Valves of Norway thrive on the unusual

Photo: Øyvind Hagen / Statoil

Valves of Norway, Norske Ventiler AS, are a valve design and manufacturing company situated near Bergen on the north west coast of Norway. The company supplies a range of high quality valves which they deliver to the petrochemical industry, oil production companies both on and offshore, oil refineries and gas storage facilities all over the world. Not content to be a 'run of the mill' supplier of standard valves to this huge area of industry, Valves of Norway specializes in manufacturing tailor made valves to customers' specifications often made from exotic materials, offering short delivery times for all orders.
Valve World went to Bergen to visit Valves of Norway and spoke with Managing Director, Mr Kjell-Rune Brunborg to find out more about this niche business.

By Christian Borrmann and Gillian Kersley

"The company Valves of Norway was launched back in 1987 by two local engineers who began offering a valve repair service to the North Sea oil and gas industry", Mr Brunborg tells us. "This developed into a design, drawing, production and construction business which has evolved into a specialist company and today, we cover the whole range of process valves for the oil and gas industry worldwide". The company is ISO 9001 – 2008 approved and holds a PED, module H, certificate. "Our company is known in the market as a specialist in exotic materials," continues Mr Brunborg; "A lot of the specifications from the oil and gas industry include metals and alloys such as titanium, Inconel, Hastelloy, duplex and super-duplex, all of which are defined as exotic materials. We have achieved a high level of competence to handle titanium and in this area, we know we are not unbeatable but our performance justifies our price". He goes on to explain that the company took a conscious decision to steer away from the production of standard valves, and instead to concentrate on producing a smaller volume of specialist and tailor made valves and at the same time to ensure high quality and short delivery times.

A different direction

Mr Brunborg explains that the reason for choosing to go in this direction was influenced by various factors. As applications and environments become more aggressive and more challenging, the demand for non standard specifications and exotic materials will increase. The location in Norway means that the company is perfectly positioned for the North Sea basin. Norway is a high cost country – another reason for steering away from standard valve production since it is difficult to compete with other countries for this area of production. This was important in making the choice to become a niche company and focus on the high quality market segment. Their clients know they are different to a conventional manufacturer and know where to come for that unusual or special valve in a hurry. Valves are only produced to order and not made for stockists to put on their shelves. The average order is between five and ten valves which could be made up of different valves and / or different materials. "If someone needs a valve with a flange on one side and a screw connection the other, instead of two flanges, then they can come to us," says Mr Brunborg. "Our production is such that we machine everything – we don't use castings. This gives us a greater flexibility to produce exactly what our customer requires and can, if needed, deliver a couple of valves within a couple of days. He tells us that delivery of a larger order is normally made within four to six weeks and says that they are able to achieve this because the raw material availability in the area is good. The west coast of Norway is where most of the the oil and gas business for the North sea Basin is concentrated so a lot of the steel makers and steel companies have storage facilities in both Stavanger and Bergen. This means that it only takes 24 hours to get most materials, including titanium and Inconel. The company's experience in the North sea area has also given them a great advantage and being able to deliver goods according to NORSOK and other strict specifications is respected globally.
Mr Brunborg goes on to say that: "We produce all our valves from forged bar and, because machining is flexible, this enables us to have at least ten orders ongoing at the same time. Everything is done in-house so there is no waiting around for external companies. We can keep total control of the whole process from both quality and timing points of view. We are also lucky enough to have a high level of competence in our staff and specialists and we are very proud of that. We do produce carbon valves as well, for those customers who have ordered some non standard valves and who also need carbon valves in a hurry. The price may be high for these compared to a conventional manufacturer but the customer is assured the quality, short delivery time, correct documentation and professional handling of the whole order in one place, saving the cost of following up several suppliers."
Mr Brunborg says that the feedback they receive from oil companies about Valves of Norway products is the high quality and the delivery time. Last year, the company received its largest order ever for the Valhall field in the North Sea (BP). The order was for approximately 350 different valves, most of them double block and bleed valves(combination valves). This type of valve normally consists of two ball valves with a needle bleed in between. In this case the requirement was changed under way and the new specification called for the bleed valve to be a ball typ. This meant the valve had to be redesigned, but we managed to still deliver within the previously agreed lead time.

Mr Kjell-Rune Brunborg standing outside the factory which conveniently located on an island in the North Sea.

