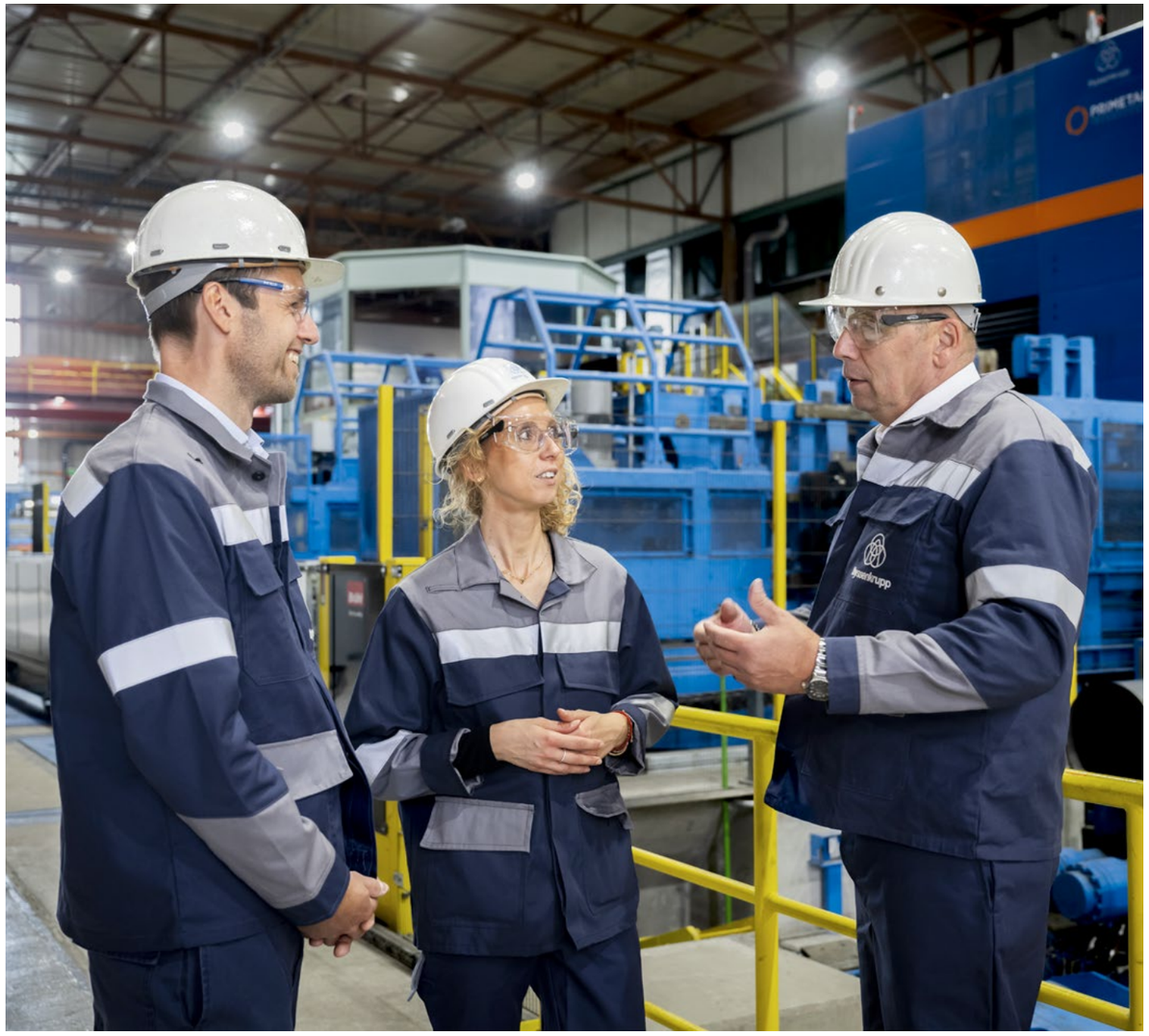


Successful change of generations: Lars Bode (left) and Anja Brüggemann in conversation with Volker Kamen, who is retiring at the end of 2024.

Realignment of the NO electrical steel business

A **new management team** has taken the helm of the Non-Grain-Oriented Electrical Steel (NO) business sector. The personnel shake-up is being accompanied by **investments** in the production network, and represents an important new departure that will enable the company to respond with even greater agility to customer requirements in a dynamic market.

Text Jan Ritterbach

Photo: Rainer Keysers

Non-grain-oriented electrical steel strip (NO) has been produced at thyssenkrupp Steel for almost 70 years: from 1955 to the present day, the steel manufacturer has established itself as one of the leading producers of this highly efficient, high-performance material with continuous research and development. Customers such as stamping shops and electric motor developers, home appliance manufacturers, and energy companies in particular already rely on thyssenkrupp Steel's powercore® brand of NO electrical steel. Another customer group is now being added as part of the mobility revolution: the automotive industry.

