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Primetals Technologies to supply new rebar mill to Agha Steel Industries in Pakistan

- **Rolling mill will produce rebar for the national market**
- **Annual production capacity will be 300,000 metric tons**
- **Efficient Heating System (EHS) for billets optimizes the combination of different heating sources, reducing OPEX**
- **Optimized pass schedule for uniform wear of rolls**

Primetals Technologies has received an order from Pakistani rebar steel producer Agha Steel Pvt Ltd (Agha Steel Industries) for the supply of a new rebar mill in Port Qasim near Karachi, Pakistan. The new state-of-art mill is designed to produce 300,000 metric tons of rebar per year. To optimize the combination of different heating sources for incoming billets according to their respective variable cost and availability, the rolling line will be equipped with an Efficient Heating System (EHS). This will reduce transformation costs. Also, the pass schedule is optimized in order to achieve a uniform wear of the rolls. Hot commissioning is expected for mid-2018.

The new bar mill will roll up to 50 tons of steel bar per hour, at a top rolling speed of 13 meters per second. The mill processes carbon steel billets with a square cross-section of 130 x 130 millimeters and a maximum length of 12 meters. The finished products are rebars with diameters ranging from 8 to 40 millimeters. The productivity of the plant is maximized by rolling bars with diameters of between 8 and 9.5 millimeters in four-slit mode, and diameters between 10 and 12.7 millimeters in two-slit mode. Finished bar bundle weight is 3 to 4 metric tons. Bundle lengths are in the range from 6 to 16 meters.

Primetals Technologies is responsible for engineering the plant and will supply the process equipment from the billet induction furnace to the dispatching area. The EHS will govern the efficient use of the two main billet heating routes according to the production plan and to the billet length. The billets of 12 meter length will go through a new inline high-power induction furnace located between the continuous casting

machine and the first stand of the roughing mill. The induction furnace boosts the billet temperature to the required rolling value, and allows for precise control of its uniformity over the entire billet length.

The rolling line consists of a roughing mill with a VHVHHV arrangement, an HVHVHV intermediate mill, and a finishing mill with an HHHH arrangement. Roughing and intermediate mill will be equipped with six, the finishing line with four fifth-generation Red Ring stands. The scope of supply also includes hot cropping and emergency shears, a heat-treatment Pomini Quenching System (PQS) installed downstream of the last stand of the finishing mill, a pinch roll and hot dividing shear in front of the 54 x 8 meter cooling bed., which is equipped with a brake slide. This is followed by a cold dividing shear with a cutting force of 300 metric tons, and machines to count, bundle, weigh and label the bars. Primetals Technologies is also supplying the guides, lubrication and hydraulic systems, basic (level 1) and process automation (level 2), motors, drives and an uninterruptible power supply. Primetals Technologies will also assist the customer with erection and commissioning work.



Red Ring generation 5 rolling stand from Primetals Technologies. The new rebar mill of Agha Steel Pvt Ltd (Agha Steel Industries) in Port Qasim near Karachi, Pakistan will be equipped with a total of 16 stands.

This press release and a press photo are available at

www.primetals.com/press/

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