

Title (en)

SECONDARY COOLING METHOD FOR CONTINUOUS CAST STRAND

Title (de)

SEKUNDÄRKÜHLUNGSVERFAHREN FÜR EINE STRANGGUSSTRANG

Title (fr)

PROCÉDÉ DE REFOIDISSEMENT SECONDAIRE POUR DALLE DE COULÉE CONTINUE

Publication

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Application

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Priority

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Abstract (en)

[origin: EP4052815A1] Provided is a secondary cooling method for a continuously cast strand that allows the facility to be maintained easily and allows the uniformity of the cooling capacity to be improved. The secondary cooling method for a continuously cast strand according to the present invention includes cooling a strand 5 using spray nozzles 21 having a quadrangular spray pattern. The spray nozzles 21 are arranged in the width direction of the strand between guide rolls 19 having a radius d (unit: mm) and arranged in a casting direction with a center-to-center distance P (unit: mm) in part or all of a horizontal zone 15 in a secondary cooling zone of a continuous casting machine 1. For each of the spray nozzles 21 that spray cooling water, values of the water volume density of the cooling water at two points A and B that are spaced apart in the casting direction by a distance L (unit: mm) are 50% of the maximum value of the water volume density in the casting direction, and the relation between the distance L and the center-to-center distance P satisfies formula (1) below. The strand is cooled while a nucleate boiling state is maintained in the range between the point A and the point B: $L/P \geq 0.70$.

IPC 8 full level

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CPC (source: CN EP KR)

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