

Panam Engineers Ltd emerges as a technology leader

THE OIL PRICE MAY BE LOW, BUT PANAM ENGINEERS LTD, A MANUFACTURER AND SUPPLIER OF INSTRUMENTATION PRODUCTS AS WELL AS GATE, GLOBE, AND DOUBLE BLOCK AND BLEED VALVES TO THE OIL AND GAS SEGMENT, HAS SEEN A STRONG UPTAKE IN ORDERS. "AS A NEW ENTRANT IN THE VALVE SEGMENT, PANAM ENGINEERS LTD TOO FEELS THE PRESSURE. BUT A GOOD BLEND OF TECHNOLOGY, INFRASTRUCTURE, PRODUCTS AND EXPERTISE IS HELPING US TO COMPETE AGAINST ESTABLISHED PLAYERS," A MODEST MR. JAGDISH PRAJAPATI, CEO OF PANAM ENGINEERS LTD TELLS VALVE WORLD INDIA.

By Sonal Desai



An ISO 9001-2008 company, Mumbai-based Panam Engineers Ltd was established in 1998 as a manufacturing unit producing stainless steel fittings for instrumentation. Since then, the company has rapidly developed its product portfolio to emerge as a global manufacturer and supplier of products such as instrumentation and industrial valves to discerning customers in the oil and gas market. Says Mr. Prajapati, "We started out as a manufacturing company to supply instrumentation fittings to the export market. We soon identified instrumentation valves as a critical segment to move into and that decision has paid dividends for us, as has our insistence on making quality our top priority. As you know, valve supply in many areas is price driven, especially with the current dip in the oil and gas market. For this reason many

second to none. In fact, the new built plant in Prantij boasts the only state-of-the-art infrastructure and testing facility currently to be found in India. Across both units, Panam has more than 70 high-precision CNC machines, eight high-precision VMC machines, 40 high-precision manual lathes and an in-house forging facility. Having such equipment brings definite benefits, claims Mr. Prajapati. "Important to note is that we can perform almost 100% of all process operations in-house using CNC machines, not manual lathes. This means that our components, and hence our valves, are more accurate, very precise and totally consistent in quality." And, in another first of its kind, Panam has designed and manufactured high-pressure fittings, valves and pressure reducing stations for warships manufactured for the Indian Navy by Mazgaon Dock Limited.

The steady stream of new valves emerging from the design team is underpinning Panam's success, states Mr. Prajapati. "We want our growth to be gradual but robust. To achieve this, we are constantly studying trends and opportunities in the segments we are present in, and the new verticals that we want to target. The new products will help us push our brand further into local and international markets and into our target verticals where these valves are in great demand."

Products are assembled and tested as per all applicable or customer-specific standards. Panam's strict approach to final testing, stage wise inspection and third party inspections has helped in delivering quality products to a large extent. Additionally, the installation of two laser marking machines enables the company to trace products by marking the heat number of each and every component. These help Panam to meet the production pace and for marking on smaller components. This robust manufacturing arrangement is another unique selling point that appeals to customers.



Panam performs almost 100% of all process operations in-house on CNC machines to ensure constant top quality.

valve manufacturers and suppliers of high end products have lowered prices in order to remain competitive. However, end user companies with critical applications continue to insist on purchasing high quality, technology based products. That is why we are not going to enter the price-driven segment but will continue to focus on critical applications. We will never compromise the high quality of our products."

Citing examples he says: "our customers include large organizations such as ONGC, ISRO, Bhavini, NTPC and so on who remain committed to quality and technology. They recognise that even a failure in a small product such as a connector could result in millions of dollars in losses. They are therefore less concerned with cost prices and certainly wouldn't consider the risk associated with cheaper alternatives."

Aligning business and technology

Panam's manufacturing facilities at Rabale in Maharashtra and Prantij in Gujarat are

Another advantage in having two production locations is that Panam is able to offer very short delivery times. Explaining the benefits of this arrangement Mr. Prajapati states: "our reputation for fast manufacturing is not just restricted to standard valves either, but applies equally to customized items. It definitely helps that we have fast access to raw materials directly from mills. In all, our manufacturing and turn-around-time is reduced by almost 50 percent."

Mr. Prajapati also points to Panam's research and design team which, he says, is an important factor behind new product designs, enhancements and upgrades. "For each and every component we have a freeze design which is proven and type-tested. Thus far we have more than 75,000 designs in our databank. Smaller changes in design are incorporated in the databank after customer approvals. In such instances, of course, the timelines can be longer depending upon the complexity of the design and product but even so our delivery times are very, very sharp indeed."

Pushing boundaries

Research and development is another of Panam's trump cards. Indeed, every single detail is important to the R&D team, who know full well that even little tweaks to existing products can boost user-friendliness and/or open up different areas of application. This approach has helped Panam develop a wide range of instrumentation tube fittings (1/16" to 2"), pipe fittings, high pressure pipe fittings ranging up to 10,000 psi and 15,000 psi (1/8" to 2"), instrumentation valves such as ball, plug, needle and check (1/4" to 2"), relief valves, (1/4" and 1/2"), gauge root valves (1/4", 1/2" and 3/4"), 2-3- 5 valve manifolds and regulators.

