

Crane Fluid Handling: in valve and automation

In the valve industry, Crane is one of the most widely recognized names around the world. Crane's Fluid Handling Group is backed by 150 years of manufacturing experience and commitment to providing the best overall solutions to their customers needs. Through a collection of strongly branded products and services, Crane is well positioned as a complete valve supplier from specification and selection through production and fulfillment to installation and after-sales service. "It is our total dedication to our customers that has made Crane a global force in valve supply," explains Crane Fluid Handling's newly-appointed President Mr Max Mitchell.

Before looking at the Crane of today, it is interesting to take a step back in time. Exactly 150 years ago, in 1855, R.T. Crane founded Crane Co. with the commitment, in his words, "to conduct my business in the strictest honesty and fairness; to avoid all deception and trickery; to deal fairly with both customers and competitors; to be liberal and just toward employees and to put my whole mind upon the business." That commitment—which set the standards for a small company whose landmark innovations helped to fuel the American industrial revolution—has guided Crane's actions and investments ever since.

Those values so nobly expressed by R.T. Crane are even more relevant today, stresses Max Mitchell. "They continue to guide this company, set to achieve USD 2 billion in sales for 2005 and which now employs over 10,000 people around the world. The underlying ethos remains the same, even though the tools at our disposal may have changed. For example, Crane Co. operates a continuous improvement program of Operational Excellence that helps sustain our high level of quality and

timely delivery while updating product configurations to meet customers changing needs. These skills are taught at the virtual Crane University as well as on the shop and office floors."

Global network

Crane has a long tradition of innovation and leadership in fluid handling and has in fact been a force in the valve industry since the early 1900's. Now boasting a network of facilities world-wide, Crane manufactures and services valves for nearly all industrial uses. Crane Fluid Handling consists of The Crane Valve Group, Crane Supply, Crane Valve Services, Resistoflex, Crane Pump and Systems and Crane Environmental. This Crane Group achieved USD862 million of sales in 2004 and Mr Mitchell notes that quarterly sales in each of the first three quarters of 2005 have eclipsed the figures for 2004.

Crane's strategically located facilities and sales offices provide full logistics and service support for third party distributors

and end users on a global basis, says Mr Mitchell. "We have manufacturing sites in countries like Germany, Hungary, the United Kingdom, Australia, India, Singapore and China along with numerous sites in the US and Canada.

This network gives us flexibility in production, ensuring the timely delivery of Crane products that meet the exacting local standards demanded by a variety of process applications. When combined with sales offices in the countries already mentioned plus many more, Crane's global network provides the complete support required by local and international companies."

Product lines

Crane's Fluid Handling Group manufactures a wide variety of process valve and actuator types. The product lines include gate, globe, ball, butterfly, plug and diaphragm valves. Crane produces valves that vary in size from 1/8" all the way up to 88" (DN50 to DN2200). Body materials include bronze, iron, cast steel, forged



End users benefit from complete automation packages.

Crane: a global force in valve solutions



Saunders diaphragm valves are renowned for their versatility and reliability.



Crane Australia holds significant valve inventory.



Crane benefits from a full range of development and test facilities.



Crane boasts vast experience in the design and manufacture of valves

steel, carbon, stainless, Monel, Hastelloy, titanium and zirconium. Valves have been produced to meet ASME B16.34, Class 125 to 2500, PED, API 607, AGA/CGA, UL/FM/CSA and MSS-SP-42. In addition, complete automation packages are available for many of the valve offerings. Many of Crane's products are sold under very strong brand names. For Valve World, Mr Mitchell kindly provided a synopsis. One of the cornerstones is Flowseal®, a premier high-performance butterfly valve line offering metal seat, soft seat, fire safe and "MS" triple-offset versions. Configurations are also available for harsh conditions as well as applications requiring nominal temperature and pressure ratings. All Flowseal valves are manufactured to the exacting ISO 9001 and PED standards, Mr Mitchell notes. Customers looking for resilient seated butterfly valves are also catered to by Center Line®, which has manufactured such products for more than 40 years. Today, Center Line supplies high quality valves at economical prices for a variety of applications, including on/off and throttling services. Similarly, Crane's wafer check valves uti-

lize superior design for improved performance and economy. All models feature compact construction to reduce weight and installation time for a lower cost of ownership than traditional swing check valves. Duo-Chek and Uni-Chek® models use spring closure discs for quick response to changes in flow conditions. All CVNA Wafer Check models are high performance, non-slam check valves.

