



Huaxia Industry invests in quality and the future

Huaxia Industry Co. Ltd. is fast becoming one of China's leading manufacturers and exporters of titanium, nickel, stainless steel tube, duplex, super duplex and special grade alloys. The company has been actively involved in the international market for over fifteen years, building up a large global network of sales agents, stockists and end users. Two years after our last visit, Stainless Steel World travelled to Huaxia's Shanghai office to learn all about the company's latest achievements from Sales and Marketing Manager Ms. Cao.

By Sjef Roymans and Yuzhong Shen

After Huaxia's founder and Company President, Mr. Lin Jian gained a degree in metallurgy he carried out scientific research into titanium alloys and managed the aerospace department of a trading company. Combining the advantages of academic knowledge and trading experience, Mr. Lin was a pioneer in bringing Chinese titanium products to the international market. Founded in 1985, Huaxia started out by manufacturing and trading titanium, stainless steel and non-ferrous metals in the forms of plate, tube, wire and bar. Twenty-four years later, the tiny plant

on the southeast coast of China has grown to become a large special metals company located in the most dynamic of areas: the Pudong Fengxian district in Shanghai. The number of employees has increased from ten to five hundred, while annual turnover reached USD 60 million in 2008.

The word "Huaxia" is the ancient name for China and dates back 5000 years. Huaxia's logo, CSM, stand for China Special Metal, and was chosen to reflect the company's ambition and goals. "Everyone from the Company President Mr. Lin Jian right through to the rank and file of Huaxia employees is

constantly striving to ensure that the company becomes number one in the field of special metals in China, while the CMS logo shows that we are also aiming for international recognition," Ms. Cao explained.

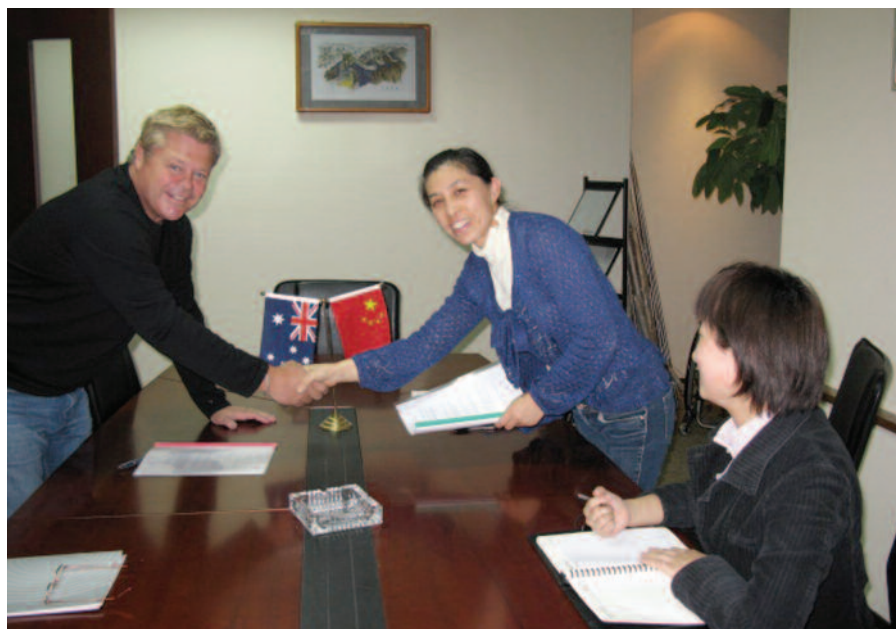
Focus on quality

Although Huaxia produces a broad portfolio of titanium and stainless steel products, quality has always been the company's main focus. "We focus on improving the quality of these types of materials," explains Ms. Cao. "For many western clients, Chinese products have the profile of being low priced and of



Seamless stainless tubes ready to be dispatched to clients.

low quality; our commitment is to change this. We believe our company is able to produce high-quality products, particularly in titanium and stainless steel. China is one of the very few countries that can produce titanium from titanium sponge to final products,



An Australian agreement being signed between Mr. Steve Dillion and Ms. Helen Cao.

and this is our main focus, and in recent years stainless steel technology with regard to smelting and forming has been considerably improved in China."

