

**NEWS RELEASE** 

October 7, 2020

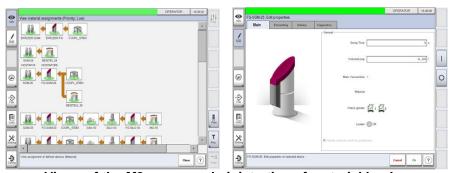
[Witt-NR-15-2020\_WITTMANN-novelties-2020\_Material-Handling-Recycling]

# WITTMANN novelties in 2020 Material Handling and Recycling

After this year's FAKUMA has been canceled, WITTMANN presents the exhibits originally planned for the show by way of product videos, and to upload them on "Virtual Fakuma". – The presentation of the videos is intended to take place primarily in personal meetings with customers. To present the product highlights as vividly as possible to a wide audience, the product videos will also be made available on the company's YouTube channel. – In the following, a first overview of novelties in the areas of material handling and recycling.

#### M8 network control for central material handling systems

User-friendliness and functionality of control systems are a top priority for WITTMANN. With the revision of the current **M7-IPC** control system, the CAN-bus-based **M8-IPC** network control system has been introduced. It simplifies the administration of complex installations and shows a clear display of every appliance in modern design.



Views of the M8 screen: administration of material loaders

A new feature is a number of freely programmable modules – or "logical devices" – which support queries, counting functions, loops and much more, to enable logical switchover and connection of outlets. To give an example: as soon as one source of material runs out, the system switches over automatically to another source. These new possibilities to define logical operations offer users an easy way to program sequences perfectly geared to each individual process.

What is more, **M8** comes with a "counting" functionality: whenever a user wishes to have a certain action triggered following the execution of a fixed number of switch cycles, this is now very easy to implement.



Another new feature is coded regrind recycling. If the regrind coming from several machines is not all processed in the same way, the regrind from individual granulators can be transported unmixed into separate containers. RFID-coded materials handling devices ensure that materials are only transported if the material line is correctly connected to the granulator and to the matching container. In this way, mixing of different types of regrind is prevented.

Something often requested – and now also made possible: residual quantities of material left on the machine can be transported back to the material source. If the production is interrupted, there is a risk of dried material being left on the machine during the time of standstill, which then causes start-up problems when the production is resumed. Or it happens during a material change that left-over material on the machine is (mostly) emptied out and then disposed of. With the help of the **M8-IPC** control functions, such residual quantities can be "reclaimed" and re-used. The operating status of the individual appliances catches the eye immediately thanks to the different color codes. In case of error signals it is possible to have persons responsible notified by email.

Operators can choose between several different systems to perform the tasks assigned to them quickly and faultlessly.

For this purpose, several different views are available, showing the path followed by the material – through all stations right up to the consumer, that is, up to the machine and/or to the mold.

One view is assigned to the administration of users; it enables comprehensive administration of individual users or groups of users and the appliances allocated to them.

Another special view is available to visualize the vacuum participants. Here, the material loaders, valves, vacuum and filter stations of a given vacuum line (or all vacuum lines) are depicted clearly allocated in their context. In case of emergency shut-offs with the use of replacement pumps, the automatic changeover valves and all connections that have been changed are shown to the operator.

### CARD – small dryers with a great effect

The new compressed air dryers from the **CARD** series have been an integral part of the WITTMANN product portfolio since April 1 of this year. The first few months have shown that, in spite of the great variety of different models and sizes, three types of appliances have become particularly popular. These are the sizes **CARD 6G/FIT**, **CARD 10S** and **CARD 20S**. On these appliances, the desired drying temperature can be set via a touch screen operating panel, and at the end of the pre-drying phase a signal is issued to release an automatic production start-up. The material drying data can be exported via a USB port or via OPC UA.





