

Title (en)

METHOD AND DEVICE FOR CONTROLLING A STRETCH REDUCING ROLLING MILL FOR WALL THICKNESS COMPENSATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUM STEUERN EINES STRECKREDUZIERWALZWERKS ZWECKS WANDDICKEKOMPENSATION

Title (fr)

PROCÉDÉ ET DISPOSITIF DE COMMANDE D'UN LAMINOIR ÉTIREUR-RÉDUCTEUR POUR LA COMPENSATION DE L'ÉPAISSEUR DE PAROI

Publication

EP 3840896 B1 20221012 (DE)

Application

EP 19755610 A 20190815

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Abstract (en)

[origin: WO2020038832A1] The invention relates to a method and to a control unit for controlling a stretch reducing rolling mill for rolling pipes, comprising a plurality of roll stands (7) arranged one behind the other in a conveying direction of a pipe (6) to be rolled. A wall thickness measuring device (2-2, 9) determines a wall thickness progression (4) of the pipe (6) to be rolled prior to rolling. A control unit (1, 1A, 1B) controls respective rotational speeds of the roll stands (7) during the rolling of the pipe on the basis of the determined wall thickness progression (4) in order to compensate for wall thickness fluctuations of the pipe. According to the invention, a pipe position measuring device (8) arranged in front of the roll stands (7) in the conveying direction continuously measures a current longitudinal coordinate (lx) of the pipe (6), the measured values of the longitudinal coordinate (lx) of the pipe (6) are transmitted to the control unit (1A, 1B), and the control unit (1A, 1B) controls the rotational speeds of the roll stands (7) during the rolling of the pipe also on the basis of the transmitted measured values of the current longitudinal coordinate (lx) of the pipe (6) in order to compensate for wall thickness fluctuations of the pipe. The invention further relates to a stretch reducing rolling mill designed for carrying out the method.

IPC 8 full level

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Citation (examination)

EP 1611969 B1 20090701 - SUMITOMO METAL IND [JP]

Citation (opposition)

- Opponent : KOCKS TECHNIK GmbH & Co. KG
- US 3496745 A 19700224 - KOCKS FRIEDRICH
 - DE 2947233 A1 19810527 - KOCKS TECHNIK [DE]
 - WILLEMS S, FRIEDRICH KOCKS : "TUMICON --Mill Management and Control Tool of Advanced Stretch Reducing Blocks", TUBE UKRAINE INTERNATIONAL CONFERENCE 2007, 1 January 2007 (2007-01-01), pages 107 - 114, XP093106968

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