Throughout its history most of Huaxia's investments and decisions have been aimed at achieving better product quality. In 2003 the company relocated to Shanghai where it purchased the Baosteel No.3 factory. This investment was prudent for a number of reasons, and in particular for the availability of a vacuum-annealing furnace which is essential to produce top-quality titanium. The cold rolling line used in the mill was quickly upgraded with better hydraulic and driving systems to facilitate an increase in both the quality and quantity of output. A few years later Huaxia moved out of this factory and started production of a brand new facility in the Pudong Fengxian district of Shanghai. Again, this decision was made to attain quality improvements.

Huaxia's new plant consists of a state-of-the-art facility covering an area of 72,600 m², including 32,000 m² of workshops. The new plant encompasses production facilities for cold rolled sheets and plates for titanium, stainless steels, nickel alloys and other non-ferrous metals. For sheet and plate products, the plant will include one 1.2-meter hot rolling mill and two 1.2-meter cold rolling mills. By February of 2009 three furnaces will have been installed; one for heating, one for solution annealing and the third for vacuum annealing. The pickling system is also advanced for Chinese standards because it has a recycling system to control environmental pollution. The vacuum-annealing furnace is a key piece of equipment ensuring high-quality products which will enable Huaxia to meet the very strict requirements of the nuclear power and aerospace industries. Over the past two years Huaxia has focused on meeting the high-quality requirements of foreign clients. A key achievement has been the production of sheet for plate heat exchangers, which have strict requirements for both raw material and production technology. Working with a high-quality selection of titanium sponge, Huaxia keeps strict control of the melting process and has improved the technology during the hot rolling and cold rolling processes to improve the chemical properties of the material and secure production quality.

Today Huaxia's main product – titanium CP sheets for plate heat exchangers (PHE) - has been fully approved by many overseas clients. At the same time, in order to supply the very best quality of material to clients, the company's investment in 1700 sticky hot rolling facilities is well on track. At



Testing the microstructure of the metal on the production premises.

the beginning of 2008 Huaxia signed a contract for a newly designed hot rolling machine equipped with the latest German technology and Huaxia's also came up with their own specially designed equipment to produce titanium and stainless steel coiled wire. In order to launch this specialised coil facility, Huaxia's engineers have worked closely with the manufacturer to ensure maximum production quality. "This new facility is currently under construction and will be installed in July 2009. There are only a few titanium coil manufacturers in the world and none in China, so we will be the first Chinese producer of titanium coil. Our next step will be to improve our forging facilities in response to demand from the aerospace industry which mainly requires forged products," explains Ms. Cao.

Markets and applications

With years of marketing and business experience, Huaxia enjoys a solid reputation in the overseas market, particularly in the titanium and stainless steel industries. As the world economic situation keeps changing, Huaxia is also looking for more opportunities in the Chinese domestic market. Working closely with many

Chinese fabricators, the domestic market has become a substantial part of Huaxia's business. "Increasing numbers of local fabricators are becoming familiar with our company and products, and with the developing Chinese economic climate many foreign companies are moving their manufacturing base to China. This has increased demand from within the domestic market and enhanced our position in China because local companies prefer to use our products rather than import material which requires extra VAT and duty. Today domestic sales make up 50% of our total turnover." Ms. Cao explains. Needless to say, exports which make up the remaining 50% are still of great importance for Huaxia, which aims to be a global player in the long term. Of all the overseas markets, Europe is the company's main focus. Ms. Cao explains: "We have many clients in Italy and Germany, where our products are very competitive in terms of quality and price among the suppliers there. Through large stockists and fabricators we have successfully exported titanium and stainless steels to Europe for use in various applications including plate heat exchangers, electric plating and the chemical process industry.

We have further had sales agents in South Africa for nine years, in Korea for ten years, and in Belgium for the past year now. We have, moreover, just signed an agreement with a sales agent in Australia last Christmas and throughout 2009 we will continue to develop this new market. Our agent there has already successfully supplied CSM products to BP, Shell, and QAL. Further, several agents in India have been promoting CSM products there for more than eight years. All these markets can be considered to be developing areas for CSM and we have put a lot of time and effort into becoming well known in these regions. Huaxia will further cooperate and expand business within these distribution channels." She continues: "In Europe we have fewer agents because most European clients prefer to come here and speak directly with us. Many of them have plants or offices in China and we always welcome customers to come and see our production plants." While Huaxia is currently focusing on producing a general range of products, it is also trying to develop products for other specific applications. "Currently heat exchange plates are the main application we're focusing on, and once our new titanium coil facilities are



Checking the surface quality of the titanium target plate.



