

Galvanized Steel from the High-Tech Factory: thyssenkrupp Steel Extends its Plant in the German City of Dortmund

Dortmund, Germany, November 28, 2022. It weighs in at 8,000 tons, with its steel structure rising to a height of more than 70 meters: thyssenkrupp Steel Europe AG in Dortmund is setting new standards with its innovative hot-dip galvanizing line. Together with the existing line at the Westfalenhütte, one million tons of steel strip per year will be hot-dip galvanized at the site. The easy-to-process and durable sheets are in demand mainly from car manufacturers and the home appliance industry. The new line was opened in October in the presence of Minister President Hendrik Wüst. Drees and Sommer's experts for large-scale projects in industrial and plant engineering supported the construction project. Drees & Sommer SE is a real estate and building consultancy.



The new FBA 10 hot-dip galvanizing line at thyssenkrupp Steel in Dortmund will produce steel mainly for vehicles and household appliances on an area of around 12,600 square meters.

© Thyssenkrupp Steel Europe AG

Barbara Wiesneth

Head of Media and Public Relations

phone +49 (0)711 1317 2411 • mobile +49 (0)172 7995752

barbara.wiesneth@dreso.com

Lisa Fehrentz

Media and Public Relations Manager

phone +49 (0)711 1317 10202 mobile +49 (0)172 7692202

lisa.fehrentz@dreso.com

Media Release

November 28, 2022



For Dr. Heike Denecke-Arnold, Chief Operating Officer of thyssenkrupp Steel, the new line is an investment with future potential for the site and sends an important signal to the workforce: 'With the new hot-dip galvanizing line, our Dortmund site is developing into Europe's biggest competence center for hot-dip galvanized steel strip. This enables us to meet the requirements of our customers in the automotive and domestic appliance industries. Through this investment, we are not only securing the existing 1,300 jobs at the site, but also creating around 100 new jobs for highly qualified employees.' Hot-dip galvanized steel provides vehicles with long-lasting protection against corrosion. This makes the steel particularly sustainable, as it can be 100 percent recycled without loss of quality.

Multitasking-Based Construction Processes

The planning and construction of the ambitious steel structure, which is up to 75 meters high, faced special challenges right from the beginning. Several World War II bombs were found during site development and the civil engineering work. As they had to be made safe, construction was at risk of facing a very long delay. Klaus Martin, Drees & Sommer's project team head responsible for site assembly, therefore relied on *lean* construction management to identify conflicts between individual trades and minimize time delays. 'Unlike traditional construction management, in which a planner does not bring together the individual trades planned by various project participants until the end of the process, *lean* construction management focuses on collaboration from the very beginning. A lot of construction and assembly work, from the foundations to the steel structure hall through the line itself, had to be done in parallel and coordinated accordingly,' explained Klaus Martin.

The classic construction trades and plant engineering traditionally operate in separate teams. Drees & Sommer's integrated project management approach and the use of Drees & Sommer experts in both construction and assembly management enabled the representatives of the individual trades to merge into an integrated team, resulting in optimum processes and a smooth sequence of construction and assembly work. 'We had a detailed workflow that was coordinated between the assembly and construction management teams, and scheduled exactly to the week. This meant that we knew at all times how many employees were on the construction site, and which materials and machines were needed at what time,' said Drees & Sommer's expert. Using this method, construction specialists can accelerate progress in the construction phase compared to the conventional approach.

Barbara Wiesneth

Head of Media and Public Relations

phone +49 (0)711 1317 2411 • mobile +49 (0)172 7995752

barbara.wiesneth@dreso.com

Lisa Fehrentz

Media and Public Relations Manager

phone +49 (0)711 1317 10202 mobile +49 (0)172 7692202

lisa.fehrentz@dreso.com

Media Release

November 28, 2022

DREES & SOMMER

Large-Scale Site Logistics

For delivery and goods logistics alone, several hundred supplier firms had to be organized. The individual components for the hot-dip galvanizing line were manufactured in different countries, resulting in complex delivery logistics. In addition to the challenge of establishing a global supply chain for delivery in the right sequence to the Dortmund site, the restrictions resulting from pandemic-related measures worldwide made it difficult to ensure on-time delivery. Because much of the plant was delivered long before it was assembled in order to meet deadlines, a huge storage area along with warehouse management was also required. This was set up and kept available on a neighboring site. Deliveries had to be scheduled to prevent waiting times, and a road infrastructure with special access points had to be built that could also be used by heavy trucks. Last but not least, the appropriate staff had to be provided and organized. On some days, up to 20 trucks delivered goods, which had to be sorted, stored and labeled to ensure that assembly went smoothly at a later stage. At times, 15 to 20 employees worked two shifts just to receive and store goods. 'We managed all of this by actively planning the construction and assembly process within the project. This also enabled us to compensate for delays in the downstream progress of construction and assembly,' sums up Klaus Martin.

* * *

Drees & Sommer: Your Innovative Partner for Consulting, Planning, Construction and Operation.

As the leading international consulting, planning and project management enterprise with headquarters in the German city of Stuttgart, Drees & Sommer SE has worked with private and public clients from construction bodies to investors on all types of real estate and infrastructure projects — both analog and digital — for more than 50 years. With its pioneering and future-shaping consulting, the company offers solutions for successful buildings, high-return portfolios, powerful infrastructure and livable cities. Around 4,500 employees in interdisciplinary teams based at 51 locations worldwide support clients across a wide spectrum of sectors. All the services provided by the partner-run company take into consideration both economic and ecological concerns. Drees & Sommer calls this holistic approach 'the blue way'.