

## USER REPORT 使用者報告

Hayco, Hong Kong

### Environmental award for Hayco plant in the Dominican Republic 多明尼加共和國的 Hayco 工廠獲得環保獎

***The “Donald Espie Hay Building”, opened by Hayco in the Las Americas Free Zone Park, Dominican Republic in 2017, has been awarded the LEED (Leadership in Energy and Environmental Design) platinum certificate by the USGBC (US Green Building Council.) One deciding factor in this success story was the significant amount of energy savings achieved by the use of injection molding lines from WITTMANN BATTENFELD.***

**2017 年，Hayco 在多明尼加共和國拉斯美洲自由園區開設的“Donald Espie Hay 大廈”被 USGBC(美國綠色建築委員會)授予 LEED(領先能源與環境設計)鉑金認證。這一成功案例的一個決定性因素是通過使用威猛巴頓菲爾集團的射出生產線實現了大量的能源節省。**

Hayco, based in Hong Kong, is a globally leading manufacturer of durable consumer goods for daily use, which has been successfully operating three production sites in China for more than 35 years. In 2015, Hayco decided to establish a production plant in the Dominican Republic to optimize its deliveries to the USA and Europe.

總部設在香港的 Hayco 公司是一家全球領先的日常耐用消費品製造商，在中國已經成功經營三個生產基地超過 35 年。2015 年，Hayco 決定在多明尼加共和國建立一個生產工廠，以優化其向美國和歐洲的交貨。

Right from the start in August 2016, this building project was planned according to the standards of the LEED Initiative. Donald Hay, founder of Hayco, personally committed himself to take actions as specified by the LEED Initiative in planning and constructing the production facility. So it was also an obvious choice to give his name to the building, where 2,000 people are now employed. 從 2016 年 8 月開始，這個建築項目就按照 LEED 倡議的標準進行規劃。Hayco 的創始人 Donald Hay 在規劃和建設生產設施時，親自承諾採取 LEED 倡議的要求。因此，以他的名字命名這棟建築也是一個顯而易見的選擇，現在這裡有 2000 名員工。

The most important contributing factors to winning the LEED platinum certificate were:

- local procurement of building materials
- 40 per cent reduction in electricity consumption by using injection molding machines from WITTMANN BATTENFELD
- installation and complete use of 1.5 MW solar electricity generated on the roof of the building
- substantial cuts in energy and water consumption by using water technology with low flow rates and adjustable LED lighting
- covering of green areas with native plants, which need no watering
- use of public transport by company staff

The Donald Espie Hay Building is equipped with servo-hydraulic injection molding machines from the *SmartPower* series and large machines from the *MacroPower* series, as well as robots, auxiliary appliances and a central materials handling system from the WITTMANN Group. A total of 82 machines are installed in the Donald Espie Hay Building.

獲得 LEED 鉑金認證的最重要的因素是：

- 在當地採購建築材料
- 通過使用威猛巴頓菲爾集團的射出機減少 40% 的電力消耗
- 在建築屋頂上安裝並完全使用 1.5 兆瓦太陽能發電
- 通過使用低流量的水技術和可調節的 LED 照明，大幅減少能源和水的消耗
- 用不需要澆水的本地植物覆蓋綠色區域
- 公司員工使用公共交通工具

Donald Espie Hay 大廈配備了 SmartPower 系列的伺服液壓射出機和 MacroPower 系列的大型機器，以及威猛集團的機械手臂、周邊設備和中央供料系統。在 Donald Espie Hay 大廈共安裝了 82 台機器。

Apart from their compactness and user-friendliness, the servo-hydraulic machines from WITTMANN BATTENFELD stand out above all by their intelligent, economical use of energy. Their high level of energy efficiency is primarily due to the combination of a fast-response, speed-controlled, air-cooled servo motor with a robust fixed displacement pump, known as the “Drive on Demand” system. “Drive on Demand” means that the drive unit is only activated as long as required for movements and pressure generation. During cooling times and cycle breaks for parts handling, the servo drive remains switched off and consumes no energy. In operation, “Drive on Demand” is the basis for highly dynamic control of machine movements and minimized cycle times. This results in a high standard of regulation accuracy combined with improved repeatability and time savings in axis movements. “Drive on Demand” achieves in a demonstrably lower energy consumption compared to systems using servo-controlled, dual-circuit pump technology or electrohydraulic drives.

威猛巴頓菲爾集團的伺服液壓機除了結構緊湊和易於使用外，最突出的是它對能源的智能和經濟利用。他們的高水平能源效率主要是由於快速反應、速度控制、風冷伺服電機與強大的固定排量泵的組合，即“按需求驅動”系統。“按需求驅動”意味著驅動裝置只在需要移動和產生壓力時才會被啟動。在冷卻時間和零件處理的週期休息期間，伺服驅動器保持關閉，不消耗任何能源。在運行中，“按需求驅動”是機器運動的高度動態控制和最小化循環時間的基礎。這導致了高標準的調節精度，同時提高了軸運動的可重複性和節省時間。與使用伺服控制、雙迴路泵技術或電液驅動的系統相比，“按需求驅動”實現了明顯的低耗能。

Christopher Hay, CEO of the Hayco Group, is very proud of his company having won the LEED platinum certificate for the Donald Espie Hay Building. “Hayco is one of only 5 manufacturing facilities in all of Mexico, South and Central America to have received this award”, he says and continues: “Hayco has set itself the goal of being a leading company in the area of sustainable production, hoping by this example to encourage other production companies to construct sustainable buildings.”

Hayco 集團的首席執行官 Christopher Hay 對他的公司為 Donald Espie Hay 大廈贏得 LEED 鉑金認證感到非常自豪。“Hayco 是整個墨西哥、南美洲和中美洲僅有的 5 家獲得該獎項的生產設施之一”，他說，並繼續說道。“Hayco 為自己設定的目標是成為可持續生產領域的領先公司，希望通過這個例子鼓勵其他生產公司建造可持續建築”。

WITTMANN BATTENFELD shares Hayco's happiness and warmly congratulates them on their success.

威猛巴頓菲爾集團與 Hayco 一樣，對他們的成功表示熱烈的祝賀。



Fig. 1: LEED platinum certificate (Photo: Hayco)

圖 1: LEED 鉑金認證 (Photo: Hayco)



**Fig. 2:** The project team responsible for planning and implementing the measures in accordance with LEED Initiative standards (Photo: Hayco)

**圖 2:** 負責按照 LEED 倡議標準規劃和實施措施的項目團隊 (Photo: Hayco)



**Fig. 3:** Donald Espie Hay Building (Photo: Hayco)

**圖 3:** Donald Espie Hay 大廈 (Photo: Hayco)



**Fig. 4:** Injection molding machines from WITTMANN BATTENFELD in the Donald Espie Hay Building (Photo: Hayco)

**Fig. 4:** 在 Donald Espie Hay 大廈裡的威猛巴頓菲爾集團的射出機 (Photo: Hayco)

## 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](http://www.wittmann-group.tw)

FB: <https://www.facebook.com/WittmannBattenfeldTaiwan>

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

威猛巴頓菲爾有限公司 Wittmann Battenfeld (Taiwan) Co., Ltd.

40768 台中市西屯區工業區36路16號

No.16, Gongyequ 36th Rd., Xitun Dist., Taichung City 40768, Taiwan (R.O.C.)

Tel.:886 4 23595158 Fax.:886 4 23592878 E-mail : [info@wittmann-group.tw](mailto:info@wittmann-group.tw)