讓中國裝備技術與世界同步 WE WALK ALONGSIDE THE WORLD

Stock code:300415



A5標準型高端伺服注塑機

A5 Series Standard High-end Servo Injection Molding Machine

> 一樣的傑出不一樣的A5 New A5, Excellent As Always

广东伊之密精密注压科技有限公司

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We reserve the right to change specifications without prior notice.

The pictures are only for reference, please refer to the real object











伊之密公司簡介

立志成為所在領域世界級企業



伊之密順德容桂總部 Yizumi's headquarters in Ronggui, Shunde



順德五沙生產基地 Wusha production base in Shunde



蘇州吳江生產基地 Wujiang production base in Suzhou

輕合金及高分子複合材料模型成型工藝的廣泛應用,改變了近代的工業製造模式,使低成本大批量生產成為可能。今天,以鋁、鎂、鋅為代表的輕合金,及以塑膠、橡膠為代表的高分子複合材料,已成為工業製品和消費產品不可或缺的重要組成原料,從而帶動相關的模壓成型裝備的飛速發展。

2002年,公司在佛山市順德區容桂鎮四基生產出第一台伊之密塑膠注射成型機,隨後,伊之密相繼推出鋁、鎂、鋅合金壓鑄機、橡膠注射機和機器人自動化集成系統,並得到了越來越多模壓成型行業知名客戶的認可和信賴。現在,在中國市場,伊之密注塑機已經位列業內前三名,壓鑄機、橡膠機均位列行業前二。

2015年1月23日,伊之密成功登錄深交所A股市場,開啟企業發展的新征程。13年來,伊之密一直致力於讓中國裝備技術與世界同步,著力提高自身的技術實力、產品品質和服務。上市後,伊之密繼續朝著這個方向努力,鎖定"成為所在領域的世界級企業"的新目標,圍繞模壓成型專用機械設備領域多元化地延伸產品,創新產品研發和企業運營方式,積極佈局全球市場,最終讓全球的客戶和同行都認可伊之密的產品和品牌。

今天,伊之密除了擁有占地8000m²的順德高新區生產基地外,順德五沙生產基地(占地81117m²)和蘇州吳江生產基地(一期占地33213m²)已全面投產,滿足伊之密未來五到十年的發展需要。另外,伊之密在全球市場運行"伊之密"和"HPM"雙品牌戰略,在北美、印度設立生產基地,開拓和鞏固伊之密的國外市場。

為進一步把產品做到精益求精,伊之密引入IPD產品集成研發管理模式,從客戶需求出發,以嚴謹的流程開發產品,完善產品升級換代。 投入累計超過1.2億元人民幣,打造屬於伊之密自己的精密製造平臺,並投資建設恒溫計量檢測中心,全力升級產品品質。

為客戶創造更大價值及更佳的投資回報,是我們存在的意義。今後,我們將在節能技術、自動化技術、精密控制技術、產品無故障技術等領域作更大投入,持續保證產品的先進性和可靠性。同時,我們還將致力建設業內更佳服務體系,提供快速、準確的服務,為提高全球客戶競爭力不懈努力。

About Yizumi

We aspire to become a world-class enterprise in our field!

With the widespread application of compression molding technology of light alloy and polymer-based composite, the mode of modern industrial manufacture has been changed and massive production with low-cost becomes possible. Today, light alloy exemplified by aluminum, magnesium and zinc, and polymer composites represented by plastics and rubber have become indispensable raw materials of industrial and consumer products The relevant molding machinery industry thus achieves rapid development.

At the beginning of 2002, Yizumi manufactured the first injection molding machine in Siji, Ronggui Subdistrict. Then Yizumi launched die casting machines for aluminum, magnesium and zinc alloy, rubber injection machines and robotic automated integrated systems, obtaining high recognition from more and more well-known customers in the molding industry. Yizumi ranks top three among Chinese injection molding machine manufacturers and top two among both Chinese die casting machine manufacturers and rubber injection machine manufacturers.

On January 23, 2015, Yizumi successfully launched an IPO on the A-share market of Shenzhen Stock Exchange, which was a new start for the company's development. Yizumi has been committed to improve Chinese equipment technology to walk alongside the world and enhance its technical strength, product quality and service for 13 years. Yizumi will keep forward as always, set the new goal as becoming a world-class enterprise in the industry, diversify the products around the area of molding machinery for special applications, make innovations in the research and development of products as well as enterprise operation, so that Yizumi's products and brands are recognized by customers and counterparts worldwide.

