

Title (en)

Automatic control methods and devices for rolling mills.

Title (de)

Verfahren und Vorrichtung zur automatischen Steuerung von Walzwerken.

Title (fr)

Procédé et dispositif de commande automatique pour laminoirs.

Publication

EP 0063633 A1 19821103 (EN)

Application

EP 81103238 A 19810429

Priority

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Abstract (en)

In methods of automatically controlling the strip thickness in a rolling mill for producing a rolled product having a desired thickness and devices therefore, either an automatic gauge control (AGC) mode for controlling a deviation of the output thickness of a material being rolled from the predetermined desired uniform gauge thickness to be diminished to zero or an automatic reduction rate control (ARC) mode for controlling the rate of reduction of the material being rolled to a predetermined value is properly selected in accordance with the rolling condition, i. e., the degree of the actually measured output thickness deviation of the material or the progress of the rolling passes. Furthermore, as a method of and a device for automatically controlling the rate of reduction suitable for the ARC mode of the methods of and the devices for automatically controlling the strip thickness, the rate of reduction is controlled such that an output thickness of the material is calculated from an actually measured input thickness of the material and a desired rate of reduction based on the principle of the constant mass-flow rate of the material being rolled, an input thickness is estimated from the calculated output thickness, an input length and an output length, and an error signal between the estimated input thickness and the actually measured input thickness is diminished to zero.

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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