

# Hempel Special Metals GmbH: Alloy

News from the old world: a steadily growing material trend is taking its cue from Europe. The stainless steel grade “Alloy 24” is coming back to life and being used in projects from seawater desalination, power plants, and chemical plant construction. This miraculous material is proving to be a true jack-of-all-trades. *Stainless Steel World Americas* wanted to find out more and went to the center of this new material renaissance: Hempel Special Metals GmbH, an internationally renowned sales specialist for high-performance materials based in Germany.

Ingo Stiebe, General Manager, and Markus Sokolowski, Sales Manager and Team Manager Export, talked about the background of the new material trend. They shared what distinguishes Hempel Special Metals from other competitors and why the company from the North Rhine-Westphalian town of Oberhausen is increasingly becoming the focus of attention for North America customers.

*Text and translation by Philipp Isenbart*

The city of Oberhausen is regarded as the “cradle of the Ruhrindustrie” and is located in the western part of Germany with a population of more than 200,000 and commissioned the first Eisenhütte in the Ruhr area, the largest metropolitan area in the country. But this is not enough: in recent times, Oberhausen has once again emerged as the cradle of a new development that could be of similar industrial importance. In the rooms of Hempel Special Metals GmbH a new material trend has come to the forefront, which has now also crossed over to the Atlantic. The talk is of the stainless steel grade Alloy 24—a multi-talented material, which has just awakened from its deep sleep. The material miracle has already achieved international triumph. Therefore, Ingo Stiebe and Markus Sokolowski of Hempel Special Metals GmbH are hardly surprised by the successful return of the austenitic stainless steel. Because it was always clear to them that the material veteran Alloy 24, also known as stainless steel grade 1.4565, is by no means one to be put on the shelf.

## Jack-of-all-trades

Hempel Special Metals is a stockholder and distributor for bars, rods, tubes, pipes plates, sheets, flanges, and fittings in special stainless steel, nickel alloys, titanium, and zirconium in six service centers and eight destinations worldwide. The stocks of the company are located in Germany, Switzerland, Poland, Hong Kong, the United Kingdom and since 2016, Hempel Firmus Metals Ltd. Stiebe is the branch manager of the German office of the “Hempel Special Metals” group. It is likely that no one has ever seen the new triumph of Alloy 24 closer than the General Man-



Markus Sokolowski: “We are working closely with our customers from our office in Germany.”

ager because Hempel Special Metals is the only sales specialist who has the material in stock.

The comeback began with the targeted demand from the customer side: “For a plating project, one of our customers explicitly wanted the stainless steel Alloy 24, because he was very satisfied with it earlier,” Stiebe says. Further inquiries about the material came from the chemical equipment industry, which also led to corresponding deliveries, “An American company also searched for the material and saw that we have it in stock,” tells Stiebe. The customers were amazed and delighted that Alloy 24 was again so easily and quickly available.

## Material renaissance

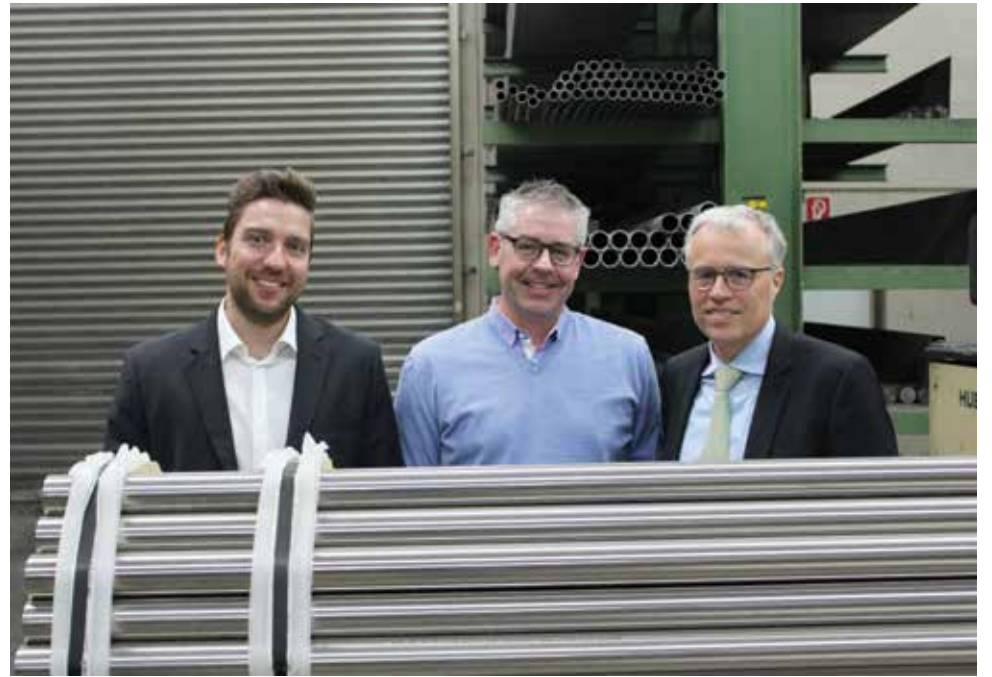
For Sokolowski, the return of Alloy 24 is also obvious, “As a good alternative to the Alloy 31 we recommend to our customers that our exclusive Alloy 24 may be a good alternative. This grade has a better corrosion resistance as well as a better weldability,” the Sales Manager and Team Leader Export explains. “Combined with a more favorable price than for the Alloy 31 it is a good deal for a lot of customers.” The high strength of the material promotes, among other things, the production of very thin walls, which in turn can save weight on the end product, Stiebe calls another advantage, which is of crucial importance for many customers.

