

April 2023, Kottlingbrunn/Austria

## PRESS RELEASE

The WITTMANN Group at the Plastpol in Kielce

### **WITTMANN BATTENFELD with energy-efficient and resource-saving injection molding technology at the Plastpol**

***From 23 to 26 May, WITTMANN BATTENFELD Polska will present to interested trade visitors ultra-modern injection molding machines and process technology, as well as state-of-the-art robots and auxiliaries at the Plastpol 2023 in hall F, booth No. F-9.***

The Polish market is one of the most important export markets for the WITTMANN Group. Consequently, the Plastpol is a key platform for WITTMANN to present latest technologies to this market in cooperation with its subsidiary WITTMANN BATTENFELD Polska.

At this year's Plastpol, two servo-hydraulic injection molding machines will be shown.

On a SmartPlus 90/350 equipped with the new control unit B8X as well as the CMS Lite conditioning monitoring system and an automation cell designed and manufactured by WITTMANN BATTENFELD Germany, WITTMANN produces a spirit level made of ABS with a 1+1-cavity mold supplied by SOLA, Austria. As a first production step, the top and bottom parts of the spirit level housing are injection molded. The top part is then deposited and printed at a laser station. Simultaneously, the bottom part placed on a tray is fitted with vials from SOLA. Next, the top part is pressed onto the bottom part by a pre-set force. The finished parts are then transported to a testing station, where the positioning of the vials is checked by a vision system. After quality inspection, the finished spirit levels are removed and deposited on a conveyor belt by a WX138 robot from WITTMANN.

Special features of the SmartPlus are high levels of cost and energy efficiency and repeatability. By using proven technologies combined with carefully selected options, it has become possible to offer an excellent price/performance ratio for these machines.

The second machine is a SmartPower 60/210. This machine comes with Airmould internal gas pressure technology. Using this technology, a clothes peg will be manufactured with a 1+1 cavity mold. In the Airmould process, nitrogen is injected into the cavity partly or completely filled with melt by an Airmould nozzle specially developed for this purpose, which leads to the formation of a bubble structure. In this way, substantial quantities of material can be saved, with the result of a significant cost advantage especially for mass products such as clothes pegs. In this application, the latest-generation Airmould technology, known as Airmould 4.0, will be demonstrated. It stands out by its compact hardware, plus a high level of user friendliness through its integration in the Unilog B8 control system. All components were developed and are produced in-house by WITTMANN BATTENFELD.

### **Automation and auxiliaries**

In addition to the robots and auxiliary appliances connected to the machines on display, numerous robots and auxiliaries from WITTMANN will also be shown as stand-alone solutions at the Plastpol in Kielce.

The low energy consumption of the WITTMANN robot series will be demonstrated at the Plastpol by an interactive showpiece known as the ErgoRobot. This application consists of a robot and a bike used as an ergometer. The trade fair visitor serves as the "power source". While riding the bike he sets the robot in motion. The robot used in this case is a Primus 14 in the standard version with an R8 control system, an appliance normally used for pick & place applications on machines with clamping forces ranging from 50 to 150 t. The moving bike pedals drive via force transmission a servo motor mounted on the rear wheel. In the ErgoRobot application, this motor functions as the robot's power supply. The electricity generated by the motor is transmitted to the robot and sets it in motion.

To enable the Primus 14 to move at 100% of its top speed, the bike rider must generate about 150 watts of power. This is roughly the power required by an average refrigerator with freezer compartment to suit a four-person household. If more power is generated on the bike, the surplus is used to light two floor lamps placed next to it. The brightness of the lamps then depends on the amount of additional power supplied.

In addition to this application, WITTMANN BATTENFELD Polska will exhibit a Sonic 108 robot at the Plastpol. The robots of the Sonic series have been optimized for maximum-speed parts removal in packaging and pick-and-place applications. They are designed for cycle times below 4 seconds.

