from what our distributors have in their own branches," said Hernandez. "It is a huge

Walworth: Celebrating 175 years of quality & innovation

A valve undergoing a cryogenic test on Walworth premises

From heating the White House and participating in the introduction of the Stillson wrench to collaborating with Alexander Graham Bell on the first building-to-building telephone conversation, Walworth's rich history as a pioneer in innovation and the company's ongoing commitment to quality are the reason Walworth has maintained its position as one of the world's leading valve companies. Supplying world-class valves and components for the flow control industry through exceptional service, competitive pricing, and consistent, on-time delivery, Walworth remains a world leader of unparalleled valve manufacturing. Valve World met with Business Development Director Eng. Victor Manuel Hernandez during a recent visit to Walworth's state-of-the-art facility in Mexico City, where he discussed the company's distinguished past and how Walworth's commitment to technology and service is a driving force for future success.

By Sarah Bradley

Founded by James Walworth and Joseph Nason in the United States in 1842, Walworth is one of the oldest valve brands in the world. The Walworth name was purchased by a Mexican group forty years ago, moving operations to Mexico. Knowing the company's reputation for cutting-edge designs and great performance, Salomon Waisburd acquired the company in 2002 with the vision of restoring one of the oldest names in the business - a name synonymous with the highest-quality, best available technology and superior design.

Today, the valve manufacturer is continuing to flourish, known for its high quality products, quick delivery times and unwavering commitment to customer service and satisfaction. With over 1 076 391 -square-feet of production space at their various facilities, Walworth relies on highly qualified machinery, equipment and personnel in order to tend to market demands. With over 600 employees on staff at their facilities, Walworth's highly qualified personnel represent the prime example of competence, due to

investment but it is one of the strategies that we follow to be successful, in terms of price and delivery. It allows us to be able to deliver in a very short period of time. That is the kind of difference that we are offering to the market. We are very proactive and have made significant investment into an inventory management system. In that way we can see the trends of the market and we are ordering materials in advance, preparing our manufacturing of the product accordingly with these trends."

By offering competitive prices at the global level, Walworth is able to provide better value to their customers through training, post-sales service and careful and timely attention to their needs.

Quality flow control products

"Walworth Valves is very well known for the core business of gate, globe and check valves. We are currently producing more products, with over 14 different product lines. It is quite a big difference from when we started in 1842 to the huge production capacity we have now," said Hernandez. "We are looking to add more products to our portfolio. Diversity is important to remaining competitive and being able to fulfill the needs of our customers in all industries. We are attending to the majority of industries - not only refineries, but everything from production and

distribution of oil & gas, to petrochemical, power generation and many other industries. In relation to materials, we are now handling more than 50 base materials, from carbon steel, stainless steel, nickel alloy, duplex stainless steel, super duplex, high nickel alloys, and even titanium and zirconium. These materials, pressure classes and sizes are changing to meet the demands of the market." Walworth offers a wide range of quality valves. Designed and manufactured to meet the most stringent special requirements, Walworth's valves are ideal for applications in various industries including power generation, chemical and petrochemical, oil and gas, pulp and paper, mining, cryogenic and ship building applications. As one of the leading companies in industrial valve manufacture for fluid control, Walworth's products are made in a wide variety of high-quality materials such as carbon and alloyed steels, austenitic and duplex stainless steels, nickel alloys, ductile iron, and bronze, among others. Their portfolio includes Cast steel Gate, Globe, Check, Forged Gate, Globe and Check, Trunnion mounted Ball, Pressure Seal, Slab, Expanding, Dual plate, Floating ball, Triple eccentric Butterfly and Plug Valves, among other, in the various alloy materials necessary to meet the required specifications for the valve industry.



The company assures that their valve quality is further assured with the aid of in-house test facilities including X-Ray source Iridium 192, impact, tensile, hardness, adhesion test equipment, measuring coordinate table and their own HVOF process for applications of tungsten carbide or chromium carbide coatings, among others. Seen here the HVOF process.

Walworth offers a wide variety of options with valves designed and manufactured to meet the special requirements of the different industries they serve. To meet demanding applications, the company can deliver valves in a number of specialty alloys with a range of internal materials and specifications. Valve quality is further assured with the aid of in-house test facilities including X-Ray source Iridium 192, Impact, tensile, hardness, adhesion test equipment, measuring coordinate table and their own HVOF process for applications of tungsten carbide or chromium carbide coatings, among others. "The company has made a great investment in a performance lab, which is one of the most complete labs in America for developing design validation and checking the performance not only of the valve, but also of the materials. That is the way that we are keeping the innovations in our product line," he said. "We have performance test equipment such as boiler to produce steam for verification of elastomers quality and product performance at temperatures over 430 °F, Fugitive emissions equipment to comply with new standard API-624, cryogenic facility for temperatures below 196 °C, fire-testing to comply with requirements of API-6FA, etc. Not only for material, but also for the performance and design validation, which few companies have nowadays. And this is right here in-house."

