Hydro testing machine for U tube

Huaxia Industry: a special metal expert, meeting client needs with professional verve

Founded in 1985, Huaxia started out manufacturing and trading stainless steel, titanium, duplex/super duplex, and other non-ferrous metals in the form of plates, tubes, wire and bars. Twenty-six years later, the original tiny workshop on the southeast coast of China has grown to become a large, special metal company with four production bases spread across the country. With seventeen years' export experience, 70% of all current product sales go abroad. Today's Huaxia Industry Co., Ltd. has become an active pioneer in many famous projects around the world. In addition, the CMS brand is well known in the global marketplace.
Two years after our last interview with the company, Stainless Steel World once again travelled to Huaxia's Shanghai office to talk with Ms. Helen Cao, their Sales and Marketing Manager, about the developments that have been taking place during the intervening period and about the company's future strategy plans.

By HUANG Juan

Although this is the third visit of Stainless Steel World to Huaxia Industry Co., Ltd., we are always impressed by the freshness and vitality of this leading Chinese manufacturer and exporter of titanium, stainless steel, duplex, super duplex and special alloy products.

Developments in product portfolio

With continuous investments being made in quality and product portfolios, the present-day Huaxia offers a more comprehensive range of products, in terms of shape and materials, and these have a greater premium quality.
As one of the major traditional materials produced by Huaxia, titanium is manufactured in a wider range than just the plates, seamless tubes, wires and bars of two years ago. During the intervening period, the company has been following current trends in the Chinese titanium industry to develop rolled products. It has successfully delivered some trial orders to clients, from whom the test results have been very promising.
Titanium welded pipes have been another focus for Huaxia during recent years. Using optimized consecutively formed welding equipment, Huaxia today produces welded pipes with lengths up to twelve meters. In 2010, the company successfully delivered forty tons of titanium welded pipes (6"Sch10S x 12 m) to a US-based Chlorine project.
Aiming to become a one-source supplier

with excellent services for its clients in the chemical, petrochemical and oil & gas industries, Huaxia has further expanded its product categories by developing titanium fittings. “There are many fittings manufacturers in China but none producing titanium fittings. It can therefore be very difficult for end users and EPC contractors to source these materials and they are very much needed in the current marketplace,” explains Ms. Cao. “We have therefore invested in R&D and our production of fittings has been increased since we noticed that there could be a niche market for us here. This year, our titanium fittings have already been used to replace old ones in Mitzubishi Chemicals’ plants in India and Indonesia.”

The quality of titanium sheets used for plate heat exchangers (PHE) and anode plates has significantly improved since 2009 and both of these have now become major products within the company. “Our rich experience and sophisticated know-how in manufacturing these two products have ensured that we have gained a significant competitive advantage, which has led us to getting product approval from some of the world’s leading companies, including Alfa Laval, with whom we have built up a business relationship since early 2007,” says Ms. Helen Cao.

When talking further about the success of Huaxia’s titanium sheets, there is one point that is not only fantastic for Huaxia but also for the whole of the Chinese titanium sheet industry. This is the fact that Huaxia’s titanium sheets have been chosen, this year, to be used in various architectural buildings specially built for the 2012 London Olympic Games. “This is not only the first time that Huaxia’s titanium sheets have been used in architecture, but also the first time that this has happened within the whole of the Chinese titanium sheet industry,” says Ms. Cao proudly. “In China we only have two theaters that have used titanium sheets to date and these were all imported from Japan. Since our successful delivery to the London Olympic Games project, we have already received some inquiries from EPC contractors in the Chinese architectural industry so it seems that it will be only a matter of time before our products will be used in local architecture,” she adds.

Huaxia keeps investing in quality and the future

In connection with their titanium bars, the company has also achieved military and aerospace standards and has been serving clients in these industries during the past two years.

Accounting for 40% of the company’s total export sales, seamless stainless steel tubes and pipes also remain another of Huaxia’s major products. Since 2011, orders for seamless tubes, especially U tubes in both stainless steel and titanium, have increased considerably. There have been orders from Indian petrochemical and chemical end-users with whom the company has solid, long-term business relationships, such as HPCL and Tata Chemical, to name just two. Recently, the company has received an order for stainless steel pipes for a petrochemical project in Brazil. “Our U tube equipment is the best of its kind in China,” explains Ms. Cao. “By using this equipment, we are able to ensure a better premium quality because of the high precision that can be achieved right through the whole product process from bending, stress relieving to radian calibration. This is also one of the reasons why customers trust our products.”

Huaxia, moreover, as a visionary pioneer in the special metals industry, has been producing duplex since 2005 – ever since it became a hot topic on the global market. Ms. Cao recalls: “In 2005 we became the first local indigenous manufacturer of super duplex in China, exporting eighty tons of super duplex pipes to the Middle East.”

Nowadays, Huaxia offers duplex/super duplex seamless pipes in sizes up to 12 inch and it has delivered a considerable number of duplex 31803 U tubes to chemical plants around the world, such as SASOL. “Presently, we are producing duplex 31803 tubes for use in heat exchangers in an aluminum plant in Australia,” adds Ms.Cao.

