

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

Stock code:300415

YIZUMI伊之密

Designed by Yizumi in March 2018

A5

A5標準型高端伺服注塑機

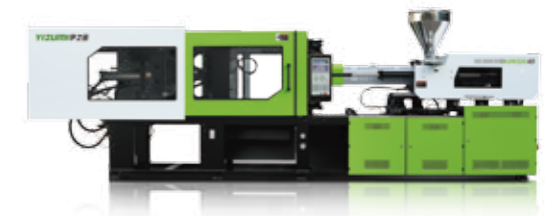
A5 Series Standard High-end Servo
Injection Molding Machine

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

廣東伊之密精密注壓科技有限公司

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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 brand。

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，並於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:

- 適用範圍廣
- 精密穩定
- 可靠耐用
- 高效節能
- 人性化

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

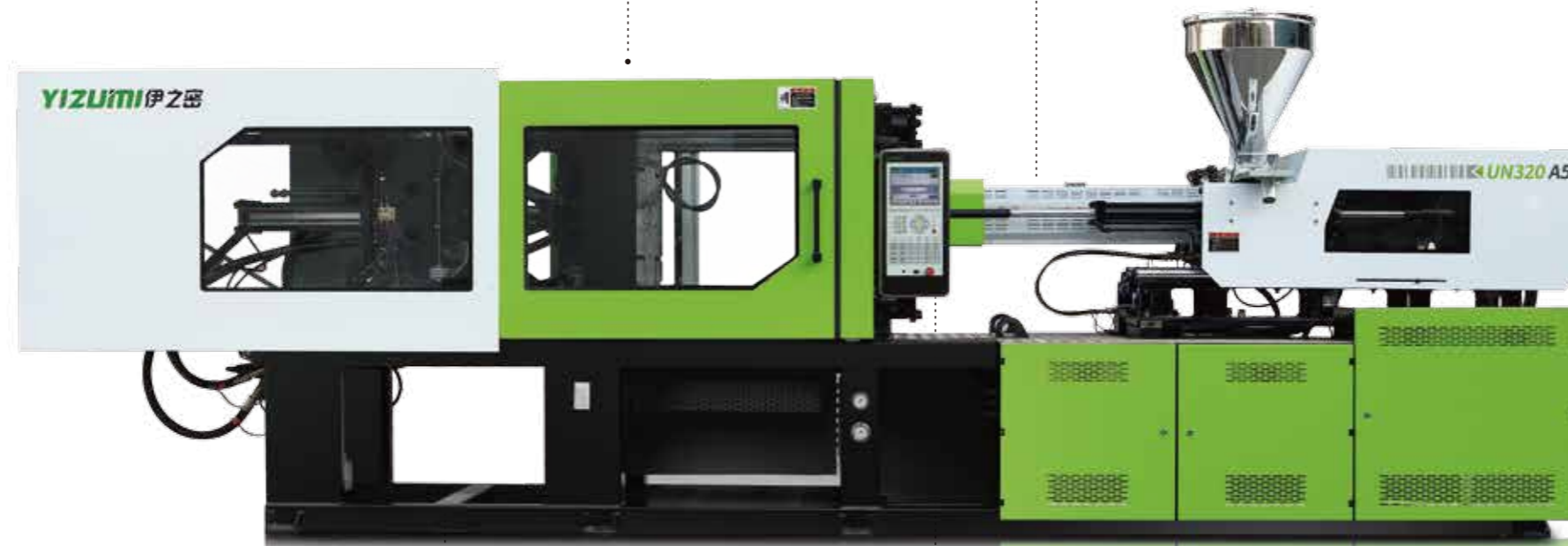
- Larger machine specifications
- Stronger power and faster response
- Wider processing range and lower repeated investment costs

Machine model: 60T-560T

A5 Series Standard High-end Servo Injection Molding Machine 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:

- Wide range of application
- Precise and stable
- Reliable and durable
- High-efficiency and energy-saving
- User-friendly



