

Method for rolling bars and rods involves continuous rolling through the calibers of sequentially arranged rolling stands, with alternating horizontal and vertical roller arrangements, and the division of the stands into subgroups within which the nominal roller diameters are the same. As rolling progresses, the diameters of the rolls in the subgroups are reduced in accordance with the decrease in the thickness of the rolled material. In this process, rolling is carried out in subgroups with no more than four stands; in the first stand of each subsequent subgroup, the workpiece with a uniform cross-section is rolled, and the roll diameters for the subgroups are determined by the arithmetic mean of the calculated diameters, which are calculated using the relationship

$$D_i = 125 \cdot \exp[0,165 \cdot \ln(A_i)],$$

where i is the stand number in the rolling sequence;

A_i - is the cross-sectional area of the strip in the i -th stand.