

CONNECTING THE KINGDOM

Having recently been awarded of Saudi Aramco approval for the manufacture of specialised line pipe capable of transferring sour service materials, Global Pipe Company (GPC) has taken a major step forward in its growth plan since its last interview with Euroasia Industry in 2013. Sarah Pursey speaks to Mr Ahmed Hamed Al Khonaini, Managing Director, to learn how GPC's enhanced manufacturing capabilities have not only enabled the company to secure new supply agreements, but also to emerge as one of only a few local manufacturers capable of meeting the increasingly demanding technical requirements of KSA's oil & gas sector. Written by Marius Goubert. ▽



الشركة العالمية للأنابيب
Global Pipe Company



Representing a joint venture

between Erndtebrücker Eisenwerk GmbH & Co. KG (EEW), a highly specialised and experienced German manufacturer of submerged-arc welded (SAW) pipes, Saudi Steel Pipe Co. (SSP), Pan Gulf Holding (PGH) and Mr Ahmed H Al Khonaini – one of the leading industrialists in Saudi Arabia's Eastern Province – Global Pipe Company was established in late 2010 in Jubail Industrial City with a total investment in excess of SAR 660 million (US\$176 million). Founded with a view to manufacturing thick-walled steel pipes for the Saudi Arabian and GCC markets – where such products had traditionally been imported – the company commenced operations from its manufacturing facility in the last quarter of 2012 and, after an initial trial production phase, completed its first pipe delivery in March 2013 to a water treatment facility in Jordan. During the second quarter of 2013, GPC succeeded in gaining approval from the American Petroleum Institute (API) and, on 25th November 2013, the company's pipe mill was awarded official supplier status by Saudi Aramco for non-Sour pipes and structural tubular.

Intending to serve the oil & gas sector as well as offshore and structural applications, GPC now specialises in the production of large-diameter, heavy wall thickness pipes in two main categories: longitudinal submerged-arc welded (LSAW) line pipes with outside diameters ranging from 16-62 inches and thicknesses of 8-51mm, and structural tubular, large-diameter pipes of up to 200 inches with thicknesses of up to 130mm. The company's annual production capacity stands initially at an impressive 200,000 tonnes, which incorporates 170,000 tonnes of line pipes and 30,000 tonnes of structural tubular pipes. While the majority of its line pipe production is aimed at oil & gas applications, GPC also has the capacity to manufacture products for the water sector; the petrochemical industry, and the drilling sector, and primarily supplies its structural pipes to offshore platforms.

Sweet and sour

Underpinned by a commitment to supply superior quality products in compliance with its customers' specifications and requirements, GPC has continued to make rapid progress in the two years since last speaking to Euroasia Industry. In addition to ramping up its operations

to full capacity and implementing a new two-shift system, the company has also moved to enhance its competitiveness by filling a visible gap within the local Saudi Arabian market for high-end industrial pipe products and value-added services. "We have implemented a series of important changes over the last two years," begins Mr Ahmed Al Khonaini. "As well as increasing our production capacity, we have also been working on a strategic level to move away from the production of more low-end, commodity pipe products – an area where we see high competition from producers throughout China and India – to focus instead on highly specialised products that are primarily used in the transfer of sour service materials."

Characterised by high levels of carbon dioxide (CO₂) and hydrogen sulphide (H₂S), sour gas reserves were historically left underdeveloped throughout the Middle East due to the technical challenges and high cost associated with their extraction and processing. Yet, in the wake of recent technical advances, sour gas reserves are increasingly being revisited as potential supply sources in areas with high demand for natural gas. Indeed, as Mr Khonaini reports, the Middle East region is particularly interested in tapping the potential of these challenging unconventional gas reserves: "A few years ago, demand for pipelines capable of transferring sour materials was limited within the Middle East. This is now changing, however, particularly within areas such as Abu Dhabi, Kuwait and Saudi Arabia where the trend is very much going in the direction of sour materials which require the use of more resilient pipeline networks.

"Overall, this has provided GPC with an opportunity to diversify from its traditional line pipe business, and begin producing high-end products manufactured from specialised steel, which is currently imported from Japan and Europe. The main challenge with sour service material is that it cannot be transferred using normal steel pipes, and developing pipeline infrastructure with sufficient resistance requires a different approach to both steel production and pipe manufacturing – especially with regard to the welding process. Indeed, only a limited number of steel mills are capable of producing the raw materials from which these pipes are manufactured, and steel suppliers are required to gain approval from Saudi Aramco before they can deliver those products to the local

market. It is a similar situation for pipe manufacturers, and Saudi Aramco provides producers with the opportunity to gain two levels of approval: the first is for non-sour or sweet, which GPC gained in November 2013, while the second is for sour service materials. Saudi Aramco requires manufacturers to produce a certain quantity of non-sour material in-line with Aramco's quality specifications before they are eligible to attain the second level of approval. Making this crucial progression is essentially what we have focused on for the last two years, and we are now finalising the qualification process for sour service material and on track to gain official vendor status from Saudi Aramco within a matter of weeks."

Building new networks

GPC's approval by Saudi Aramco for the supply of sour service material is particularly notable given the fact that GPC represents a comparatively new player within the domestic pipe manufacturing sector. Crucially, it also means the company now occupies an exclusive market position shared by only a limited number of global producers. "Around 12 pipe manufacturers worldwide – including GPC – are currently certified by Saudi Aramco for sour services," confirms Mr Ahmed Al Khonaini. "GPC is therefore in a strong position to meet growing demand for such pipe materials and we continue to regard product diversification as a core part of our development strategy. Indeed, in addition to expanding our range to accommodate sour service materials, we have also embarked on a new venture to supply value-added services to the local market – specifically related to the supply of well casings for OCTG (oil country tubular goods) applications. In 2013, the pipe market situation was significantly different to what we see today – back then, few supply contracts were being awarded. As it was not possible to acquire new projects, we began assessing the possibility of further diversifying our portfolio by supporting Saudi Aramco's upstream development activities through the supply of the well casings used in drilling.