精密穩定

- 全面優化注射機構確保注射的精密性和穩定性

Precise and stable

- Fully optimize injection unit to ensure precision and stability

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

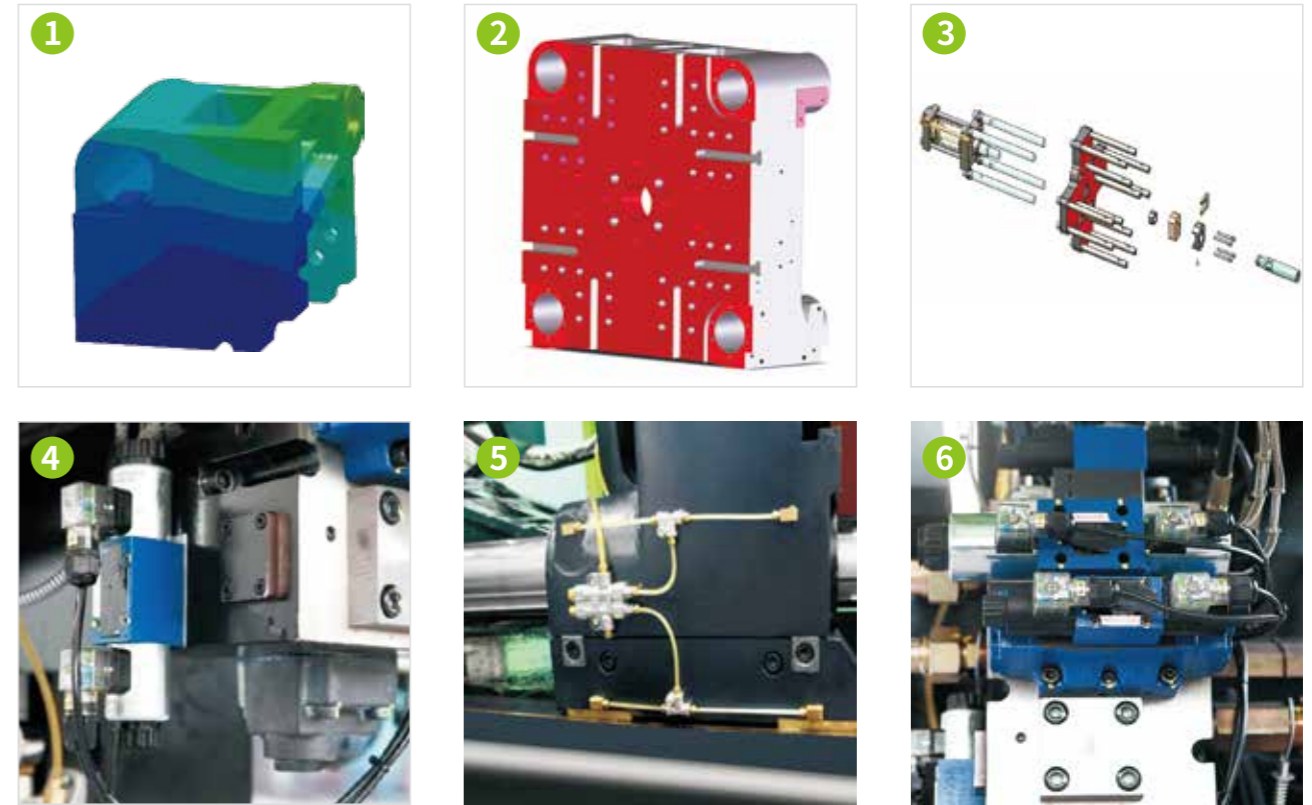
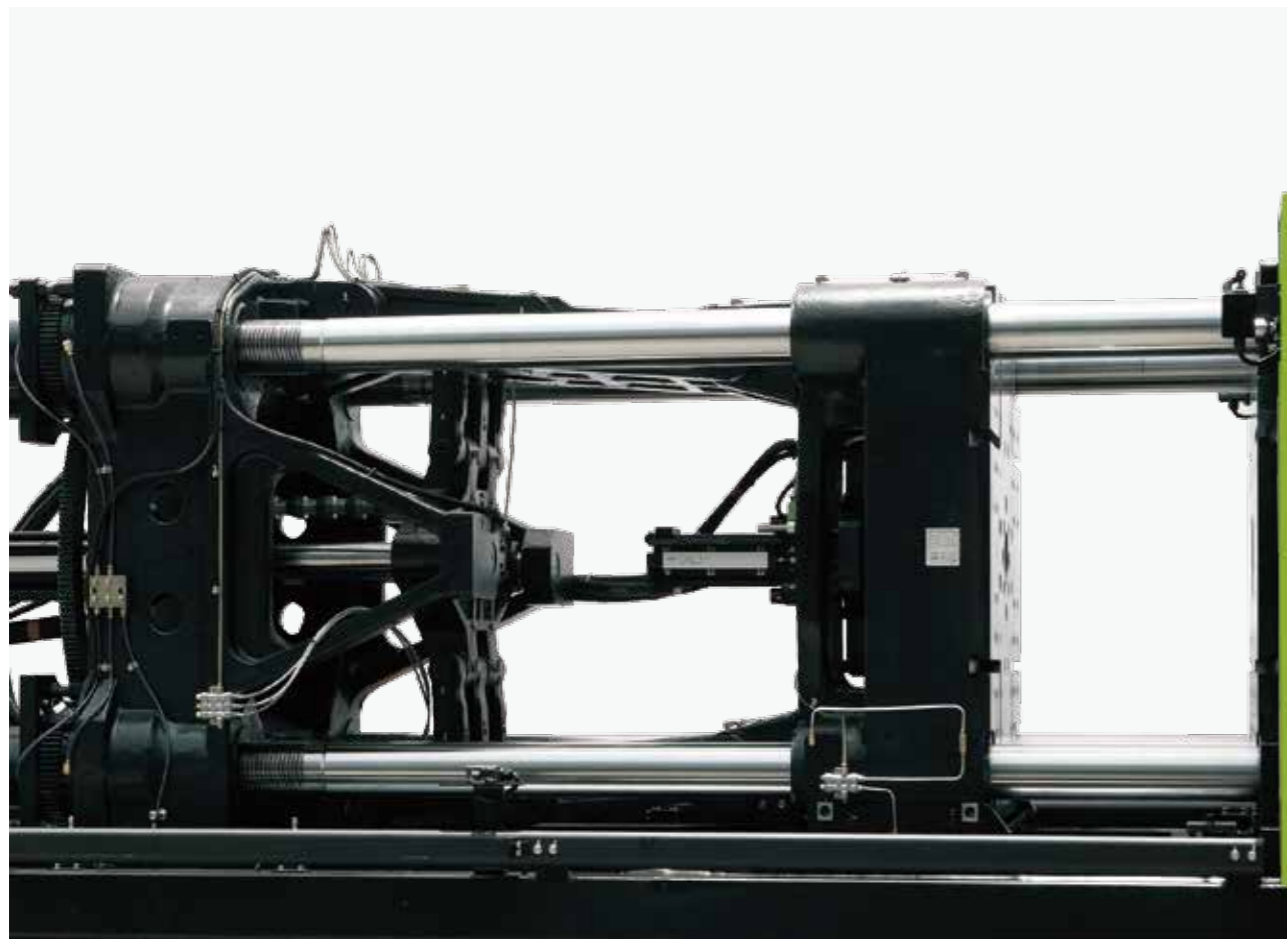
人性化

