

Service and expertise: the keys to Hempel Special Metals' success



The core business of Hempel Special Metals (HSM) is to develop, procure, process and distribute corrosion and heat resistant high-performance materials and components made from these materials. Its wide range of semi-products in stainless steel, nickel alloys and titanium are used in applications as diverse as medical implants to the chemical process industry. Stainless Steel World talked to Managing Directors Mr. André Hempel and Dr. Markus Holz about the company's vision for the future, how the global special metals market is developing and how HSM is expanding its role itself as a value-added service provider.

By John Butterfield & Joanne McIntyre

Since consolidating all of its brands under one name in 2008, HSM has operated under the Hempel brand at an increasing number of locations around the globe.

"Our motivation was to have our brand recognized internationally, which is a rare phenomenon in the distribution business," explains Mr. André Hempel, Managing Director. "Our approach to the market is inherently different; we want multinational customers to recognize us no matter where they are operating in the world. The watch making, medical implant, offshore and chemical processing industries recognize us as high-performance materials distribution specialists and know

they can expect the same high quality products and services wherever they may be. Our slogan of 'metals and more' encapsulates our growing role as a service provider willing to go the extra mile for our customers."

Asian hub

Having established one corporate identity for the entire group, HSM also centralized its stock within the company's international network to facilitate efficient distribution. "Many of our customers are multinationals moving into new regions; for instance in the past three years the demand for nickel alloys in Asia has grown tremendously," continues Mr. Hempel. "Last year some

customers from the chemical processing industry revealed that 75% of their business related to stainless steel, titanium or nickel alloys was generated in Asia. With fierce competition in the industry large customers are sourcing fabrication orders internationally, and HSM can bring familiar, trusted materials to any market. Having optimized our logistical operations, our customers can rely on the same standards and quality wherever they may be. Stock held in Hong Kong and destined for the Asian market is from the same origin as the products we carry in Germany. For instance we supply large German and Swiss multinationals in China and India with Alloy 59, a typical German material.



The crew of employees that make up the team of Hempel Special Metal employees in Oberhausen.

As our German and Swiss customers have expanded their operations in China, India and Korea, our Hong Kong centre has become an important special metals distribution hub.”

HSM now has six locations in five countries plus agents in five countries or regions; all working with the same philosophy while incorporating a certain amount of autonomy to develop their own specializations. “Ultimately these are local markets and while we can bring certain universal know-how, we look for local opportunities even if they seem unrelated to our existing activities. One example is the mobile phone industry which has become an interesting market to us Southern China although it was the watch industry which originally attracted us to China.”

The company’s Hong Kong service centre is made up of three employees and a warehouse for stock. “This is where we keep nickel alloys and stainless steel for customers in China, India, Korea and Japan. We’re also investing in a plasma cutting machine for the Hong Kong facility

to cut the nickel alloy plates according to customer request,” says Mr. Hempel. In mainland China HSM is planning to open a representative office in Shanghai in order to promote HSM products and services directly.

Value-added approach

Dr. Markus Holz joined the German office as Managing Director in January 2010 to both manage the German operations and further develop the titanium market. “The European titanium industry has undergone a significant change in the past year following the merger of ThyssenKrupp VDM and ThyssenKrupp Titanium, presenting opportunities for us,” explains Dr. Holz. “Our Oberhausen facility has traditionally served the chemical, de-coking and construction markets and while the European economy in these areas is still sluggish there are chances for growth in other areas like the LNG, regenerative energy and pharmaceutical markets. As we investigate what special materials these sectors require we will grow with certain customers.”

HSM has developed a three-pronged approach to penetrating new markets globally. “Firstly, we will increase our presence outside of Germany; from Oberhausen we are guiding agents in Scandinavia, France, Italy and will soon expand into other countries. We also plan to expand our centers of competence serving the chemical and construction market and some specialist applications,” continues Dr. Holz.

“Secondly we will identify new markets to introduce products which may initially

seem costly but are actually less expensive in the long run due to improved corrosion resistance. The third area for growth is the project business; today we can offer our customers a complete package including a semi-finished product which is not only cut but also has additional features such as screws or welded/forged pieces, and it will be shipped for just-in-time delivery. The advantage is that it’s less work for the customer and they have the benefit of utilizing more specialist materials.”

“To meet these three goals we have enlarged our capacity at Oberhausen to optimally store flat products to serve customers with precisely timed delivery. Customers are demanding more ready-to-use products; they want precisely cut materials which don’t need reworking and, which minimizes the expensive scrap in high-performance materials. To meet this demand we’ve invested in the latest water cutting technology; a fully computerized 3-D 6,000 bar water jet device which works at high speed and produces a superb surface finish after cutting. The customer is able to use the product immediately with no reworking or reshaping.”

“Of course the most important factor in a service driven business is people, and we’ve invested in new employees for this project team, some with engineering capabilities and an extensive knowledge of the market. Our customers are being served better with a professional sales force and consultants who bring additional benefits to their business. Our team is experienced in R&D and qualified to give advice and consultancy for corrosion



Left, Dr. Markus Holz and right, Mr. André Hempel posing for a shot during a break in the interview.



An overview of the new waterjet cutter at the Oberhausen plant.

problems, another value added benefit for customers.”

“Tailor made products are a win-win situation,” says Dr. Holz. “We produce a higher value added product, while the customer profits extensively from our experience. We’ve had instances where we’ve advised customers to optimize the mix of material in certain areas to reduce cost. HSM’s long standing technical experience is an invisible but valuable product which is part of the complete package. Our experienced team can help customers to make a better product to their benefit. We’re actively recruiting new employees with experience in oil and gas, de-coking and chemical processing. This fundamental know-how offers intrinsic benefits for the customer. The economic recession has forced a lot of customers to reduce personnel including experienced staff, leading to a serious loss of knowledge. HSM’s experienced staff can compensate for this loss by supporting customers, acting as substitutes in their supply chain. This strengthens our mutual relationship.”