In addition to the manufacturing base that covers an area of 80,000m² in Shunde National Hi-tech Industrial Zone, Yizumi's Wusha Factory (covering 81,117m²) and Suzhou factory (1st stage land area of 33,213m²) also have been put into use, which will meet the development needs of Yizumi in the next five to ten years. Yizumi also implements the YIZUM-HPM dual brand strategy in global markets and builds overseas bases in North America and India to develop and consolidate foreign markets.

To further improve the products, Yizumi introduces IPD mode to develop the products following strict procedures and upgrade the products based on customer needs. Yizumi has spent over 120 million RMB building its own precision manufacturing platform and invested in building a constant-temperature measuring and testing center to fully improve the product quality.

The greatest significance of Yizumi's existence lies in creating more value and better investment return for customers. In the future, the company will devote more input to areas such as technology of energy-saving, automation, precision control and trouble-free products so as to make sure our products are advanced and reliable. Meanwhile, we will be dedicated to setting up the better service system in the industry to provide rapid and quality service, making unremitting endeavor to improve the competitiveness of customers worldwide.

宗旨:我們致力於讓中國裝備技術與世界同步,並為全球客戶創造更佳的投資回報和客戶體驗。

使命: 五年內成為中國領先的裝備製造商, 並干主要新興市場建立全球經營系統, 成為真正的"全球化"企業。

願景:成為一家經營好、管理好、文化好、讓員工引以為傲,為社會仰慕及尊敬的企業,永續經營。

Aim: We are dedicated in providing global clients with better investment return and customer experience.

Mission: We are determined to become a leading Chinese machine manufacturer in five years and a real globalized enterprise with establishment of global business system in major rising markets.

Vision: We wish to become a long-lasting enterprise with effective operation, efficient management and excellent culture, of which the employees are proud and to which social respect are showed.

A5標準型高端伺服注塑機 機型: 60T-560T

五大客户价值主张

繼伺服機成功推向市場多年,在吸收了伊之密收購HPM的先進歐美技術後,經過兩年多的市場調研,充分了解客戶的"痛"和需求後, 採用IPD模式全新打造的一款標準型高端伺服注塑機。其為客戶創造的五大核心價值包括:





精密穩定



高效節能



③ 人性化

A5 Series Standard High-end Servo Injection Molding Machine

Machine model: 60T-560T

Five Value Propositions

After successfully bringing servo machines to the market for years, mastering advanced European and American technology from HPM Company and completely understanding customer needs through over-two-year market research, Yizumi develops a brand-new standard high-end servo injection molding machine, A5 Series, based on IPD mode. A5 Series creates five core values for customers including:



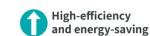


精密穩定

精密性和穩定性



• 全面優化注射機構確保注射的



Precise and stable

precision and stability

• Fully optimize injection unit to ensure





適用範圍廣

- 更大的規格參數
- 更強的動力和更快的響應速度
- 用戶可獲得更寬的加工範圍降 低重複投資成本

Wide range of application

可靠耐用

- Larger machine specifications
- Stronger power and faster response
- Wider processing range and lower repeated investment costs





高效節能

- 搭載第三代伺服系統
- 整機動作噪音低、動力強、回應快

High-efficiency and energy-saving

- The third-generation servo system
- Low noise, strong power and quick response in operation



可靠耐用

- 整機剛性綜合加強
- 採用均應力壓模技術
- 機器運作更加穩定可靠耐用

Reliable and durable

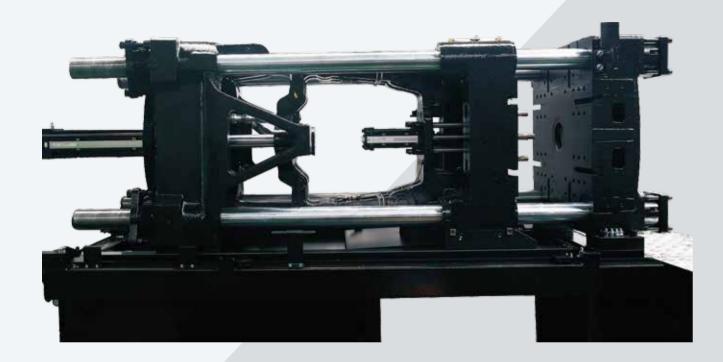
- Higher overall rigidity of machine
- Uniform-stress molding technology
- More stable and reliable operation of machine

