

Title (en)

Method for spraying strands.

Title (de)

Verfahren zum Besprühen von Strängen.

Title (fr)

Procédé pour asperger des billettes.

Publication

EP 0245722 A2 19871119 (DE)

Application

EP 87106338 A 19870502

Priority

CH 193186 A 19860513

Abstract (en)

[origin: US4765390A] A continuous casting apparatus has a secondary cooling zone for spray cooling a travelling, continuously cast strand. Groups of spray nozzles are spaced longitudinally of the path of the strand on either side of such path. Each of the spray nozzles produces a flat, fan-shaped spray which diverges transversely of the path of the strand with increasing distance from the respective nozzle. The nozzles of a group are spaced from one another transversely of the path of the strand by a distance such that the sprays from two neighboring nozzles intermix to form a combined spray which, at the surface of the strand, has a length equal to the distance between the two nozzles. The portion of the strand extending between the outermost nozzles of each group is thus everywhere impinged by a combined spray. The marginal portions of the strand, on the other hand, are impinged only by the sprays from the respective outermost nozzles. The angles of divergence of the sprays are preferably in the range of 60 to 130 degrees.

Abstract (de)

Beim Stranggiessen von Stahlbrammen (2) wird die Strangoberfläche durch Flachstrahlsprühfächer (6, 6') gekühlt. Mindestens zwei solcher Sprühfächer (6, 6') werden in einen Spalt zwischen zwei einander sich folgenden Stützführungsrollen (5) gerichtet. Um solche Sprühfächer (6, 6') optimal an unterschiedliche Strang- und/oder Giessparameter ohne mechanisch betätigbare Abdeckungen anzupassen, wird vorgeschlagen, den Strang (2) im Abstandsbereich (A) der beiden Düsen (4, 4') von Teilen (7) der Sprühfächer beider Düsen (4, 4') zu kühlen. Ausserhalb des Abstandsbereiches (A) soll der Strang (2) nur vom Restteil des jeweiligen Sprühfächers (6 bzw. 6') jeder der beiden Düsen (4 bzw. 4') gekühlt werden.

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