

Title (en)

METHOD FOR THE MODEL-BASED DETERMINATION OF ACTUATOR NOMINAL VALUES FOR THE SYMMETRIC AND ASYMMETRIC ACTUATORS OF THE ROLL STANDS OF A HOT WIDE STRIP MILL

Title (de)

VERFAHREN ZUR MODELLBASIERTEN ERMITTLUNG VON STELLGLIED-SOLLWERTEN FÜR DIE SYMMETRISCHEN UND ASYMMETRISCHEN STELLGLIEDER DER WALZGERÜSTE EINER WARMBREITBANDSTRASSE

Title (fr)

PROCÉDÉ DE DÉTERMINATION, BASÉE SUR UN MODÈLE, DE VALEURS THÉORIQUES POUR LES ACTIONNEURS SYMÉTRIQUES ET ASYMÉTRIQUES DES CAGES D'UN LAMINOIR À CHAUD À LARGES BANDES

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Abstract (en)

[origin: WO2011038964A1] The invention relates to a design for the model-based determination of actuator nominal values for the symmetric and asymmetric actuators of the roll stands of a hot wide strip mill, by which means the application of the actuator nominal values enables the adjustment of a desired target contour of the roll gaps of the stands. In a first method step, a nominal speed distribution at the outlet of each stand is defined. In a second step, strip thickness contours at the outlets of the stands are determined by means of strip flatness models. In a third step, roll separating force distributions to be applied for each stand are distributed by means of material flow models. In a fourth step, the target contour for the symmetric actuators and a target contour for the asymmetric actuators is determined. In a fifth step, the nominal values for the symmetric and asymmetric actuators are calculated for each stand, from the determined target contours, by means of optimisation methods.

IPC 8 full level

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