人性化

- 友好的人機界面
- 集成大量常用功能軟體
- 提高可操作性和可維護性,讓 客戶用得更自由舒暢

User-friendly

- User-friendly HMI
- Integrate a great deal of common functional software
- Improve operability and maintainability to give customers more flexibility and ease during use

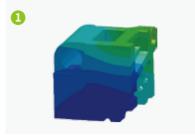




客戶需求:鎖模機構可靠耐用,模具保護功能有效、開模位置重複精度高

Customer need: reliable and durable clamping unit, effective mold protection and high repeatability of mold open position.

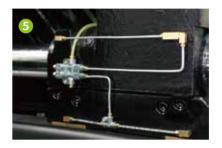
解決方案:基於現有成熟的鎖模機構,經過深入研究提出12項關鍵的元素進行優化、創新,其中包括: **Solutions:** Based on mature structure of clamping unit, 12 key functions were optimized and innovated, including:













1 均應力壓模技術

均應力壓模技術,鎖模力分佈平均,模板變形小,使用較低鎖模力,生產同樣產品也不會產生成型問題,同時保護模板和模具。

2 高剛性的T型槽模板

全系列模板高剛性設計,鎖模單元整體剛性提升30%;全系列標配T型槽,方便装卸模具,降低因螺孔長期使用牙損機率,提升模板使用壽命。

3 頂針強制復位

標配頂針強制復位,滿足特殊模具強制復位要求,模具適用範圍更廣。

4 開模位置閉環控制

開模位置定位精度及重複精度提升,滿足機械手精確取出,有利自動化持續生產。定位精度<2mm,重複精度<0.3mm。

5 獨特防傾滑腳設計

採用獨特防傾滑腳設計,提升運動的平穩性,降低摩擦力,提升運動效率降低能耗,同時避免模板傾斜保護模具。

6 低壓模保功能

配置低壓模具保護控制單元,確保模具的有效保護。

Uniform-stress molding technology

The clamping force is evenly distributed with little deformation of platen. No injection molding defect will be caused when the same part is produced under lower clamping force, which protects the platen and mold.

High-rigidity T-slot platen

High-rigidity T-slot platen is standard on the product line, which increases the overall rigidity of clamping unit by 30%, brings convenience for installation and removal of mold, reduces the wear of thread due to long-term use of screw hole and extends the life of platen.

Compulsory ejector return

This function meets the requirement of special mold reset and the molds are more applicable.

Closed-loop control of mold open position

The enhanced accuracy and repeatability of mold open position result in accurate part removal by robot and benefit automated continuous production. The mold open position accuracy is smaller than 2mm and repeatability is below 0.3mm.

Anti-tilt platen support design

Special anti-tilt platen support design increases the smoothness of motion, lowers friction, improves the efficiency of motion, reduces energy consumption and prevents the platen from tilting so as to protect the mold.

Low pressure mold protection

Low-pressure mold protection control unit ensures the mold gets effectively protected.

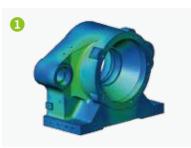


注射單元 Injection Unit

客戶需求: 射膠精密穩定、塑化和混色效果好

Customer need: high injection precision stability and improved quality of plasticizing and color mixing.

解決方案:基於現有成熟的射膠機械,提煉15項重要相關點進行優化、創新,其中包括: Solutions: Based on mature structure of injection unit, 15 key functions were optimized and innovated, including:



高剛性射膠模板 High-rigidity injection component



標配線性導軌支座 Injection unit support with linear guide rails



水平雙射移設計 Horizontal double-carriage design



新一代螺杆料管組 New screw & barrel unit



人性化設計:移動料斗滑軌 (320T 及以下) User-friendly design: movable hopper rails (60T-320T)



集中潤滑模塊 Centralized lubrication module

① 優化注射單元

注射機構優化設計,提升注射剛性,並確保機構運動受力方向和射膠受力同軸,降低阻力,提高注射的穩定性和精度。

2 整體式線軌結構

注射系統採用線軌結構,線軌配整體式射台支撐,射台移動摩擦力極小,提高注射精度,提升塑化效率。

3 水平雙射移設計

採用水平雙射移設計,雙缸平行注射,能有效消除注射機构翻轉力矩,確保注射穩定可靠。

4 新一代通用型螺杆料管組

搭配新一代升級螺杆料管組件,進一步提升混色質量的同時提升塑化速度,還具有易換色、易清洗、低剪切不升溫等優點,具有良好的綜合性能,適用性更強。

5 人性化設計

採用人性化設計,包括電熱護罩、料斗滑軌、射嘴防護罩、集中潤滑等多項設計,在保護操作安全的同時,降低勞動強度,提高操作和維護方便性。

Optimized injection unit

The injection unit is optimized to increase rigidity, ensure coaxiality of the forces on motion and injection, reduce resistance, and enhance the stability and accuracy of injection.

