PRESS RELEASE

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Shandong Iraeta to receive world’s biggest ring rolling machine from SMS group

Record: Seamlessly rolled rings with diameters of up to 16 meters

Successful cooperation: Ulrich Vohskämper (SMS group), left, and Niu Yugang (SIHI), right, during the contract signing ceremony.

Shandong Iraeta Heavy Industry Co., Ltd. (SIHI), China, has placed an order with SMS group for the supply of a newly developed ring rolling machine for the production of seamlessly rolled rings. With this
radial-axial ring rolling machine, SMS group is entering entirely new dimensions. The “RAW 2500/1250-16000/3000” allows rings with a diameter of up to 16 meters to be seamlessly rolled for the first time. The maximum rollable ring height is three meters. From the end of the 2017, SIHI will be the only company worldwide to be able to roll seamless rings of this size.

The rings produced on the machine will be used e.g. for tower flanges of wind turbines and will have to be able to withstand extreme loads. The machine will be specially designed with additional features for these products. Another application for the rollable rings will be large shells such as those required e.g. in the construction of large pressure vessels (e.g. for nuclear power reactors).

INCREASE IN RING ROLLING CAPACITY

During radial-axial ring rolling, the cross-section of a ring blank is reduced in a combined forming process in which wall thickness and height are reduced at the same time. As a result, the ring diameter increases due to the constant volume of the workpiece. With the new machine for its works in Zhangqiu (Shandong Province, Eastern China), SIHI is increasing the production capacities for rings that are made from blanks with a weight of up to 200 tons. The ring rolling machine will be equipped with the latest sensor technology and a state-of-the-art machine controller. The power supply to the machine is constantly adapted by the controller to the energy required for the forming process. The installed systems will guarantee that the capacities of the machine are fully exploited while securely preventing any overloading.

“With the maximum ring diameter of 16 meters, this new development from the SMS group opens up opportunities for us to serve the market with new ring dimensions, and hence to expand our product portfolio,” says Yugang Niu, President of SIHI. “We are happy to have SMS group at our side as a partner who has the necessary expertise to master this technological challenge by engineering such a
machine and the associated processes.” Equally pleased is Robert Düser from the SMS group’s Forging Plants/Ring and Wheel Rolling Division who adds: “The development was a great technological challenge. The experience that we have gained here will help us to considerably expand the capacities of our ring rolling machines, opening up completely new markets for our customers.”

A ring rolling machine that will produce the biggest rolled rings in the world is to be supplied to Shandong Iraeta Heavy Industry.

*The SMS group is a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. Its 14,000 employees generate sales of over EUR 3.3 bn.*