Title (en)

METHOD FOR HEAT-TREATING, AND QUENCHING DEVICE FOR COOLING PLATE- OR WEB-LIKE SHEET METAL

Title (de

VÉRFAHREN ZUM WÄRMEBEHANDELN UND ABSCHRECKEINRICHTUNG ZUM KÜHLEN VON PLATTEN- ODER BAHNFÖRMIGEM BLECH AUS METALL

Title (fr

PROCÉDÉ DE TRAITEMENT THERMIQUE ET DISPOSITIF DE TREMPE POUR REFROIDIR UNE TÔLE MÉTALLIQUE EN FORME DE PLAQUE OU DE BANDE

Publication

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Application

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Abstract (en)

[origin: WO2015075041A1] The invention relates to a method for heat-treating plate- or web-like sheet metal, wherein the metal sheet (6) is heated and subsequently continuously transported by transport means through a quenching device in passage direction (D) and cooled by a fluid cooling medium, wherein at least a first cooling medium jet in the form of a flat jet is generated by a nozzle body (1) having at least one slit-shaped nozzle opening (4), which is connected to a connection (2) for introducing the fluid cooling medium, wherein the first cooling medium jet extends transversely to passage direction (D), and is directed, at a first angle ( $\alpha$ ), towards both the upper side (5) and the underside (7) of the metal sheet (6). According to the invention, at least a second cooling medium jet in the form of a flat jet is generated by means of a slit-shaped second nozzle opening (11, 17). The second cooling medium jet is directed over the width of the metal sheet, parallel to the first cooling medium jet, at a second angle ( $\beta$ ), towards both the upper side (5) and the underside (7) of the metal sheet (6). In addition, the first cooling medium jet and the second cooling medium jet are directed in opposite directions in passage direction (D), and have a predetermined spacing (A) between each other in passage direction (D). Formed on the upper side and the underside, between the first and the second cooling medium jets, is a cooling area upon which cooling medium acts and in which the metal sheet is intensively cooled.

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