"But while upstream development is very much based around pipes, we realised that to supply the necessary products we would also have to provide the associated connectors enabling these pipes to be linked together to form a drill string: essentially a column that transmits drilling fluid

and torque to the drill bit. These strings have a depth of around 1000 feet and each well contains approximately 40 Joints. Yet, while it was possible for us to manufacture the pipes, the associated connectors represent complex products that are currently manufactured by a small number of highly qualified producers. To overcome this, we qualified and approved vendors and formed a supply agreement whereby GPC manufactures the mother pipe and our partners supply the associated connectors.

"Since 2014, we have been working on the installation of a dedicated welding line using machinery sourced from WELDEC GmbH – part of the EEW Group. The erection, commissioning and testing of this new line is now complete, and we recently concluded an internal qualification process with our selected partners to confirm that GPC is capable of welding these connectors in accordance with our partners' quality specifications. The side survey for this new welding line was held on 02nd of November 2015 by Saudi Aramco's drilling department. We have received positive feedback after the visit and we expect to close the approval process during the first quarter of 2016. Once finalised, this new line will not only open up a significant new market for the business, but will also provide us with a valuable source of revenue that will enable us to endure any disruptions that we experience within our line pipe manufacturing business."

Projects of prestige

Given the sheer scope of its operations and development activities, Saudi Aramco has provided GPC with multiple opportunities to diversify its capabilities to meet the organisation's changing and increasingly complex requirements. Indeed, while GPC remains committed to expanding its presence throughout the wider GCC, the company has also found itself particularly well placed to capitalise upon Aramco's growing demand for its productive and technical abilities, which, in addition to the supply of well casings for upstream development, has also led to a number of new supply agreements as Aramco embarks on a nationwide development of the Kingdom's pipe-line infrastructure.

"While we are working with other NOCs (national oil companies) throughout the GCC, many of those companies require a five-year operating track record, and so ➤





diversifying our customers and growing our presence throughout the region remains an ongoing process,” continues Mr Ahmed Al Khonaini. “Yet, our continuing supply agreement with Saudi Aramco is providing us with clear growth opportunities as well as an excellent point of reference which has been further strengthened following our acquisition of a number of large-scale supply agreements.” The most prominent of those contracts is the Shedgum project: a 150.6km, east-west gas pipeline connecting the Shedgum gas processing plant with the Yanbu export terminal. GPC has been contracted to supply a total of 84,000MT (metric tonnes) of steel pipes made of API 5L Gr. X65 PSL2, with a diameter of 32 inches (812.8mm) and wall thicknesses of 26.79-31.75mm.

More recently, GPS secured a major new supply agreement with Aramco for an extension of Saudi Arabia’s Master Gas System (MGS). Dating back to the 1970s, MGS was initially designed to monetise Saudi Arabia’s gas reserves through the implementation of a country-wide network of pipelines and gas-processing plants. Those facilities have since enabled the Kingdom to produce significant quantities of ethane, which is used as a petrochemical feedstock, and LPG, which is primarily exported, and dry natural gas, which is supplied to the domestic power, desalination and petrochemical industries. Growing domestic demand for natural gas, particularly regarding the delivery of feedstock to petrochemical plants, has driven consistent expansion of the Master Gas System over the years and, as Mr Ahmed Al Khonaini informs: “GPC has been contracted to supply material for a forthcoming expansion of the network, which will involve implementing extensions within the eastern, central and western regions of Saudi Arabia. In total, 500,000MT of steel material is required and, out of this, GPC has been contracted to supply 293,000MT, which is around 60 per cent. The total length of the new pipeline, meanwhile, is around 1,000km and we will supply the necessary materials to complete 550km of the new pipeline network. The project is anticipated to begin between April 2016 and will keep us busy for around 12 to 14 months.”

Prosperity in the pipeline

Given the sheer scale of GPC’s current workload, the company certainly has good reason to look towards the future with



a sense of optimism and, as Mr Khonaini informs, the management team is currently assessing the possibility of further expansions to cope with the growing level of demand from the Saudi Arabian market. “Having a full order book for the next two years is a very good position to be in, particularly when you consider the current global economic climate. If we look at other pipe producers worldwide, the situation is profoundly different.

“The company is certainly well placed within the local market and has secured a solid reputation in a remarkably short period of time. If we take the Shedgum project, for example, there was a great deal of surprise when it was awarded to a new mill like GPC, but the challenge now is to prove that we can successfully manage an order of this scale and make it a success. Of course, we then have to meet our obligations for the Master Gas System project but, overall, GPC has proven itself as a reliable partner that is capable of taking on these kinds of large-scale developments.”

As GPC looks to the future, the company will continue to reinforce its reputation for quality and reliability, says Khonaini, and will also focus on diversifying its range from low-end to high-end industrial pipe products, in addition to providing value-added services. “This is at the core of our development strategy – and clearly reflected by our new approval for sour service material and our new ventures into sour service materials and supply of well casings to Saudi Aramco,” he emphasises. “Even though the market remains volatile and the sustainability of long-term demand is difficult to predict, these investments give us confidence for the future and, once we have built upon our successes here in Saudi Arabia, we will be in a position to target new opportunities throughout the wider GCC and go international,” he concludes. □