

thyssenkrupp Steel awards major revamp and new-build contracts for core units at Duisburg and Bochum sites to Primetals Technologies

Following the recent approval of investment funds, thyssenkrupp is now forging ahead with implementation of the projects under its Strategy 20-30. The greater part of the contracts – revamp of the casting-rolling line, rebuild of an existing continuous caster, both in Duisburg, and construction of a new double reversing mill in Bochum – have now been awarded to Primetals Technologies Ltd., a world leading engineering and plant construction company for the metals industry.

Bernhard Osburg, CEO of thyssenkrupp Steel: “We are implementing the approved investment projects immediately in order to achieve the associated positive portfolio effects as quickly as possible. In Primetals Technologies we are delighted to have an excellent partner at our side for the implementation of the forthcoming major projects. Primetals convinced us with a cohesive, holistic and innovative proposal for the revamp and new-build work.” Satoru Iijima, CEO of Primetals Technologies adds: “We are delighted to be supporting thyssenkrupp in realizing its forward-looking strategy.” “This major contract from thyssenkrupp marks a new high point in the decades-long cooperation between our two companies, and it’s on a scale rarely found anywhere in the world”, says Olaf Meininghaus, Key Account Manager für thyssenkrupp bei Primetals Technologies.”

All the new-build and revamp measures are to be completed by the beginning of 2025. They represent an investment in the high three-digit million range.

Separation of the casting-rolling line: reconfiguration of a central interface in the production network

The centerpiece of the quality offensive at thyssenkrupp Steel is the separation of the casting-rolling line at the Bruckhausen plant into a new continuous caster and a hot strip mill with new key components. The existing 20-year-old unit has integrated casting and rolling sections. Its quality capabilities are no longer sufficient to meet future customer requirements.

COO Dr. Arnd Köfler: “The interface between our upstream operations and hot strip production is a core element of our integrated production network. We are now making this area fit for the next generation. By separating and rebuilding the casting and rolling sections we can further enhance our capabilities for high-strength steels and premium finishes. By splitting off the rolling section into a separate hot strip mill we will also make our slab production more flexible.”

March 4, 2021
Page 2/4

New units to be installed largely during ongoing operations

The plan is for the new and revamped units to be installed with minimum disruption to production. Many major components will be manufactured in advance and then installed. At the same time some existing plant parts can be integrated into the new units, such as the ladle turret, which will be used to supply liquid steel from the melt shop to the new continuous caster. The switch from the existing casting section of the casting-rolling line to the new continuous caster will be carried out from September 2023. The new hot strip mill – the biggest construction measure under the investment package – will be prepared while operations continue and will likewise be connected to the production network from late summer 2023. The hot strip mill will include proven as well as innovative and energy-efficient solutions in the new roughing train, an upgraded finishing train with a highly innovative downstream strip cooling section, and new automation and process models. Comprehensive Industry 4.0 solutions such as integrated process optimization and quality monitoring across the facilities will enhance the viability of the overall project. Arnd Köfler: “The reconfiguration of this area will enable us to achieve higher quality and better utilize the capacity of our upstream melt shop by increasing our casting and rolling capacities. This will further improve the overall performance of our production network at a central point with lasting positive effects also on the security of supply for our customers.”

A further unit to be built under the forthcoming measures is continuous caster 3. It will replace the existing continuous caster 1 at the Bruckhausen plant in Duisburg and will likewise provide improved surface quality. It will be built after the revamp of the casting-rolling line in 2024.

New double reversing mill at Bochum site increases capabilities for high-strength steels and electrical steel

Primetals has also been awarded the contract to build a double reversing mill at the Bochum site. The plant on Essener Strasse will be expanded into a center of excellence for e-mobility over the next few years. Here, too, the trend is towards ever thinner and high-silicon materials, which place increased demands on cold rolling technology. The new double reversing stand will meet these demands and significantly enhance the site's capabilities for non-oriented electrical steel. With its back and forth (reversing) action, the mill will be able to roll particularly thin materials. This is particularly important for sheet used in electric motors and generators because it minimizes magnetic losses. "Here, too, the individual measures of Strategy 20-30 will mesh together," explains COO Dr. Arnd Köfler: "Material for the new double reversing mill will be supplied from the new hot strip mill 4. In this way we will exploit quality improvements throughout the process chain in order to excel, for example, with high-strength multiphase steels or with the optimized electrical steel grades of the future."

March 4, 2021
Page 3/4

Investments support portfolio offensive as part of steel strategy 20-30

The measures now commissioned form an essential basis for the successful implementation of the steel strategy: CEO Bernard Osburg: "With the biggest investment package under our Strategy 20-30, we are moving onto the offensive in order to maintain and strengthen our position as leader in key growth and focus segments. Our customers will require different and better products in the future: lower tolerances, increased crash safety requirements, steel for more powerful electric motors. The investments in our facilities will enable us to meet these requirements. Moreover, our customers will not have to do without any of their accustomed products for the duration of the conversion and construction work. Another important point: as part of our transformation to climate-neutral steel, we will also be able to offer the new high-quality grades in "green" in the future."



March 4, 2021

Page 4/4

Primetals Technologies, Limited, headquartered in London, UK, is a technology pioneer and a global leader in engineering, plant construction and lifecycle services for the metals industry. The company's complete technology, product and service portfolio includes holistic solutions for electrics, automation, digitization and environmental technology and covers all steps of the value chain in iron and steel production - from raw material to finished product - as well as state-of-the-art rolling mill solutions for non-ferrous metals. Primetals Technologies is a joint venture of Mitsubishi Heavy Industries and partners and employs around 7,000 people worldwide. If you would like to learn more about Primetals Technologies, please visit the company's website at www.primetals.com.

thyssenkrupp Steel is one of the world's leading producers of carbon flat steel and stands for innovations in steel and high-quality products for demanding, state-of-the-art applications. Steel employs around 27,000 people and with an annual production volume of around 11 million tons of crude steel is Germany's biggest flat steel producer. Our capabilities range from customized materials solutions to materials-related services. Together with our customers we are constantly developing our company's long-standing success story, shaping global markets, our region and a wide range of high-performance industries. As a pioneer in climate transformation, thyssenkrupp Steel has set itself the goal of producing 3 million tons of CO₂-neutral steel a year by 2030. By 2050 steel production is to be completely climate-neutral.

Contact:

thyssenkrupp Steel Europe AG
Head of Media Relations
Mark Stagge
T: +49 203 52 - 25159
mark.stagge@thyssenkrupp.com
www.thyssenkrupp-steel.com

Primetals Technologies Limited
Dr. Rainer Schulze
T.: +49 9131 9886-417
rainer.schulze@primetals.com
www.primetals.com