Integrated linear guide rail structure

The injection unit is equipped with the one-piece supporting base which is integrated with linear guide rails, which minimizes the friction to motion, increases injection accuracy and enhances plasticizing efficiency.

Horizontal dual-carriage design

Adopt a horizontal dual-carriage design for two-cylinder parallel injection, effectively eliminating rotary torque to ensure a reliable and stable injection.

New universal screw and barrel unit

The upgraded screw and barrel unit further optimizes color mixing and plasticizing efficiency. It has the advantages of easy color change and cleaning, low shear without tempera ture rise and wider applicability, etc.

User-friendly designs

Heating device guard, hopper slide rail, purge guard and centralized lubrication, etc. are user-friendly designs that ensure the operation safety, reduce labor intensity and offer more ease of operation and maintenance.

液壓系統 Hydraulic System

伊之密第三代伺服節能技術 Yizumi's third-generation energy-saving servo technology

第三代伺服系統從電機內部結構和磁鋼的要求及油泵的選型和驅動軟體的開發均作了系統的改進優化,實現穩定、可靠、耐用、節能、高效、低噪音等極佳功能,比傳統液壓機節電約30%~80%。新增液壓油溫閉環控制功能,實現油溫控制精度±0.5℃以內,穩定性進一步提升。

The third-generation servo system has been improved and optimized in the internal structure of motor, the standard of magnetic steel, the selection of oil pump and the development of drive software to achieve superior performance in stability, reliability, durability, energy conservation, efficiency and low noise; the servo system uses 30%-80% less energy than conventional hydraulic machines. The accuracy of closed-loop hydraulic oil temperature control, which is the new function, is ± 0.5 °C with further increased stability.



專業品牌電機Professional brand-name motor



進口品牌高壓齒輪泵 Imported high-pressure gear pump



匯川伺服驅動器 INOVANCE servo drive

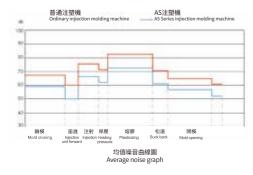
多年市場應用驗證,更佳組合配置,系統穩定,可靠耐用,並具有高效、節能、低噪音、動力強、響應快等特性。

Proven by years of practical application and higher configured, the third-generation servo system is stable, reliable and durable and characterized by high efficiency, energy saving, low noise, strong power and fast response.

低噪音 Low noise

生產同一產品,在相同的工況下,第三代伺服系統, 相對第二代伺服系統噪音降低約20%

Under the same working conditions, the 3rd-generation servo system emits 20% lower noise than the previous generation when producing the same product.



動力強 Strong power

動力系統功率配置充足,超載能力強勁,以120T為例,全速全壓測試可實現5分鐘 不超載報警的極限測試。

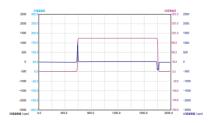
The servo system has sufficient power and strong overload capacity, for example, a 120T machine in A5 Series can raise no overload alarm at maximum speed and under maximum pressure for 5 minutes in a test.



響應快 Fast response

系統響應速度進一步提升,相對二代 伺服系統提升一個檔次,以120T為 例,系統響應時間約40ms。

The speed of response is further upgraded. Take a 120T machine for example, the response time of servo system is about 40ms.



電控系統 Electrical System

盟立MK500控制系統:提升機器控制性能,製品更加穩定,整機穩定性更強。

Mirle MK500 control system delivers better performance in machine control and adds to the stability of product and machine.