Stable

A Crane brand that boasts a long period of customer service is Aloyco®, which for over 70 years has been a world leader in the design and manufacture of corrosion resistant valves. "Aloyco gate, globe, ball, and check valves can endure the severe conditions encountered in applications ranging from refining and chemical processing to pulp and paper production," comments Mr Mitchell. But even Aloyco products are comparative newcomers compared to Crane® branded valves, whose history stretches back for 150 years. During that time, Crane branded valves have earned a reputation for high quality and customer satisfaction. Mr

Mitchell: "For industrial applications, Crane bronze, iron, cast steel, ball, and butterfly valves satisfy the requirements of critical applications."

Other famous names in the Crane stable include Stockham®, Jenkins®, NH Valves and Pacific Valves.

Mr Mitchell: "The Stockham line of bronze, iron, cast steel, fire protection, ball, butterfly and Slim-Chek™ valves can meet the needs of any commercial construction project and are recognized as setting the standard in service. With Stockham, you can be assured of our commitment to earn your business before and after the sale."

In Canada, the combined strength of Jenkins, a trusted trademark in the valve market, and NH Valves, a trademark noted for proven performance, provides commercial and light industrial valve users with outstanding products, comments Mr Mitchell. "These products include ball, butterfly, bronze, iron, cast steel, forged steel, and plug valves. Competitive prices and premium service sets Jenkins and NH Valves apart from their competition."

Pacific Valves produces a variety of special- ▶

Just a small sample of the many valve brands and types available from Crane Fluid Handling...

Pacific Valves' reputation is based on providing specialty valves for critical applications.



Center Line has more than 40 years' experience manufacturing resilient-seated butterfly valves.



Wedge plug designs are available from 1/2" up to 30".



Xomox is the global market and technology leader in sleeved plug valves.



ty engineered valves, including C12A, for critical applications. "Pacific Valves can change the size of your pipe with its superior Cv values (lower pressure drop). Designed for the power generation industry, Pacific Valves' pressure seal valves can withstand the high temperatures and pressures of steam service. The bolted bonnet valves are ideal for use in tough applications, and for alkylation processes, Pacific HF acid valves are an industry standard. Further, its high precision Wedgeplug® valves are designed for coking, ethylene, and catalyst operations," says Mr Mitchell.

Recent acquisitions

Probably one of the most successful and well-known global manufacturers of industrial valves and actuators for demanding service applications is XOMOX, which was recently acquired by Crane. Their products find use in many process industries, including chemical, petrochemical, pharmaceutical, power generation, and pulp and paper. Mr Mitchell: "Quality is assured through practical experience, state-of-the-art manufacturing facilities, commitment to customer sup-

port, and a quality assurance department approved by international inspection authorities."

Another recent development took place in April 2001, when Crane Co. established Crane Process Flow Technologies through the acquisition of the highly reputable Saunders, Depa, Elro, and Revo product ranges. Mr Mitchell: "Key markets for our actuated diaphragm, butterfly and ball valves and pumps include the chemical industry, biopharmaceutical industry, power and water generation, food processing, minerals and metals processing, and finally the marine industry."

Mr Mitchell further notes that PK Saunders invented the diaphragm valve as far back as 1928, and the company has continued to improve the design and range of diaphragm materials ever since. As a result, Saunders diaphragm valves have gained an excellent reputation around the world for versatility and reliability in aseptic and sanitary applications as well as industrial applications with corrosive and abrasive media.

