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PRESS RELEASE

WITTMANN BATTENFELD at the Fakuma

WITTMANN BATTENFELD presents new SmartPlus

The highlight of the WITTMANN BATTENFELD exhibition at the Fakuma 2021 is the new SmartPlus, to be shown at booth 1204 in hall B1. The outstanding features of this servo-hydraulic machine are its high level of cost efficiency, energy efficiency and repeatability.

The *SmartPlus* 180 exhibited at the Fakuma is the first model to be presented to the general public from a new machine series entirely based on the concept of the proven *SmartPower* series from WITTMANN BATTENFELD.

The name given to the *SmartPlus* machine series has been derived from its large number of "smart" attributes, from the compact design of its machine body, its intelligent, energy-saving drive system and simple, central hydraulic clamping system, right up to injection control via a highly dynamic servo drive.

While the *SmartPower* was designed as a high-end solution in the area of servohydraulic machines which can be configured with innumerable different equipment options, the *SmartPlus* will offer a limited choice of equipment and consequently cover the sector of standard applications. This is why it was decided to create a machine series primarily geared to less complex applications and with less need for equipment variance, without compromising on high quality standards. These considerations led to the birth of, the *SmartPlus*. Here, "Plus" stands for the added value this new machine series has to offer for the types of applications just mentioned.

Use of proven technologies and carefully selected options have made it possible to offer the *SmartPlus* with short delivery times and an excellent price/performance ratio.

The *SmartPlus* comes with the proven UNILOG B8 control system logic and the high-performance B8X hardware. These enable a higher clock frequency, shorter response times and higher repeatability in parts production, with user friendliness

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and the familiar visualization concept remaining unchanged. Like all other machines from WITTMANN BATTENFELD, the *SmartPlus* fully supports the integration of robots and auxiliaries under WITTMANN 4.0.

Of course, the *SmartPlus* is also equipped with the KERS energy recovery technology originally designed for the *EcoPower*. To enable processing of regrind without any problems in the interest of sustainable production, this machine is also offered with the HiQ Flow[®] application software, a program to offset the viscosity fluctuations which often occur whenever this type of material is being processed.

All *SmartPlus* plasticizing/injection units are freely accessible, compact and swivel-mounted. The machines are all equipped as standard with a wear-resistant plasticizing unit.

Another special feature of the *SmartPlus* is its further improved "Dive-on-Demand 2.0" drive technology. It increases the machine's response speed even more by a booster unit specially developed in-house, which enables a higher clock frequency. This drive unit is only activated as long as required for movements and pressure generation. During cooling times or cycle breaks for parts handling, the servo drive remains switched off and consumes no energy. In operation, "Drive-on-Demand 2.0" is the basis for highly dynamically controlled machine movements and short cycle times.

Like the *SmartPower*, the *SmartPlus* is also available as an Insider production cell version with an integrated parts handling system, conveyor belt and protective housing permanently connected with the machine, furthermore as an Ingrinder model with an integrated sprue picker, vacuum conveyor and granulator.

The *SmartPlus* is currently being used for practical test runs on the premises of selected customers. From the 4th quarter of 2021 onwards, this machine will be made available in a first series with clamping forces ranging from 60 to 180 t to an extended circle of customers.

The advantages of the new *SmartPlus* will be demonstrated at the Fakuma 2021 on a *SmartPlus* 180/750. This machine is equipped with the HiQ Flow® application software, the new CMS-Light condition monitoring system to monitor an extended range of service-relevant machine parameters and a GRAVIMAX G14 gravimetric blender. The automation system, using a PRIMUS 26T robot from WITTMANN, is implemented via an Easy Cell developed and manufactured by WITTMANN BATTENFELD Deutschland in Nuremberg. The Easy Cell requires no safety gate and thus takes up only a minimal amount of space beside the injection molding machine. In spite of its compact design, customers receive the complete range of CE-compliant safety features.

On the SmartPlus 180/750 a hub-cap for lawn mowers will be manufactured from PP, using a mold supplied by Uralan, Germany. In the interest of sustainable manufacturing, the part will be produced from a mixture of virgin material with regrind. The HiQ Flow® software will be used to ensure adequate parts quality



Fig. 1: SmartPlus 60



Fig. 2: Swivel-mounted injection unit of the SmartPlus

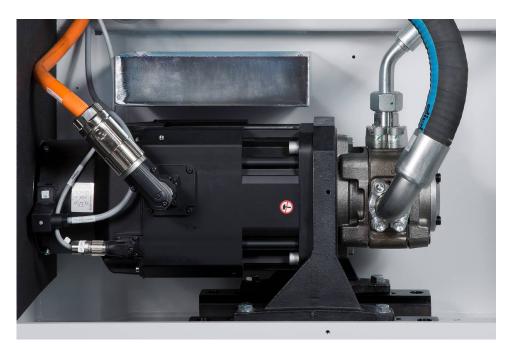


Fig. 3: "Drive-on-Demand 2.0" servo drive technology

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 eight production plants in five countries, and the additional sales companies at their 34 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.

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