

NEWS RELEASE

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WITTMANN novelties in 2020 **Flow Control and Temperature Control**

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 flow control and temperature control.

WFC 120, the digital water distributor of the next generation

Today, the demand for comprehensive process monitoring includes the so vital area of mold tempering right up to regulation of the water flow. With its globally well-known flow controllers, WITTMANN has already been a pioneer in the field of innovative temperature control water distribution systems for a long time, and has set industrial benchmarks with these appliances. The aim was always to eliminate various disruptive factors from the process, in order to achieve optimal production results and to minimize scrap. As its most recent development step, WITTMANN is now presenting for the first time the digital water distributor of the next generation: the **WFC 120**.



WFC 120

The new **WFC 120** is a digital water distributor for injection molding tooling, which can be run with a maximum operating temperature of up to 120 °C. The appliance

comes in a modular design with a minimum of four circuits and can be extended by adding more circuits in steps of two up to a total of twelve circuits.

Its compact design and integrated bulkhead plate assembly device enable the **WFC 120** to be installed on the processing machine in a space-saving way, and above all close to the mold. This dispenses with laborious and costly tubing. Possible pressure loss caused by long tubes can be prevented, a factor contributing substantially to process reliability, since the absence of pressure loss extends the pump's service life and optimizes the flow quantity.

Another benefit of the new design is its user-friendliness. All important power connections are accessible from the front.

The digital 3.5" TFT display provides visualization of the flow quantities and temperatures for every single circuit. Should any one of the circuits be out of tolerance, it can be very easily readjusted with a handwheel.

Every circuit is equipped with a vortex flow rate measurement system covering a measuring range from 1 to 20 l/min with an accuracy of ± 0.2 l/min. With the temperature sensors installed in every circuit it is possible to run applications with temperatures of up to 120 °C with a guaranteed measurement accuracy of ± 1 °C. The PT100 sensor placed inside the water inlet enables Δt monitoring.

As options, a digital interface, an alarm contact device and a remote control panel with a 5.7" TFT display are available as well.

The advantages of the **WFC 120** at a glance:

- Installation close to the mold thanks to compact design
- Lightweight through use of high-tech engineering plastics
- Low maintenance requirements due to no moving parts inside the circuit
- Continuous process monitoring
- Integration into the machine via the CAN interface as standard

The new TEMPRO plus D M120 temperature controller

In 2019, the pressurized **TEMPRO plus D M100** temperature controller quickly established itself on the market with impressive sales figures. Following the introduction of this appliance, targeted market research revealed a similarly great demand for a directly cooled pressurized unit of the same size. The secret of WITTMANN's success lies in the development of need-oriented innovative products in line with the market, so the company decided to respond to the call and fulfill its customers' wish for a corresponding directly cooled pressurized model. On the traditional date for the Fakuma trade fair, WITTMANN will now present its new, directly cooled **TEMPRO plus D M120**, in a single-circuit as well as a dual-circuit version. The latter is the first directly cooled dual-circuit appliance from WITTMANN.



TEMPRO plus D M120 dual zone temperature controller

The compact, powerful **TEMPRO plus D M120** dual-circuit temperature controller offers the advantage of two independent temperature control circuits with high cooling performances. Direct cooling imposes stringent demands in terms of wear-resistance on the cooling valve which, depending on the application and the specific temperature control required for the individual process, switches over with varying frequency. WITTMANN has taken this into account by installing a durable piston cooling valve in the **TEMPRO plus D M120**. This valve withstands a considerably larger number of switching cycles without maintenance, and consequently offers a much longer service life than a conventional membrane cooling valve.

The new **TEMPRO D M120** impresses users with its more-than-complete standard version which, in combination with a wide range of optional equipment (all of which cannot be enumerated here) leaves nothing to be desired in terms of configuration options.

As standard, the appliance features a highly efficient direct cooling capacity of 80 kW with an Δt of 75 °C.

Apart from the 9 kW standard heating capacity, capacities of 12 kW or 16 kW are also available, depending on the production heat required for various applications. In its choice of pumps, WITTMANN relies exclusively on high-quality stainless steel pumps with wear-free magnetic couplings, covering a range of maximum flow rates from 40 to 90 l/min. As a specialty, the choice includes a frequency-controlled pump with 1.1 kW / 50 l/min / 9 bar. The great advantage of a frequency-controlled pump installed in the directly cooled **TEMPRO** model is its high flexibility in control parameters, since it offers a choice of being controlled either by motor speed, pressure or flow rate. This allows every user to choose in each case which parameter they wish to use for controlling their process. A choice which also supports the general effort to save energy.

The new **TEMPRO** comes with a **WITTMANN 4.0** interface as standard, which enables integration of the appliance into the work cell's control system.

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.

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