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## **PRESS RELEASE**

### ***PowerSeries* shows top-class performance at the WITTMANN BATTENFELD Competence Days 2010**

*Visitors from more than 30 countries accepted the WITTMANN Group's invitation to attend the Competence Days 2010, which took place on 28 and 29 April in Kottlingbrunn (Austria). "Simply the Best" was the motto, under which experts of the WITTMANN group presented latest innovations and process technologies to interested trade visitors. The total of 1,000 visitors, thereof 700 customers, exceeded by far the organizers' expectations for the Competence Days.*

In addition to its newly developed *PowerSeries* range with the *EcoPower*, *MacroPower* and *MicroPower* series, WITTMANN BATTENFELD presented exhibits from the HM and Vertical machine series, while WITTMANN showed its latest developments in the area of peripheral equipment – robots, granulators, dryers and temperature controllers. Since the merger of WITTMANN and BATTENFELD in 2008, it has become possible to fully implement the corporate philosophy of "everything from a single source". During the Competence Days, this was demonstrated once more with a total of 70 exhibits from the areas of injection molding, automation and peripheral equipment.

Several introductory presentations gave the guests an overview of the latest developments in injection molding and process technology.

The series of presentations was opened by a guest speaker from the Kiska design agency (Austria) talking about "Plastics and Design". The subsequent speeches about the *PowerSeries* demonstrated the efficiency of the new machine series to the visitors. Finally, the energy-saving potential of the new injection molding machines was discussed in detail under the heading of "Energy- and cost-efficiency" – a topic of special interest both from an economic and an ecological point of view.

WITTMANN BATTENFELD is also breaking new ground in the area of process technology. The combination of water injection and projectile technology has opened

up new possibilities in injection molding; the latest achievement in process technology is a process by the name of BFMOLD™ technology, which was presented to a broader public for the first time as one of several highlights at the Competence Days.

This variothermic mold tempering technique has been developed by Kunststoffinstitut Lüdenscheid and is marketed exclusively by the WITTMANN group. BFMOLD™ enables the production of parts with high-gloss surfaces without sink marks, warpage or joint lines, and even within shorter cycle times in some cases. The temperature control function in this process is taken over by the WITTMANN multi-circuit tempering unit TEMPRO plus C VARIO, specially developed for this purpose.

The series of presentations was concluded by a speech about the latest developments in WITTMANN robots and special equipment in automation technology. Optimal solutions for complete production cells tailored to every application can be put together from an extensive choice of components.

During the subsequent machine demonstration, the visitors were able to experience the high performance and efficiency of the injection molding machines and peripheral equipment themselves – live on site. The performance show was opened with a show program, in the course of which the new *MicroPower* and *MacroPower* machine models were officially unveiled.

The *MacroPower* injection molding machine with 800 tons clamping force proved its efficient productivity by manufacturing a dryer center part (with a mold supplied by Coko Kunststofftechnik). The machine concept geared to user benefit offered the advantages of minimal locking and high-pressure buildup times as well as a facility for extremely quick mold change.

The newly developed *MicroPower* proved to be of special interest for the visitors. This production cell is available with clamping forces of either 5 or 15 tons and consequently ideally suited to the production of micro precision parts and nano parts. At the Competence Days, the production of a micro plug with a part volume of no more than 0.0035 cm<sup>3</sup> was demonstrated. Here, the part quality is checked and monitored by a camera integrated in the production cell and the machine's control system. The modular design allows for easy integration of a clean room module, to accommodate medical clean-room applications as well.

The servo-electric machines were represented by several units from the new *EcoPower* series. On an *EcoPower* 110/350, an LSR O-ring was produced in a 128-cavity mold supplied by Rico (Austria). With a 32-cavity mold from Schöttli

(Switzerland), an *EcoPower* SE 110/350 produced a 2 ml barrel for medical applications. Another example from this series, an *EcoPower* 180/750, was shown producing a PP fitting formed in a mold from IFW (Austria).

An HM 180/1330, equipped with the new, energy-efficient *ServoDrive* drive concept, was presented with the production of a PA media duct. Here, a combination of water injection and projectile technology was used, with a mold supplied by IKV Aachen (Germany). Projectile technology enables constant duct cross-sections, smoother inner surfaces and forming of special cavity geometries. This project was presented in cooperation with IKV Aachen.

As an example of COMBIMOULD multi-component technology, a two-component oil closure in Gram technology was manufactured in a double stack mold supplied by KTW (Austria) on an HM MK 300/2250H/525V. Here also, the new *ServoDrive* drive concept was demonstrated.