Proven product in a new application

NO electrical steel is indispensable for building motors due to its special magnetic properties, and demand for this steel is increasing worldwide with the advance of electric mobility. thyssenkrupp Steel meets the special requirements of the automotive industry – such as high mechanical strength and low core losses for higher energy efficiency – with its powercore® Traction grades. "By producing our material in the heart of Europe, we are strengthening the resilience of the value chain, while at the same time benefiting from the opportunity to grow in a supply-critical market. After all, no automotive manufacturer can afford to rely on insecure supply chains," says Anja Brüggemann, who has headed the NO business sector since July 1, 2024.

In her new role, Brüggemann will be working closely with Lars Bode, who is following in the footsteps of the long-serving Sales Director, Volker Kamen. Kamen comes from a family of steelworkers: not only did his grandfather's and father's generations work for thyssenkrupp Steel, but he and his daughter also work there. He is now due to retire at the end of 2024. Bode and Kamen are tightly coordinating their work to ensure that his expertise can be passed on smoothly to the next generation: "For one thing, we ensure that personal relationships with our existing customers are maintained in a spirit of trust, and that the exchange is further intensified. After all, they are the backbone of our business. For another, electric mobility is about seizing new opportunities and meeting the challenges of a dynamic market. We have now introduced the necessary changes to achieve this," says Bode.

An agile team for a dynamic market

The combination of new management and the experienced NO Sales team will create a compact and powerful business unit that understands the specific needs of both established customers and new customer groups. Anja Brüggemann is the former Key Account Manager for the VW Group, and Lars Bode was previously Key Account Manager for the customers Ford and BMW. This means both of them possess extensive automotive experience, which also contributes to this understanding. "The automotive manufacturers among our customers often have a different organizational structure to the privately managed SMEs from the industrial and energy sectors that we work with at NO," explains Brüggemann. "With our new personnel structure, we are sending a strong signal to the market that we are equally well positioned for all future challenges in the industrial and automotive sectors," continues Brüggemann.

One of the biggest challenges remains the volatile market environment of NO. There is strong pressure to innovate, particularly in the automotive sector. thyssenkrupp Steel must be able to respond to this promptly: "The rapid pace of development in electric mobility means that the general conditions are also changing rapidly. We've got to be agile enough to keep up with this pace," explains Lars Bode.

Customer service at NO more agile than ever

To ensure that flexible customer requirements can always be met as effectively as possible, thyssenkrupp Steel has combined its development and consulting expertise for NO electrical steel and firmly integrated all important functions under the overall management of Anja Brüggemann: Sales, customer consulting, and research and development are all available from a single source. In addition, the flexible organizational structure guarantees an agile planning landscape – which also includes variable quantity planning – as well as market-driven research and development work, ensuring that the NO business sector is geared up to the customer as far as possible. Brüggemann: "We are building a highly functional team in which one cog meshes with another. Not only with regard to product development, technical and sales marketing, but also all other aspects: Innovation, production, quality – everything dovetails optimally so that we can participate in the valuable future market for non-grain-oriented electrical steel."

New AIL for innovations

The new annealing and insulating line (AIL) enables thyssenkrupp Steel to produce innovative high-performance materials and coating variants of the highest quality for mass production. One example of this is stabosol®, the highly reactive adhesive and insulating varnish. It is ideal for joining innovative electrical steel to form rotor and stator stacks – the core assemblies of an electric motor. In contrast to other processes commonly used in mass production, stabosol® avoids adverse effects such as material damage, while increasing thermal stability and impermeability. As a result, innovative electric motors can be built with significantly higher efficiency and power density. Another example is the new top grade for electric mobility, powercore® Traction NGO 020-120Y420. At 0.20 mm, it is extremely thin, and is about to go into series production. The material was developed for ultra-efficient automotive electric drives and offers the lowest hysteresis losses of 12 watts per kilogram, with a mechanical strength of 420 megapascals. This makes thyssenkrupp Steel the European leader for production of this top grade for mass production.

