



NEWS RELEASE

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Fakuma 2021: **WITTMANN's key focus is flexibility**

Nearly one year ago, WITTMANN presented the concept of the new **A-C servo axis** for applications of 400–1,300 t of clamping force. Now the time has come for Fakuma 2021 visitors to Friedrichshafen (October 12–16) to experience this innovation in a live setting. Continuing orders through 2020 and 2021 have strengthened WITTMANN's opinion that production flexibility is the real key to the industry's needs. Therefore, Fakuma 2021 will see WITTMANN exhibit its brand new servo axis for the small and compact WITTMANN robot series (**W918–W922**). Hall B1. Booth 1204.



***B servo axis and A-C servo axis (left)
and A-C servo axis for small robots (right)***

In the field of additional rotational axes, WITTMANN primarily counts on the **B servo axis** (rotation 0–270° around the vertical Y-axis), where the execution process is hidden inside the vertical profile of the axis. In the case of small robots, only a combination with additional **C servo axis** was offered until now (rotation 0–180° around the horizontal Z-axis). At this year's Fakuma show, WITTMANN now can present live its new **A-C servo axis combination**.

With a total weight of about 4 kg, the axis is able to handle grippers of a weight of up to 10 kg. The construction is highly compact. Compared to a robot with pneumatic C-axis, the new solution needs a maximum of no more than 15 mm additional space in the demolding direction. Thus even more flexibility is added to the overall system. A

typical application example would be the decoration of parts using labels; here, the A-axis would be used for rotating the insertion core and for the positioning of the labels.

WITTMANN has also given some thought to robots that are already in current usage; and the new A-C servo axis is, of course, retrofit enabled; like all the other WITTMANN rotational axes. In the case of retrofitting, the advantages of the WITTMANN control architecture show real user-benefits. In the case of an updated installation into an existing system, for example, the control cabinet has not to be extended or modified, only the cabling of the vertical axis has to be extended. The additional axes are directly connected to the servo regulator at the vertical axis or the demolding axis respectively. This makes it possible to minimize cost and effort in the process of upgrading.

At the Fakuma 2021, WITTMANN introduces its new **A-C servo axis** on a **WX138** servo robot.

Also shown at the Fakuma:

A-B-C servo axis for medium-sized robots (WX142–WX153)

The **WX** robot series can be equipped with three additional servo rotation axes (**A-**, **B-** and **C-Servo**). In this way, synchronized 6-axis movements or less axis movements can be programmed, with the **R9** robot control system from WITTMANN coordinating automatically the speeds of the individual axes that have to be synchronized, so that all rotatory and translational motions are completed simultaneously.



Schematic diagram of additional servo rotation axes.

Various optimizations still enable – for example – the **WX153** robot to operate with a gripper weighing more than 20 kg even when using three (!) additional axes. Compared to the previous device concept, this equals a possible increase in weight by more than 30 %.

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.

Contact:

WITTMANN BATTENFELD Deutschland GmbH
Am Tower 2
90475 Nuremberg
GERMANY
Tel.: +49 9128 7099-0
info.de@wittmann-group.com

WITTMANN Technology GmbH
Lichtblaustrasse 10
1220 Vienna
AUSTRIA
Tel.: +43 1 250 39-0
info.at@wittmann-group.com

www.wittmann-group.com

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WITTMANN at the Fakuma show: Hall B1, Booth 1204