

Title (en)
OPERATING METHOD FOR A COLD-ROLLING LINE WITH IMPROVED DYNAMICS

Title (de)
BETRIEBSVERFAHREN FÜR EINE KALTWALZSTRASSE MIT VERBESSERTER DYNAMIK

Title (fr)
PROCÉDÉ D'EXPLOITATION POUR UN TRAIN DE LAMINOIR À FROID AVEC DYNAMIQUE AMÉLIORÉE

Publication
EP 2268427 A1 20110105 (DE)

Application
EP 09718646 A 20090309

Priority
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Abstract (en)
[origin: WO2009112443A1] In a multi-staged cold-rolling line, a strip (5) is rolled. An actual rolling force (F) of a last rolling stage (4) of the cold-rolling line is detected using a rolling force detection apparatus (14) and fed to a force control unit (15). The force control unit (15) determines at least one control parameter (ds1*, dv*) using the actual rolling force (F) and a target rolling force (F*) fed to it and outputs the at least one control parameter. An actual thickness (d) of the strip (5) is detected using a thickness measurement unit (10) directly downstream of the last rolling stage (4) of the cold-rolling line and this thickness is sent to a thickness control unit (11). The thickness control unit (11) acts on the last rolling stage (4) of the cold-rolling line. Another actual thickness (d') of the strip (5) is detected using another thickness measurement unit (16) directly upstream of the last rolling stage (4) of the cold-rolling line. Speeds (v', v) at which the strip (5) enters the last rolling stage (4) of the cold-rolling line and exits the last rolling stage (4) of the cold-rolling line are detected using speed detection units (19, 20). The detected speeds (v', v) and a pre-determined final thickness (d*) which the strip (5) should have following the last rolling stage (4) of the cold-rolling line are fed to a setpoint determination unit (18). The setpoint determination unit (18) determines a target thickness (d**) as a function of the parameters (v', v, d*, d) fed to it. Another thickness control unit (H') acting on the next to last rolling stage (3) of the cold-rolling line receives the target thickness (d**) as a setpoint (d**) and the other actual thickness (d') as an actual value (d').

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Citation (search report)
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