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Finite Element Modeling of Influence of Roll Form of Vertical Scale Breaker on Decreased Formation of Surface Defects during Roughing Hot Rolling

Authors : A. Pesin, D. Pustovoytov, M. Sverdlik

Abstract : During production of rolled steel strips the quality of the surface of finished strips influences steel consumption considerably. The most critical areas for crack formation during rolling are lateral sides of slabs. Deformation behaviors of the slab edge in roughing rolling process were analyzed by the finite element method with Deform-3D. In this study our focus is the analysis of the influence of edger's form on the possibility to decrease surface cracking during roughing hot rolling.

Keywords : roughing hot rolling, FEM, crack, bulging
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