Discovering KCON Valve

Facing a sustained low oil price, engineering companies are striving to optimize their supply chain wherever possible. This is creating opportunities for suppliers such as KCON who are cost-effective, familiar with engineering projects and can deliver high-performance products. Taking up a kind invitation to visit KCON in China, Valve World could see for ourselves the high level of integration between valve manufacture and project application. From marketing to manufacturing and from design to quality control, all departments at KCON work very closely together to produce a valve that is robust, reliable, and perfectly engineered for the intended service.

By David Sear

Established in June 2001, KCON Valve focusses on manufacturing pipeline valves and process valves. Thanks to the company's ability to provide engineering and cost-effective solutions to its customers it has enjoyed fifteen years of solid growth. During that time all relevant qualifications and approvals have naturally been gained.

Yet possibly even more important to prospective business partners such as users, contractors and distributors, KCON has accumulated a vast experience in numerous and varied projects. This track record is an important selling point and something that all employees are extremely proud of, says KCON's managing director, Mr. Gu Li Dong.

"With our solid practical experience KCON has become a core valve supplier to companies such as PETRO-CHINA, SINOPEC and CNOOC. This surely highlights KCON's reputation in the mainstream market of the Chinese oil and gas industry. At the same time, KCON is also fully committed to emerging overseas markets and has won numerous projects. For example, the BP/AIOC G350-356 project in Azerbaijan; the Looping Gas Pipeline, GEM Ø48'' Phase 2 Hassi R' mel project in Algeria; the Paradip Integrated Offshore Crude Oil Handling Project in India; the Ghana Early Phase Gas Infrastructure Project; the AOGC West Karoon Oil Field Early Production unit project; the Missan Oil Field, extra valve for BUT upgrade project in Iraq; TAKREER Norm Handling, Treatment & Disposal Project at BeAAT; the GASCO Giza North Power project and the South Helwan project in Egypt to name just a few."

As Mr. Gu further explains, KCON is a project-oriented manufacturer. "Throughout the company – from engineering to production and from marketing to management – everything is in place to properly serve projects. So we don't see ourselves as simply making valves but rather we provide engineered valve solutions. We have the ability to do this because we fully understand the valve application, we are familiar with the interactive working procedures of engineering projects and, possibly the most important factor, we respect and adhere to all our customer's needs."

Asked about KCON's USPs, Mr. Gu replies that the product quality, price and delivery are spot on. However, there are other factors, too, he indicates. "For example, never underestimate the importance of proper control over engineering documents to EPCs and end users. That is an issue which KCON pays particular attention to. Also, good language skills are absolutely essential. Whatever the client needs – such as attending a project conference call, ITP establishment, professional working with TPI, a production schedule report, clarification of a specification or more details about a specific valve feature – he is assured of an answer that is grammatically correct and totally unambiguous from the engineering viewpoint.

KCON products include ball, plug, slab gate and check valves

Overcoming scepticism

Thanks to its professional knowledge and ability to execute engineering solutions, KCON is able to win orders for valves in critical applications. Looking back on recent success stories, Mr. Gu is very proud of how his colleagues leave a positive, lasting impression on clients. In 2012, for example, KCON bid for a shallow water gas export pipeline project in Africa where valves were needed that could handle wet gas with a high sulphur content. The engineering company was from the UK and, stresses Mr. Gu, were clearly sceptical about using Chinese valves in such a critical application. Mr. Gu: "we eventually persuaded this British engineering firm to allow us to present our company. Throughout the meeting KCON valve engineers gave a presentation in fluent and professional engineering English that

With a high level of integration between all departments KCON is fully geared to serve the project markets.

