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## Zhejiang Nisshin Worthington starts up Z-Hi reversing cold mill supplied by Primetals Technologies

- First mill of this type to process wide strips at high rolling speeds of up to 800 m/min
- Produces up to 120,000 metric tons per year of precision specialty steels mainly for automotive applications
- Mill can be run in two different reduction modes
- Mill features newly designed quick roll changing device
- Automatic gauge control(AGC) and automatic shape control (ASC) optimize shape and flatness of the strip

On October 25, a Z-Hi reversing cold mill supplied by Primetals Technologies was officially inaugurated at the Pinghu, China production site of Zhejiang Nisshin Worthington Precision Specialty Steel Co., Ltd. The mill had commenced operation in July. It is designed to produce 120,000 metric tons per year of precision specialty steels, mainly for automotive applications. It is the first mill of this type worldwide capable of processing wide strips at high rolling speeds of up to 800 m/min. The aim is to serve the world's largest automotive market, where a significant increase in demand for special steel coils and sheets is expected. The mill can be run in two different reduction modes and features a newly designed quick roll changing device. Automatic gauge control (AGC) and automatic shape control (ASC) optimize shape and flatness of the strip. The order to supply the mill was awarded to Primetals Technologies in December 2013.

Zhejiang Nisshin Worthington Precision Specialty Steel Co., Ltd. is a joint venture of Nisshin Steel Co., Ltd., Marubeni-Itochu Steel Inc. and Worthington Industries, Inc. located in Pinghu, Zhejiang Province. The company produces and sells special steel coils and sheets in the region locally. The new mill will help promoting initiatives for further local procurement of Japanese, American and European automotive parts makers operating there.

The Z-Hi reversing cold mill is able to process strips with a maximum width of 1,250 mm. The maximum rolling speed is up to 800 m/min. The Z-Hi mill combines the advantages of the Sendzimir cluster-type rolling mill with those of the 4-High cold rolling mill. Heavier reductions per pass can be achieved as well as thinner gauges. Also, it can roll harder materials and produces a better surface quality. The system installed by Primetals Technologies can be run in two modes: the Z-Hi heavy-reduction mode and the 4-high mode for skin pass rolling. Special emphasis has been put on the automatic gauge control (AGC) and the automatic shape control (ASC) systems to optimize shape and flatness of the strip. In addition, the mill features a newly designed quick roll changing device.

Primetals Technologies supplied the complete mechanical and electric equipment as well as the instrumentation and software packages and was responsible for technical advice during the erection and commissioning phases.



Front view of the Z-Hi reversing cold mill from Primetals Technologies at Zhejiang Nisshin Worthington Precision Specialty Steel Co., Ltd. in Pinghu, Zhejiang Province, China, which is exchangeable with a 4Hi mill for special steel.

This press release and a press photo are available at

www.primetals.com/press/

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