### **“Everything from a single source”**

A TM Xpress 210/1350 injection molding machine gave an impressive demonstration of manufacturing a cup with 750 ml. The IML automation equipment used in this process, as well as the mold, all came from WITTMANN.

The complete range of WITTMANN peripheral equipment was on hand with the latest developments from every product group. Robots, dryers, granulators, metering devices, feeders, temperature controllers, chillers and flow regulators were all on display in the showroom.

WITTMANN automation equipment can be delivered with a great number of different functions. High-speed parts removal is one option, others are high-precision path planning via the *TruePath* function, or synchronization of several robots and conveyor belts.

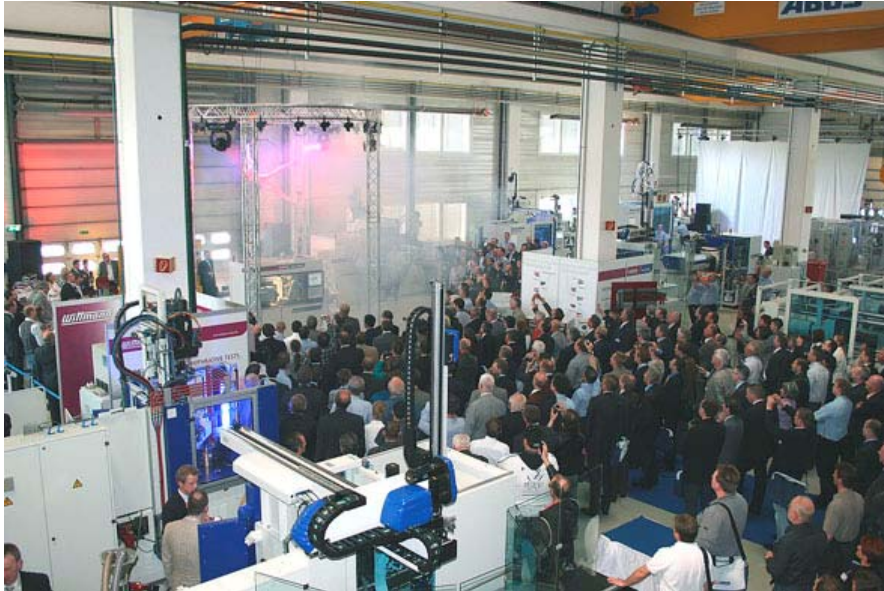
The new *SoftTorque* function allows parts demolding by pressing the part to be removed just “vaguely” into the gripper of the robot with the help of the ejector, rather than via a highly accurate positioning regulation. Depending on the forces to which it is exposed, the demolding axis of the robot can be actively pressed backward, thus compensating forces working in the opposite direction. This virtually complete prevention of mechanical loads protects the mechanical parts on a sustainable, long-term basis.

Another novelty is the *SafeMotion* function that monitors the motor's torque curve during manual operation of the robot. As soon as a strong increase in torque is recognized, for example caused by a collision with the protective frame of the injection molding machine, the movement is stopped immediately to prevent damage to the machine, the robot or the gripper.

The WITTMANN series of temperature controllers was exhibited with several different models for tempering water and oil. The innovative *Aton* wheel dryer and the new FEEDMAX B central loader were also shown – peripheral equipment that stands out by its efficiency and functionality. High-precision gravimetric dosing equipment with Real-Time Live Scale technology, together with the crimper grinding mill and granulator series, rounded off the exhibition program. With a total of more than 70 different exhibits, the Wittmann group demonstrated its leading-edge know-how in peripheral equipment and control technology.

Experts from many different fields of plastics processing placed their comprehensive specialist knowledge at the disposal of visitors throughout the day. The cooperation partners of long standing also passed on their expert knowledge of molds and materials to interested guests. As an extra-special information highlight, the program included factory tours in Vienna and in Hungary.

Mag. Georg Tinschert, Managing Director of WITTMANN BATTENFELD, expressed great satisfaction with the obvious success of the Competence Days in Kottlingbrunn: “We are the only supplier of complete solutions from a single source worldwide. The new products have met with a very positive response, and we can look to the future with great optimism“.



Presentation of new products with a special show



Efficient productivity of the large machine series: the new MacroPower line with 800 t clamping force



Micro injection molding with unprecedented precision: the new MicroPower production cell



The new DRYMAX Aton combines the advantages of a constant dew point with high energy-efficiency.



Visualisation of the SafeMotion function of Wittmann R8 – always active in the background – SafeMotion recognizes immediately the increase in torque

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