

Title (en)

Inert gas shrouding device for moulds for the continuous casting of metals

Title (de)

Inertgasabschirmvorrichtung für Kokillen zum Stranggiessen von Metall

Title (fr)

Dispositif d'inertage pour lingotière de coulée continue des métaux

Publication

EP 0990474 B1 20031217 (FR)

Application

EP 99402209 A 19990909

Priority

FR 9812128 A 19980928

Abstract (en)

[origin: EP0990474A1] Continuous steel casting device, comprises a blanketing device having a ring shaped inflatable membrane made of a gas permeable material in order to protect the surface of the molten metal. Blanketing device of the gap (27) surrounding the free surface (17) of the liquid metal (2) which is continuously cast in an ingot mould (6) positioned under an adaptor (1) having a cast gate (5) of liquid metal (2) feeding the ingot mould, comprises a ring-shaped inflatable membrane (19) made of a gas permeable material. The thickness of the membrane (when inflated) is superior to the maximal distance between the top flange (26) of the ingot mould and the bottom (3) of the adaptor during casting. A tubular armature (20) is positioned inside the membrane and is provided with at least one intake manifold (21,22) for an inert gas. The device also comprises outlets (23,24) for releasing the gas into the membrane, fixing elements (25) for fixing the membrane on the bottom (3) of the adaptor or on the top flange (26) of the ingot mold, the membrane surrounding the casting gate, inflating means to inflate the membrane and to keep it inflated and in seal contact with the bottom of the adaptor and the top flange of the ingot mold.

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