Cleaning before annealing.



The Belgian agent, Mr. Lode Masquillier, visiting Huaxia marketing ladies.



Huaxia devote much time to ensuring that staff receive a very high level of training.

completed we expect to be the first Chinese supplier to produce titanium welded tubes. A number of nuclear stations will be built in China in the next few years so we expect there will be significant demand for them. In addition to these CP titanium products, our next target will be to develop new products for other applications; for example new alloys for the military and aerospace industries, and we have applied for military certificates to obtain supply approval. Meanwhile an important project has been planned to produce large aircraft in Shanghai, which will also generate demand for titanium. Huaxia is already cooperating with some important universities on the backdrop of this project and this will be an ideal opportunity to enter the aerospace industry."

These new projects will ensure a bright future for Huaxia. "The new hot rolling facility will also benefit the aerospace project, and by the time we complete the new hot rolling machine, trial production will have started for aerospace specifications" Ms. Cao adds.

Targets and expectations

Huaxia's new facility will give it the capacity to produce 5,000 tons of titanium per year (of which 4,500 will

be titanium coil and sheet and 500 of titanium seamless tubes) and 100,000 tons of stainless steel coil and other alloys including duplex and super duplex. Elaborating further on Huaxia's plan for the future, Ms. Cao is confident that the company has the capacity to diversify in terms of both product range and applications, depending on market developments. "All of our projects and plans are progressing well. In June the electro-beam furnace we planned two years ago will be installed, in July the new coil facility will arrive, and by the end of the year trial production will have begun."

Ms. Cao sees 2009 being a year full of challenges and opportunity for Huaxia.

"We expect some market shrinkage and competition will intensify. In order to maintain a good position in the market we will need to reduce production costs and expand in the market, for example by saving more energy and improving production yield. On the other hand China has a large capacity to produce titanium sponge which is our raw material; this will also benefit us as we are the largest buyer in the Chinese market."

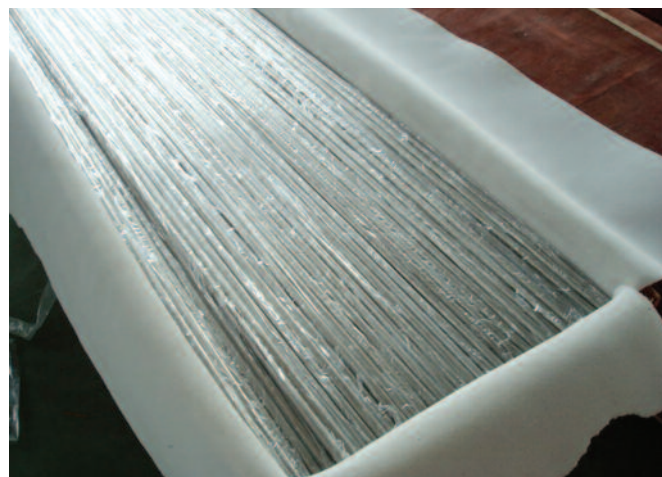
Ms. Cao concludes by again extending a welcome to guests from overseas: "It is our mission to serve our customers better and to provide high-quality products. You are most welcome to witness Huaxia's progress first hand."

Facts & Figures

Name:	Shanghai Huaxia Industry Co., Ltd
Headquarters:	Shanghai, PR China
No. of mills:	4
Total number of employees:	600
Total capacity of production:	5000 tons titanium plate/sheet/coil, 500 tons titanium seamless tube, 6000 tons stainless steel tube/pipe
Product applications:	chemical & petro-chemical, power plant, ship building, offshore, oil & gas, water treatment, etc.
Main material produced:	titanium & alloys, stainless steel, duplex, super duplex, nickel & alloys, copper & alloys
Key market areas:	Europe, US, South Africa, Asia, Brazil



Stainless steel pipes.



Titanium seamless tubes packed in boxes and almost ready for shipment.