- 友好的人機界面
- 集成大量常用功能軟體
- 實施可操作性和可維護性方案讓客戶用得自由舒暢

User-friendly

- User-friendly HMI
- Integrate a great deal of common functional software
- Carry out feasible and maintenance-friendly solutions to give customers more flexibility and ease during use.

鎖模單元 Clamping Unit



1 均應力壓模技術

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

2 高剛性的T型槽模版

全系列模版高剛性設計，鎖模單元整體剛性提升30%；全系列標配T型槽，方便裝卸載模具，降低因螺孔長期使用牙損機率，提升模版使用壽命。

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 開模剎車功能

開模位置重複精度提升，滿足機械手精確取出，有利自動化持續生產。

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。

1 Uniform-stress molding technology

Benefits of this technology include evenly distributed clamping force, little deformation of platen, no injection molding defects even with the use of lower clamping force, as well as protection of platens and molds.

2 High-rigidity T-slot platen

Platens of the machines in A5 Series are highly-rigid, with overall rigidity of the clamping unit up by 30%. T-slot is a standard feature for the whole series, which brings convenience for installing and uploading the mold, reduces the chance of wear of thread due to long-term use of screw hole and extends the life of platen.

3 Forced ejector reset

This function enables special molds to be forced to reset and the molds are more applicable.

4 Mold opening control

Repeatability of mold-open position is improved so that the manipulator can exactly remove the parts, which facilitates automated continuous production.

5 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 tilting so as to protect the mold.

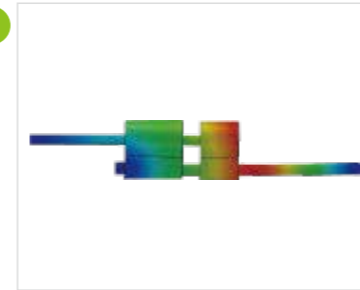
6 Low pressure mold protection

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

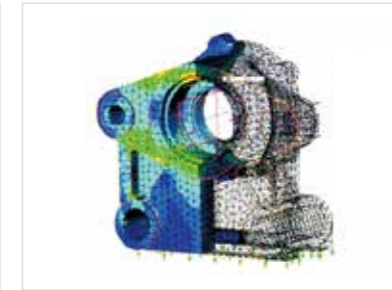
注射單元 Injection Unit



1



注射軸向受力優化分析
Optimization axial force analysis



高刚性射膠模板
High-rigidity injection platen



標配雙射移確保注射可靠
Double carriages as a standard feature that ensures reliable injection

2



標配移動料斗滑軌(320T 及以下)
Movable hopper rails as a standard feature (for 320T machine and smaller models)



集中潤滑模塊
Centralized lubrication module

3



標配高效塑化混煉螺桿
High-efficiency mixing screw as a standard feature

1 優化注射單元

注射機構優化設計，提升注射刚性，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 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。

3 高效塑化混煉螺桿

A5系列標配高效混煉螺桿，其設計體現了塑化效率、塑化品質及混色效果的極佳平衡。

1 Optimized injection unit

Optimized design of injection unit increases the rigidity, ensures coaxiality of the forces on motion and injection, reduces resistance, and enhance the stability and precision of injection.