Future R&D development

Aiming to be a materials solution provider, Huaxia has been focusing on the research and development of new materials. Nickel-based alloys are a current new focus within the company. “Since we are quite familiar with various kinds of materials, we decided to make


ESR furnace for nickel alloy products

good use of our technical advantage to provide our clients with more options and services," explains Ms. Cao.
Technical skills have always been a major focus for Huaxia and the company has recently employed two renowned experts, one with forty years' experience in the field of nickel alloys and another who is an authority on nickel alloys and Monel. Ms. Cao continues "Now we have two top-notch experts leading our R&D team who have considerable knowledge and experience in metallurgy and forging, and who both have a background as a Professor at Shanghai Jiaotong University. One is also the Secretary-General of the Shanghai Forging Association. Besides these employees we also have two pipe and tube experts. They have accumulated much practical experience and will be responsible for product development and for educating our young technician team."
When developing new products, quality has always been the priority. In order to control the quality from the very beginning of the manufacturing process, the company plans to install an ESR furnace to melt nickel and nickel alloy. This is expected to be commissioned in 2012 and, by then, Huaxia will also produce plate, rod, wire, tube and fittings in nickel alloys.
"For our next step with regard to fittings, we plan to systematically develop a fittings product line (titanium and nickel-based alloys)," says Ms. Cao: "Our ultimate goal is to become a composite supplier, providing project and engineering companies with our products and services. In other words, we want to provide both material and engineering solutions. In the preparatory stages, we have negotiated with Ude, Technip and SK. We want to turn our advantage in titanium production to drive other products and services."

Huaxia's young staff has also benefitted from the one of the renowned experts hired by the company

Professionalism

When considering professionalism, there are several important elements securing our success," explains Ms. Cao: "the first is our technical advantage and our interest in technology. Some of the technologies that we use are not yet available to our competitors, especially the detailed knowledge about production processes. This knowledge is all important for the production of quality titanium products. In fact, some of our equipment is old, but for the key process we use good facilities in order to guarantee the technical craft . It is our knowledge that is the winning factor."
Huaxia's corporate culture also reflects its pursuit of professionalism and this has been listed at the top of its corporate culture guidelines. Professionalism stands for doing the job with maximum competence, knowledge, and skills. At Huaxia, half of the sales team has at least a Bachelor Degree in Material Engineering. Ms. Cao explains: "We met an equipment manufacturer who needed a titanium sheet for electric tank. They had been in negotiations with the biggest state owned company in China about the project but had failed to work out an agreement due to the complicated requirements regarding materials and performance. In the end, Huaxia took over the order and delivered a satisfactory product. Since then, we have built up a long-term relationship with the client."
In addition to their advanced technology, Huaxia also pays attention to their services. The services take into account pre-sales, including an in-depth understanding of the client's requirements. This is an important issue especially for titanium products, which are most likely to be used in the most critical applications. Moreover, their clients' requirements and specifications vary greatly from one industry to the another, resulting in a great difference in material needs, specifications and techniques. Looking at the characteristic of titanium products and the market, Huaxia has carried out a measure-for-

Client from Siemens inspecting titanium sheet in Huaxia's workshop]

Titanium structure beam for PTA project

measure strategy to provide customized services that achieve maximum satisfaction. According to Ms. Cao: " We react to all these requirements during our production processes. In other words, we are flexible with our technical resources and endeavor to satisfy our clients' critical requirements for products. Huaxia firmly believes that good quality and services are the only way to obtain a client's long-term appreciation. Their quality services are also reflected in their quick response times to queries, which have become a key factor in their success and are highly prized by clients. Further, in accordance with their guidelines for "Doing all you can to achieve maximum client satisfaction", Huaxia is keen to reduce lead times. This also gives clients a good impression of the company. " Over many years of operation," says Ms. Cao "we have noticed that quite a few engineering companies place small orders with us that are characterized by low profitability but need quick delivery times. We always give these orders just as much priority as any others. That's one reason why we tend to gain favorable comments on orders."

Short-term goals and investment plans

When asked about short-term goals and investment plans, Ms. Cao explains: "We've decided to build Huaxia into a supplier of both material and engineering solutions. Accordingly, a titanium hot rolling mill for coil will be added in 2012. Compared with a hot rolling mill in CS or SS factories which can also be used for rolling titanium, this one will incorporate our own design especially for titanium, so the quality will be much higher. By commissioning these products both our efficiency and the quality of our titanium rolling process will be upgraded."
Actually Huaxia have had this plan in mind since 2008 but it was temporarily postponed because of the world economic recession but now we are ready to go ahead with it. The company also holds the intellectual property rights to this rolling equipment.
Further to new equipment, Huaxia will continue to invest in human resources, especially in experienced technicians and designers. This is done to boost their design capabilities for projects and consequently to realize the long-term objective of providing project solutions. Ms. Cao explains: "The technicians and designers are also expected to enhance our capabilities in equipment manufacturing. We used to work with Sulzer to produce some of the titanium equipment for BP and PTA projects. If we can provide more technical and design supporting, more and more EPC companies will choose Huaxia as their partner.

Vision

"The word 'Huaxia' is the ancient name of China and dates back 5000 years," Ms. Cao informs us: "This name indicates that Huaxia is determined to build itself an enterprise which represents the excellent spirit and corporate image of the Huaxia nation. Every little thing done by Huaxia staff is very meaningful because we have such a great objective. Therefore our staff is encouraged to work with passion and pride."
Huaxia also takes significant care with corporate culture building. The aim to provide each staff member with a goal to develop their potential. In conclusion, Ms. Cao says: " We will strive to build Huaxia into an exceptional special materials base."

Facts and Figures

Company name:	Shanghai Huaxia Industry Co., Ltd.
Material produced:	stainless steel, titanium, duplex/super duplex, nickel-based alloys and other special material
Key applications:	oil & gas, chemical, petrochemical, power generation, shipbuilding, water treatment, aerospace, military installations, industry
Key geographical market:	Europe, US, South Africa, Middle East, Asia