

Tailor-made solutions, used in multiple fields globally.

精準呈現客製工藝，應用全球多元領域
東毓，全方位解決方案

TIP-1000-2RT-L-250-PCD

iTungYu-efficient injection molding machine
(with universal cold runner block, UCRB)

智慧型雙邊自動脫模射出成型機
(搭配泛用型冷澆道)

Automatic Double
Shuttle System
雙邊自動脫模系統

Universal Cold Runner Block, UCRB
創新泛用型冷澆道系統

Independent Temperature
Control of Heating Platens
獨立下熱盤溫控系統

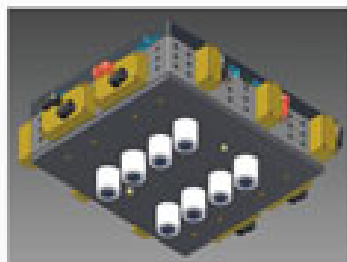


Features 特寫說明

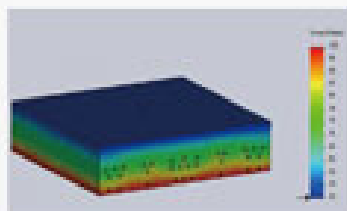
- Save material - Mold with cold runner block system can effectively reduce rubber waste.
- High utilization rate - Double shuttle front kit design is available for two molds continuing production.
- Operation safety - Covered with safety fence and equipped with light curtain to ensure the operator.
- Automatic cleaning - Not only with automatic lifting the mold, but also with internal brush device and spray release agent. It's easier and stable cleaning the mold.
- Easy to take - With rotation flapping design, the operation area is larger after mold opening to take the finished parts and mold inspection easily.
- 節省原料：冷澆道系統搭配模具，可有效減少廢膠料。
- 主機稼動率高：雙邊自動脫模設計，可供兩副模具連續生產。
- 操作安全：全機採全包式圍網設計，前方操作空間使用安全光柵，確保設備運作時的操作人員安全。
- 自動清潔：清潔刷及離型劑噴灑裝置，自動於模具上噴灑離型劑，更簡單穩定的清潔殘膠。
- 取件便捷：懸臂式翻板設計，掀模後的作業空間較大，方便進行成品取出作業與模具檢查。

Brand new patent from Tung Yu Innovation Center 東毓技研中心，開發全新專利技術

Universal Cold Runner Block, UCRB 創新泛用型冷澆道系統



This device has a thermostatic control module for the runner block to keep the compound under a constant of target temperature. A sprue located on the top of block can accurately match the runner between injection unit and cold block, and it will ensure that the compound smoothly flow without any leakage. It can maintain the temperature of compound at the range of 70°C to 80°C via the PID control. This is to let compound smoothly flow and maintain the normal properties of compound without scorch. There are eight nozzles arrayed by 2x4 whose function is to pour compound into the cavity of mold. We also design several shut off valves to control the flow route of compound, and the customers can feel free to choose which nozzle they want to use.



The utility of the UCRB developed by TungYu will effectively reduce the proportion of wasted materials. Meanwhile, the UCRB could be regarded as a subsystem and be conveniently attached to the any injection machine. It is no longer to customize the CRB limited by the mold features, which will greatly reduce the cost of CRB and increase the customer's acceptance.



具有恆溫控制之橡膠澆道結構。在結構上方，裝置一可承接射料機射嘴輸出膠料之澆嘴，確保膠料可完全注入澆道中，將澆道內膠料溫度控制在70-80°C範圍，維持膠料正常之物性與化性。而結構下方，設計8具4x2陣列式射嘴，作為膠料導入上模之模穴中。同時設計澆道控制閥，提供客戶依其模具之穴數位置選擇開啟或關閉對應接合之射嘴。

使用東毓開發之泛用型冷澆道，將可有效降低廢料比例；同時，膠料溫控技術可隨附在成型機端，進行一次性設計，大幅降低業者成本，增加導入可行性。

中國寧波公司 Ningbo China

東毓(寧波)油壓工業有限公司

Tung Yu (Ningbo) Hydraulic Industries Co., Ltd.

T + 86 574 5533 3028

ningbo@tungyu.com

F + 86 574 8659 9050

全國免費服務專線: 4001133028

F + 886 49 2252998

www.tungyu.com

Thermoplastic Production 熱可塑性複合材料成型

To enhance thermoplastic composites (TPCs) productivity and quality, Tung Yu develop all electric automation forming machine with our innovation and rich experience in the market. The machine is equipped with auto-loading & unloading system is able to provide incredible productivity with lowest labor cost.

To precisely control the forming temperature, the machine designed with independent ceramic heating system for quick materials preheating.

The mold is also equipped with heating and cooling system to meet the different forming process from customer. That is the key to make TPC products with high surface requirement, perfect shapes and dimensions while maintain the fiber orientation and mechanical properties of the composites.

為提升熱塑性複合材料(以下簡稱TPC材料)產品質量與生產效率，東毓運用累積孕育卓越技術，自行開發TPC材料熱壓成型機，搭配自動送料與取料機構，可達到最大產能同時降低人工成本。

精準控制材料成型溫度，設計陶瓷獨立加熱控制模組，使材料快速達到目標預熱溫度；另模具配備加熱與冷卻系統，可由客戶依其成型製程特性，獨立設定溫度參數，提供TPC材料成型所需急冷/急熱功能，以滿足產品表面滑順、外型幾何準確及維持纖維編織方向等成型要求。

All Electric Design 全電式設計

The design theory is to drive by servo motor and equipped with toggle type clamping unit to replace the traditional hydraulic closing system with high speed and operation precision. The toggle mechanism is working from top to lower the working height.

設計原理以伺服馬達驅動，搭配肘節式夾模設計，取代傳統油壓合模，有效提高速度與精度；驅動夾模機構採上置式設計，有效降低工作高度。

Electricity Saving

省電



Oil Saving

省油



Water Saving

省水



Force Saving

省力



Labor Saving

人力



High Capacity

產能



Speed

速度



Precise

精度



產業應用領域 Industrial Applications

汽機車產業 Automotive Application
3C光電產業 Photoelectric Application
工業用品產業 Industrial Application
生活用品產業 Lifestyle Application
運動用品產業 Sports Application
特殊應材產業 Composite Application
航太科技產業 Aerospace Military Application

Tailor-made solutions, used in multiple fields globally.

精準呈現客製工藝，應用全球多元領域
東毓，全方位解決方案

TYC-150-2RT-PCD-UP

All electric automation
composites forming machine
全電式自動化碳纖維成型機

Independent Ceramic Heating System 移動式陶瓷獨立加熱控制模組



- Heating temperature(max.) : 900°C,
Heating rate : 7.5°C/sec.
- 最高溫度可達900°C，
升溫速率每秒高達7.5°C

Auto-loading & Unloading System 自動送料與取料機構系統

Products 製造成品

