Title (en)

METHOD FOR INCREASING THE PROCESS STABILITY, PARTICULARLY THE ABSOLUTE THICKNESS PRECISION AND THE INSTALLATION SAFETY DURING THE HOT ROLLING OF STEEL OR NONFERROUS MATERIALS

Title (de)

VERFAHREN ZUM ERHÖHEN DER PROZESSSTABILITÄT, INSBESONDERE DER ABSOLUTEN DICKENGENAUIGKEIT UND DER ANLAGENSICHERHEIT, BEIM WARMWALZEN VON STAHL- ODER NE-WERKSTOFFEN

Title (fr)

PROCEDE POUR AUGMENTER LA STABILITE AU TRAITEMENT, NOTAMMENT LA PRECISION D'EPAISSEUR ABSOLUE ET LA SECURITE D'INSTALLATION, LORS DU LAMINAGE A CHAUD DE MATERIAUX EN ACIER OU EN METAL NON FERREUX

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Abstract (en)

[origin: WO2005070575A1] The invention relates to a method for increasing the process stability, particularly the absolute thickness precision and the installation safety during the hot rolling of steel or nonferrous materials, with small degrees of deformation (f) or no reductions while taking the high-temperature limit of elasticity (Re) into account when calculating the set rolling force (FW) and the respective setting position (s). The process stability can be increased with regard to the precision of the yield stress (kf,R) and the set rolling force (FW) at small degrees of deformation (f) or small reductions, during which the high-temperature limit of elasticity (Re) is determined according to the deformation temperature (T) and/or the deformation speed (phip) and is integrated into the function of the yield stress (kf) for determining the set rolling force (FW) via the relation (2)) Re= a + e <b1+ b2 . T>. phip<C >, in which: Re represents the high-temperature limit of elasticity; T represents the deformation temperature; phip represents the deformation speed, and; a, b, c represent coefficients.

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