

Title (en)

METHOD FOR SETTING THE SPEED MODE FOR A CONTINUOUS HOT ROLLING MILL TRAIN WITH MINIMUM TENSION IN THE SPACE BETWEEN MILLS

Title (de)

VERFAHREN ZUR EINSTELLUNG DES GESCHWINDIGKEITSMODUS FÜR EINE KONTINUIERLICHE WARMWALZSTRASSE MIT MINDESTSPANNUNG IN DEM RAUM ZWISCHEN WALZGERÜSTEN

Title (fr)

PROCEDE DE REGLAGE DU REGIME DE VITESSE DE FONCTIONNEMENT DU GROUPE ININTERROMPU DE TRAINS D'UN LAMINOIR A CHAUD PERMETTANT D'ASSURER UNE TENSION MINIMALE DANS LES INTERVALLES ENTRE LES TRAINS

Publication

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Application

EP 03717829 A 20030319

Priority

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- RU 2002107152 A 20020322

Abstract (en)

[origin: RU2198753C1] FIELD: automatization of rolling processes, namely regulation of interstand tension in mills for continuous hot rolling of metal. SUBSTANCE: method comprises steps of measuring parameters of rolling process and controlling torque values of stand motors successively from one stand group to another at using groups having three successively arranged stands; performing control during four stages; in first stage at guiding rolled piece to first stand until time moment of guiding it to second stand forming signal for storing torque of static load and speed mode of drive motors of first stand; at second stage beginning from time moment of guiding rolled piece to second stand until time moment of guiding it to third stand forming signal for changing speed mode of drive motors of previous first stand if said speed mode differs from standard one determined by minimum torque of first stage; at third stage beginning from time moment of guiding rolled piece to third stand calculating relation of torque of stored static load of drive motors of first stand to current value of torque of drive motors of third stand for forming signal determining difference between said values and realizing continuous control of speed mode of drive motors of first stand; at forth stage beginning from time moment when rolled piece leaves first stand interrupting continuous control of speed mode of drive motors of first and second stands and storing signal formed at third stage while holding above mentioned relation due to proportional control between second and first stands for controlling speed mode of drive motors when next rolled piece enters given group of stands. EFFECT: high accuracy of size along the whole length of rolled piece, enlarged functional possibilities, high reliability of manufacturing process for making high accuracy rolled piece. 2 dwg

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Citation (search report)

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