



London, February 19, 2019

Continuous slab caster upgraded by Primetals Technologies started up at China Steel Corporation

- Molds and associated equipment were thoroughly modernized
- Technology packages increase flexibility, product quality and minimize breakouts
- New technology packages worked in automatic mode from the start

In December 2018, the continuous slab caster S6 upgraded by Primetals Technologies of Taiwanese steel producer China Steel Corporation (CSC) was started up at the company's Kaohsiung plant. The project included the replacement of obsolete or redundant features via the modernization of the mold and the installation of proven technology packages. The aim was to increase flexibility, product quality and to minimize breakouts. The upgrade also considers possible additional enhancement features in future. The new technology packages worked in automatic mode from the start.

Primetals Technologies equipped the caster with three new technology packages, namely the DynaWidth hydraulic mold width adjustment to allow accurate slab width change during or between casting, the Mold Expert breakout prevention and mold monitoring system to minimize the possibility of breakouts, and the DynaFlex hydraulic mold oscillation with a new frame type oscillator which gives complete flexibility over oscillation control during casting to maximize as cast product surface quality. Primetals Technologies was responsible for design and supply, and provided advisory services during erection and commissioning. New mold parts and a new frame type DynaFlex oscillator were manufactured in Taiwan by CSC-owned China Steel Machinery Corporation (CSMC).

The two-strand continuous slab caster S6 originally started up in 1996 and was equipped with a straight twin casting mold. The machine radius is around 9 meters and the metallurgical length is around 44.7 meters. It produces slabs with a thickness of 250 millimeters with widths ranging from 750 to 1,880 millimeters. Grades cast include low, ultra-low, medium and high carbon steels, peritectic, micro alloyed and high silicon steels.

China Steel Corporation (CSC) is the leading steel producer in Taiwan with an annual production of around 10 million metric tons per year. Around two thirds of the production is for the domestic Taiwanese market, the rest is exported. The CSC plant in Kaohsiung includes two BOF shops with a total of seven 2-strand slab casters and three 4-strand bloom casters. The slab casters mainly produce carbon and low alloy steels.



Continuous slab caster S6 at the Kaohsiung plant of Taiwanese steel producer China Steel Corporation (CSC). The casting machine was upgraded by Primetals Technologies.

This press release and a press photo are available at www.primetals.com/press/

Contact for journalists:

Dr. Rainer Schulze: rainer.schulze@primetals.com

Tel: +49 9131 9886-417

Follow us on Twitter: twitter.com/primetals

Head: Gerlinde Djumlija

Reference number: PR2019021769en

Page 2/3

Primetals Technologies, Limited headquartered in London, United Kingdom is a worldwide leading engineering, plant-building and lifecycle services partner for the metals industry. The company offers a complete technology, product and service portfolio that includes integrated electrics, automation and environmental solutions. This covers every step of the iron and steel production chain, extending from the raw materials to the finished product – in addition to the latest rolling solutions for the nonferrous metals sector. Primetals Technologies is a joint venture of Mitsubishi Heavy Industries (MHI) and Siemens. Mitsubishi-Hitachi Metals Machinery (MHMM) - an MHI consolidated group company with equity participation by Hitachi, Ltd. and the IHI Corporation - holds a 51% stake and Siemens a 49% stake in the joint venture. The company employs around 7,000 employees worldwide. Further information is available on the Internet at www.primetals.com.

Chiswick Park, Building 11, 566 Chiswick High Road W4 5YS London United Kingdom

Reference number: PR2019021769en