“Alloy 24 is not only exceptionally resistant to pitting and gap corrosion,” Sokolowski adds. One of its biggest strengths is its broad range of applications. “This extends from flue gas desulfurization to seawater desalination, which is a major sector in California, for example,” Stiebe says. “Since the 1980s, Alloy 24 has been a component of countless seawater desalination plants, which still work without problems.” The material is found in heat exchangers as well as in submarines, and is found in the oil and gas industry as well as in the chemical industry and the pulp and paper industry.

## International victory

Like Alloy 24, the products of Hempel Special Metals are often used for highly corrosive applications - for example in the chemical industry, on and offshore as well as for tunnels and swimming pools. The products are also used in high temperature applications as furnaces, burners, and exhaust systems in the petrochemical industry and power generation sector.

But how can a material fall into oblivion? “Over the years there has been many new developments and advancements in materials, where already some have fallen by the wayside,” Stiebe comments. “Sometimes, difficulties arose from the fact that several decades old requirement profiles are simply barred and the current state of affairs would have to be adapted even though the material isn’t all that old.” In the past 10 years silence fell around Al-



The pleasure of success (from left to right): Markus Sokolowski (Sales Manager and Team Manager Export), Ingo Stiebe (General Manager Hempel Special Metals GmbH), and André Hempel (Managing Director Hempel Special Metals Group).

loy 24 - wrongly, as shown in the sudden awakening from that slumber.

## Exceptionally resistant

Besides Alloy 24, Hempel Special Metals distributes a wide variety of different products. “We mainly stock coil, sheet, plate, and bar material,” Sokolowski says. “For some grades as Alloy 59, UNS N06059, and Alloy 926, AL6XN, UNS N08926 we have the full spectrum for projects which also includes tubes, pipes, and fittings. Our materials are at least certified with 3.1 certificate including ASTM standards and including the Pressure Equipment Directive (PED).”

Alloy 602CA and Alloy 59 are the company’s biggest selling grades in North America. “The availability is limited there, so we are happy that we can supply it to many customers in the North American market with short delivery times,” Stiebe explains.

## Rising demand

Due to the increasing demand, Hempel Special Metals Alloy 24 was included in the program last year. The exclusive trading

partnership with Industeel made it possible. “Not only for Alloy 24 the sales partnership plays a central role,” Sokolowski says. Another example is about the austenitic stainless special steel Alloy 926. “In this case, a preferred trading partnership with an European mill allows us to serve the market accordingly.”

Working together in partnerships is very important for Hempel Special Metals. Stiebe stresses, “For our respective material concepts we seek targeted partnerships with corresponding plants.” The partnerships with the suppliers do not end with the award of contracts, Stiebe says, “You win or lose a joint project. If we win a project, we do not go looking for the cheapest plant, but remain faithful to our partners. With regard to the quality of the materials we are ultimately ‘just’ as good as our suppliers.”

## Exclusive trading partnership

What applies to suppliers, of course also applies for customers. “We do not see the customers as clients but as partners,” Sokolowski explained. Therefore, it is only logical that Stiebe and Sokolowski always



Overflowing with stock: the Oberhausen site offers almost 2,000 square meters of hall space.



# 24-The comeback of a classic alloy



True splendor: Ingo Stiebe presents a big screw with a nut used for flange connections.

talk about “Partner Supply Management” instead of “Supply Chain Management.”

