

Title (en)
CONTINUOUS CASTING METHOD FOR SLAB CASTING PIECE

Title (de)
STRANGGIESSVERFAHREN FÜR BRAMMENGIESSSTÜCK

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

Publication
EP 3332889 B1 20201209 (EN)

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): $\theta = 6 \pm \theta_0 + 10$ In 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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