Westad, acquired in 1994, is a Norwegian manufacturer of high performance butter-

fly and ball valves for service in corrosive media, cryogenic temperatures, and other extreme operational conditions. Their products are designed and tested to meet customer requirements for marine, offshore, and LNG applications. They have been manufacturing valves since 1895 and were a pioneer in the development of high performance butterfly valves

From the UK to Australia

The history of Crane Fluid Systems began in 1906 when the original owner opened doors as a coppersmith. Crane Co. acquired that company in 1919 and soon after broadened the product offerings to include bronze and iron valves, fittings, and associated fluid handling products. Today, the company is one of the UK's leading manufacturers of valves for heating and ventilation, processing, and general industrial applications.

On the other side of the globe, Crane Australia Pty Limited, established in 1961, manufactures, markets and distributes gate, globe, check, butterfly, ball, diaphragm and plug valves in pressure class-



Crane branded valves have a history stretching back for 150 years.

CVNA's wafer check valves utilize superior designs for improved performance and economy.

Crane Valves North America offers a broad spectrum of valves, from butterfly to gate to non-slam check.

Wafer and lug body butterfly valves are available in cast and ductile iron.

Jenkins' cast steel gate, globe and swing check valves come in size ranges from 2" to 12".

Stockham "sets the standard in service".

Jenkins and NH Valves are trusted trademarks for commercial and light industrial users in Canada.

es 150 through 4500. All of these valves are available in a wide range of materials such as cast and forged steel, iron, bronze and special alloys, and can be supplied complete with gear, pneumatic, or electric actuation where required.

Crane Valve Services

The Crane Valve Services business unit is comprised of two companies: Crane Nuclear, Inc., and Crane Valve Services. The business unit supplies valves and replacement parts, valve diagnostic equipment and related testing, engineering, and maintenance services to the nuclear and commercial industries worldwide, as well as offshore oil and gas processing industries. Headquartered in Kennesaw, Georgia, this business unit offers a variety of industries a single-source-solution for valve products and services.

Mr Mitchell: "In 1971, Crane became the first U.S. manufacturer authorized to use the "N" symbol of the American Society of Mechanical Engineers. To date, Crane Nuclear Services and Training programs have streamlined valve maintenance and testing practices, extended the life of existing

equipment, and maximized efficiency of personnel in all of the 103 nuclear power facilities in the United States."

Automation

Crane's dedication to superior customer service through single-source solutions is embodied in their St. Louis Service Center, an all-in-one automation provider. This operation includes a full-service machine shop and automation center capable of servicing almost any actuation package. Mr Mitchell: "The Crane team in St. Louis can mount just about any actuator to any valve and provide a full range of accessories, including limit switches, solenoids, position indicators, positioners, speed controls, fusible link assemblies, and smart control packages. Crane also markets its own line of automation that includes the XRP rack & pinion, Matryx Vane and Revo pneumatic actuators."

Finally, Mr Mitchell touches upon Re-

sistoflex[®], which manufactures corrosion-resistant plastic lined pipe, fittings, valves and hoses for the chemical, petrochemical, pharmaceutical, pulp and paper, water treatment and electronic industries. As the inventor of PTFE Teflon[®] lined hose, Resistoflex continues to offer the largest selection of flexible Teflon[®]

lined hose systems in the industry.

The 1998 acquisition of Dow Chemical's Plastic Lined Piping business made Resistoflex the largest and most technologically advanced lined piping manufacturer in the world. Furthermore, the 2001 acquisition of its European licensee, Resistoflex GmbH, brought increased product capabilities and market reach.

Mr Mitchell: "Without doubt, it is the breadth and depth of our product portfolio that really sets Crane Fluid Handling apart. Whatever their needs, from one-off engineered products to complete packages for new-build projects, Crane is a global force that valve customers can rely on."