“We also provide a consultancy service to bring customers together to form new business partnerships, matching producers and end users. For instance a company in Germany may produce very good pipes, tubes and fittings but may not have an international sales network. We can connect them with a customer in India or China looking for a supplier for their maintenance needs.”

Global reach

Two years ago part of HSM’s Swiss service centre was relocated to Sonowiec in Poland. The decoiler is now located in Southern Poland. The coils are sourced

from Europe and Asia, and fixed length sheets are trucked weekly to Switzerland to optimize logistics. The centre was the first stockholder of titanium and nickel alloy coils east of Berlin. “Our Polish centre covers together with our sales representative in Russia the whole of Eastern Europe, focusing on industries ranging from medical implants, to chemical processing, to the rapidly developing energy sector,” says Mr. Hempel. HSM’s Swiss service center has grown strongly the business in the medical implant industry, with core competencies developed there being transferred successfully to other markets. “The medical implant industry has experienced strong global consolidation towards mainly American groups such as Zimmer, Biomet, and Stryker. This has led to increased coordination of purchasing and quality management systems. In Europe the medical industry in Switzerland is very strong. The industry requires special grades and specifications and last year we employed a specialist who has worked in

the medical industry for many years as quality manager.”

To guarantee quality and 100% traceability from melting to surgical implantation, the medical industry is served by less and less suppliers. “Implant manufacturers in this business must integrate the whole supply chain to ensure they are in control of it, and must be able to demonstrate this process to the FDA,” explains Mr. Hempel. “For example, we cut bone plates and are integrated into the quality system of the customer; we measure every part and give them the statistics. This concentration in the medical industry means just a few distributors can access it and they must have very strong relationships with their suppliers and customers. It’s a growing market which demands great precision and quality control. We use the expertise gained from our Swiss operation to gain access to other markets in Europe.”

“Our large customers in this industry have several related production locations around the globe. They work with many subcontractors who have to source their raw materials from approved suppliers, and we are one of them. We’ve also invested in special equipment for this sector such as quality control equipment, a bar marking and turning machine. This equipment allow us to be part of the supply chain and simplify the logistics of our customers. We can test the products and the results are sent to the end customer, for final verification and approval, before we put them into the consignment stock from where they can be called-off internationally by the customers. It’s a fully integrated and quality audited supply chain in which we have a function that is not easy to replace.



The stock is stored meticulously in racks so that components for orders can be found in a moment.



The impressive lasercut machine in Duebendorf.

There are few industries besides the medical industry where this is possible, such as the watch industry or the oil & gas industry.”

HSM has a wire mill in the UK producing wire in a wide range of stainless steel and nickel alloys. The Bradford plant has four lines with a capacity of over 500 tonnes producing profile or shaped wire, largely destined for the oil and gas industry and subjected to rigorous quality controls. The Rotherham plant produces round wire. “Round wire is not such a specialized product, but true to our philosophy we are seeking specialization for this product, for instance by producing spring wire, escomatic wire, and specialist medical wire. In the UK we also have a service centre in

Econox metal exchange

In its expanding role as a value-added service provider, HSM has developed an on-line metal exchange for cut pieces, second choice material, surplus material, and scrap pieces in high-performance materials. Managed by an employee in Switzerland, Equinox matches up buyers and sellers of valuable left-over stock. “Customers may end up with excess stock such as several tons of nickel alloy or titanium,” explains Mr. Hempel. “It’s not always cut pieces; it may be 2 x 6 m plates left over from a project. Through our international network we can help them to find buyers; for instance customers in India will be happy to weld together cut pieces, which would not be a suitable solution in Europe. Equinox is a service we provide for our customers around the globe to make their business practices more efficient.” Visit www.econox.com

Wokingham with a stock of titanium and nickel bars.”

Looking to the future

Dr. Holz predicts some significant changes in the special metals industry, particularly for embattled titanium producers who are still reeling from a double-hit inflicted in the last couple of years. The first was aerospace market crisis. “Titanium producers invested in new capacity in

anticipation of the expected ramp-up of the aerospace industry, but then a crisis developed with orders from the main producers Boeing and Airbus being heavily delayed. Meanwhile they had stockpiled a lot of material and this situation is still ongoing.”

The second factor is the impact of the economic crisis on the chemical process industry, which is now minimizing titanium use due to its cost. “Fortunately there will be some light in the end of the tunnel in 2012, especially in India and China. Desalination will be a growth market and new areas may emerge. With our network we are able to find leads into such niche markets.”

“The key to future success is to be where the fast growing industries and markets are. For example renewable energy is a growing market so we’re investigating where new applications for our products will emerge. It is absolutely necessary that the specialty materials industry works together. In a growing market, the industry has to find new areas of application for the future,” concludes Dr. Holz.

Facts & Figures

Name:	Hempel Special Metals, a division of F.W. Hempel Erze & Metalle, Düsseldorf.
Group companies:	Hempel Special Metals in Germany, Switzerland, UK, Hong Kong, and Poland; Hempel Wire in the UK.
Products:	Stainless steel (304, 316L, etc), special stainless steel (duplex, 1.4529, Alloy 31, etc), nickel alloys (Alloy 825, 625, C276, C4 etc), titanium (TiGr. 1, 2, 5, 7 etc), all from stock.
Key markets:	Medical, leisure goods, architecture, chemical and pharmaceutical, oil & gas, renewable energy.
Agents:	Russia, France, Italy, The Netherlands, Scandinavia
Employees:	110
Turnover:	approx.USD 100 million



Specially bent tubes ready to be shipped off for an order.