

Phone: +49 211 881 4449

E-mail: thilo.sagermann@sms-group.com

Thilo Sagermann

PRESS RELEASE

Düsseldorf, March 22, 2021

Zenith Changzhou commissions SMS group to modernize wire rod mill

SMS group's upgrade enables Zenith to enter the automotive and special steels markets



Reference picture of an SMS group PSM^{\circledR} (Precision Sizing Mill).

Zenith Steel Group Co. Ltd., one of the largest steel producers in China, has awarded SMS group the order to upgrade the existing wire rod mill at its Changzhou works in China to a combined wire rod mill. With this modernization, Zenith aims to widen its portfolio to include round bars and maximize the rolling speed for smaller-diameter products.

Currently, the wire rod mill produces 780,000 tons per year of wire rod from 11.5 up to 26.5 millimeters in diameter in commercial steel grades. As part of the modernization various equipment along the mill will be replaced and new equipment installed, such as combined and rotary shears, a shiftable water cooling line, a 320/5 PSM[®] (Precision Sizing Mill), the newly designed high-speed MEERcut[®] shear for wire rod and a pinch roll unit with laying head of the latest generation. The pouring reel line will accommodate two walking beam conveyor lines, cooling fans and cooling hoods for the in-line treatment of coils.

Thanks to the modernization and installation of the 3-roll Precision Sizing Mill (PSM[®]), Zenith will be able to roll smaller product at speeds of up to 42 meters per second. This will make this mill the first of its kind in the world to operate at such high speeds.

The addition of the new pouring reel from SMS group will enable Zenith to extend its current bar-in-coil diameter range from 16 to 42.5 millimeters. In the future, it will even be possible to roll product of 50 millimeter diameters for special applications. Additionally, the company will be able to produce heavy compact coils of up to 2.3 tons for automotive applications. To this end, bearing, spring, high-carbon, pre-stressed wire, alloy and tool steels will be added to the range of processed steel grades.

The various stations of the pouring reel line will be connected by means of a conveying system that ? in combination with the automation package supplied by SMS ? will enable enhancements of the surface quality of the bar-in-coil product, the coil forming process and the coil shape. As further availability-enhancing features, the line will come with the CCT® (Controlled Cooling Technology) off-line simulation process and a system for quick-changing the water cooling line complete with the headers. These improvements will enable Zenith to enter the automotive and special steels market.

This latest modernization project further underpins SMS group's expertise in plant upgrades and its position as a leading supplier of rolling mills for quality steel products

in all size ranges.



Pouring reel installation of a similar design in operation at a rolling mill in the Far East.

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.