

## NEWS RELEASE

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### WITTMANN robots now with new servo axes and higher payload

*Innovation is key for the WITTMANN Group. 2017 is no exception. At the beginning of the year, the company presented the first model of the new **PRIMUS** robot series, the **PRIMUS 16**, for cost-efficient pick & place applications at clamping forces up to 200 t. WITTMANN then undertook a complete revision of the additional rotational axes for robots. Now, the results are available.*



**Servo C-axis (left) and Servo B-C-axis**

Compact robots from WITTMANN are designed for injection molding machines with clamping forces from 150–400 t. This range is covered by the type series that ranges from the **W821** to the **W831** model. These robots enable payloads from 10 to 15 kg, and from now on, new servo rotational axes are available for them.

When molding technical plastic parts with longer mold cooling times, injection molding automation systems – after having demolded the parts – can take advantage of this additional cycle time in order to execute downstream automation handling. To give the operator maximum flexibility for these additional tasks, WITTMANN has completely overworked the servo rotational axes for the **W821** to **W831** series. The standard models consist of three linear servo axes and a pneumatic swivel axis. The vertical axis realizes a stroke of 1,400 mm with a maximum payload of 12 kg. In case, an additional servo rotational C-axis should be needed – maybe for the orientation of the parts gripper towards the part, using any angle – the maximum payload is nearly unchanged. Now that a servo rotational B-axis is added (rotating the gripper around the vertical axis) the payload is lowered slightly to 10 kg.

Using these different combinations of axes – either a servo B-C-axis, or a servo B-axis combined with a pneumatic C-axis – any horizontal orientation of the parts can now be achieved. If necessary, these movements can be used in combination with additional palletizing actions. Using a servo B-axis also offers the operator further additional functionality; making it possible to determine from what mold half the parts should be removed – either from the moving half, or from the fixed half.

A special and unique feature that WITTMANN robots offer is the unchanged movement profile of the axes (acceleration/deceleration), thus enabling a constant cycle time that is independent from the robots' configuration. The movement patterns of other manufacturers' devices have to be adjusted in order to accommodate supplementary equipment. Thus, the achievable accelerations and decelerations are typically reduced. This is not the case with WITTMANN robots. For WITTMANN robots, the achievable cycle time is constant within a series. For the customer, this means that he gets an absolutely exact calculation of the costs per molded piece.

In addition to the servo rotational options, the robots of the series **W821** to **W831** can now handle a de-molding stroke of up to 800 mm. The horizontal axis is available up to a length of 6,000 mm. Many more options are also available, for example: additional I/O-function, additional vacuum circuits and gripper circuits, RFID recognition for grippers, and so forth.

„Thanks to the continuous feedback from our customers and agents, WITTMANN had started the development of servo rotational axes very early. Otherwise the actually possible increase in efficiency could not have been realized“, states Martin Stammhammer, the WITTMANN Group's International Sales Manager Robots and Automation Systems. „We are delighted to not only design and supply the most compact rotational modules in the market, but to also have increased the payloads of our robots. Altogether, our customers get the highest flexibility when automating their production systems with the WITTMANN Group.”

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The WITTMANN Group is a worldwide leader in the manufacturing of injection molding machines, robots and peripheral equipment for the plastics industry. Headquartered in Vienna/Austria, the WITTMANN Group consists of two main divisions, WITTMANN BATTENFELD and WITTMANN, which operate 8 production facilities in 5 countries, including 33 direct subsidiary offices located in all major plastics markets around the world.

WITTMANN BATTENFELD focuses on the independent market growth in the manufacturing of state-of-the-art injection molding machines and process technology, providing a modern and comprehensive range of machinery in a modular design that meets the actual and future requirements of the plastic injection molding market. WITTMANN's product range includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators, mold temperature controllers and chillers. With this comprehensive range of peripheral equipment, WITTMANN can provide plastics processors with solutions that cover all

production requirements, ranging from autonomous work cells to integrated plant-wide systems.

The syndication of the WITTMANN Group has led to connectivity between all product lines, providing the advantage plastics processors have been looking for in terms of a seamless integration of injection molding machines, automation and auxiliary equipment – all occurring at a progressive rate.

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