

Title (en)

In-situ semi solid metal slurry formation and delivery apparatus and method

Title (de)

In situ Herstellung- und Zuführungsapparat und -verfahren von halbfestem Metall

Title (fr)

Appareil et procédé pour fabriquer et alimenter un mélange métallique semi-solide

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Application

EP 06017526 A 20060823

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Abstract (en)

An embodiment of the presently claimed invention includes an in-situ slurry formation apparatus (10) mounted to die casting machines to convert liquid metal to semi-solid metal (SSM). Thus, there is no need to modify existing machines or change the cell layout to accommodate more space than would otherwise be necessary. These machines also need not be replaced with machines specially designed for SSM. Further, a method for converting molten metal to semi-solid metal includes coupling a conduit to a die casting machine, wherein the conduit comprises an inlet, an outlet and a body disposed between the inlet and the outlet, regulating the conduit's temperature, surrounding the conduit with a housing, inserting molten metal at the inlet, cooling the molten metal to semi-solid metal in the body, and expelling semi-solid metal from the outlet.

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