2 User-friendly designs

Heating device guard, hopper rail, nozzle safety 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.

3 High-efficiency mixing screw

High-efficiency mixing screw is standard on A5 Series and it is the embodiment of outstanding plasticizing efficiency, plasticizing quality and coloring mixing.

液壓系統 Hydraulic System

伊之密第三代伺服節能技術

自2005年伊之密工程師深入研究伺服節能系統至今，基本上從廣度和深度上比較全面地把握了該系統的應用技術。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%。

Yizumi's third-generation energy-saving servo technology

So far, Yizumi has comprehensively grasped the application technology of energy-saving servo system since it was further studied in 2005. 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.

第三代伺服系統 The third-generation servo system



專業品牌電機
Professional brand-name motor



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



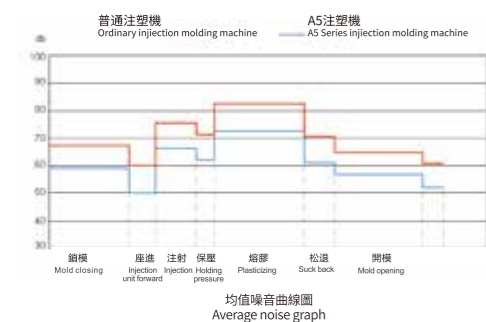
匯川伺服驅動器
INOVANCE servo drive

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 third-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。

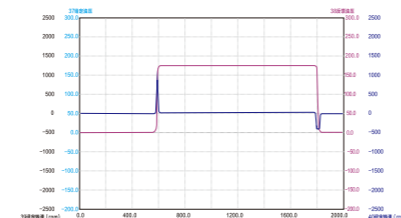
The servo system has sufficient power and strong overload capacity, for example, a 120T machine in A5 Series can raise no overload alarm at maximum speed and under maximum pressure for 5 minutes in a test.



響應快 Fast response

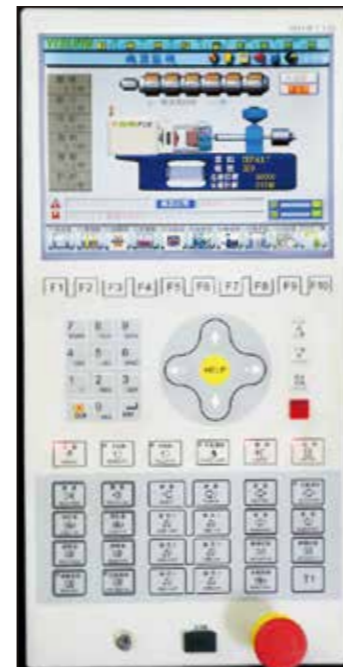
系統響應速度進一步提升，相對二代伺服系統提升一個檔次，以120T為例，系統響應時間約40ms。

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

電腦功能 Functions of controller



MH9110電腦

- MH9110電腦控制系統，運行速度快且穩定；
- 10.4" TFT 256色LCD真彩展示，獨立CPU控制更快更穩；
- 控制單元RISC CPU工業級32bits，主機掃描時間小於1ms，響應速度快，控制精度高；
- 240組模具參數存儲，帶USB接口可無限擴張存儲空間；
- 7+1組PID獨立CPU溫度控制，料筒溫度控制PID參數自動調整功能；(可擴展6-12組熱流道接口)
- 品質監控管理，主要工藝參數曲線顯示和列表統計；
- 輸出/輸入點擴張功能；(可擴展至64點輸入/64點輸出)
- 集成大量常用軟件，能滿足多種不同的模具成型工藝。

MH9110 controller

- MH9110 control system that is fast and stable 10.4 " TFT 256 color LCD display. Independent CPU control which is faster and more stable
- 32-bit RISC CPU, with scanning time less than 1ms, fast response and high control accuracy
- Internal memory for up to 240 mold data sets and USB interfaces that support infinite storage space extension
- 7+1 sections of PID temperature control and automatic adjustment of PID barrel temperature control parameters (6-12 sets of hot runner interfaces can be added)
- Production quality control, with display of process parameter graphs and listed statistics
- I/O points extendable to 64/64
- A large number of common software to meet different injection molding requirements

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.



