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PRESS RELEASE

WITTMANN BATTENFELD Process Technology

WITTMANN BATTENFELD introduces new IMIW internal welding process

With the IMIW process, WITTMANN BATTENFELD is offering a new technology which makes it possible to insert-mold parts with a gas- and waterproof protective layer. This process is of special interest for RFID technology (RFID= Radio Frequency Identification). RFID is not only increasingly used in the automotive sector, but is also becoming more and more common in medical applications, in transport, in the electrical industry and other branches of industry. The advantage of RFID is its ability to transmit an extremely large volume of information within a minimum of time and without direct contact.

All RFID components must be protected from mechanical damage, moisture, heat and other detrimental effects. Therefore these parts are embedded for their protection.

There are a number of different methods to connect two halves of a housing or two half shells, such as bonding, welding, clamping or bolting, to name just a few.

With the innovative IMIW process, it has now become possible for the first time to establish the connection directly between the contact surfaces, which means right where it is actually needed. In this case, the previously injection-molded halves are joined together by injection- molding the connection between the contact surfaces with the same plastic material from the inside. By way of this IMIW-process (IMIW = In-Mould Internal Welding), it is now possible to create a gas- and waterproof connection between the two halves and thus ensure optimal protection for the sensitive electronic components.

Special advantages of this new process are that the molded parts come out without any ridges or welding beads, so that downstream finishing can be dispensed with, that they are joined together by a gas- and waterproof connection in the same production process, and that the joint is extremely robust.



This process is also suitable for other applications where two parts are to be connected with each other and the above-mentioned advantages are desirable.

The IMIW process will be demonstrated to the public for the first time on an *EcoPower* 110 during WITTMANN BATTENFELD's Competence Days in Kottingbrunn on 24 and 25 April 2013.

The technology developed by Barkley Plastics, UK is sold exclusively by WITTMANN BATTENFELD.



Left: 2 half shells connected with each other without insert Right: electronic part insert-molded with the IMIW process



WITTMANN BATTENFELD

WITTMANN BATTENFELD, a company of the WITTMANN group based in Kottingbrunn, Austria is a leading manufacturer of injection molding machines for the plastics industry. With its own sales and service companies as well as representations in about 60 countries, WITTMANN BATTENFELD provides optimal support to its customers in all matters concerning injection molding technology. Its innovative strength, highest precision and strong focus on maximum customer benefit make WITTMANN BATTENFELD a valuable partner for its customers.

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