

Stahlo Customer Event on 26 June

An insight into the high-end steel service for “ultra-high strength” steel

Premiere in Gera: Stahlo gives customers their first insights into its new plant, even before its completion in late 2019. One of Europe’s most technically advanced steel service centres is currently being built on a 43,000 square metre site. Stahlo is continuing to expand its machining expertise and technological leadership in the high-end steel service for high-strength and ultra-high-strength steels for the automotive industry.

A first peek at the new factory impressed the roughly 60 people taking part in the Stahlo Customer Event on 26 June. In the brightly lit, 23,000-m² production and warehouse building, they were able to marvel at newly installed high-tech systems and machines that were already up and running: a new contoured blanks press with a pressing force of 800 tonnes, a slitting line, an automatic coil store featuring two crane systems, each with a load capacity of 40 tonnes, as well as a total of ten process crane systems for 16 to 40 tonnes. Here, ultra-high-strength steels with a tensile strength of up to 1,900 MPa and with an outer ring diameter of up to 2,100 mm can be processed into slit strip with a maximum ring diameter of 2,100 mm – and that even in automotive body sheet quality. In the future, it will be possible to slit up to 60 strips in one single operation.

Over 400,000 metric tons of steel per annum

Currently, the retrofitting and relocation of the existing contoured blanks and slitting line from the old to the new building is still in progress. Everything should be ready by the end of 2019. Then, it will be possible to process around 100 coils daily and over 400,000 tonnes of steel per annum with a plant technology that is twice as good – and even better. Stahlo can now guarantee its customers maximum delivery capability, thanks to the combination of the production sites in Dillenburg and Nordhausen, as well as the redundancy offered by its plant park.

“Ultra-high strength” offers a great potential

In the run-up to the factory tour led by Ralf Vetter, Plant Director at Stahlo Gera, experts from Stahlo, SSAB and the Esslingen University of Applied Sciences gave presentations to introduce the participants to the world of high-strength and ultra-high-strength steels and lightweight construction. Everyone agreed on one thing: Steel as a material would continue to shape automotive engineering for a long

time to come. “Steel dominates in volume production. Potential savings in terms of thickness and improved safety, as well as further developments and innovations in high-strength steels continue to offer a great potential for steel,” Kerstin Hirsch, Technical Applications Consultant at Stahlo said in her presentation. And she continued: “Third-generation ultra-high-strength steels, which have been further developed in terms of their mechanical properties compared to conventional high-strength steels, permit further weight savings.” Professor Hermann Lücken from the Esslingen University of Applied Sciences was also convinced of the benefits of steel in lightweight construction. “Steel has a relatively high potential for use in lightweight construction as it permits high strengths and has a very high modulus of elasticity.”

Urban Bergström and Uwe Wolf, Technical Customer Advisers at SSAB, describe steel as the most ecological material. For example, carbon dioxide emissions during production are much lower than with aluminium, carbon or magnesium. The experts described the “Fossil-free 2045” initiative of the Swedish steel producer and leading manufacturer of high-strength and ultra-high-strength steels. The goal was to develop a new technology using hydrogen and electricity (and not coal and other fossil fuels) in the steel production process. According to the speakers, this would revolutionise the steel industry if it succeeded.



An impressive mass: Roughly 100 coils can be processed daily and over 400,000 tonnes of steel can be processed per annum.



In stock: Steel coils are transported to the site with two crane systems, with a capacity of 40 tonnes each, as well as by total of ten process cranes for 16 to 40 tonnes.



Presented: The new machine park is explained to the participants at the Stahlo Customer Event.



Top-class contents: Expert lectures provided the roughly 60 participants at the Stahlo Customer Event with first-class information



Ralf Vetter, Plant Director at Stahlo Gera: “The new plant will double our production capacity.”



Full of practical knowledge: Kerstin Hirsch, Application Consultant at Stahlo: “High-strength and ultra-high-strength steel will continue to play a key role in lightweight construction and drive forward its development. □”



Scientific: Professor Hermann Lücken: “Steel has a relatively great potential for lightweight construction.”



Progress: Automated processes increase Stahlo's performance capability. This ensures that the products are available more quickly.