

Title (en)
CONTINUOUS CASTING METHOD FOR SLAB CASTING PIECE

Title (de)
STRANGGIESSVERFAHREN FÜR BRAMMENGISSSTÜCK

Title (fr)
PROCÉDÉ DE COULÉE CONTINUE POUR PIÈCE DE COULÉE DE TYPE BRAME

Publication
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Application
EP 16845932 A 20160912

Priority

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Abstract (en)

[origin: EP3332889A1] A continuous casting method by which a high quality slab can be produced is provided. In the continuous casting method, an immersion nozzle is placed in a continuous casting mold, and casting is performed by supplying molten steel to the immersion nozzle. The immersion nozzle has a pair of discharge openings that are arranged symmetrically about a vertical axis of the immersion nozzle. An immersion depth is greater than or equal to 180 mm and less than 300 mm. A molten-steel discharge angle is in the range from 15 to 35°. The ratio A/P of a flow rate A of injected inert gas to a molten steel throughput P is in the range from 2.0 to 3.5 NL/ton. A discharge direction of the immersion nozzle is inclined with respect to a reference plane, which passes through a vertical axial center of the immersion nozzle and which is parallel to mold long side surfaces, in the range of Equation (1): $\theta = 6 \pm \theta_0 + 10 \ln$ Equation (1), θ is an inclination angle with respect to the reference plane and θ_0 is an angle defined by Equation (2) : $\tan \theta_0 = D / 2 / W / 2$ In Equation (2), D is a thickness of the slab and W is a width of the slab.

IPC 8 full level
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