- CANopen總線代替原有壓力流量模擬量傳送模式,傳輸更穩定,控制更精准
- 10.4吋800×600 TFT LCD顯示,獨立32 bits CPU控制
- 控制單元CPU採用Cortex A8, 掃描週期達0.5ms, 響應速度快、控制精度高
- 240組模具參數存儲,帶USB接□可無限擴展存儲空間
- 7+1組PID獨立CPU溫度控制,支持J、K型熱電偶切換;溫度控制使用PID自動調節功能,提高控制精度
- 可擴展熱流道接口,最大支持60組熱流道並支持J、K型熱電偶切換(特工選配)
- 品質監控管理,主要工藝參數曲線顯示和列表統計
- 輸出、輸入點擴展功能,最大支持64點輸出、64點輸入(特工選配)
- 內置常用軟件功能,能滿足多種不同的模具成型工藝
- 支持常用通訊接口RS-232\485、CANOPEN、OPC UA (需擴展)
- CANopen bus technology makes transmission more stable and control more accurate.
- 10.4-inch 800×600 TFT LCD with separate control by 32-bit CPU.
- The control unit adopts Cortex-A8 processor with scan time of 0.5ms, speedy response and accurate control.
- 240 sets of mold data memory, USB port for extension of storage.
- 7+1 sections of PID temperature control supports switchover between type J and type K thermocouples. Automatic PID tuning improves the temperature control accuracy.
- Expansion of hot runner interface is available, supporting 60 sets of hot runner and switchover between type J and type K thermocouples (optional).
- Production quality control, with display of process parameter graphs and statistics tables.
- The I/O module has 64 outputs and 64 inputs at maximum (optional).
- Integration of common software meets different injection molding process requirements.
- Common communication interface, including RS-232\485, CANOPEN, OPC UA (expand as needed).

標配數控背壓 Standard CNC back pressure

采用数控背压方式,可更方便调整熔胶背压。

Use CNC back pressure for easier adjustments of plasticizing back pressure.



人性化設計 User-friendly design

人工學設計的可旋轉式電腦掛箱,採用獨特的外觀設計,美觀、 大方、操作舒適;電箱等部件設計既考慮了走線的安全,同時也 提升了操作和維護的方便性。

The ergonomic rotary controller cabinet has a special and nice exterior design while offering comfort during use. The design of electrical cabinet and other components ensures safety of wiring and also makes operation and maintenance easier.



電箱整潔安全易於維護 Electrical cabinet that is neat, safe and maintenance-friendly



各種接口通用標準化 Universal standardized interfaces and connectors

A5標準型高端伺服中大型注塑機 機型: 650T-2600T

A5大機的研發背景 R&D background of A5 series medium to large tonnage machine

自2015年9月A5系列中小型(60T-480T)全面上市后,其"適用範圍廣、高效、精密穩定"的獨特差異化優勢已得到客戶廣泛認同和驗證,同時客戶需求的系列化亦要求A5產品線進一步延伸。經過大量走訪,調研客戶需求和"痛點",最終確定650T以上的A5中大機系列的核心客戶價值為:可靠穩定。在此背景下,伊之密A5 IPD項目組順勢而為,在保證全系列產品線的優勢下,中大機著重研究并測試了其穩定可靠性和塑化要求,這與客戶的需求和實際的"痛點"高度吻合。

A5 series of small-medium machine (60T-480T) was introduced to market since Sept. in 2015. Its unique advantage of "wide range of application, high efficiency and precision stability" has been identified and verified by customers, and customers also request to extend existing A5 series. After interviewing, researching customers' needs, YIZUMI finally determined the core customer value of the A5 series medium-large machines (over 650T), which is reliability & stability. Under this background, YIZUMI IPD-program team follows the trend and focuses on research and test of medium-large injection molding machine in its reliability, stability and plasticizing performance, which completely meets customers needs.

High Standard A5 Series Medium To Large Tonnage Servo Injection Molding Machine

Machine model: 650T-2600T

在A5中大型產品線中,為確保"可靠穩定"的核心價值,我們 重新定義并嚴格執行以下關鍵檢驗或性能指標:

- 逆流檢測偏差<1mm
- 熔膠重量偏差<0.5%

- 模板平行度(負載)<0.18mm(UN800A5)
- 模板平行度 (開模至100mm) < 0.54mm (UN800A5)
- 導柱受力偏差<±3%
- 鎖模力重複精度<1%
- 開模終點位置精度<2mm
- 静态温控精度<±1°C

To fulfill the core value of "reliability & stability" in A5 series mediumlarge machines, we redefine and strictly implement key inspection and performance criteria below:

