Press release

Double capacity: Twelve Demag cranes double capacity in the new Stahlo production building

- **Automated cranes in the central coil store**
- **Load handling attachments can be changed quickly for steel or aluminium coils**
- **Process cranes with position measuring system for the transport of blanks**
- **Demag WMS system will control the material flow**

Wetter, Germany, 23 October 2018. Stahlo Stahlservice GmbH & Co. KG has opted for Demag crane technology for its Gera site. Stahlo processes sheet steel into customer-specific strips, blanks and cut-to-size sheets at the plant. Stahlo is currently building a completely new Steel Service Center and will double its previous processing capacity. Twelve Demag cranes will handle the large quantities while the Demag Warehouse Management System (WMS) will control the material flow.

The central automated coil store will supply the production lines. For further steel processing and refining at the site, Stahlo plans to build five more production bays and has already invested, for example, in another slitting line and an additional contours plant with a pressing force of 800 tonnes. All production plants also satisfy the quality standard for processing steel in the outer shell quality required for the automobile industry.

To double the capacity, the material flow needs to be restructured. That is why twelve new cranes will be installed in the new production bays. Demag Cranes & Components GmbH won the tender for the project.

In the new central coil store, aluminium coils weighting a maximum weight of 30 tonnes and steel coils up to 40 tonnes will be stowed. That is why the cranes can change their load handling attachment via a permanently reeved spreader: steel coils are moved by magnets, aluminium coils with grabs. Handling by magnet offers the advantage that the coils can be stacked with smaller spaces left between them. As a result, the necessary distance between the coils is reduced from 800 to 400 mm. Accordingly, the intake capacity of the warehouse is increased.

The two process cranes in the coil store with a load capacity of 48 tonnes each and a track gauge of 41.10 meters will travel on a crane runway length of 126 meters, which is also part of the order package. When unloading the cars or trucks, the cranes will be operated manually and placed first on one of three motorised roller tables, making it possible to easily remove the packaging.

After unpacking and quality control, the process cranes will – now in automatic mode – deposit the coils at the storage location specified by the warehouse management system. On demand, the cranes will deliver the coils at defined transfer points to bays 2 to 6. These bays will be arranged transversely to the central warehouse and will be the location where processing and refining occurs. The performance of these cranes was designed for high handling rates. This also includes re-storage of residual amounts from processing.

The five production bays where the coils are to be processed will also receive new Demag cranes. In two production bays, the process cranes will be fitted with calibrated weighing equipment and highly accurate position measuring systems. In addition to coil handling, these cranes will also replace and position the carriers for the blanks. Of the twelve cranes, six will be designed as low deadweight V-type cranes having high load capacities and reduced oscillation characteristics.

Project management expertise, project planning and delivery of an integrated solution from a single source were only some of the reasons why Stahlo opted for Demag cranes. The integrated solution includes the Demag Warehouse Management System (WMS), which will be responsible for controlling the entire material flow in the expanded Steel Service Center. Demag configured this warehouse management system for individual requirements in each application and designed it to meet the specific requirements of high-availability crane handling required for the paper and steel industry, for example. In the Stahlo warehouse, the Demag WMS ensures (among other things) the optimal use of the available space. The direct connection to the Stahlo ERP system creates the conditions for a continuous flow of information.

Images:


40444-32 and 40444-45: Demag process cranes with magnet spreaders for the automated handling of steel coils

Contact for product and trade media:

Christoph Kreutzenbeck
Demag Cranes & Components GmbH
Wetter Site
Ruhrstraße 28
58300 Wetter/Ruhr, Germany
Tel: +49 211 7102 3907
Email: christoph.kreutzenbeck@demagcranes.com