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PRESS RELEASE



Chinaplas 2009:

Wittmann Battenfeld presenting innovative INDUMOLD process

At this year's Chinaplas in Guangzhou from May 18 to 21, the Austrian Wittmann group is demonstrating the brand-new INDUMOLD process for inductive heating of injection molding tools (Hall 11.1, booth E21). With this innovative process, molded parts with extremely high surface quality can be achieved.

At the Chinaplas 2009, the Wittmann group will present INDUMOLD, the process for inductive heating of injection molding tools developed by the plastics research institute Kunststoffinstitut Lüdenscheid (KIMW). This variothermic process yields an extremely high surface quality.

The INDUMOLD process for a wall thickness of up to 10 mm will be shown on the "bottle opener" demonstration unit developed by KIMW. An HM 110/350 injection molding machine from Wittmann Battenfeld with 110 t clamping force will be used. The bottle opener will be injection-molded from an ABS compound with a foaming agent within a cycle time of 140 seconds.

An induction heater built into the mold will heat up the cavity surface efficiently to about 160° C within only a few seconds. In contrast to infrared heating technology, the heating phase requires only a minimally longer cycle time with the use of inductive heating.

Cooling the mold down to the basic temperature with a Wittmann tempering device from the Tempro Plus series sets in directly with changeover to holding pressure.

A Wittmann W811 robot inserts the metal parts, which are supplied from a bar magazine and separated by a cylinder, and it also removes the finished parts. Dosing of the ABS resin and the foaming agent is handled by a gravimetric metering device from the Gravimax series. Subsequent drying and conveyance of the material takes place with the help of a Wittmann Drymax D30 PDC dryer with an integrated dry air conveyance system. Dry air conveyance to a just-in-time feeding unit, which minimizes the quantities of material present on the injection molding machine, is used to prevent remoistening of the dried granulate, which is an important asset especially in tropical regions.

This new technology lends itself to a wide range of applications with molded parts, resins and foaming agents. The result is a high-gloss surface - free of previously unavoidable sink marks, striations or visible joint lines in places where the melt has flown together.

The Wittmann Battenfeld booth: hall 11.1 / booth E21



Fig. 1: At the back: typical surface structure of foam-molded parts
At the front: a foamed part with a high-gloss surface



Fig. 2: The bottle opener is produced on an HM 110/350 injection molding machine

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