Paperwork is important

One thing that Valves of Norway prides itself on is the documentation issued with orders. "This is truly a challenge for producers," says Mr Brunborg. "Here, this is something we take very seriously indeed and have made it our business to be the best in this aspect. Our customers know and potential customers should be aware that when they receive goods from us they will also receive the required documentation package. For us, this is very important, and we employ dedicated people whose job is specifically to deal with documentation. I had a customer call me from the USA late in the evening, with an inquiry from Canada. They want to order from us, despite our price being a little higher; because the documentation had to be right/on time and their normal supplier just could not guarantee this. Having said our price is higher, however," he continues, "it does include the documentation package. We have had people come to us just for answers to queries on documentation issued by other suppliers. In this case the customer has paid a cheaper price for valves but had to

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pay extra for the documentation to be sorted out. Sometimes a customer will not even ask the cost to begin with. The main concern is that we can deliver to a tough specification and still keep a short delivery time, with a perfect document package.
For a bulk order of standard valves, the first concern is the price since this is where money can be saved"
After sales service is also important to Valves of Norway. Every client receives a drawing with their valve order and on the drawing is a recommended list of spare parts that can be supplied if required, including those for small valves from 0.5 inches to 6 inches, although as a general rule, under 1 inch, the whole valve tends to be replaced.

Target markets

"We divide the market into new projects and maintenance," Mr Brunborg explains. "We work mainly in the maintenance market. Normally new projects have a lead time of three to four years so there is plenty of time for planning, engineering, procurement and construction. But when it comes to maintenance and something has to be changed, it's usually needed immediately and, for non-standard valves that cannot be bought off the shelf, that's where we come in. Very often we receive a specification for a standard valve with a list of particular requirements to make it into a tailor made item. We will prepare a drawing of our proposed design for the customer's approval, price it and give a delivery time, then set about making it. We do keep a few stock items such as hardfaced interiors and standard components to keep the delivery time as short as possible."
Mr Brunborg tells us that the company pressure tests all valves. Plus, because they are PED approved, they also carry out testing for other, local valve traders when requested, for instance, a re-test on an item that has sat on a shelf for two years so that an up to date pressure test certificate can be issued.
Being close to the North Sea basin does mean that Valves of Norway focuses heavily on this sector. They have, however, over the last five years, developed export of valves to the USA, Canada, the Middle East, the UK, Denmark and Brazil. More recently they have received an order from Australia which they hope will open up more potential as titanium is used extensively in the mining industry there. Mr Brunborg sees Australia as a good prospect because of the company's experience in titanium.
What about China? "So far we do not have any business in China," Mr Brunborg confirms. "I don't feel that we have the resources to cover this right now, but I wouldn't rule it out in a few years' time".
In the USA Valves of Norway work with a distributor, but elsewhere, clients come to them directly. "The engineering side of the oil and gas industry is a very small world and engineers move from company to company and talk to each other or work with each other on different projects", Mr Brunborg confides. "This means that business comes our way through word of mouth recommendation which really is the best kind. To carry that through it's also why I believe it's so important to build relationships with customers and why I do a lot of traveling to meet clients. If I get to know them, they know that if they have any issues or problems at all, they can pick up the phone and talk to me. Through relationships you receive enquiries, without which you cannot even compete, even though you cannot win them all!"

What of the future?

Mr Brunborg tells us that they opened a subsea department in Drammen two years ago, where they employ two experts in subsea valves. Between them they have designed and developed a range of subsea products. The qualification for subsea is strict and items are tested for up to 1,200 cycles break open under full pressure before qualification can be approved.
Testing must be witnessed by a third party such as DNV, Norske Veritas or Lloyd's. But as Mr Brunborg says, "We believe that this is an area we must move into. Today, there are still a lot of topside valves connected with an oil platform. Even now, things are changing and going to depths of 1,000 metres is becoming more common. In ten or twenty years, the main topside valves will still be needed but it's likely that there will be a different kind of oil platform – below the sea and unmanned. There will be a need for valves with higher pressures, 10,000 psi to 15,000 psi and maybe higher still. I think maybe 50% topside valves and 50% subsea. If we don't get on the train now it will leave the station without us."
On a final note, one more thing that Mr Brunborg points out is that being Norwegian is an advantage from another aspect entirely. "Our international customers tell us that the Scandinavian knowledge of conditions in harsh environments is of great benefit as we can fully appreciate areas prone to the same climate of ice, snow, storms and low temperatures, such as Newfoundland. Lastly," he concludes, "the Scandinavian culture of trust is very important. We deal in facts and, when we say something, then that's what we mean. Our message to our clients is: You can trust us."

Valves of Norway's headquarter in Bergen.

Where the magic happens – This is inside the facilities of Valves of Norway

In short: Valves of Norway

Valves of Norway design and manufacture standard and tailor made quality valves from a wide range of materials including special alloys. They are a flexible and customer-oriented supplier of high quality valves with short delivery times. Valves of Norway/Norske Ventiler AS was founded in 1987 by engineers experienced from the North Sea oil sector. It started with maintenance and repairs on valves but quickly developed to a valve manufacturer. Their location enables them to develop their own designs in close cooperation to demanding customers and challenging environments at their doorstep. The company's subsea office is in Drammen, which means that Valves of Norway is located in two of the most important subsea clusters globally.