KCON has a proven track record of delivering engineered valves to major projects throughout the Middle East, South Asia and South East Asia.

clearly left a good impression about our engineering capabilities."
The engineers further demonstrated how KCON would design and build valves that were fully suited to the application, starting from extensive partial pressure and in-situ pH calculations, moving on to the key manufacturing and welding stages verified by SSC examination and concluding with an outline of our quality control procedures.
Continues Mr. Gu: "we dispelled any concerns about KCON's ability to deliver an engineered product. Following the technical and commercial bidding evaluation we were awarded the contract to deliver high quality ball valves with suitable overlays on all wetted parts. Since installation all our valves have been working perfectly with the corrosive and toxic gas."

Going the extra mile

Of course, making engineered valves is one thing, producing them to short delivery times is an even harder task. Yet this is a challenge which KCON relishes, states Mr. Gu, recalling KCON's last-minute assistance on the Trans-Asia Gas pipeline C-line project.
"In January 2014, with the pipeline almost complete, faults were discovered in valves prior to installation. The end user - Asia Gas Pipeline Limited - insisted on new valves being purchased despite the incredibly short timeframe. To compound matters the project was politically sensitive with all the presidents of the Central Asian countries along the pipeline having been invited to the opening ceremony just three months away."
Shortlisted by PETRO-CHINA as one of the core vendors capable of completing this demanding task, KCON promptly delivered its professional solution during a three-day meeting at PETRO-CHINA's headquarters in Beijing.
"Thanks to our comprehensive technical and commercial response we were awarded the contract for 111 fully welded ball valves," notes Mr. Gu. "The contract, signed almost immediately after our meeting, had a clear stipulation for ex-works delivery within just 45 calendar days. That is a tight schedule by any standards, but especially so given that this period included the week-long Chinese New Year holiday."
KCON therefore quickly mobilized all staff to make sure that every contract detail was properly met. This included, for example, ensuring that all communications relating to the project were in English, including the full inspection records and reports. KCON also facilitated weekly visits by officials from Asia Gas pipeline Limited, the EPC company and PETRO-CHINA who wanted to monitor progress and ensure the timetable was being adhered to. And, when everyone else was celebrating the Chinese New Year, staff at KCON cut short their holidays to ensure production was kept up to speed.
Thanks to the solid technical foundation underpinning all of KCON's departments and the efficient, well-established quality control procedures, the project was smoothly brought to a satisfactory conclusion. In fact, all of the 111 fully welded ball valves were finished in only 39 days – almost a week ahead of the original deadline. This outstanding performance clearly made a good impression, with the Asia Gas pipeline Limited, PETRO-CHINA and the third-party inspection company all sending letters of appreciation to KCON, praising the company's professional capabilities, precise organization of the production schedule and cooperative attitude. With not a single problem reported in any of the valves in the Trans-Asia Gas pipeline, KCON has without doubt set an impressive benchmark for both product quality and timely deliveries.