- Backflow detection variation <1mm
- Plasticizing weight deviation<0.5%
- Platen parallelism (after load) <0.18mm (UN800A5)
- Platen parallelism (mold opening to 100mm)<0.54mm (UN800A5)
- Force deviation of tie bar < ±3%
- Repeatability of clamping force <1%
- Accuracy of mold-open end position <2mm
- Static temperature control accuracy< $\pm 1^{\circ}$ C





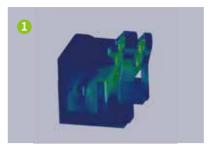


鎖模機械結構——穩重、高剛性

Mechanical structure of clamping unit—stable, high-rigidity

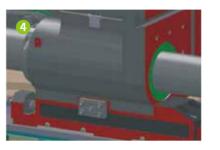
模板結構采用歐洲風格設計、全面優化參數與受力分布,機架采用高剛性材料及制作工藝,確保整機紮實、穩定可靠。

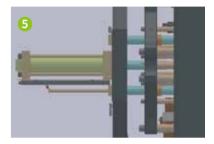
The platen structure is designed with European style and fully optimized parameters and force distribution. High-rigidity materials and manufacturing processes for base frame ensure the machine is strong, stable and reliable.











1 均應力壓模技術

鎖模力分佈平均,模板變形小;可使用較低鎖模力,生產同樣的產品不會發生飛邊,同時可保護模板和模具。

2 高剛性的T型槽模板

全系列模板高剛性設計,大大提升鎖模單元整體剛性;全系列標配T型槽,方便裝卸模具,降低因螺孔長期使用牙損機率,提升模板使用壽命。

3 頂針強制復位

標配頂針強制復位,滿足特殊模具強制復位要求,模具使用範圍更廣。

4 加長型設計滑腳

動模板採用前置型重載支撐滑脚,支撐重心向碼模面前置,避免模板傾斜,重型模具亦可運行平穩。

5 加長型頂針板導向設計

頂針板導向采用加長型設計,有效避免頂針板傾斜,提高頂針穩定性;頂出力均勻,頂出位置更準,機器頂出效果更佳。

Uniform-stress clamping technology

Uniform distribution of clamping force, less platen deformation . Lower clamping force is applicable to produce the same part without flash, protecting platen and mould.

High-rigidity T-slot platen

Full range of high-rigid plates greatly improve the overall rigidity of the clamping unit; The series is equipped with T-slotted plates to facilitate mold loading/ unloading, reduce the rate of wear on screw hole threads after prolonged use and extend the useful life of platens.

Compulsory ejector return

Standard ejector forced reset feature to fulfill the forced reset requirement for certain special molds and expand mold applications.

Extended moving platen support

The movable platen is equipped with front heavy-load sliding supports. The center of gravity of support moves forwards to the mold mounting surface, preventing the platen from tilting. Machine still operates steadily when it is loaded with heavy molds.

Extended ejector guiding platen design

Ejector guiding extended, effectively avoiding ejector plate tilting and improving stability of ejection. Uniform distribution of ejector force, precise ejection position with better ejection performance.





射膠機械結構——穩定、少摩擦

Mechanical structure of injection unit—stable, less friction

射膠結構優化設計,提高注射的剛性;減少注射過程中的各項摩擦阻力,提高注射精度,確保注射的穩定性。

Optimized injection structure design improves rigidity of injection unit.

Reduce all frictional resistance during injection molding process enhance the stability & precision of injection.



整體式線軌支座 Integrated linear guide rail support

- 採用整體式線性導軌、水平雙射移設計,雙缸平行注射,確保注射穩定可靠;
- 整體式線軌支座,可減小射臺與線軌或導桿的摩擦力,成型制品的重複精度更高。
- Medium size machine adopts integrated linear guide rail, horizontal double-carriage design and double-cylinder injection to ensure injection is reliable & stable.
 Integrated linear guide rail support reduces the friction between injection unit and linear guide rail or tie bar and enhances production repeatability.



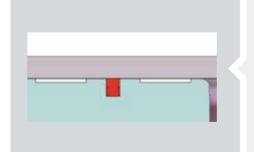
螺杆參數結構優化 **Optimized plasticizing screw**

- 進一步提升塑化效率10%-30%,同時提升塑化品質,改善混色效果。
- 配置四套標準料管組,適用範圍進一步擴展。
- The plasticizing efficiency is up by 10%-30% and the quality of plasticizing and color mixing is improved as well.
- Four sets of standard barrel assembly are available so that the machine has wider applicability.



