

WITTMANN SONIC robots:
威猛機械手臂 SONIC
A new robot series presents itself
呈現自我的一款新型機械手臂

WITTMANN has been known worldwide for decades as a maker of high-quality robots. Its standard parts removal appliances have been continuously improved over recent years. To meet the more and more stringent demands from customers and simplify the choice, WITTMANN developed the **PRIMUS** series two years ago. **PRIMUS** robots are typically used for pick-&-place applications. At the K 2019, WITTMANN presented a new series for the first time: the **SONIC** robots.

威猛公司作為高品質機器手臂製造商已享譽全球數十年。近年來，其標準零件取出設備得到了不斷改進。為了滿足客戶越來越嚴格的要求並簡化選擇，威猛兩年前開發了 PRIMUS 系列。PRIMUS 機器手通常用於取放應用。在 K2019 展會上，威猛首次展示了一個新系列：SONIC 機器手臂。



WITTMANN SONIC 143.
威猛機械手臂 SONIC 143

In contrast to the introduction of the **PRIMUS** series, WITTMANN is now rolling out the **SONIC** series with several types of appliances all at once. The models currently available are **SONIC 131**, **SONIC 142** and **SONIC 143**. These robots cover a clamping force range from 150 to 500 t. The new **SONIC** robots are based on the well-known **UHS** appliances (**UHS = Ultra High Speed**), which WITTMANN has been producing for more than 20 years. Parts removals with a total robot cycle time of less than 8 seconds are known as ultra high speed removals. The **SONIC** series can be used for parts removals down to 4 seconds robot cycle time. But short-cycle applications are only one of many possible uses, since applications which require longer production times can also benefit from these highly dynamic appliances. Gripping times below 1 second contribute to significantly improving the productivity of such production cells, too.

此次推出與 **PRIMUS** 系列相反款式，威猛現在正在同時推出具有多種類型設備的 **SONIC** 系列。當前可用的模型為 **SONIC 131**，**SONIC 142** 和 **SONIC 143**。這些機器手的鎖模力範圍

為 150 至 500 t。新的 SONIC 機器手基於著名的 UHS 設備 (UHS =超高速)，威猛已經生產了 20 多年。機械手總循環時間少於 8 秒的零件取出被稱為超高速取出。SONIC 系列可用於最短 4 秒的機器手循環時間的零件取出。但是短週期應用只是眾多可能用途中的一種，因為需要更長生產時間的應用也可以從這些高度動態的設備中受益。低於 1 秒的夾持時間也有助於顯著提高此類生產單元的生產率。

Consequently users can benefit from a number of additional advantages. For safe parts removal, the mold closing process is only released if all parts have remained inside the gripper. Compared to free falling parts production, this method involves only a minimal lengthening of the cycle time. Further benefits for users are also improved surface quality, and the possibility to have the parts deposited in the form of stacks, each containing an equal number of parts, which simplifies subsequent handling and packaging.

因此，用戶可以從許多其他優點中受益。為了安全地取出零件，只有在所有零件都留在夾具內的情況下，才關閉合模過程。與自由下落的零件生產相比，此方法只需要最小的循環時間延長。對用戶的進一步好處還在於改善的表面質量，以及使零件以堆疊形式放置的可能性，每個堆疊包含相等數量的零件，這簡化了後續的處理和包裝。

The appliances currently available cover a load capacity range from 3 to 7 kg. To prevent – in line with the typical slender gripper design for such applications – any additional interfering contours from entering the mold area, the entire electric and pneumatic power supply for the gripper is located inside the vertical axis in **SONIC** robots. As is customary in other WITTMANN robots, too, the gripper valves and inlets are seated directly on the vertical axis to ensure short response times. The **SONIC** robots are available with the following strokes as standard:

當前可用的設備的荷重能力範圍為 3 到 7 kg。為了防止（與此類應用中典型的細長夾持器設計相符）任何其他結構的干擾進入模具區域，**SONIC** 機器手中夾持器的整個電力和氣動電源都位於垂直軸內。就像其他威猛機器手一樣，夾持閥和進氣口也直接位於垂直軸上，以確保較短的反應時間。**SONIC** 機器手的標準行程如下：

- X-axis: 500 to 900 mm / X 軸: 500 – 900mm
- Y-axis: 800 to 1,600 mm / Y 軸: 800 – 1,600mm
- Z-axis: 1,500 to 4,000 mm / Z 軸: 1,500 – 4,000mm

Axis configurations going beyond these ranges are available upon request. This series owes its extraordinary dynamism to acceleration rates of 65 m/s². (These rates exceed those of the currently fastest roller-coaster worldwide, the Formula Rossa, whose passengers are exposed to acceleration pressures of up to 4.8 g.)

可應要求提供超出這些範圍的軸配置。該系列具有非凡的活力，可達到 65 m /s² 的加速度。（此速度超過了目前世界上最快的過山車，羅莎方程式，其乘客承受的最大壓力為 4.8 g）



WITTMANN SONIC 143
威猛機械手 **SONIC 143**

At the K 2019, the new **SONIC** robot series was shown with two appliances. At the booth of WITTMANN BATTENFELD, a **SONIC 143** handled the 48-fold removal of medical plastic parts (blood vials). At the WITTMANN booth, a **SONIC 142** tandem robot was shown: two robots on one Z carrier axis demonstrated ultimate precision with extremely dynamic movements.

在 K 2019 上，新的 **SONIC** 機器手系列展示了兩種設備。在威猛巴頓菲爾（WITTMANN BATTENFELD）的展位上，**SONIC 143** 處理了高達 48 疊的醫用塑料零件（血瓶）的取放。在 WITTMANN 的展位上，展示了一個 **SONIC 142** 串聯機器人：在一個 Z 承載軸上的兩個機器手展示了極高的精度和極高的動態運動。

The **SONIC** series from WITTMANN is immediately available from now on.
威猛的 SONIC 系列機械手臂，現已開始供貨。

The WITTMANN Group

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. They jointly operate the companies of the group with eight production plants in five countries, and its additional sales and service companies are active with 34 facilities on all 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 process 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 syndication of the various segments under the umbrella of the WITTMANN Group has led to complete connectivity between the various product lines, for the benefit of plastics processors with an increasing demand for seamless integration of processing machinery with automation and peripherals.

威猛集團

威猛集團是塑料行業中製造射出機、機械手和周邊設備的全球領航者。威猛集團總部設在維也納/奧地利，由兩個主要部門，威猛巴頓和威猛組成，他們共同經營集團旗下分公司，在全球 5 個國家設有 8 個生產工廠，其中超過 34 個直屬子公司位於世界各大塑料市場，並各自負責該區域的銷售及售後服務。

威猛巴頓致力於製造最先進的射出機和工藝技術的獨立市場增長，提供現代化和全面的機械模組化設計，滿足塑料射出成型的實際和未來要求。

威猛的產品系列包括機械手和自動化系統，中央供料系統，除濕乾燥機，秤重式和體積式的計量機，粉碎機，模具溫度控制器和冷卻器。憑藉這種全面的周邊設備，威猛可為塑料加工商提供涵蓋所有生產要求的解決方案，從自主工作單元到整個工廠範圍的系統。

威猛集團的結合已經使所有產品線連接為一體，提供塑料加工商在射出機、自動化和輔助設備的無縫接軌，為塑料加工廠帶來了益處，對加工機械與自動化和外圍設備的無縫集成日益增長。

更多信息可參訪我們的網站 www.wittmann-group.tw