人工學設計旋轉掛箱
Ergonomically-designed controller cabinet



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

自2015年9月A5系列中小型(60T-480T)全面上市後，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，中大機著重研究並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。

R&D background of A5 series medium to large tonnage machine

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中大產品線中，為確保“可靠穩定”的核心價值，我們重新定義並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 $\pm 3\%$
- 鎖模力重複精度<1%
- 開模終點位置精度<2mm

To fulfill the core value of “reliability & stability” in A5 series medium-large 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 $\pm 3\%$
- Repeatability of clamping force <1%
- Accuracy of mold-open end position <2mm





鎖模單元 Clamping unit

鎖模機械結構——穩重、高剛性

Mechanical structure of clamping unit——stable, high-rigidity

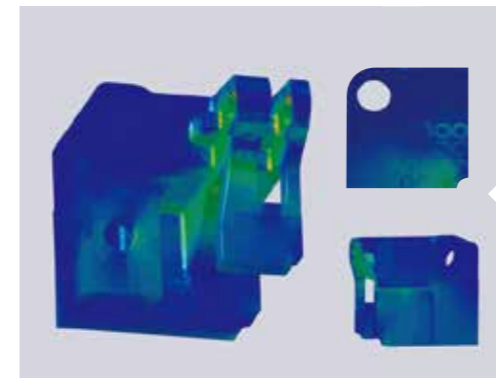
模板結構採用歐洲風格設計、全面優化參數與受力分布，機架採用高剛性材料及制作工藝，確保整機紮實、穩定可靠。

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.



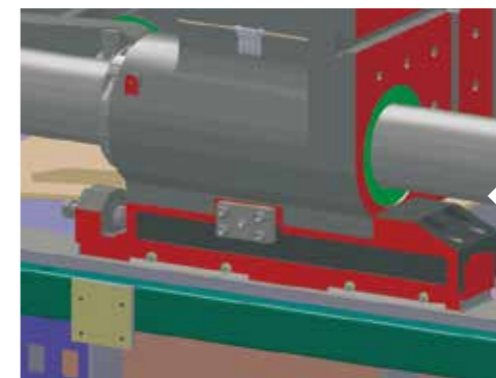
高剛性鎖模單元 Highly rigid clamping unit

- 模板變形小，模板平行度更好，導柱受力偏差更小，鎖模力重複精度更高；
- 可適應高速高壓的特殊注塑工藝，有效提高製品精度。
- Less platen deformation, better parallelism, less deviation of stress on tie bars, more precise repeatability of clamping force.
- Applicable to high-speed & high-pressure injection molding requirement, effectively improving precision of molded parts.



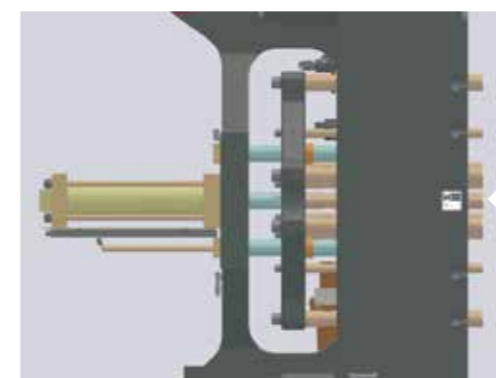
均應力壓模技術 Uniform-stress clamping technology

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



加長型設計滑腳 Extended moving platen support

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



加長型頂針板導向設計 Extended ejector guiding platen design

- 頂針板導向採用加長型設計，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。
- 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.



注射單元 Injection Unit

射膠機械結構——穩定、少摩擦

Mechanical structure of injection unit——stable, less friction

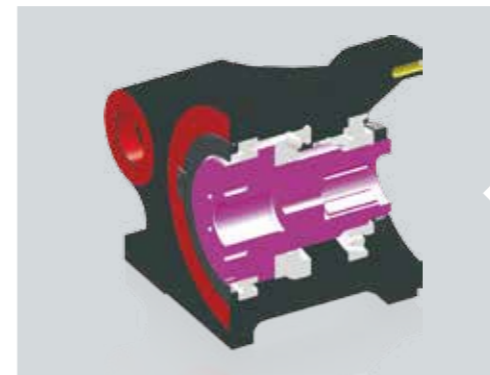
射膠結構優化設計，提高注射的剛性；
減少注射過程中的各項摩擦阻力，提高注射精度，確保注射的穩定性。

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

- 中型機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，成型制品的重復精度更高。
- 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.



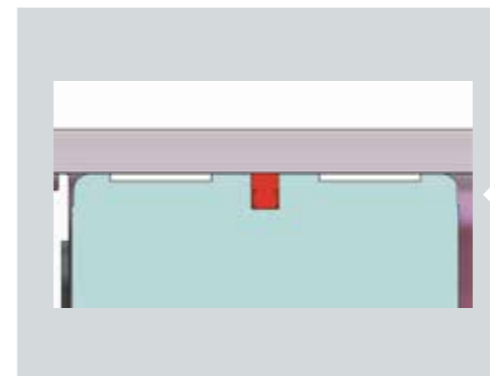
三軸承 Three bearings

- 在傳動軸前端靠近螺桿的位置增加一深溝球軸承，改善軸承對傳動軸的支撐，減少傳動軸旋轉時的跳動，延長推力軸承使用壽命。
- A deep-groove ball bearing is added to the front of transmission shaft, close to the screw, to improve the support of transmission shaft, reduce vibration when it rotates and prolong the service life of thrust bearing.