Seizing opportunities

When it comes to developing new business KCON is keen to seize every opportunity and does so with a proactive attitude.
"We live in a state of constant flux and the requirements of the market are changing as we speak," says Mr. Gu. "Suppliers which demonstrate excellent management, have a solid technical foundation and can deliver a cost effective solution will be recognized all the more by the market."
This explains how KCON has successfully penetrated some very conservative markets such as the oil and gas industry where for a very long time end users relied almost exclusively on a handful of proven suppliers.
"I can fully understand their position," states Mr. Gu. "Oil and gas companies place top priority on safety and reliability so they tend to stick with the products and suppliers they know. Take CNPC, for example, the energy giant that controls more than eighty per cent of all the natural gas pipelines in China. For years they exclusively used pressure balanced plug valves made by foreign brands. There were simply no openings for Chinese manufacturers, whose products were perceived to be less reliable."
An unexpected opportunity for KCON arose in early 2013 when CNPC announced plans to evaluate domestic pressure balanced plug valve brands. The verification procedures were extremely extensive, taking in issues such as the vendor's quality assurance system, qualification/approvals certifications, the company's production capability, the design and development package, the manufacturing procedures (monitored by a premier third party authority), a functional in-factory test, an examination of a valve on a real pipeline, the disassembly and inspection of a valve, and last but by no means least a track record of the plug valve being used on an operating gas pipeline for at least one year.
Mr. Gu: "CNPC wanted absolute proof that vendors could deliver reliable valves. That's why they built a by-pass demonstration circuit on an operating pipeline in North-West China to check valve performance in actual practice. It is easy enough to pass a functional test in a factory; an in situ assessment is quite a different matter. This test was the real deal-breaker as it showed which valves can successfully deliver zero leakage performance under high pressure when closed. Each test lasted for a month and if any leakage was detected during that time the valve was automatically rejected. KCON provided two plug valves (6" #900 and 16" #900) and both passed with flying colours. In fact, KCON Valve was the only manufacturer to pass all these tests and we have therefore been added to CNPC's approved plug valve vendor list."
KCON's endeavours have definitely paid off as today the company's plug valves are extensively used on CNPC's West-East Gas Pipeline and Sebei-Xining-Lanzhou Pipeline. Moreover, SINOPEC has chosen KCON to supply all the plug valves on many of its pipelines, namely the Sichuan-East Gas Transmission Pipeline; FULING shale gas pipeline; Jinan-Qingdao Gas Pipeline, Yulin-Jinan Gas Pipeline, and Zhongyuan-Kaifeng Gas Pipeline etc. In fact, in just three years KCON has become a top player for its plug valves in the Chinese oil and gas market.
Prompt after-sales service is another key feature offered by KCON, notes Ms. Gao Yan Sue, Director of KCON's overseas market division. "Thanks to a ten year file storage system, KCON can quickly retrieve a full package of technical and commercial information using just the unique serial number stamped on each valve. With this information we can answer many client queries about maintenance by phone and can also offer a prompt spare parts service."

Opening doors

With our pleasant interview drawing to a close, Mr. Gu reels off yet more examples demonstrating KCON's ability to develop new valves for unique applications.
"We provide tailor-made 40"- Class 600LB ball valves with expandable face-to-face dimensions for the China Aerospace rocket testing project. We also developed four-way plug valves for a fuel metering system which successfully passed a 3,000 cycle test with zero leakage. And we must also mention our innovative "SNoir" plug coating technology which was developed in-house and for which we hold a national patent. All these accomplishments demonstrate our role as a professional valve manufacturer and a valve engineering solution provider."
Discussing future opportunities, Mr. Gu pays a gracious comment to this very magazine. "During the past ten years KCON has established stable and fruitful partnerships with many clients throughout the Middle East, South Asia and South East Asia, and these areas constitute our main target market. But we are keen to grow elsewhere too, and we are pleased how Valve World has helped us promote the KCON brand internationally. Looking forward, we will continue to work hard to obtain more qualifications and approvals from end users which open doors to yet more markets."

Following a very extensive technical and commercial evaluation, KCON's plug valves are now on the AMLs of leading companies in China.

Well-established quality control procedures form a solid basis for efficient and very fast manufacturing.

Facts & Figures

Name:	Sichuan KCON Valve Mfg. Co., Ltd.
Major Products:	ball valve, plug valve, slab gate valve, check valve (API 6D valves)
History:	founded in 2001
Test bench capacity:	from 1/2" up 60"
Crane output:	up to 50 tons
Qualifications:	APIQ1, API6D, API607/6FA, CE/PED, ISO9001/14001, OHSAS18001, ATEX, TS
Trademark:	KCON, standing for Key Control
Website:	www.kconvalve.com

Meet Mr. Gu

Mr. Gu Li Dong, Managing Director of KCON Valve, Senior Mechanical Engineer, has over thirty years' experience in the valve industry. "I'm very fortunate to lead a well-educated, experienced and dedicated team whose sole aim is to deliver the very best products and services to our customers. We would be delighted to welcome you to our premises in Guanghan, nearby Chengdu, in the Southwest of China, which incidentally is the hometown of the giant panda. There's also a warm reception for all at our stand in Hall 03 / B01 this December during the Valve World Expo & Conference in Dusseldorf, Germany."