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Primetals Technologies modernizes continuous slab casters of CSN in Volta Redonda, Brazil

- **A joint turnkey modernization for three 2-Strand slab casters**
- **Product quality will be improved, maintenance costs lowered**

Brazilian steel producer Companhia Siderúrgica Nacional (CSN) awarded Primetals Technologies the order to modernize three continuous slab casters at its production site Volta Redonda in Rio de Janeiro state. The focus of this turnkey project lies on the revamp of the electric and basic (level1) automation, including the implementation of a number of technological packages, the installation of new automation and drive technology as well as new auxiliary systems and construction of several control rooms. The aim of the modernization project is to improve product quality and reduce the maintenance costs. Installation work is scheduled in the second half of 2018 during a regular shutdown, commissioning is planned for the third quarter of 2018.

The existing electrical, instrumentation and automation equipment of continuous slab caster CCM#2 contains obsolete components and systems whose manufacture is being or has been discontinued generating high costs of maintenance with risk of long shutdown in case of failures, since there is no spare parts readily available. CCM#2 will be equipped with technological packages, including LevCon mold level control, DynaFlex hydraulic mold oscillator, DynaWidth automatic width adjustment, DriveCon to control the withdrawal drives and Hydraulicon and LubriCon to control the hydraulics and lubrication systems, respectively. Furthermore, Primetals Technologies will supply new AC and DC drives, replacing existing ones. New PLC systems and safety PLCs will be installed and programmed. New HVAC (Heating, Ventilation and Air Conditioning) and new fire alarm and fighting systems will be supplied. All molds will be made fit for the installation of LevCon, Mold Expert and new hydraulic units. Primetals Technologies will also be responsible for the civil construction of new control rooms and pulpits. The other two casting machine will experience some small-scale modifications. Both will be equipped with new mold level measurement systems, while additionally the DynaWidth automatic mold width adjustment is installed on CCM#3.

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The city of Volta Redonda in the state of Rio de Janeiro is the headquarter and the most important location of Companhia Siderúrgica Nacional. The company operates an integrated production complex with an annual capacity of 5.6 million tons of steel.

The casting machines CCM#2 and CCM#3 started-up in June 1982 and June 1983 and are identical, each featuring an annual production capacity of 1.8 million metric tons. Carbon steel grade slabs are cast in a width range of 810 to 1,650 mm and a thickness of 255 mm. CCM#3 was previously revamped in a similar turnkey project by Primetals Technologies. The service division of Primetals Technologies is since years the maintenance partner of CSN in charge of the slab continuous casters at this plant, with approximately 200 employees on site.



Exit section of a continuous slab caster in the Volta Redonda, Brazil production site of Companhia Siderúrgica Nacional (CSN). Primetals Technologies is revamping three of CSN's continuous casting machines (Photo courtesy CSN).

This press release and a press photo are available at

www.primetals.com/press/

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