Moreover, a Codemax RFID-coded coupling station including its M8 network control system will be shown. The latter prevents the supply of wrong materials to a processing machine caused by an operating error.

WITTMANN BATTENFELD Polska will also present a wide range of auxiliary equipment. The dryers to be shown include an Aton plus segmented wheel dryer, a compact dryer Drymax primus 60-150 and a Card 10S compressed air dryer. The Aton plus segmented wheel dryer combines a constant dew point with energy efficiency. It comes with the WITTMANN drying wheel, many energy-saving functions, a touch-screen user interface and the Net5 system. This enables parameter setting and the administration of material loaders. The Drymax dryers are equipped with two desiccant cartridges, which deliver a continuous flow of process air with consistent drying air quality for perfect drying of plastic granulate. The compressed air dryers from the Card series are small and efficient. They are ideally suited for drying applications with low throughput rates.

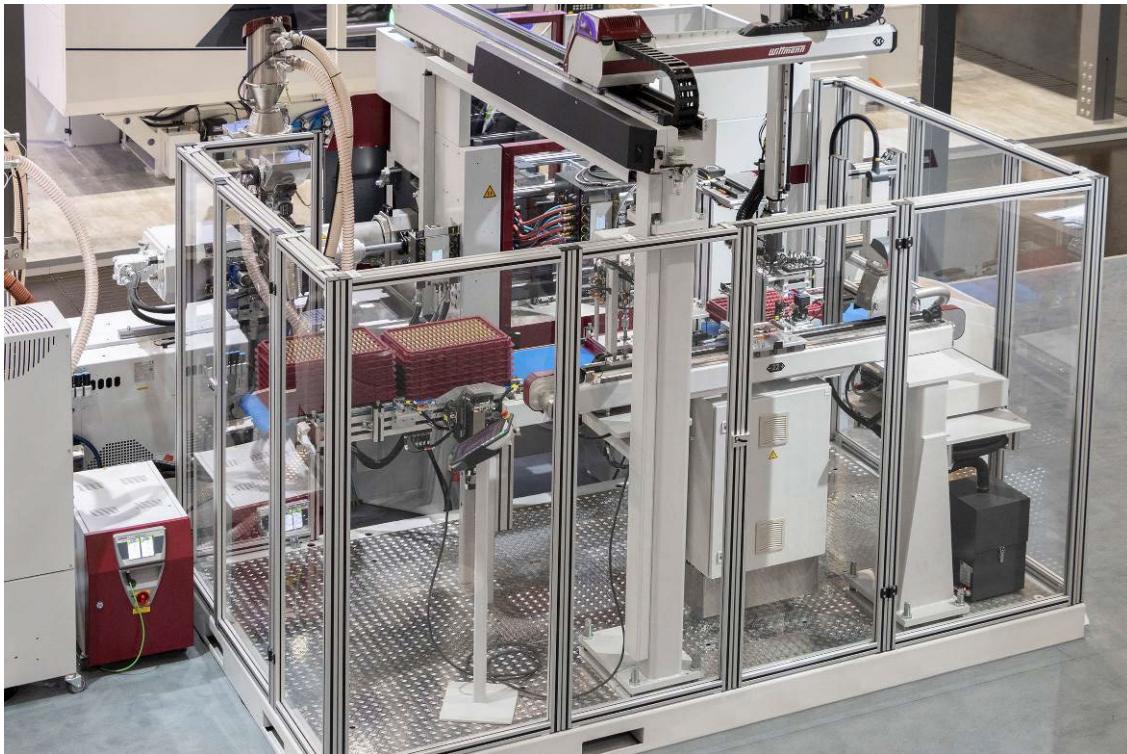
As representative examples of temperature control technology, WITTMANN BATTENFELD Polska will show its appliance models Tempro primus 90, Tempro basic C120 and Tempro plus D140. The outstanding features of Tempro temperature controllers are reliability and easy operation. A small heat exchanger requires less circulating water, with the result of much shorter heating and cooling times.

