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NEWS RELEASE 新聞稿

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Flow controller series 110 and 310: new generation, familiar look

110 和 310 系列流量控制器：新一代，熟悉的外觀

*Redeveloping a globally known product with a unique selling point requires a good team and a lot of patience. When the next optimization step is then accomplished, it is the best argument for the work that has been put in. From October last year, the new water flow controller series **110** and **310** from WITTMANN are available.*

重新開發具有獨特賣點且全球知名的產品需要一支優秀的團隊和相當的耐心。當下一個優化步驟完成時，這是對已投入工作的最佳論據。從去年 10 月開始，威猛推出了新款水流量控制器 **110** 和 **310** 系列。

For more than 40 years, WITTMANN flow controllers have been part of the standard equipment for every injection molding machine. With more than 500,000 devices sold, they have long been the undisputed number 1.

The predecessor models **101** and **301** had satisfied users worldwide for decades. They were used for distributing cooling water and cooling molds as well as specific areas inside injection molding machines, such as the feed zone, or the oil cooling system in hydraulic machines. The new **110** and **310** flow controller series are setting new benchmarks to ensure the ongoing technical progress for these products, which seem simple at first glance but prove being sophisticated when taking a closer look.

40 多年來，威猛流量控制器已成為每台射出機的標準配備之一。憑藉超過 500,000 台設備的銷售量，無可爭議早已成為業界銷售第一名。

先前的型號 **101** 和 **301** 滿足了全球數十年的用戶需求。它們用於分配冷卻水和冷卻模具以及注塑機內部的特定區域，例如進料區或液壓機中的油冷卻系統。新的 **110** 和 **310** 流量控制器系列正在設定新的基準，以確保這些產品的持續技術進步，乍看似乎很簡單，但仔細觀察便證明它是專業的一項產品。



1: EPDM O-ring. – 2: Polyamide 12 is the best choice of material for use with hot water up to 100 °C. – 3: For the heavy-duty use, a fiber-glass-reinforced PPO (polypropylene oxide) compound has been chosen as the material for the top and bottom parts of the flow controller's housing. – 4: Adjustment rings to display the flow quantity.

1：EPDM O 形環。2：聚酰胺 12 是用於最高 100°C 的熱水的最佳材料選擇。3：對於重型用途，已選擇玻璃纖維增強的 PPO（環氧丙烷）化合物作為流量控制器外殼頂部和底部的材料。4：調整環顯示流量。

Proven and new features

經過驗證的新功能

The tried-and-tested method of pipe cleaning, which can be carried out without removing the pipe through the top part of the housing, has been left unchanged in the **110** and **310** series. It is easy to replace the O-ring by lifting the pipe out of the bracket and then pulling it through the housing.

An absolute novelty is the new control valve that allows precise control of the flow rate. The double sealing of the valve disk towards the spindle and the axial movement performed by the valve disk instead of a radial movement are also novelties in the sector of cooling water flow controllers. With these features, WITTMANN is setting a new, unprecedented standard!

These vital innovations contribute to reduced wear of the O-rings and extend their service life. The O-rings themselves are made of EPDM and offer a high level of chemical and thermal resistance. As before, the sensor tube of the thermometer is placed directly in the return water and thus responds very quickly to temperature fluctuations. To keep the pressure drop inside the flow controller to a minimum, the cross-sections have been designed as large as possible, since a minimal pressure drop constitutes a decisive advantage at low system pressure.

在 110 和 310 系列中，無需通過外殼頂部拆下管道就可以進行管道清洗的方法。通過將管道從支架中提出，然後將其拉出外殼，可以很容易地更換 O 形環。絕對新穎的是可以精確控制流量的新型控制閥。閥盤朝向主軸的雙重密封以及由閥盤執行的軸向運動而不是徑向運動在冷卻水流量控制器領域也是新穎的。憑藉這些功能，威猛正在設定一個前所未有的新標準！

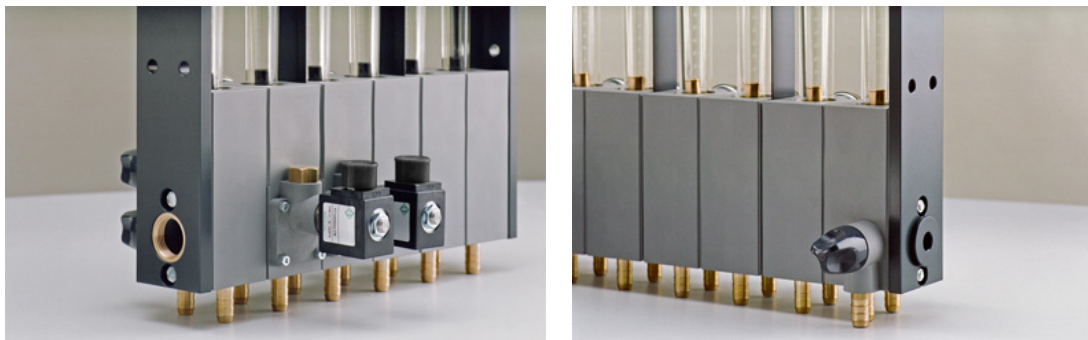
這些重大創新有助於減少 O 形環的磨損並延長其使用壽命。O 形環本身由 EPDM 製成，具有很高的耐化學性和耐熱性。和以前一樣，溫度計的傳感器管直接放在回水中，因此對溫度波動非常迅速地做出反應。為了將流量控制器內部的壓降保持在最低水平，已將橫截面設計得盡可能大，因為最小的壓降在低系統壓力下具有決定性的優勢。

Interesting options

有趣的選配項目

Additional valves are also offered for the new **110** and **310** series, such as the central shut-off or Z-valve for central blocking of the water supply to several circuits in the event of interruptions in the injection molding cycle. Single shut-off valves or E-valves are available as well, which are used to interrupt the cooling process in individual mold circuits by cutting off the cooling water flow. E-valves are normally used in combination with temperature sensors evaluated by the injection molding machine's control system. In this way, temperature control of individual mold cooling circuits can be performed by cooling pulses.

