



Wickeder Westfalenstahl: Update of the safety technology

On schedule with safety

At Christmas - of all times - the Bosch Rexroth Factory Automation Service was commissioned to upgrade the safety technology of Wickeder Festfalenstahl to the latest standards. The team had just two weeks over the holiday period to implement the concept up to the commissioning stage.

The rolling mill consists of three individual stages which form the 4.5 millimeter thick steel strip into 0.05 millimeter sheet steel or steel foil by means of hydraulic force alone. The strip is continuously wound and unwound under the roller until it is thin enough - at a speed of 60 kmh. The enormous forces involved and the sharp-edged material moving at high speeds requires reliable protection for the operators.

A complex project fully in view

As the general contractor, Rexroth coordinated the other ten participating companies. A total of 55 specialists were on site. They installed monitoring functions according to a risk analysis by the TÜV. For safety reasons, the hydraulic systems were implemented as two channel systems and equipped with Rexroth valves, which have an average failure probability of 150 years. The specialists installed hydraulic shut-off valves with position monitoring, pressure measurement and integrated emergency stop functions in lifting equipment. In addition, they removed and reinstalled a 27 ton motor, installed sensors and took care of the installation of the switchgear. For the electrical and automation systems, the specialists from Bosch Rexroth programmed the safety control systems, for example for gates, and connected everything to the rolling mill's control center.

Considerably ahead of schedule

The extensive deployment ended two days earlier than was planned: All of the work was completed on 31 December. Bosch Rexroth handed over the documentation and the validation documents and the rolling mill was able to make a safe start to the new year.

Ingenious solution

With precise deployment planning, detailed preparation and great expertise, the team of Rexroth as well as ten other companies were precisely coordinated.

System running

Modernization of the safety technology of a rolling mill plant to meet international standards – in less than two weeks.



Solved with

Rexroth as the general contractor in the area of machine safety: Establish a security concept, project control, implementation and commissioning.