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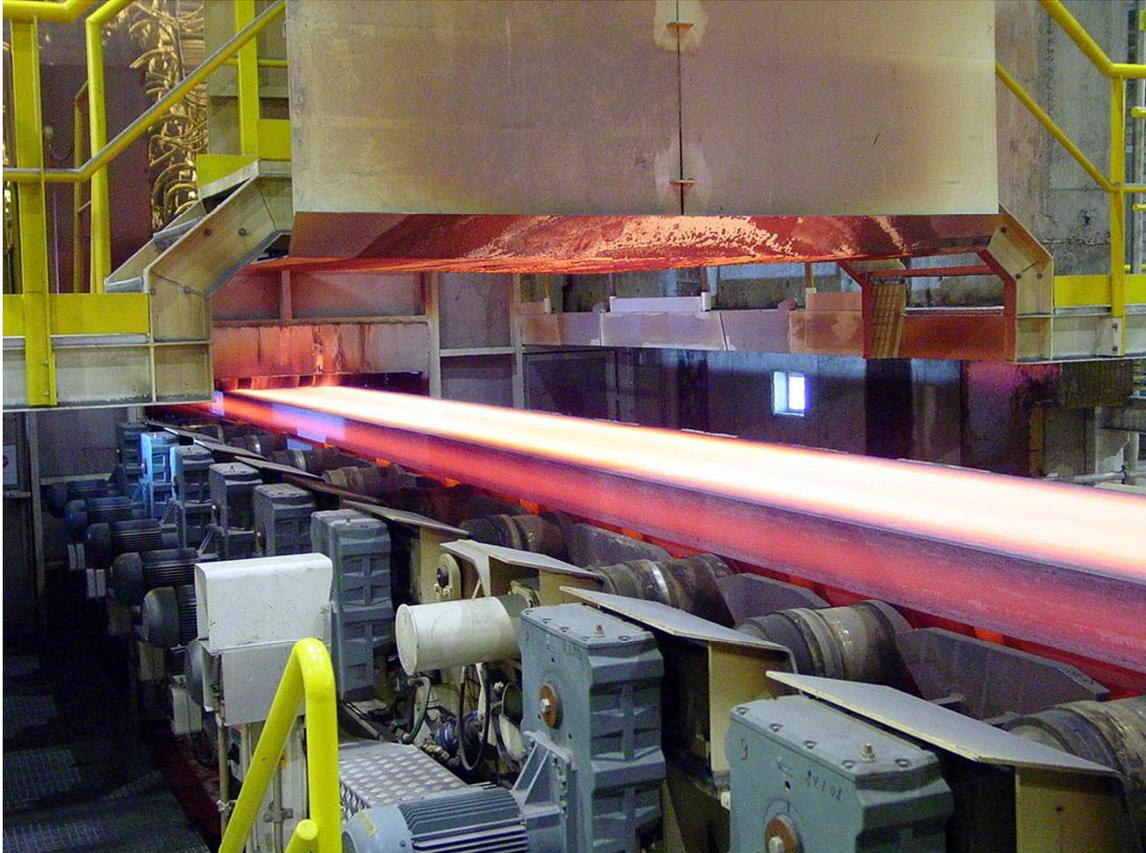
Stainless steel continuous slab caster modernized by Primetals Technologies started up at Outokumpu in Finland

- **Modernization facilitates production of slabs with a thickness of 200 millimeters**
- **High-speed casting of austenitic grades is still possible with the new thickness**
- **Production capacity rises**

In December 2017, the stainless-steel continuous slab caster modernized by Primetals Technologies was started up at Outokumpu's production site in Tornio, Finland. The aims of the project were to increase the annual production capacity of slabs and to enable thicker slabs of austenitic grades to be cast at high speed. This involved the machine head of the casting plant to be modified to cast slabs with a thickness of 200 millimeters, and the necessary adaptations were also made in the bending section and to the dummy bar system. The order was awarded to Primetals Technologies in the second quarter of 2017.

Outokumpu is one of the world's leading stainless steel producers with the widest product portfolio in the industry. The company's products are used in the civilization's basic structures and its most famous landmarks as well as products for households and various industries. Primetals Technologies installed the initially stainless steel continuous slab caster, together with an electric arc furnace and an AOD converter, in 2002. Until now, the continuous slab caster has produced slabs in widths from 800 to 1,650 millimeters, with a thickness of 185 millimeters. The caster is also equipped with a range of modern technology packages. For example, the world's first DynaGap Soft Reduction system was installed here in a continuous slab caster for stainless steels.

Primetals Technologies modernized the machine head to enable slabs to be cast with a thickness of 200 millimeters and so to raise the production capacity. The Smart Mold was equipped with new narrow faces, including lateral foot rollers and a new cover. The bending section was fitted with shims suitable for the new slab thickness and the dummy bar system was also adapted. The existing Dynacs cooling model was parameterized for the new casting thickness. The LevCon mold level control was already upgraded in 2016 to include a function to minimize bulging in order to meet higher demands in the future.



Stainless steel-continuous slab caster at Outokumpu's stainless steel mill in Tornio, Finland. The caster, modernized by Primetals Technologies, was started up in December 2017.

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

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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.

Primetals Technologies, Limited
A joint venture of Siemens, Mitsubishi Heavy Industries and Partners
Communications
Head: Gerlinde Djumlija

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