

PRODUCTION OF FLUTED-SURFACE THICK PLATE

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The production of fluted plate 7-20 mm thick is now a regular feature at the Taganrog metallurgical plant (see Fig. 1). These plates were rolled on a three-high Lauth mill: the bottom and middle rolls are plain-bodied rolls, while the top roll has specially machined square-shaped grooves. The flutings on the plate are applied in a

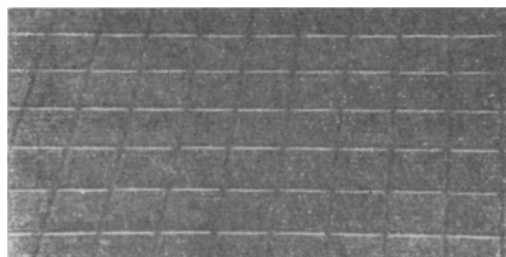


Fig. 1. Plate with fluted surface.

single pass by the top roll. A prerequisite is that the plate have a smooth surface and be at a temperature not below 800°C. In order to obtain such a smooth surface, the plates are passed three to five times, depending on their thickness, between plain-bodied rolls and without reduction in area between the top and middle rolls. Since the flutings are applied by the top roll, the surface of the plates is easily accessible and convenient for inspection. When the flutings are applied, reduction in area must be achieved within a range of 15-20%, since binding of the top roll by the plate is observed at higher area reductions.

The fluted plates are mainly intended for use in flooring.

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