When asked about the importance of having these testing capabilities in-house, Hernandez explained the necessity for the company's investments: "The main reason is that the standards are changing so often and with those changes, must be proof that the product will work properly in-service. It is not only to make changes to the design, but also to ensure that the design will work properly in the field. The only way to do that is with validation and the best way is not only with validation by computers with software, but also running a real test in the field or in the lab. Testing in the lab is one step before the field to ensure the product is working before it is in service with the end user. Of course with Walworth products the quality is always there, but it is important to prove it." The investment in their state-of-the-art laboratories has allowed the company to not only remain at the forefront of the ever-changing demands of industry regulations, but also to provide their customers with additional support and solutions.

"The way that we are working is to first of all to comply with the international standards, but secondly and no less important, is to comply with the standard in a timely manner and offer additional solutions to the customer. If we are testing the valve, we can experience what is going on with the design, with the performance, and what may happen in service," Hernandez said. "We run several tests before we can approve a development. It is different testing procedures, different temperatures, different pressures, different materials, different ways to test the valve or the product, in horizontal or vertical positions or angles. That will ensure to our customers the product will comply with the more severe conditions in the field and for many different applications such as low or high temperature, and high pressure - any conditions that always exist in the plants. We want to assure our customers that even though the conditions are severe, we have already tested and the product will comply with any service conditions." Walworth is a certified company which has established and maintained a Quality Management System based on the requirements in ISO 9001:2008 and API Q1 9th Edition. The certifications guarantee that their Quality Management Systems establish methods and procedures in order to ensure regulation during the various stages of the



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process, from the receipt of a customer requirement, the order entry, design control, manufacturing process, tests, shipments and post-sales service. The company's Quality Assurance model followed at their facilities ensures the regulation, consistency and dependability of the products is exported all over the world.

"I compliment the origin of the company because Walworth was an American company and they brought the technologies to Mexico. We also have a manufacturing facility in China and we keep the same standards of manufacturing at all of our facilities worldwide," said Hernandez. "Process control in Mexico is the same as we have in China and the U.S. and that makes the difference. We ensure the same quality around the world; the key factor is who controls and what methods are used to control the quality."

Walworth's Quality System is an integral part of the company's manufacturing policy. With the primary goal of providing products that meet and exceed market standards, Walworth's system consists of a rigorous quality control as well as the selection of raw materials from approved vendors. Control over the manufacturing process is vital and serial numbers allow Walworth to monitor and trace fabrication processes along with the materials of components.

Walworth products have international recognition and approval and are manufactured under the latest editions of applicable standards such as API, ANSI, ASME, MSS, NACE AWWA and BS1. The continued improvement of their products has allowed the company to establish and maintain their position as one of the primary manufacturers in the industry by continuing to offer reliable, quality products.

Fighting fugitive emissions

Walworth strives not just to meet industry demands for reduced emissions, but to exceed them.

"We invested in the equipment in-house to perform our own low fugitive emission testing to comply with new standard API-624, and once we qualified our design to the standards, we also invested in low emission packing for our valves with our business partner Chesterton. We also comply with ISO 15848 standard, also low fugitive emissions for the European market," explained Hernandez. "Walworth is a socially responsible company and we take protecting the



A drawing of a Walworth expanding gate valve.

environment seriously. We are always looking to develop products that can be more protective of the environment and the safety of our workers and the end user."

Looking toward longevity

Looking to the future of the industry and the role Walworth will play within the valve world, Hernandez is optimistic about future growth and the company's proven longevity.

"We know that many companies want to be in the market for a long time and the challenge for us is to stay one step ahead. The only way to do that is by offering something different. Many companies can offer a good product, few have the opportunity to offer after-sales service in a quick response time. Not too many companies have the opportunity to offer the service and integral solutions that we are offering. The challenge is demonstrating to the end users that Walworth is that reliable partner," he said. "We expect to be here for a long time, another 175 years at least! The philosophy of the owners is that we are now preparing a group of new engineers as key people that will help in the succession of the company and help continue to grow and support the Walworth brand. Our plan goes far beyond next year, it is for the next century."