

Metinvest Launches Production of 32-Tonne Hot-Rolled Coils

Ilyich Iron and Steel Works of Mariupolis completing hot tests of a hydraulic coiler to produce 32-tonne hot-rolled coils at its 1700 hot strip mill and launching production of the new product.



Implementation of this phase of

[the 1700 Mill upgrade](#)

marks the completion of an extensive scope of activities aimed at boosting competitiveness of rolled coils. With the new coiler, the heavy coil production line is complete.

What are the specific features of the new product

The new equipment makes it possible to increase the weight of hot-rolled coils to 32 tonnes and their thickness from 8 to 16 mm. Until now, hot-rolled coils with a thickness greater than 8 mm have not been commercially produced in Ukraine.

Re-rolling mills and producers of welded pipes, including large diameter spiral welded pipes, are major consumers of heavy coils. Target markets for the new product are mainly Europe and the Middle East.

Consumers using heavy coils have lower logistics costs, higher performance, save time and consumables, and have more possibilities to process rolled products.

Moreover, for some applications, heavy hot-rolled coils are an affordable alternative to more expensive rolled plates. The launch of heavy coil production also opens up opportunities to expand the range of high-strength steel grades for the tube and pipe industry.

The shop's production line outfitted with the new coiler allows producing hot-rolled coils in a thickness range from 1.2 to 16 mm, in widths up to 1,550 mm, and weighing up to 32 tonnes. The capacity of the 1700 hot strip mill is up to 2.5 million tonnes of rolled coils per year.

The revamped mill already produces hot-rolled products in a thickness range from 1.2 to 1.8 mm according to European standards. Besides, the output of such products has been increased significantly, and, currently, they are not only processed in-house by the steelworks but also supplied to local and export markets.

The hot-rolled products are produced in a wide grade range, including high-strength steels S460MC and S500MC according to European standards and equivalent steel grades according to other standards.

Metinvest has increased its order portfolio and expanded its market presence in Europe, Turkey, and the Gulf countries after the revamp of the mill.



How does the mill operate

The high quality of hot-rolled coils is ensured by modern technology and state-of-the-art equipment supplied by Primetals Technologies Austria.

Steel for coils is produced in the basic oxygen furnace shop and cast at the new continuous casting machine that came on line in 2019.

Premium slabs are supplied to the upgraded 1700 Mill, where they are heated in furnaces to achieve the required temperature. First, slabs are rolled in the roughing mill and coiled in the coilbox to equalize the temperature across the entire surface.

Then semi-finished coils are uncoiled, rolled in the finishing train, where they achieve the required section, and subsequently cooled by water in a special unit. The end point of the production line is down coilers that wind strips into coils.

The finished product can be processed by the steelworks into cold-rolled and galvanized steel products, used in the manufacture of pipes, and sold in the market.

The 1700 hot strip mill was restarted in autumn 2019 after undergoing a large-scale revamp. The mill was revamped in several stages.

The mill was outfitted with a new reheating furnace, a heavy-duty pneumatic coiler, a coilbox, hydraulic descenders, a reversing roughing mill stand, and other process equipment. The finishing train of the rolling mill was also upgraded.

At the end of 2020, a hydraulic coiler was installed in the mill and required infrastructure for it to function was built.