

Title (en)
METHOD AND DEVICE FOR APPLYING AN ADJUSTABLE TENSILE-STRESS DISTRIBUTION, IN PARTICULAR IN THE EDGE REGIONS OF COLD-ROLLED METAL STRIPS

Title (de)
VERFAHREN UND VORRICHTUNG ZUM AUFBRINGEN EINER REGELBAREN ZUGSPANNUNGSVERTEILUNG, INSBESONDERE IN DEN KANTENBEREICHEN KALTGEWALZTER METALLBÄNDER

Title (fr)
PROCEDE ET DISPOSITIF POUR ETABLIR UNE DISTRIBUTION DE CONTRAINTES DE TRACTION AJUSTABLE, EN PARTICULIER DANS LES ZONES DE BORD DE BANDES METALLIQUES LAMINEES A FROID

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Abstract (en)
[origin: WO2005023444A2] The invention relates to a method and a device for applying an adjustable tensile-stress distribution, in particular in the edge regions during the cold-rolling of metal strips (16), in particular metal foil, in order to reduce the risk of an excessive build-up of tension and cracks at the edges of the strip, which can lead as a negative consequence to cracks in the strip and to a reduction in production, and in order to improve the surface of the strip and its planarity, even for a relatively high strip displacement speed, and also to reduce strip trimming widths. To achieve these aims, at least one or a combination of two of the following measures are implemented: a) separation of lubrication and cooling of the working rolls by lubricating on the run-in side and cooling on the discharge side, b) additional influencing of the strip edges using a hot edge spray", in particular by spraying (21) rolling oil with differing temperatures in zones, c) use of a special cross-sectional configuration of the working rolls (12, 12') in the vicinity of the strip edges, which creates a partial material build-up during the blooming pass, said build-up forming a longer strip edge with subsequent passes, thus counteracting the risk of an excessive build-up of tensile stress.

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