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

- 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.



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

- 注射油缸採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——可靠耐用、高效節能、低噪音等

Yizumi third generation of energy saving servo technology——
durable, highly efficient, energy-saving & low noise

伊之密第三代伺服節能技術

自2005年伊之密工程師深入研究伺服節能系統至今，基本上從廣度和深度上比較全面地把握了該系統的應用技術。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%。

Yizumi's third-generation energy-saving servo technology

So far, Yizumi has comprehensively grasped the application technology of energy-saving servo system since it was further studied in 2005. 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.

第三代伺服系統

The third-generation servo system



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 third-generation servo system emits 20% lower noise than the previous generation when producing the same product.

高響應 Fast response

高效率齒輪泵實現高響應注塑，可應用在高精密成型。

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

高性能 High performance

特殊大扭矩伺服電機和高壓齒輪泵使極低速成型和連續保壓性能格外提高，重複精度高。

Special high-torque servo motor and high pressure gear pump greatly improve the low speed molding and continuous pressure-holding performance with excellent repeatability.

控制系統 Control System

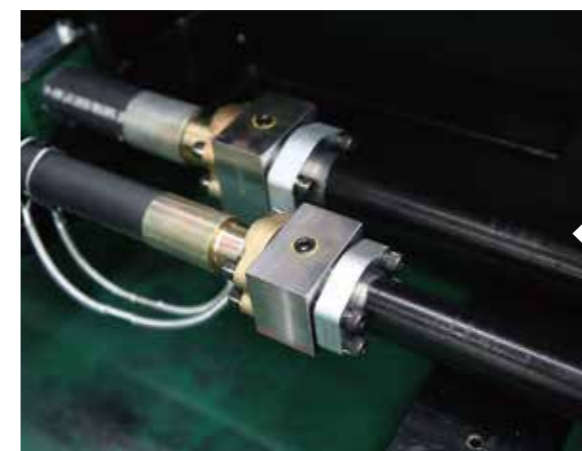
高精度的控制系統——系統壓力、流量、位置和溫度控制更加準確，制品更加穩定，整機穩定更強。

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



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.



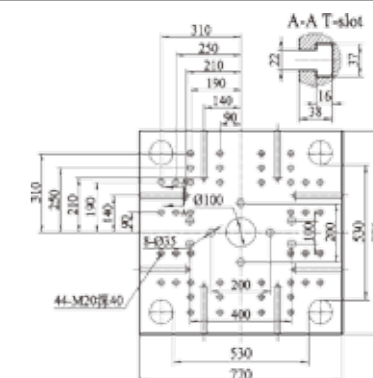
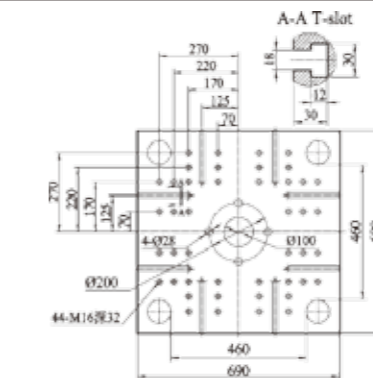
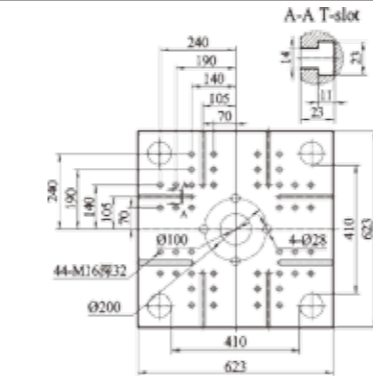
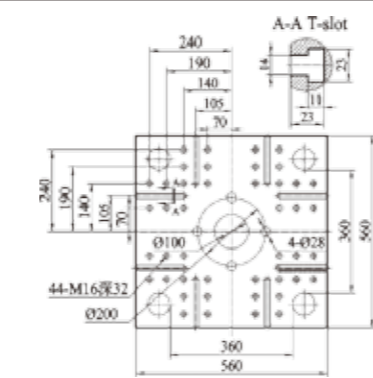
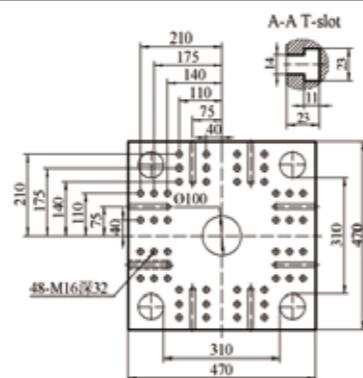
STAR系統升級換代 Upgraded STAR system

- 控制系統由ES600升級為ES620；
- 人機介面友好設計，方便操作與監視觀察；
- CPU運算速度提升，主頻相對ES600提升7.2倍。
- Control system upgraded from ES600 to ES620.
- User-friendly design, easy to operate and monitor.
- CPU computing speed increased, main frequency increased by 7.2 times compared with ES600.