CARD G (left) and CARD S with FIT control system and optional OPC UA interface

With the integrated week timer, the use of the dryers can be ideally adapted to ongoing production planning, and they are ready to run immediately as soon as dried material is required. In the **CARD S** models, the compressed air consumption is very finely and precisely adjusted to the actual demand by an intelligent digital air volume control system.

If a material loader is used to fill the dryer, this ensures a continuous material supply, and the dryer recognizes automatically when the drying temperature must be lowered.

If the interval between two conveying cycles exceeds a certain period of time, this is interpreted as "no material consumption", and the dryer then starts the necessary actions to protect the material and to reduce energy consumption.

**CARD** dryers can be mounted directly onto the machine feed. In combination with a claw flange, the appliances can be pushed into a parking or emptying position. If quick-change adapters are used on **CARD** dryers, this will save time when transferring the dryers from one machine to another.

## **G-Max 13 beside-the-press granulator**

The **G-Max 13** completes the existing **G-Max** granulator series from WITTMANN, which offers cutting chamber sizes ranging from  $130 \times 260$  mm to  $460 \times 235$  mm and engine outputs from 2.2 kW to 4 kW. The models from the **G-Max** series can be used for material throughputs of up to 50 kg/h on injection molding machines with up to 500 t clamping force.

The **G-Max 13** granulator is suitable for in-line recycling of soft to medium hard sprue consisting of PP, PE, ABS or PU, and can be used on injection molding machines with clamping forces of up to 230 tons.





The new G-Max 13 granulator from WITTMANN

The material screens of the **G-Max 13** are available with screen perforation in different sizes: either 4 or 5 mm in diameter. This ensures suitability for varying materials and throughputs. The perforations in the screens have a conical shape, so that soft and sticky granulate can pass through more easily. A feature which ultimately contributes to minimizing the accumulation of material deposits in the openings. The tiltable material hopper simplifies cleaning and servicing of the appliance enormously. For instance, a screen change can be carried out without tools, and the time required for servicing is reduced to a minimum.

The granulator has an open rotor with three knives. It is designed with openings between the knives and the rotary axis to ensure unhindered ventilation of the cutting chamber. Thanks to this type of design, this model is ideally suited for grinding materials which are sensitive to heat or parts not yet completely cooled. Exchanging knives is extremely easy and comfortable.

The new **G-Max 13** can handle a material throughput of up to 35 kg/h (depending on the shape of the parts/sprues, screen size and quality of material), it operates with a low noise level and is extremely energy-efficient.

-----

The WITTMANN Group is a worldwide leader in the production of injection molding machines, robots and peripheral equipment for the plastics processing industry, headquartered in Vienna/Austria and consisting of two main divisions: WITTMANN BATTENFELD and WITTMANN. These two divisions jointly operate the companies of the WITTMANN Group with eight production plants in five countries. Additional sales and service companies are active in 34 facilities in important plastics markets around the world.

WITTMANN BATTENFELD pursues the further expansion of its market position as an injection molding machine manufacturer and specialist for state-of-the-art plastic processing technologies. As a supplier of comprehensive, modern machine technology in modular design, the company meets both present and future market demands for plastics injection molding equipment.

The WITTMANN product portfolio includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators,



temperature controllers and chillers. With this diversified range of peripheral units, WITTMANN offers plastics processors solutions to cover all production requirements, ranging from independent production cells to integrated plant-wide systems. The integration of these various segments under the umbrella of the WITTMANN Group has led to complete connectivity between the various product lines. This integration has greatly benefited plastics processing users, who are increasingly looking for seamless production, including automation and peripheral functions.

-----

#### Contact:

WITTMANN Kunststoffgeräte GmbH Lichtblaustrasse 10 1220 Vienna AUSTRIA

Tel.: +43 1 25039-0

info.at@wittmann-group.com www.wittmann-group.com

WITTMANN BATTENFELD Deutschland GmbH Am Tower 2 90475 Nuremberg GERMANY

Tel.: +49 9128 7099-0

info.de@wittmann-group.com www.wittmann-group.com