

Title (en)

DEVICE AND METHOD FOR COOLING ROLLS USED FOR ROLLING IN A HIGHLY TURBULENT ENVIRONMENT

Title (de)

VORRICHTUNG UND VERFAHREN ZUR KÜHLUNG VON ROLLEN ZUM WALZEN IN EINER HOCH TURBULENTEN UMGEBUNG

Title (fr)

DISPOSITIF ET PROCEDE DE REFROIDISSEMENT DE CYLINDRES DE LAMINAGE EN REGIME HAUTEMENT TURBULENT

Publication

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Application

EP 07855376 A 20071221

Priority

- BE 2007000129 W 20071221
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Abstract (en)

[origin: WO2008104037A1] The present invention relates to a device for cooling a working roll (1, 2) belonging to a rolling stand used for rolling a long or flat product (3), characterized in that it comprises a cooling head in the form of a box section (6A, 6B) that is sealed except along a front face (42) lying a short distance from said roll (1, 2), and in which face a plurality of nozzles (41) has been machined or positioned in a determined pattern, said box section (6A, 6B) being concave and cylindrical at its front face (42). The box section (6A, 6B) is also fitted with transverse (5, 7) and lateral (8) plates which collaborate with the front face (42) of the box section so as to control the flow of cooling liquid and confine said liquid in the form of a highly turbulent flow. This then yields optimal cooling of the roll both in terms of the uniformity of the cooling across the surface thereof and in terms of the reduction in temperature as a result of the turbulent effect created.

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Cited by

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