Primetals Technologies to revamp continuous pickling line of hot rolled strip for Tokyo Steel

- Higher productivity for difficult-to-descale materials
- iBox pickling tank saves energy and reduces acid consumption

In late March, Japanese steel producer Tokyo Steel Co., Ltd. (Tokyo Steel) placed an order with Primetals Technologies to revamp a continuous pickling line of hot rolled strip at the company’s production plant in Kurashiki City, Okayama Prefecture, Japan. The project includes the addition of a tension leveler type scale breaker and the installation of an iBox pickling tank with acid concentration control. The revamp will increase productivity for difficult-to-descale materials while reducing energy and acid consumption. The modernization project is expected to be finished in October 2021.

Tokyo Steel which is one of biggest electrical furnace steel manufacture in Japan operates four production plants in Japan and is the country’s number-one producer of H-beams. The portfolio includes a large number of long and flat products. The Okayama plant produces H-beams, I-beams, checkered beams, channels, rebar, hot rolled coils, checkered coils, pickled and oiled coils, hot-dip galvanized coils as well as steel sheets. Liquid steel production is based on the electric arc furnace route. The pickling line processes hot rolled coils with thicknesses between 1.5 and 6.0mm in widths ranging from 840 to 1,340mm.

Since Demands for high standard steel of electric furnace steel is increasing due to the lower environmental impact of the EAF route, one important aspect of increasing production is an increase in pickling efficiency. The tension leveler type scale breaker will improve the processing of difficult-to-descale materials, in combination with Primetals Technologies’ iBox (immersion box) pickling tank, which replaces an existing circulation type shallow-type pickling tank.

Some Steel grades for demanding applications in the household appliances or automotive industry may require two or three times as long to descale in conventional pickling lines than normal low carbon steel.
to reduce the productivity. The iBox with acid concentration control from Primetals Technologies was created to address this issue, without the need for a circulation heating or jet pickling system, which achieves high descaling performance with lower consumption of energy and acid.

iBox is a registered trademark of Primetals Technologies, Ltd. in certain countries.

iBox pickling tank from Primetals Technologies

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

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