標配熔膠比例背壓 Proportional plasticizing back pressure control

- 數控背壓方式可方便實現電腦精準控制,提高注射的穩定性。
- Proportional back pressure facilitates accurate control by industrial computer and enhances the stability of injection.



注射油缸采用低摩擦油封設計 Low friction oil seal inside injection cylinder

- 注射油缸采用低摩擦油封重載支撐環設計,充分減小射膠阻力,長期使用精度有保障。
- Injection cylinder adopts low friction oil seal design, fully reducing injection friction and ensuring longer service life.

液壓系統 Hydraulic System

伊之密第三代伺服節能技術 Yizumi's third-generation energy-saving servo technology

第三代伺服系統從電機內部結構和磁鋼的要求及油泵的選型和驅動軟體的開發均作了系統的改進優化,實現穩定、可靠、耐用、節能、高效、低噪音等極佳功能,比傳統液壓機節電約30%~80%。新增液壓油溫閉環控制功能,實現油溫控制精度±0.5℃以內,穩定性進一步提升。

The third-generation servo system has been improved and optimized in the internal structure of motor, the standard of magnetic steel, the selection of oil pump and the development of drive software to achieve superior performance in stability, reliability, durability, energy conservation, efficiency and low noise; the servo system uses 30%-80% less energy than conventional hydraulic machines. The accuracy of closed-loop hydraulic oil temperature control, which is the new function, is $\pm 0.5^{\circ}$ C with further increased stability.



專業品牌電機Professional brand-name motor



進口品牌高壓齒輪泵 Imported high-pressure gear pump



匯川伺服驅動器 INOVANCE servo drive

多年市場應用驗證,更佳組合配置,系統穩定,可靠耐用,並具有高效、節能、低噪音、動力強、響應快等特性。

Proven by years of practical application and higher configured, the third-generation servo system is stable, reliable and durable and characterized by high efficiency, energy saving, low noise, strong power and fast response.

低噪音 Low noise

生產同一產品,在相同的工況下,第三代伺服 系統,相對第二代伺服系統噪音降低約20% Under the same working conditions, the 3rd-generation servo system emits 20% lower noise than the previous generation when producing the same product.

動力強 Strong power

动力系统功率,配置充足,过载能力强劲,全速全压测试可实现5分钟不过载报警的极限测试

High efficiency gear pump realizes fast response injection molding which can be used in high-precision molding.

電控系統 Electrical System

高精度的控制系統——系統壓力、流量、位置和溫度控制更加準確,制品更加穩定,整機穩定更強。

High precision control system—more accurate c ontrol of system pressure, flow, position & temperature, higher part repeatability, as well as more stable overall machine performance.



升級KEBA系統 Upgraded KEBA system

- 可以扩展AO、AI、DO、DI、TM等多种多个模块,满足更多需求;
- 实时监测机器配置传感器等信号, 匹配相关动作, 安全性更高;
- 支持常用通讯接口RS232/485, CANOPEN, 以太网接口, 温度补偿传感器接口, USB接口。
- \bullet Expandable with multiple modules including AO, AI, DO, DI, and TM to meet more requirements;
- Real-time monitoring of signals from machine equipped sensors to coordinate corresponding movements for higher operating safety;
- Support common RS232/485 communication interface, CANOPEN, Ethernet port, temperature compensation sensor connector, and USB port.



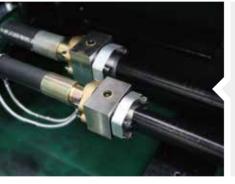
開模比例閥減速回路 (650T-1000T) Proportional valve-controlled mold opening deceleration

- 縮短開模過衝量,提升開模位置重複精度。
- 滿足機械手精確抓取產品,提升自動化連續生產效率。
- Reduce excessive distance in mold opening and improve repeatability of mold-open position
- Facilitate accurate part removal by robot and improve the efficiency of automated production



低油位報警 Low oil level alarm

- 低油位自動報警功能,防止因油位過低吸入氣體而導致液壓回路不穩定。
- Automatic low oil level alarm function prevents gas from being sucked in due to low oil level, avoiding consequent instability of hydraulic circuit



非焊接式主油管擴口設計 Weldless flared hydraulic hose design

- 確保長期使用不會出現焊縫開裂的漏油情況。
- Ensure no oil leaks due to cracked weld during long-term use