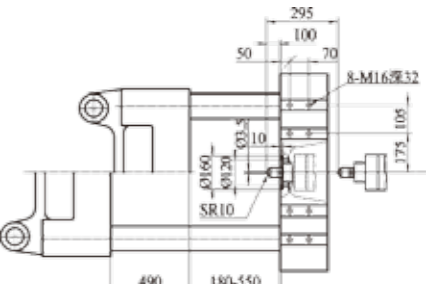
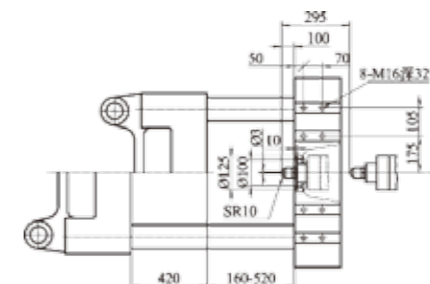
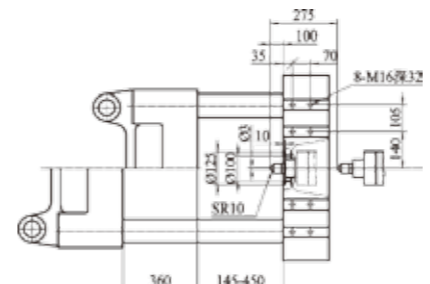
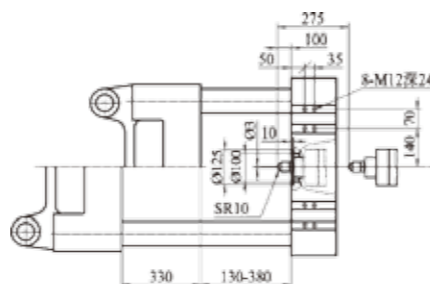
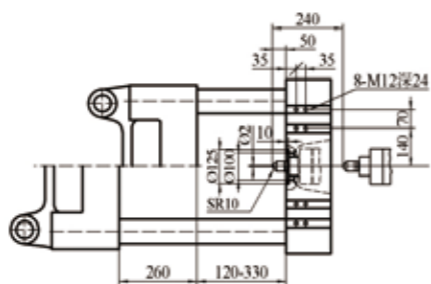
UN60A5~2600A5 技術參數表 (國產伺服泵系統)
 Specifications of UN60A5 to UN2600A5 (Domestic servo pump system)

說明	DESCRIPTION	UNIT	UN60A5	UN90A5	UN120A5	UN160A5	UN200A5	
國際標準規格	International specification		190/600	295/900	420/1200	604/1600	895/2000	
射膠單元 INJECTION UNIT								
			A	B	A	B	C	
理論注射容積	Shot volume	cm ³	51.2	71.6	116.6	159	207	
實際注射量	Shot weight (PS)	g(克)	47.0	65.9	107	146	190.4	
		oz(盎司)	1.6	2.3	3.8	5.2	6.7	
螺絲直徑	Screw diameter	mm	22	26	30	35	40	
注射壓力	Injection pressure	MPa	373.0	267.0	252.8	185.6	142.2	
注射速率	Injection rate	g/s	42.5	59.4	69.6	94.8	123.5	
螺絲長度直徑比	Screw L:D ratio		20:1	20:1	24:1	20:1	20:1	
最大注射速度	Max. injection speed	mm/s	123		107		94	
螺絲行程	Screw stroke	mm	135		165		170	
螺絲轉速	Screw speed(stepless)	r/min	0-230		0-219		0-228	
鎖模單元 CLAMPING UNIT								
鎖模力	Clamping force	kN	600		900		1200	
開模行程	Opening stroke	mm	260		330		360	
導柱內間距(W×H)	Space between tie bars	mm×mm	310×310		360×360		410×410	
模板最大距離	Max. daylight	mm	590		710		810	
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	120-330		130-380		145-450	
頂出行程	Ejector stroke	mm	60		100		120	
頂出孔數量	Ejector number		1		5		5	
頂出力	Ejector force	kN	22		28		42	
動力/電熱 POWER UNIT								
最大系統壓力	Hydraulic system pressure	MPa	17.5		17.5		17.5	
油泵馬達	Pump motor power	kW	11		11		15	
電熱功率	Heater power	kW	4.8/5.5		6.9/7.8		9/10.1	
溫度控制區數	Number of temp control zones		4		4		4	
其他 GENERAL								
干循環時間	Dry cycle time	S	1.6		1.8		2.0	
油箱容量	Oil tank capacity	L	130		150		155	
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	4.22×1.14×1.84		4.49×1.22×1.88		4.82×1.30×1.92	
設計重量	Design weight	kg	2700		3300		3800	

