

Title (en)

PROCESS AND DEVICE FOR CASTING LIQUID METAL IN A CONTINUOUS CASTING MACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VERGIESSEN VON METALLISCHER SCHMELZE IN EINER STRANGGIESSMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR COULER UNE MASSE MÉTALLIQUE FONDUE AVEC UNE MACHINE DE COULÉE EN CONTINU

Publication

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Application

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Abstract (en)

[origin: WO2011036060A1] The present invention relates to a method and a device for casting metal melt into continuously cast pre-products in a continuous casting machine. The aim of the invention is to provide a method and a device of the type indicated above, by means of which a more stable flow of the melt into the mold (1) can be achieved in the form of a single or double vortex, whereby the stability of the meniscus (5) is increased, the precipitation behavior of particles in the mold (1) is improved, and more uniform melting and distribution conditions are achieved at the same time for the casting powder. Said aim is achieved by a method wherein a measured value is captured by the measuring a state variable of the strand casting process by means of a measured value sensor; a time-variable actuator signal is determined using a controller, considering measured value; and an actuator (11) to which the adjusting signal is applied, wherein the actuator (11) changes either an immersion depth of at least one bar-shaped built-in part relative to the meniscus (5), or a position of a bar-shaped built-in part (10) relative to a side wall (2, 3) of the mold (1), so that the flow of the melt is stabilized in the area of the meniscus (5) in the form of a single or double vortex by a plurality of bar-shaped built-in parts (10).

IPC 8 full level

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