

Title (en)

METHOD AND DEVICE FOR PRODUCING THIN SLABS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ERZEUGEN VON DÜNNBRAMMEN

Title (fr)

PROCEDE ET DISPOSITIF POUR LA PRODUCTION DE BRAMES MINCES

Publication

EP 0996514 B1 20030910 (DE)

Application

EP 98936178 A 19980615

Priority

- DE 9801633 W 19980615
- DE 19728957 A 19970630

Abstract (en)

[origin: DE19728957A1] The invention relates to a method for producing thin slabs, and to a continuous casting device for use in the inventive method. Said continuous casting device has a mould with adjustable sides, a submerged nozzle projecting into said mould. Said mould has a evenly rounded cross-section which is small in the centre area at the exit end of the casting and a larger rounded cross-section opposite, at the pouring end. Support and guide roll pairs are located downstream from the mould and have a groove corresponding to the exiting rounded casting. The submerged nozzle (11) has a spade-shaped mouth (13) with a maximum thickness (d) corresponding to $d = 0.3 \text{ to } 0.5 \times DE$, DE being the spacing of the mould broad sides (21) in the pouring area. The mould broad side parts (21) have centre parts (23) at least in the shroud area of the submerged nozzle (11), said centre parts being arranged parallel to each other in relation to their contours. The broad side panels (21) are configured as even side faces (24, 25), at least in the adjustment area of the narrow side panels (22). Said even side surfaces (24, 25) are arranged so that they approach each other in a cone shape, in the direction of the narrow sides (22). The even-surfaced centre panel (23) is joined to the even-surfaced side faces (24, 25) by bridging parts (26, 27), said bridging parts (26, 27) forming a wedge shape in the casting direction of movement, tapering to a point where they meet, the tip of said wedge shape (28) finishing at a distance (A) measured from the top edge of the mould, $a = 0.5 \text{ to } 0.8 \times L$, L being the mould length. The contour of the support and guide rolls (41) corresponds with the even-surfaced centre panel (23) and the even side panels (24, 25) of the mould broad sides (21) in the mouth area of the mould.

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US 2003150589 A1 20030814; US 6810943 B2 20041102; AR 012755 A1 20001108; AT E249299 T1 20030915; AU 8531998 A 19990125; BR 9811275 A 20000718; DE 19728957 A1 19990107; DE 59809580 D1 20031016; EP 0996514 A1 20000503; EP 0996514 B1 20030910; KR 100573751 B1 20060424; KR 20010014325 A 20010226; TR 199903303 T2 20000721; TW 372204 B 19991021; WO 9901244 A1 19990114

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