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USER REPORT 客戶報導

CER Cleaning Equipment SRL, Romania

羅馬尼亞的 CER 清潔設備公司

Kärcher Romania relies on technology from WITTMANN BATTENFELD

凱馳羅馬尼亞公司採用威猛巴頓菲爾的技術

CER Cleaning Equipment in Romania, a company of the German Kärcher Group, has been using machines, automation and auxiliaries from the WITTMANN Group for years. In late 2020 and early 2021, another 18 machines of the MacroPower series were installed at CER Cleaning Equipment.

位於羅馬尼亞的 CER 清潔設備公司是德國凱馳集團旗下的一家公司，多年來一直使用威猛集團的射出機、自動化和週邊設備。在 2020 年底和 2021 年初，CER 清潔設備公司又安裝了 18 台 MacroPower 系列的機器。

Kärcher is the world's leading provider of efficient and resource-saving cleaning systems. The company's cleaning devices are characterized by functionality, ease of use and a sophisticated look. More than 1,300 patents and utility models testify to the innovative strength of the Kärcher company. The cleaning equipment is used in both commercial and private areas. The wide range of products from Kärcher includes high-pressure cleaners, scrubbing and suction machines, sweepers, window and surface vacuum cleaners, steam cleaners, air cleaners, generators and dirty water pumps, washing systems, irrigation systems, garden tools and much more.

凱馳是世界領先的高效和節約資源的清潔系統供應商。該公司的清潔設備的特點是功能性強、使用方便、外觀精緻。凱馳公司透過 1,300 多項專利和新型又實用的產品證明了它的創新實力。其清潔設備使用拓及商業和私人領域。凱馳公司的產品範圍很廣，包括高壓清洗機、擦油和抽吸機、掃地機、窗戶和表面吸塵器、蒸氣清潔器、空氣濾清器、發電機和髒水泵、清洗系統、灌溉系統、園藝工具等等。

In the year 2016, Kärcher has started their own production of professional and home & garden vacuum cleaners in Romania with CER Cleaning Equipment based in Curtea de Arges. CER Cleaning Equipment is a 100% subsidiary of the German Kärcher Group.

2016 年，凱馳開始在羅馬尼亞與位於 Curtea de Arges 的 CER 清潔設備公司合作，自行生產專業和家庭及花園吸塵器。CER 清潔設備公司是德國凱馳集團的 100% 子公司。

Since this beginning, the WITTMANN Group has been supplying CER Cleaning Equipment with machines from the *EcoPower* and *MacroPower* series, robots and auxiliary equipment. The first 16 *MacroPower* machines in the clamping force range of 4,000 kN up to 11,000 kN were delivered in 2016. Due to the continuing growth of CER and the high demand for vacuum cleaners, the delivery of a second batch of machines took place in 2018. As growth continued without interruption, another factory building next to the original building had to be constructed starting

middle of 2020 with more machines, robots and a central material handling system following as well. At the end of 2020 and the beginning of 2021, WITTMANN BATTENFELD installed another batch of 18 machines from the *MacroPower* series in the clamping force range from 4,500 to 9,000 kN in the new facility of CER. The machine park of CER Cleaning Equipment currently comprises 44 machines of the *MacroPower* series and one *EcoPower* machine. Amongst them are machines in XL configuration with extended platen size and four 2-component machines. For the implementation of lightweight constructions, three machines are equipped with WITTMANN BATTENFELD AIRMOULD® gas modules, which are connected to a centralized pressure generator.

從一開始，威猛集團就向 CER 清潔設備公司提供 EcoPower 和 MacroPower 系列的射出機、機械手臂和週邊設備。鎖模力範圍為 4,000kN 至 11,000kN 的首批 16 台 MacroPower 射出機於 2016 年交付。由於 CER 的持續增長和對真空吸塵器的高需求，第二批射出機於 2018 年交付。由於不間斷的增長，從 2020 年中開始，CER 必須在原來的廠房旁邊建造另一棟廠房，並增加射出機、機械手臂和中央供料系統。在 2020 年底和 2021 年初，威猛巴頓菲爾在 CER 的新廠房又安裝了一批 18 台 MacroPower 系列的射出機，鎖模力範圍從 4,500kN 到 9,000kN。目前，CER 清潔設備公司的機器園包括 44 台 MacroPower 系列射出機和一台 EcoPower 射出機。在這些射出機中，有 XL 配置的機器，具有更大的模板尺寸和四台雙組分機器。為了實現輕質結構，三台機器配備了威猛巴頓菲爾 AIRMOULD® 氣體模塊，該模塊與集中式壓力發生器相連。

The machines of the *MacroPower* series convince at CER Cleaning Equipment above all through their compact design, their speed, their cleanliness and their high energy efficiency, which is achieved through the use of the most modern servo motors and pump technology. The machines are equipped with the latest WITTMANN robots from the pro series. The main focus is on the W832 pro, which is characterized by its stable structure, flexibility and high accuracy.

