

Title (en)
PROCESS FOR CASTING OF CAST PARTS

Title (de)
VERFAHREN ZUM GIEßEN VON GUSSTEILEN

Title (fr)
PROCÉDÉ DE COULÉE DE PIÈCES MOULÉES

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Application
EP 22734570 A 20220615

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Abstract (en)
[origin: WO2022263517A1] The invention relates to a process for casting of cast parts, wherein a metal melt is poured into a casting mold, wherein the casting mold in the form of a lost mold consists of one or more casting mold parts or cores formed from a mold material consisting of a core sand, a binder and optionally one or more additives for adjustment of certain properties of the mold material. In the course of the process according to the invention the casting mold is provided, the casting mold is introduced into a housing to form a filling space between at least an inner surface section of the housing and a corresponding outer surface section of the casting mold, the filling space is filled with a flowable filling material having a poured density low enough to ensure that the filling material packing formed there from the filling material after the filling of the filling space is permeable to a gas flow, and the metal melt is poured into the casting mold, wherein concomitantly with the pouring-in of the metal melt the casting mold begins to radiate heat, which is a consequence of the heat input brought about by the hot metal melt, and wherein as a consequence of the heat input brought about by the metal melt the binder of the mold material begins to evaporate and combust, with the result that it loses its effect and the casting mold breaks into pieces. Rapid and energy-efficient decomposition of the casting mold is achievable with reduced effort when according to the invention the filling material has a filling material temperature of less than 100 °C upon filling into the filling space.

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