

Title (en)

ALUMINUM ALLOY SEMI-SOLID FORMING METHOD AND DEVICE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM FORMEN EINER HALBFESTEN ALUMINIUMLEGIERUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FORMATION SEMI-SOLIDE D'ALLIAGE D'ALUMINIUM

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Application

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Abstract (en)

The semi-solid molding method of the present invention comprises six parts as the traditional method: a mold, a main machine, an injection system, a pulping machine, a quantitative feeding system, and a holding furnace; the injection system, the pulping machine, and the quantitative feeding system are combined and called integrated pulping injection system, and the system is placed in the holding furnace. In order to adapt to the difficulty of molding the semi-solid slurry to carry less heat into the mold with large wall thickness, the semi-solid mold is divided into three layers according to the function, which greatly reduces the heat absorption capacity of the mold, due to the characteristics of the constant flow pump, the holding pressure after filling can reach 0.01MPa-30MPa, so low pressure casting, high pressure casting, differential pressure casting, liquid die forging and semi-solid extrusion forging can be unified in one kind of main machine.

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