

Title (en)

HOMOGENIZATION OF MARTENSITIC STAINLESS STEEL AFTER REMELTING UNDER A LAYER OF SLAG

Title (de)

HOMOGENISIERUNG VON MARTENSITISCHEM EDELSTAHL NACH DEM UMSCHMELZEN UNTER EINER SCHLACKESCHICHT

Title (fr)

HOMOGENEISATION D'ACIERS MARTENSITIQUES INOXYDABLES APRES REFUSION SOUS LAITIER

Publication

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Application

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Abstract (en)

[origin: WO2011045513A1] The present invention relates to a method for producing a martensitic stainless steel that includes a step in which an ingot of the steel is remelted under a layer of slag, followed by a step in which the ingot is cooled. Before the skin temperature of the ingot resulting from the slag remelting step drops below the martensitic transformation temperature M_s of the steel, the ingot is placed in a furnace, the initial temperature T_0 of which is then above the cooling-induced pearlite transformation finish temperature A_{r1} of the steel. In the furnace, the ingot is subjected to a homogenization treatment at least for a holding time t after the temperature of the coolest point in the ingot has reached a homogenization temperature T , said holding time t being equal to at least one hour and the homogenization temperature T varying between approximately 900°C and the burning temperature of the steel.

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