Customers benefit from investments in production network

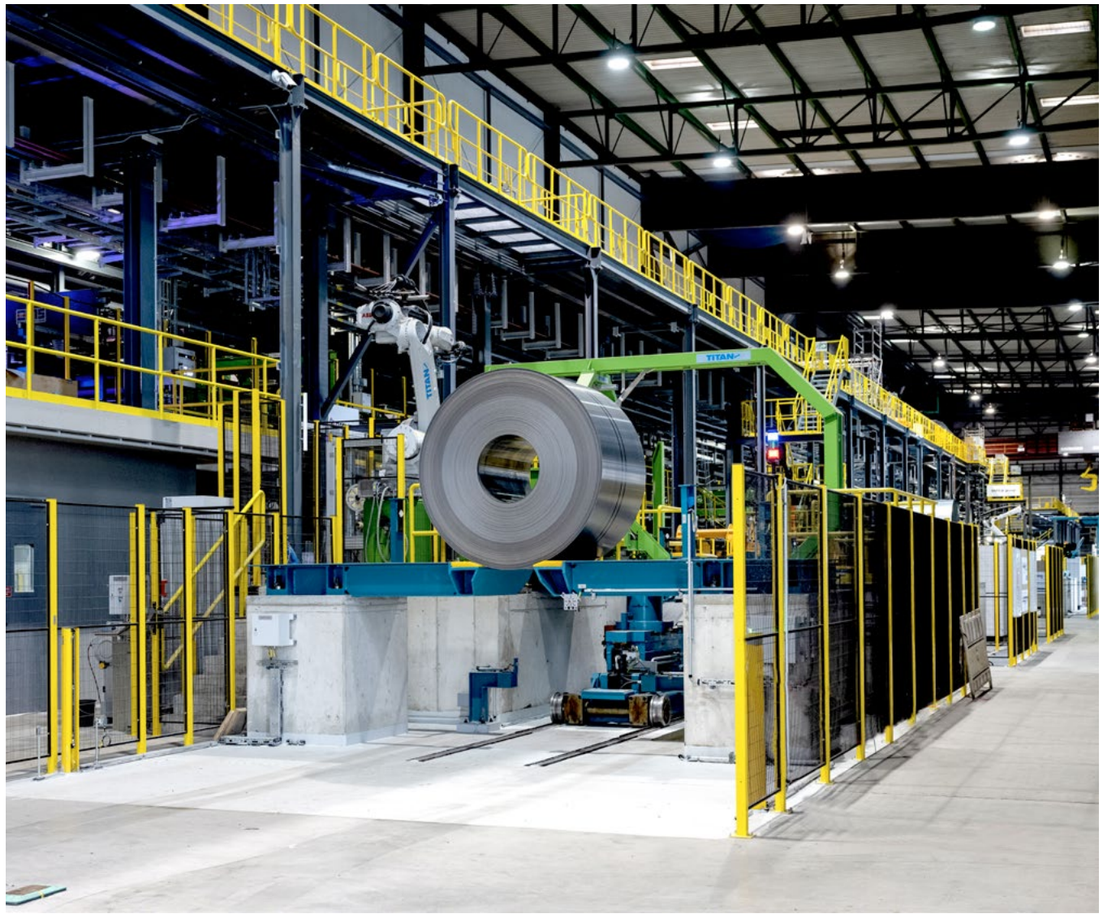
thyssenkrupp Steel is accompanying the structural changes within the NO business unit with investments aimed at strengthening product quality and production capacity for non-grain-oriented electrical steel. thyssenkrupp Steel is thus setting the course for manufacturing new, sophisticated products for lightweight automotive body and chassis elements. To this end, the steel manufacturer is currently building new facilities in one of its Bochum plants, which will turn the site into a center of excellence for electric mobility in the future.

In various finishing steps, the new units give electrical steel the final properties it requires and represent the final links in a highly complex production chain which thyssenkrupp Steel is implementing entirely under its own steam with its iron and steel plant. For example, the double reversing stand (DRS) was already taken into operation in 2023, and will be used for new dimensions of thin and high-strength grades for NO. "Specifically, the new system can produce non-grain-oriented electrical steel strip with very good flatness and extremely tight thickness tolerances between 0.35 and 0.20 mm. The double reversing stand is also used to produce high-strength multiphase steels," explains Andy Rohe, Senior Vice President Downstream Operations.

