Teuling Staal optimises the supply chain

For many in the Netherlands and surrounding countries duplex stainless steels and Teuling Staal are synonymous. Through the years the company has achieved a leading role in the supply chain of duplex stainless steels to projects thanks to its excellent project handling facilities. Moreover, Teuling Staal has built itself a truly international reputation as a number one supplier of that vital piece of equipment found nowhere else, thanks to its extensive stock. Stainless Steel World updated its knowledge on this stockist and the ever-changing relationships between supplier and customer in the stainless steel market and talked to founder and Managing Director Mr Pieter Teuling and Project Manager Mr Johan de Ruijter at Teuling Staal’s offices in Barendrecht, the Netherlands.

By Miel Bingen

Founded in 1977 Teuling Staal has built a name for itself as a reliable and efficient partner to its customers. One of the major keys to its success is without doubt the excellent and extensive stock of duplex material the company carries. Mr Teuling: “When we started with duplex stainless steels many years ago the material was a true exotic. There were virtually no dedicated suppliers who could provide know-how on the material or who carried a reasonable stock of duplex pipes and complementary products. At the same time, however, there was a market that was in desperate need of the material. Conditions in the North Sea are harsh, and duplex stainless steel solved many of the on- and off-shore problems of operators in the oil & gas industry in the region. In addition, there was a healthy interest in duplex on the part of both the chemical and the petrochemical industries. So we decided to build an extensive product portfolio in a very short period of time to serve these markets. At that time I was totally convinced that many others would jump in on short notice and duplex would be a commodity in no time. But this clearly has not happened and although duplex stainless steel is definitely more common than ever the material is still quite far away from being a commodity. Therefore there is still a clear need for a dedicated stockist of duplex material such as Teuling Staal.” “Teuling Staal continues to be one of the leading stockists of duplex stainless steel in the world today,” Mr de Ruijter continues. “We can offer the market seamless pipe from 0.5 u/i 16 inch, longitudinally welded pipe from 6 u/i 20 inch, a complete range of flanges, fittings and complementary forged bar straight from our stock delivered in a matter of hours or days world-wide. Besides the duplex stock there is a limited stock in standard stainless steels (304/316) and super duplex. Other materials in our program are materials such as nickel based alloys, 904L and 6Mo.

PROJECT BUSINESS

From the very earliest days of its existence, one of Teuling Staal’s specialities has been its outstanding ability to handle pipeline projects, offshore production platform and onshore plant packages. Especially when it comes to on- and off-shore pipelines in all kinds of sizes and forms, whether seamless, welded or clad complete with external coating and/or isolation, Teuling Staal can look back on a wealth of experience. “Teuling Staal is one of few firms in our business that has a dedicated project-handling department with an integrated engineering and inspection section. We are able to support our customers with custom made flange and fitting design complete with strength calculations. All incoming certificates and related materials documents (quality plans, welding procedures and qualifications) are checked upon receipt against client requirements and Teuling Staal internal standards before these are integrated in our computer system. All these documents can be supplied...
upon demand and project data books can be supplied digitized on CD-rom. In addition our automation and communication systems are fully capable of dealing with all requirements of our main customers such as the major oil & gas operators,” Mr de Ruijter remarks. Recently Teuling Staal completed major projects for duplex stainless steel on- and off-shore pipelines, platforms and plants, however, with the slowdown of the world economy, the project business has been somewhat quiet recently, Mr Teuling explains. “In contrast to the rest of our business, most of our project business is focussed on the Netherlands. The oil & gas industry has been a particularly important source of projects for us in the past but it should not come as a surprise that investments in new projects have slowed down for the time being. One issue that plays an additional role next to the current economic situation is the strategy of oil & gas companies and the Dutch government concerning how the smaller fields in the North Sea can be developed at acceptable cost. Nonetheless there is a constant flow of projects for our project department to handle. Furthermore we expect the project business to pick up on short notice as many companies have delayed projects that should have been initiated some time ago and they can not afford to keep on hold any longer.”

**AUTOMATION**

Getting back to the topic of automation and information technology Teuling Staal’s management emphasises that this particular topic has their full attention. Today the system is of course capable of generating state-of-the-art management information, support project handling and price calculation, and of communicating with customers’ purchasing systems such as Trade Ranger. At short notice potential and regular customers of the company can access Teuling Staal’s comput-
er system to assess vital information. “We want to support our customer wherever they are. Even if somebody is in the middle of the desert or on an offshore platform and he needs particular information he will be able to access that information at the click of a mouse 24-7,” Mr de Ruijter says. Another new online development with which Teuling Staal wants to increase its service level to customers is a web-based shop. Though still in its test phase the system is promising and well received by those that have been able to test it. The system offers the opportunity to generate proposals and place orders online, and Mr Teuling sees quite some potential for the system. “Technically it is an advanced system that attempts to give our customers optimal freedom in placing their orders. But the system’s success will stand or fall according to the customer’s acceptance or rejection of the whole concept of an Internet-based shop for advanced materials such as duplex stainless steels. So we are quite excited about what is going to happen when the system becomes fully operational.”

