

PRESS RELEASE

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SMS group receives FAC from Wuhan Iron & Steel for successful revamp of high-capacity hot strip mill

Boosting annual production and enhancing strip quality
at the same time



The SMS flat-neck spindles guarantee the safe and efficient transmission even of extremely high torques. (Photo taken during the workshop assembly).

Wuhan Iron & Steel (WISCO), China, has issued the final acceptance certificate (FAC) to SMS group for the successful modernization of key areas of the high-capacity Hot Strip Mill No. 2. The revamp comprised the drive train of roughing stand R2 and the descaling system ahead of the finishing train.

WISCO aims to boost its annual production capacity to more than six million tons, while enhancing the product quality to meet the constantly growing market demands.

To achieve this, WISCO chose to bank on knowhow and technological solutions from SMS group.

By converting the complete drive train of the second roughing stand, SMS allowed for a higher rolling torque. Thanks to the higher torque the number of necessary passes can be reduced, boosting the mill's capacity as a result.

The revamp by SMS included the installation of two new oil/air lubricated flat-neck spindles of the latest design, the associated oil/air lubrication equipment, a new spindle balancing system, work-roll sets adapted to the new rolling passes, the hydraulic control system and the mounting supports for the spindle heads. Installation of the new components required only minor modifications to the rolling stand. For most of the new equipment, the existing mounts and the anchor bolts in the foundations could be reused, minimizing the overall installation effort.

The new drive motors were installed by the customer.

To be able to raise the operating pressure of the existing descaling system ahead of the finishing train, SMS renewed the complete descaler, including added functions such as a quick-change system for the spray headers, new spray headers and new water collecting channels with position control, a stronger housing and a hydraulically actuated cover. In the design, provision was made for the customer to be able to use in-stock wear parts, such as pinch rolls and roller table rolls, also in the future. The SMS specialists adapted the hydraulic functions to the new requirements by expanding the existing valve stands.

The new design of the pump system implemented by SMS provides two options: depending on the material to be processed, the entry-side descaling headers can be supplied either with a process pressure of 180 bar by the existing system or with up to 380 bar by the new frequency-controlled rotary pump system. The valve

technology for this solution was supplied also by SMS.

The upgraded descaling system enables WISCO to increase and adapt the descaling pressure to the constantly growing product range and the resulting growing requirements due to the addition of Si grades, for example, and other surface-related quality demands.

Wuhan Iron & Steel's Hot Strip Mill No. 2, supplied by SMS, has been in operation since 2003. Thanks to the recent and previous revamps successfully implemented by SMS, WISCO has been able to roll a constantly growing and increasingly demanding range of products on the mill, meeting current and future demands of the market.

SMS group is a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. It has some 14,000 employees who generate worldwide sales of more than EUR 2.9 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.