Title (en)

Cooling drum for a continuous casting system and method for manufacturing the same

Title (de)

Kühlwalze zum kontinuierlichen Giessen und deren Herstellung

Title (fr)

Rouleau de refroidissement pour la coulée continue et procédé pour produire ce rouleau

Publication

EP 0687515 B1 20000920 (EN)

Application

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Priority

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Abstract (en)

[origin: EP0687515A1] A cooling drum which can continuously cast a favorable band-shaped cast piece having little thermal deformation and a method for manufacturing the same cooling drum, are disclosed. The cooling drum comprises a three-layer structure consisting of a rigid member (51), a cooling member (53) metallurgically bonded to the outside of the rigid member (51), and a heat-resistance member (51) plated by electro-deposition on the outer circumferential surface of the cooling member (53). The rigid member (51) is made of austenite group stainless steel, the cooling member (53) is made of Cu or Cu-alloy, and the heat-resistance member (54) is made of either Ni or its alloy or Co or its alloy. Within the rigid member (51) are equipped partition walls (61,62) and tubular partition walls (63). To the opposite end portions of the rigid member (51) are connected hollow shafts (52) adapted to be rotationally driven, by means of bolts (52) after shrinkage fitting. In the cooling member (53) are drilled cooling holes (57,58) for communicating a coolant as distributed over the entire circumference, extending in the axial direction of the drum. The cooling holes (57,58) are communicated with a flow passageway of a coolant formed by the partition walls (61,62) and the tubular partition walls (63) through cooling passageways (57a,58a). <IMAGE>

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IPC 8 full level

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