

HKC – actuators are our speciality



HKC Co., Ltd (HKC) is a South Korean valve automation manufacturing company headquartered in Ansan City in the Kyonggi-Do province, south of Seoul. With its roots in the sales of butterfly and globe valves, the company today specializes in the development and manufacture of pneumatic and electric actuators. Valve World spoke to Mr. Soung Min Han, President of HKC about how the company has developed, their main areas of expertise and their plans for the future.

By Joanne McIntyre and Gillian Gane

We begin by asking Mr. Han to tell us something about the history of HKC. He explains: "I started the company back in 1989. After I graduated from university I joined Keystone Valves as a sales engineer where I spent three years. Then I decided I wanted to set up my own company and, together with my colleague signed a contract with a Japanese valve company, Kurimoto and HK Contromatic Co., LTD was born."

Mr. Han says that, initially, the company focused on selling different types of quarter-turn valves such as butterfly valves, high performance and robust valves. They then developed their own two and three way globe valves for ice storage for the heating, ventilation and air conditioning market and began manufacturing these. He continues: "At the same time I was thinking of how we could further develop into the valve automation side and come

up with another leading product in this field. This turned out to be our limit switch box or valve position monitor."

We spotted a very wide range of brightly coloured products on our way through the plant – different colours as specified by the customer; for example, one for a Japanese valve company, one for the Korean water industry and another, yellow, for a Dutch company. On the ground floor of the HKC plant are handled the heavier products destined for the oil and gas industry, both upstream and downstream and on the second and third





general Russian market and Inmetro for South America. "Our electric actuators carry the explosion proof certification," adds Mr. Han, "and on our pneumatic actuators we have PED, pressure vessel certification plus SIL certification for our heavy duty pneumatic actuator; mainly for the oil and gas industry. This allows us to work in our target fields."

Ongoing and upcoming projects

"We have been involved in a lot of projects, for example the Gulf projects related to Oil & Gas, and the Petronas fertilizer project,

floors, the lighter weight products for the water industry, the power industry and shipbuilding are handled.

We ask Mr. Han about some of the main products HKC supply today. He tells us that electric and pneumatic valve actuators, especially heavy duty and multi-turn actuators are their main bread and butter and that the globe valve and limit switch box are minor products developed by the company. So what industries does HKC serve in particular? "Our products are already used extensively in conventional power plants and in the water industry," explains Mr. Han. "We are also now seeing an increase in the oil and gas industry on a worldwide basis so we are in a kind of transition phase and expanding from our previous typical markets."

The importance of certification

Currently HKC hold many international certifications including three different

explosion proof certificates, ATEX for the European market, IECEX for the worldwide market and CSA C/US for the North and South American markets. In addition the company is certified to CCC for the China market, GOST for the



The largest test chamber (IP68) for large size (2000x2000mm) products.



We have been regularly supplying a large quantity of heavy duty pneumatic actuators to one company who want to replace every emergency shutdown valve actuator with our product on a gas transportation line in local and overseas countries." Mr. Han continues, "We are currently bidding on quite a few projects and have two relatively large projects ongoing at the moment. The first is for Dangjin thermal power plant in Korea and the second is for a new plant in Xi'an in China electronic plants for which we are the sole vendor. For the latter, we have already completed one project and are working on the second." HKC also work in technical collaboration with one major valve company for whom they make both complete products and components – casting, machining and painting and are also in the process of building similar technical relationships with other major valve companies.

Service and support

After installation, a mobile team of engineers are available to offer a technical service to customers who require assistance in respect of maintenance or repair. This team travel wherever necessary on a worldwide basis and will either work alone, or alongside local engineers. For example, on the Xi'an project, two engineers went out to help the local engineers install the products onsite.

Mr. Han explains that, whilst HKC do offer tailor-made services, both technical and product wise, for customers with whom they have built a long-term relationship, this represents only 50% of their business. "With our long-term partners, we get together to review all the required drawings before looking step-by-step at the procedures needed to make the complete product as per the customer specification," he says, adding: "Whilst we also like to develop our own

products through our R&D department, we recognize the high potential of the technical collaboration we have with OEMs since it gives us the opportunity to see what is on the horizon near future. In the past, OEM products were more concerned with mechanical parts, but this has changed a lot and the components are now mainly electronic."

What does the future hold?

How does Mr. Han see HKC developing in the future? He tells us that they are looking to purchasing more modern computer programmed machines, especially in a larger size. "They operate on a more cost efficient basis," he says, "and we can be more confident about quality control. You have already seen in our machine shop that we don't have many workers. Manual work is good, of course, but it can vary on a day to day basis whilst robots always operate at the same level. This is why we intend to make ongoing and long-term investments on new, computer controlled machines which will ultimately save us money too."



Mr. Han acknowledges the fact that HKC can never compete worldwide with the current big leading companies, but is confident that they can achieve the accolade of becoming the number one quality product manufacturer. That is his motto and ambition.





people working for company are in R&D which is a very high proportion so is obviously a very important area. So much so, that he is considering investing in even more people in this section, as he believes the development of new, quality, reliable products with a long life-cycle is the only sure way to survive in the long-term. His activities in R&D are the reason that Mr. Han received a prestigious award from the President of the Republic of Korea for his contribution to basic science and technology development. He is the youngest person ever to receive the award. HKC have developed their own, unique testing procedures to assure the high quality of the actuators they produce. Mr. Han: "We always look for the best way to try and meet our customer's requirements for quality and production procedures. Once all the components have been produced, they are assembled

Why HKC?

We ask Mr. Han why it is that customers come to HKC from all over the world. He believes that it is his philosophy of building and maintaining relationships. He explains: "Respect for people and relationships are the most important thing, even over and above the financial side. I have done business with people where I have actually lost money rather than make money but, in those cases, I was prepared to suffer this for the sake of the good relationship. I still prefer the 'gentleman's agreement' way of doing business over the signing of a contract, although I realise that cannot always be the case in today's business world. But the respect we have for people



and the building of relationships obviously counts for something since, once a customer comes to us, they continue to do business with us. Our existing customers have been with us for an average of over 10 years. This also helps with new business since our old friends

and customers recommend us to their colleagues and acquaintances and our reputation is resulting in a steady growth." Regarding HKC's R&D department, Mr. Han tells us that 11 of the 90 or so



and testing begins. We supply to the oil and gas industry and in ship building where actuators are used in many different applications such as the ballast room, the engine room and on deck, amongst others."

The company also hosts training and education sessions in their conference room for some of their customers such as POSCO or Korea Water Treatment plant, and for suppliers, which attendees find extremely useful and informative. In this way, not only do HKC develop and sell their products but also take the time to share their knowledge and expertise, another reason why customers enjoy dealing with HKC.