新型 110 和 310 系列還提供了其他閥可選配，例如中央逆止閥或 Z 閥，用於在注塑成型週期中斷的情況下集中切斷對多個迴路的供水。也可以使用單個逆止閥或 E 型閥，這些逆止閥或 E 型閥通過切斷冷卻水流量來中斷單個模具迴路中的冷卻過程。電子閥通常與由注塑機的控制系統評估的溫度傳感器結合使用。這樣，可以通過冷卻脈衝來進行各個模具冷卻迴路的溫度控制。



Solenoid shut-off valves (left) and optional blow-out valve.

電磁開關閥（左）和可選配的排氣閥。

The blow-out valve, which is also available as an option, has an additional compressed air connection and enables – usually in combination with the Z-valve – emptying of the mold circuits by blowing out the cooling water.

排氣閥也可提供作為選配項目，它具有一個附加的壓縮空氣接口，並且通常與 Z 閥結合使用，可以通過排出冷卻水來排空模具迴路。

Specifications 規格說明

Series 110 110 系列



The essential device for your plastics processing machines for open and closed cooling circuits. Flow volume is indicated in accordance with the float measuring principle: a cone is lifted by the water flowing in the return of the mold circuit.

此為塑膠加工機的基本配備，用於打開或關閉冷卻迴路。流量顯示是依據浮球測量原理：藉由模具回流管的水流浮力。

- **Flow range per circuit 每循環流速範圍:**
standard 0–10 l/min.
標準 0-10 l/分鐘。
- **On request 根據要求:**
Al, PVC-cones.
可選配鋁製或 PVC 錐。
- **Standard 標準:**
mold connections with 12 mm brass socket for 3/8" hoses.
模具接口：12 mm 黃銅套頭，用於 3/8 " 連接軟管
- **On request 根據要求:**
threaded connection with G 3/8" brass threaded sleeve.
螺紋連接，帶 G 3/8" 黃銅螺紋套筒。
- **Option 選項:**
screwed 14 mm brass socket for 1/2" hose, or screwed 20 mm brass socket for 3/4" hose. 螺紋的 14mm 黃銅插座用於 1/2" 軟管，或螺紋的 20mm 黃銅插座用於 3/4" 軟管。

Series 310 310 系列

The optimum flow regulator for large injection molding and blow molding machines. Its low pressure drop makes it suitable for highest flow volumes. However, by means of a special design of the regulating valves, excellent regulation and accurate reproduction of cooling water volume and temperature in the different mold circuits can also be achieved for low flow volumes.

適用於大型射出機和射吹機的最佳流量調節器。其低壓力差使得其適用於最高流量。然而，通過調節閥的特殊設計，對於低流量，也可以實現對不同模具迴路中的冷卻水體積和溫度的優異調節和精確再現。

Flow range per circuit 每循環流速範圍:

Standard 0–30 l/min.

標準 0-30 l/分鐘。

On request 根據要求:

Al, PVC-cones.

可選配鋁製或 PVC 錐。

Standard 標準:

mold connections with G 3/8" brass threaded sleeve.

模具接口：3/8" 黃銅螺紋接頭。

Option 選項:

with screwed 14 mm brass socket for 1/2" hose, or screwed 20 mm brass socket for 3/4" hose.

螺紋的 14mm 黃銅插座用於 1/2" 軟管，或螺紋的 20mm 黃銅插座用於 3/4" 軟管。

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.

威猛集團是射出機、機械手和周邊輔助設備的全球領先製造商，用於加工各種可塑材料（包括塑料和非塑料）。威猛集團總部設在奧地利維也納，由兩個主要部門組成：威猛巴頓菲爾和威猛。威猛集團遵循環境保護、節約資源和循環經濟的原則，致力於最先進的工藝技術，以最大程度地提高注塑成型的能效，以及用於處理標準材料以及回收料和可再生原料含量高的材料。威猛集團的產品旨在將水平和垂直方向集成到智能工廠中，並且可以相互鏈接以形成智能生產單元。

威猛集團在全球 5 個國家設有 8 個生產工廠，其中 34 個直屬分公司銷售遍布全國所有主要工業市場。

威猛巴頓菲爾致力於不斷增強其作為注塑機製造商和模組化設計的綜合現代機械技術供應商的市場地位。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。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，成為尋求集成方面的所在優勢 - 所有這些都以漸進的速度發生。

威猛台灣分公司針對客戶需求提供系統方案為主力；以技術性整合、技術性提供之「整合」系統，從技術提供、技術諮詢，服務、訓練工程師到位、不間斷服務及教育訓練之售服，從觀念、技術及加工條件之支援，來自奧地利總公司之技術支援等，滿足全面性服務。

更多信息可參訪我們的網站 www.wittmann-group.tw LINE @: [@witw](https://www.facebook.com/WittmannBattenfeldTaiwan)

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