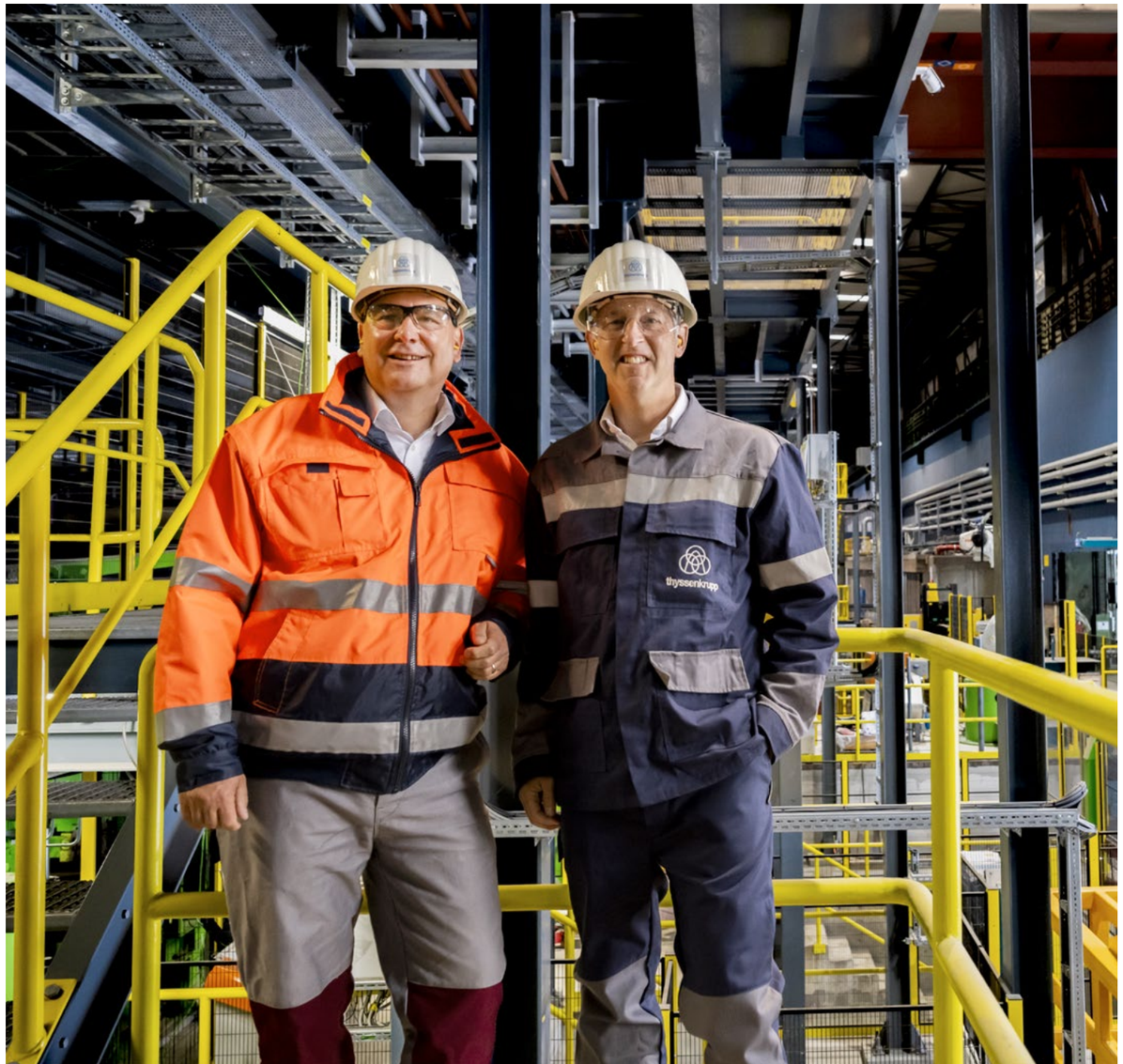
New facilities support corporate strategy

A central element of the investments at the Bochum site is the construction of a modern and energy-efficient annealing and insulation line (AIL) with rapid heating. The line, with a price tag of around 300 million euros, complements the existing units which are relatively long in the tooth, and supplies innovative technology for new electric mobility grades with the highest demands on magnetic and mechanical properties. Andy Rohe: "The AIL is thus contributing to thyssenkrupp Steel's strategy of focusing even more strongly on the demand for thinner, high-silicon and high-strength NO products in the future." Customers will also benefit from the line's resource-saving processes as well as its high degree of automation and digitalization.

With the construction of the new facilities at the Bochum plant, thyssenkrupp Steel is once again proving itself to be an important supplier to the automotive industry. Simon Stephan, Senior Vice President Sales Automotive at thyssenkrupp Steel: "Like no other supplier, we combine experience in lightweight construction with decades of expertise in electrical steel. That is why we are the ideal partner for advancing economical lightweight construction concepts and the electrification of new vehicles. In addition, by modernizing our production network, we are not only ensuring thyssenkrupp Steel's ability to deliver, but also strengthening the resilience of the local value chain. Because one thing is clear: without our locally produced non-grain-oriented and, of course, grain-oriented electrical steel, there can be no mobility revolution and energy turnaround in Europe."



One of the two core units at thyssenkrupp Steel's new center of excellence for electric mobility in Bochum: the new Annealing and Insulation Line (AIL).



Continuing to drive forward the modernization of the production network and the powercore® brand of thyssenkrupp Steel in the field of electrical steel: Andy Rohe (left) and Simon Stephan.

Photos: Rainer Kaysers

Web

More information about NO electrical steel:
https://www.thyssenkrupp-steel.com/en/products/electrical-steel/electrical-steel-non-grain-oriented/electrical-steel-non-grain-oriented.html

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