MacroPower 系列的射出機通過其緊湊的設計、速度、清潔度以及通過使用最先進的伺服電機和幫浦技術實現的高能源效率，使 CER 清潔設備公司信服。這些射出機配備了最新的威猛專業系列的機械手臂。主要為 W832pro，它的特點是結構穩定、靈活和高精確度。

Both CER Cleaning Equipment facilities are equipped with a central drying and conveying system from WITTMANN. Coded coupling stations for the drying silos as well as for the feeding to the machines are in place. The centralized system was completed with gravimetric external silos. CER puts high attention to the avoidance of any kind of plastic waste, such as runners or reject parts. In case this cannot be completely avoided, the recovery of plastics is performed strictly by type with a high quality level, and the material is fed back to the production.

兩個 CER 清潔設備公司都配備了威猛的中央乾燥和輸送系統。乾燥筒倉以及向機器供料的編碼連接站都已到位。該集中式系統由重力式外倉完成。CER 高度重視避免任何形式的塑膠廢料，如流道或廢品。如果不能完全避免這種情況，塑膠的回收將嚴格按照類型和高質量水平執行，並將材料反送到生產中。

Besides the central drying system and in order to maintain flexibility in their production needs for covering smaller batch sizes, compact segment wheel dryers of series WITTMANN ATON segment are employed. Temperature controller models TEMPRO basic C90 and C120, as well as plus D round off the supply of auxiliary equipment of WITTMANN.

除了中央乾燥系統外，為了保持生產的靈活性，還採用了威猛 ATON 系列的緊湊型除濕乾燥機以滿足較小批量的需求。模溫機 TEMPRO basic C90、C120 以及 Plus D，使威猛的週邊設備供應更加完善。

Apart from the production competency Kärcher values the development of their employees in ways which are rather unique. For this purpose a Kärcher Academy and Innovation Corner have been established. The focus is on brainstorming for generating innovative ideas within small interdisciplinary teams for best practice, ideas and solution sharing.

除了生產能力外，凱馳還重視員工的發展，這是非常獨特的。為此，凱馳成立了凱馳學院和創新角。其重點是在小型跨學科團隊中進行頭腦風暴，以產生創新想法，並分享最佳實踐、想法和解決方案。

In addition to the technology from WITTMANN BATTENFELD, CER Cleaning Equipment is particularly valued for the excellent cooperation with the local WITTMANN branch. Ion Bican, Managing Director of CER Cleaning Equipment: "The communication with the team from WITTMANN BATTENFELD Romania is excellent. The service we received after delivery of the equipment was very professional."

除了來自威猛巴頓菲爾的技術外，CER 清潔設備公司還特別看重與威猛當地分公司的良好合作。CER 清潔設備公司的總經理 Ion Bican 說：“與威猛巴頓菲爾羅馬尼亞團隊的溝通非常好。設備交付後，我們得到的服務也非常專業。”



Fig. 1: Kärcher Romania (Photo: WITTMANN BATTENFELD Romania)

圖 1: 凱馳羅馬尼亞公司 (拍攝: 威猛巴頓菲爾羅馬尼亞公司)



Fig. 2: v.l.n.r.: Eduard Lazea, Sales Manager WITTMANN BATTENFELD Romania, Ion Bican, Managing Director CER Cleaning Equipment SRL, Michael Wittmann, President WITTMANN Technology GmbH, , General Manager WITTMANN BATTENFELD Romania (Photo: WITTMANN BATTENFELD Romania)

圖 2: 從左到右: 威猛巴頓菲爾羅馬尼亞公司銷售經理 Eduard Lazea, CER 清潔設備公司執行董事長 Ion Bican, 威猛集團總裁 Michael Wittmann, 威猛巴頓菲爾羅馬尼亞公司總經理 Bogdan Nestor (拍攝: 威猛巴頓菲爾羅馬尼亞公司)





Fig. 3a+b: Production site of Kärcher Romania (Photos: WITTMANN BATTENFELD Romania)

圖 3a+b: 凱馳羅馬尼亞公司生產基地 (拍攝: 威猛巴頓菲爾羅馬尼亞公司)



Fig. 4: WITTMANN Central Conveying System (Photo: WITTMANN BATTENFELD Romania)

圖 4: 威猛中央供料系統 (拍攝: 威猛巴頓菲爾羅馬尼亞公司)



Fig. 5: WITTMANN Central Conveying and Drying System (Photo: WITTMANN BATTENFELD Romania)

圖 5: 威猛中央供料和乾燥系統 (拍攝: 威猛巴頓菲爾羅馬尼亞公司)

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

威猛集團是一家全球領先的射出機、機械手和周邊設備的製造商，用於加工各種可塑材料(包括塑膠和非塑膠)。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。遵循環境保護、節約資源和循環經濟的原則，威猛集團從事最先進的工藝技術，以實現射出成型的最大能源效率，並加工標準材料和含有高含量回收物和可再生原材料的材料。威猛集團的產品是為橫向和縱向整合到智能工廠而設計的，並且可以互相連接，形成一個智能生產單元。

威猛集團在全球5個國家設有8個生產工廠，另外在34個直屬子公司在全球所有主要工業市場都有銷售。

威猛巴頓作為射出成型機製造商和模塊化設計的綜合現代機械技術供應商，追求持續加強其市場地位。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。威猛集團旗下各個領域的組合實現了完美的整合—這對於加工機械、自動化和輔助設備的無縫連鎖需求日益增長的射出加工企業來說是有利的。

更多信息可參訪我們的網站 www.wittmann-group.tw

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YOUTUBE: <http://www.youtube.com/c/WittmannBattenfeldTaiwan>

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