This passionate approach helped Hempel Special Metals grow into one of the largest stockholders in Europe for titanium, nickel alloys, stainless steels, duplex steels, and other special materials. “We are always in the niche area, we were never interested in mass production,” Stiebe says. “We are not a dealer of tons, we act in kilograms.”

### Joint search for solutions

The company’s philosophy is similarly clear and translates as: “One face to the customer.” Sokolowski explains, “The customer gets our complete range of products. Our task is the sourcing in the market and the purchasing from the relevant supply chain.” Thus, the company satisfies the amended claims of the customer. “Today, our customers want to have not only the sheet metal, but they want to have the tube, fittings, flanges—the entire package. “We faced this demand with complete success,” Stiebe reveals.

Just the fact that the customer gets everything from one source makes Hempel Special

Metals an important resource for the American market. “We offer our customers in North America the full service package,” says Sokolowski. “Starting from cutting a plate to the full service package of plates, bars, tubes, and fittings for a large project.”

### One face to the customer

A further aspect is the international positioning of the company: In addition to the already mentioned five service centers in various countries, there is the strip service center Hempel Firmus Metals Ltd and an agent in the Czech Republic. “Our international sales department in Germany is the first contact for customers around the world. From here we mainly serve the North and South American, Scandinavian, and Australian markets,” Stiebe says. Currently there is no sales office or representative in North America. “But we are working closely with our customers from our office in Germany,” Sokolowski adds.

Another plus is the unusually fast delivery times, which are also possible due to the well-working partnerships with the suppliers. “On the basis of agreements with our partner plants we can shorten our delivery times up to 50 percent,” Stiebe says with a smile. “We can ship the products door-to-door for our customer. If desired the goods can be delivered to a harbor or airport or collected from our warehouse in Oberhausen, Germany.”

### Strength in the service sector

Undoubtedly, the strength of Hempel Special Metals lies in the service sector. Also, its extensive experience helps the company, “We are one of the biggest and oldest stockholder and service centers in Europe, therefore we are well known for our products and services in Europe and across the globe,” Stiebe says. “Regular customer contact and visits is a must to keep our customers up to date about our new products and services.”

The company’s products are sourced in the European Union, mainly in Germany and Austria. “All of our suppliers are audited and have the state-of-the-art approvals to fulfill all customer needs,” Sokolowski stresses. “All our products are produced according to our special specification with all test circumferences for most applications of our customers. Tailor made productions ac-



Machining according to customer requirements: in the sawing machine, the tube receives the desired length.

ording to customers specifications and testing procedures are possible within a short delivery time.”

### Highest quality awareness

No question: Hempel Special Metals is a company that remains successful in volatile times. Thanks to its highest quality consciousness, its active service mentality and its willingness to break new ground. “Since 2016 we are an exclusive European stockholder for Alloy 24, 1.4565, UNS S34565 for Industeel, and since 2017 we are starting projects for scrubber installations on maritime vessels,” Stiebe states. “We also have succeeded to be the market leader with Alloy 59 within a very short time.”

And what are the company goals for 2017 and beyond? “We are working on the development of new markets, for example North America. We are also establishing ourselves in the maritime and aerospace sectors,” Stiebe concludes.

All photos taken by Philipp Isenbart.



Alloy 926 - perfection all around: newly produced stainless steel rings await their delivery to booming markets.



Rich supply: the permanent inventory includes over 400 tons in nickel alloys, special steels, titanium, and zirconium in sheet metal, rods, forging stock, pipes, fittings, flanges, and much more.

## ► Hempel Special Metals at a glance

<b>Company name:</b>	Hempel Special Metals
<b>Founding year:</b>	1972
<b>Destinations:</b>	Hempel Special Metals in Germany, Switzerland, UK, Italy, Poland, and China
<b>Orientation:</b>	International sales specialist for high-performance materials
<b>Core business:</b>	Commodity trading, semi-finished products distribution, and metal processing
<b>Products:</b>	Special stainless steels as Alloy 24, Alloy 926, AL6XN and nickel alloys as Alloy 31, Alloy 800H Alloy 600, Alloy 601, and Alloy 602CA
<b>Markets:</b>	Apparatus construction, chemicals and pharmaceuticals, power generation, mechanical engineering, on and offshore, furnace, and tunnel contractions, etc.
<b>Employees:</b>	More than 120; 25 in Oberhausen
<b>Turnover:</b>	About 70 million Euros (just under 75 million US dollars)
<b>Website:</b>	www.hempel-metals.com