In addition, the volumetric blenders Dosimax MC balance and Dosimax basic will be showcased at the Plastpol. The specific design of these blenders provides even, extremely accurate dosing of colorants. Together with the volumetric blenders, a Gravimax primus 14 gravimetric blender will also be on display.

From its materials handling equipment range, WITTMANN BATTENFELD Polska will present a Feedmax basic material loader, several units from the Feedmax S3 net series and a CS filter station. The Feedmax S3 net offers the benefits of maintenance friendliness, high process reliability and easy operation.

The range of exhibits is rounded off with granulators from the G-Max and S-Max series. The models on display will be a G-Max 33 beside-the-press granulator and an S-Max 3 screenless granulator. G-Max granulators are energy-efficient and come with a small footprint as well as a sound-insulated cutting chamber. The S-Max granulators feature toothed rollers with low motor speeds (27 rev/min at 50 Hz) for efficient, low-cost granulating of engineering plastics as well as styrene, acrylic and fiberglass-reinforced materials.

As an additional attraction, the sports car of Adam Zentner, a freelance employee of the company, will be exhibited at the booth of WITTMANN BATTENFELD Polska – the vehicle with which Adam Zentner won the Polish championship in Class D5 of the CEZ Circuit Endurance contest in 2022.



**Fig. 1:** SmartPlus 90 with complex automation and digitization via Wittmann 4.0





Fig. 2: Air mould 4.0



Fig. 3: Clothes peg, manufactured with Air mould 4.0 internal gas pressure technology



**Fig. 4:** ErgoRobot application using a Primus 14 robot from WITTMANN with an R8 control unit



**Fig. 5:** Feedmax S3 net



**Fig. 6:** Gravimax 14



**Fig. 7:** Granulator S-Max 3

## **The WITTMANN Group**

The WITTMANN Group is a globally leading manufacturer of injection molding machines, robots and auxiliary equipment for processing a great variety of plasticizable materials – both plastic and non-plastic. The group of companies has its headquarters in Vienna, Austria and consists of two main divisions: WITTMANN BATTENFELD and WITTMANN. Following the principles of environmental protection, conservation of resources and circular economy, the WITTMANN Group engages in state-of-the-art process technology for maximum energy efficiency in injection molding, and in processing standard materials and materials with a high content of recyclates and renewable raw materials. The products of the WITTMANN Group are designed for horizontal and vertical integration into a Smart Factory and can be interlinked to form an intelligent production cell.

The companies of the group jointly operate ten production plants in six countries, and the additional sales companies at their 36 different locations are present in all major industrial markets around the world.

WITTMANN BATTENFELD pursues the continued strengthening of its market position as a manufacturer of injection molding machines and supplier of comprehensive modern machine technology in modular design. The product range of WITTMANN includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators, temperature controllers and chillers. The combination of the individual areas under the umbrella of the WITTMANN Group enables perfect integration – to the advantage of injection molding processors with an increasing demand for seamless interlocking of processing machines, automation and auxiliaries.

In Poland, the WITTMANN Group is represented successfully by its own subsidiary WITTMANN BATTENFELD Polska, with Bogdan Zabrzewski as CEO.

**Contact:****WITTMANN BATTENFELD GmbH**

Wiener Neustädter Strasse 81  
2542 Kottlingbrunn  
Austria  
Tel.: +43 2252 404-1400  
[gabriele.hopf@wittmann-group.com](mailto:gabriele.hopf@wittmann-group.com)  
[www.wittmann-group.com](http://www.wittmann-group.com)

**WITTMANN BATTENFELD Polska Spol. z o.o.**

Adamowizna, ul. Radziejowicka 108  
05-825 Grodzisk Mazowiecki  
Poland  
Tel. +48 (0) 22 7243-807  
Fax +48 (0) 22 7243-799  
[info@wittmann-group.pl](mailto:info@wittmann-group.pl)  
[www.wittmann-group.pl](http://www.wittmann-group.pl)