"We manufacture these products in stainless steel grade 316, duplex, super duplex and exotic materials like Inconel, Monel, and Hastelloy, etc. Now, conceding to the demand for bigger valves by large enterprise customers coupled with our vision to tap into new verticals such as pharmaceuticals, water, desalination and sewage treatment and renewable energy, we are developing more new products and also upgrading existing ones," states Mr. Prajapati.

Sales Channels

"We have our own offices in the USA, Canada, and Russia. Moreover, we work with more than 100 distributors globally, including 60 in the UK. All these distributors have a solid local footing; they understand their customers' processes and our products and will contact us if and when technical support is required. Our promise is to revert within 24 hours. This is our key—that together we can respond promptly to each and every customer inquiry," says Mr. Prajapati. In the domestic Indian market, Panam serves customers via distribution as well as through direct sales. "Whilst our extensive distribution network caters to the smaller segment, when it comes to projects we normally deal direct with the customer. Our expertise can be an important differentiator, so our marketing and technical teams often accompany the pre-sales team to properly inform customers about to how our solutions can solve their challenges," Mr. Prajapati tells us, adding, "both the MRO as well as the project market segments have their own ups and downs. Our products are intended for applications where high pressure, high temperature and high precision are required."



Thanks to the efforts of the R&D team, amongst others, Panam has developed a wide range of instrumentation tube fittings.



This approach has helped Panam to grow a customer base in more than forty countries world-wide. Clients include EPCs, distributors and consultants in markets such as oil and gas exploration, oil refineries and petrochemicals, process instrumentation, power generation, CNG/PNG and natural gas, marine, ship building and the railways, as well as the metallurgical, mining and fertilizer sectors. Without doubt, Panam has sold products to leading companies and served many of the headline projects in and around India. Asked for a particular highlight, Mr. Prajapati immediately starts to talk about ONGC's Sagar Samrat development. "Concluding the deal was no mean feat," he says. "ONGC is a government company and one of the biggest organizations in India when it comes to oil and gas production. Getting on the approved vendor list is one thing, actually winning an order is quite another as there is stiff competition. Moreover, completing one project is no guarantee that entry will be any easier next time. For each new project you could be working with different people who are unaware of your products. Winning orders takes persistence, but we have been able to demonstrate that we are at a par with established vendors in terms of both quality and price. And our determination to succeed has paid off, with a very nice order indeed!"

Quality is a continuous activity

Panam regularly applies for, and receives, approvals and certifications of national and international importance. No wonder the company appears on the approved list of vendors for many reputable companies such as Engineers India Ltd, MECON Ltd, ONGC –



Gate, globe, and double block and bleed valves are just some of the items Panam manufactures for the oil and gas segment.

Offshore, PDIL, ICF-Chennai, Bharat Heavy Electrical Ltd- All Units, Gujarat Gas, DRDL, Bhagyanagar Gas, UHDE India, Fichtner and IFFCO, in India. Globally, it is on the approval list of PDO LLC-Oman, SABIC, SAIPEM Italy, Syrian Gas, NIGC-Iran, ICOFC-Iran, PERTAMINA-Indonesia, ADCO, ADNOC, TAKREER, ADWEA, NPCC and ZADCO in Abu Dhabi.

Coupled with its best-in-class infrastructure and technology, the company has also given shape to its quality policy, which is an integral part of Panam's corporate culture. Test programs conducted in-house comprise pneumatic proof, elevated temperature, hydrostatic proof, flex fatigue, hydrostatic burst, helium leak, impulse, vacuum,

faster as compared to exotic material, though exotic comes at a price, Still endusers are now looking forward to use exotic, This will reduce the shutdown down time required for maintenance i.e. replacing of corroded fittings and valves made of SS316. In View to above, Panam has already geared up its move towards manufacturing of fittings and Valves from Exotic material and is taking every possible step to achieve it." In sync with customer expectations Panam has already started investing in good quality raw material. Mr. Prajapati says: "we are now moving towards the higher end and are regularly manufacturing in so-called exotic materials. Exotics are notoriously hard and therefore it is important to have appropriate know-how plus the right machinery in place to deliver quality products at attractive prices." Bringing the interview to a close, Mr. Prajapati stresses that Panam is committed to excellence in both manufacturing and engineering.

“ We have demonstrated that Panam is at a par with established vendors in terms of both quality and price ”

repeated assembly, vibration, pull out, radiation and rotary flex tests. Mr. Prajapati explains, "All tests are designed to eliminate any leakage or safety hazards in the fluids and gas systems, and are conducted on our SCADA-based in-house test bench. The test sizes for fittings are determined as per ISO QA Manual and as per random SPC / SQC procedures. Valves are 100 percent tested for leakage across seats and seal prior to delivery. Panam also references the sampling program as per standards described in the QA manual, as well as the latest edition of MSS-SP-99."

Going forward

Towards the end of our interview Mr. Prajapati shares some of his expectations about future trends and how Panam will respond. He believes that customers will lean toward patent technology and high quality raw materials.

"Technology is definitely the first parameter because if you have technology driven products, they will provide you with an edge over competitors," he reveals. "End users are moving away from SS316 and have opted to use exotic material specially in Offshore. The saline environment corrodes stainless steel

"At Panam we are determined to push ahead with our investments in technology and machinery. Not simply because we want to lead the market, but because we believe this is the best way to develop innovative, robust products that will meet and exceed our customer's expectations," Mr. Prajapati concludes.



Panam's strict approach to final testing, stage wise inspection and third party inspections ensures the delivery of quality products.



Mr. Jagdish Prajapati