**ONLINE BIDDING**

Looking at trends in the industry, there is one new development that impacts suppliers in our market severely: online bidding. Online bidding is an alternative and innovative way of price determination that has been introduced by major end-user companies to further streamline their procurement process. The fundamental difference between online bidding and the traditional tendering process is that bidders receive real-time feedback on how their bid compares to that of other bidders and have the opportunity to submit an alternative bid. The ultimate goal which is very difficult to achieve according to Mr Teuling is to create a more transparent market as there should be complete clarity as to what terms it is to be supplied before the project is initiated. Online bidding uses a reverse-auction tool to determine the price after issuing an invitation to tender to a pre-qualified group of suppliers. At present there are basically two types of reverse auctions. In the standard format the actual price is used to determine who will win the contract. If factors other than price have to be taken into consideration, as is often the case with technically advanced products such as corrosion-resistant alloys, transformation bidding is often used. In this system non-priced aspects of a bidder’s proposal such as technical know-how, performance history and experience are taken into account by determining transformation factors for the various aspects under consideration. Bidders are given the elements used to determine transformation factors, though not necessarily the algorithms used. Price feedback in both systems can be given by showing the actual or transformed prices offered by the contestants or by giving information on which position a supplier takes in the bidding process relative to other suppliers. In both feedback systems the identity of other bidders is undisclosed. “Online bidding is a major innovation in the end user’s procurement strategy. In one-and-a-half years’ time the concept

**FACTS & FIGURES**

Teuling Staal BV, Barendrecht, the Netherlands is an independent steel trader and specialised stockist for pipe, fittings, flanges, special forgings and bar material mainly in duplex stainless steel. Materials are exported world-wide. Its total stock encompasses over 1000 tonnes of pipe and fittings from 0,5” u/i 20” and flanges in corresponding dimensions in pressure classes from 150 u/i 2500 lbs. Teuling Staal specialises in duplex stainless steel and was the world’s first company to supply longitudinally welded pipe in 1979. Other materials within its program are super duplex, clad, stainless steels, titanium and nickel based alloys. Teuling Staal’s project organisation with an integrated engineering and inspection section has extensive experience. Projects range from complete pipelines with external coating and isolation to plant and platform packages for on- and offshore facilities. Teuling Staal has a staff of 20 people with three warehouse facilities with an overall workfloor of 4500 m².
of online bidding has grown from a novelty to standard practice for some multinational end users. As a supplier we understand the need of our customers to reduce their total cost of the supply chain. However, we feel that not only material costs savings should be considered, but also other very important cost issues such as extra inspections, additional testing, travel costs and other additional costs as well as possible project delays caused by a lack of technical know how of an inexperienced auction winner”, Mr Teuling explains.

“At the same time, though” Mr Teuling continues, “we have run into some quite peculiar situations that indicate there is need for further improvements. For one, we feel that technological expertise and know-how is insufficiently taken into account. It has happened that a customer came to us with a project that showed serious defects on engineering and specifications side. They redesigned the project specifications based on our feedback and expertise. To our surprise the redesigned project was then opened for online bidding. In the end we invested significant time and resources in the project but were dropped because we were unable to match the best price in the bidding process. Even if a transformation factor was used we feel our expertise was significantly undervalued and misused, as without our feedback the project specifications would not have been of acceptable quality. As the system works now it is quite disadvantageous for a reliable supplier to invest time and resources in a project as it is quite unclear what the return will be.”

“In another incident the online bidding system blocked a significant technical innovation we suggested to the customer. Through carefully redesigning a project we were able to reduce the total cost by at least 25 percent compared to the original project proposal. However, our innovation would have made the project no longer suitable for online bidding and in the end the customer decided they wanted to stick to the online bidding system even if it meant that the total cost for the project would be higher. What it comes down to is that the current system lacks the proper instruments to incorporate technical issues which might very well lead to a loss of expertise and less innovation in the industry,” Mr Teuling remarks.

Another issue where there is room for improvement according to Mr Teuling is the conditions on which products have to be supplied. “General Conditions, such as liability, bankguarantees, penalties and ultimate parent company guarantees, are quite a complicated issue in online bidding. While in the past there used to be a discussion of the conditions, nowadays they are set by the customer alone. In many cases these conditions are way beyond what was felt to be acceptable in earlier days. In some cases it even happened that the conditions were altered after the initial sealed bid was issued, just before the online auction. In fact we could not participate in a number of biddings because we felt we could not live up to the general conditions. It happened, that in the pre-auction phase we informed customers that we could not accept their auction terms and general conditions. To our great surprise we could participate in the auction while in fact we should have been excluded for not accepting the original conditions. Therefore it is quite unclear for us if conditions hold for all those participating in the auction or if there are different conditions for different suppliers. This state of affairs definitely does not contribute to creating a transparent market. From our point of view there is quite some work to be done to further improve the transparency of the whole online bidding system and make it a true next step in optimising the supply chain”. Mr Teuling concludes: “Still, we at Teuling Staal see the advantages of online bidding for the multinationals at short notice and understands it is a new way of streamlining procurement. Whether, in the end the system will be successful, will come down to the ability of the purchasing companies to define fair and correct rules, select reliable participants to the auctions, as well as the acceptance and participation of quality manufacturers and specialized stockists and companies, so that they do not end up with a suppliers base consists of regular no know-how auction winners, which in the end causes far higher total chain of supply costs of the project”.

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