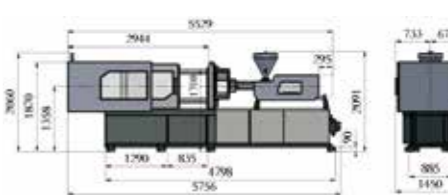
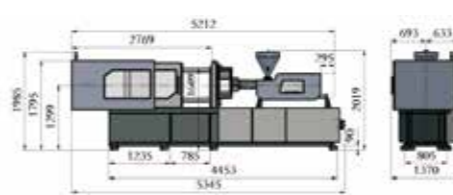
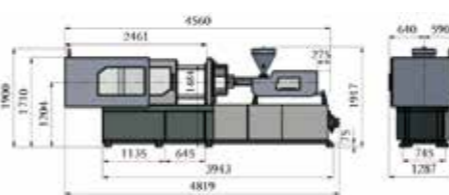
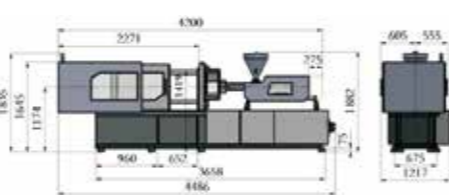
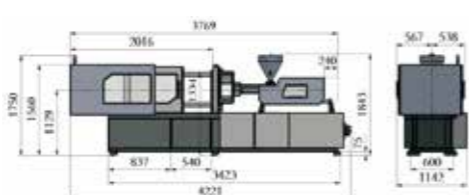
模板正面尺寸圖
Platen Dimensions (Front)



模板側面尺寸圖
Platen Dimensions (Side)



外形尺寸
Machine Dimensions



UN60A5~2600A5 技術參數表 (配國產伺服泵系統)
Specifications of UN60A5 to UN2600A5 (Domestic servo pump system)

說明	DESCRIPTION	UNIT	UN260A5	UN320A5	UN400A5	UN480A5								
國際標準規格	International specification	UNIT	1269/2600	1885/3200	2693/4000	3330/4800								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	584.6	749.3	962.4	834	1071.3	1338.2	1198.4	1497	1828.8	1678.5	2050.5	2459.6
實際注射量	Shot weight (PS)	g(克)	537.8	689.4	885.4	767.3	985.6	1231.1	1102.5	1377.2	1682.5	1544.2	1886.5	2262.8
		oz(盎司)	19	24.3	31.2	27.1	34.8	43.4	38.9	48.6	59.3	54.5	66.5	79.8
螺絲直徑	Screw diameter	mm	53	60	68	60	68	76	68	76	84	76	84	92
注射壓力	Injection pressure	MPa	217.1	169.4	131.8	226.2	176.1	141	224.8	179.9	147.3	198.6	162.5	135.5
注射速率	Injection rate	g/s	160.3	205.5	263.9	235	302	377	291	363	444	378	462	554
螺絲長度直徑比	Screw L:D ratio		22.6:1	20:1	20:1	22.6:1	20:1	20:1	22.3:1	20:1	20:1	22.1:1	20:1	20:1
最大注射速度	Max. injection speed	mm/s	79			91.8			87			91		
螺絲行程	Screw stroke	mm	265			295			330			370		
螺絲轉速	Screw speed(stepless)	r/min	0-162			0-200			0-156			0-140		
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN	2600			3200			4000			4800		
開模行程	Opening stroke	mm	530			640			700			780		
導柱內間距(W×H)	Space between tie bars	mm×mm	610×570			710×670			760×710			830×810		
模板最大距離	Max. daylight	mm	1140			1300			1430			1590		
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	195-610			220-660			240-730			260-810		
頂出行程	Ejector stroke	mm	160			170			210			220		
頂出孔數量	Ejector number		13			13			13			17		
頂出力	Ejector force	kN	77			77			110			110		
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa	17.5			17.5			17.5			17.5		
油泵馬達	Pump motor power	kW	28.7			39.4			55.4			60		
電熱功率	Heater power	kW	16.6/19			22.2/24.6			26.4/30.9			33.1/36.2		
溫度控制區數	Number of temp control zones		5			5			6			6		
其他 GENERAL														
干循環時間	Dry cycle time	S	2.8			3.2			4			4.5		
油箱容量	Oil tank capacity	L	335			445			570			760		
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	6.24×1.64×2.39			6.96×1.85×2.50			7.73×2.16×2.45			8.47×2.21×2.49		
設計重量	Design weight	kg	7900			10700			15200			18000		
模板正面尺寸圖 Platen Dimensions (Front)	UN260A5		UN320A5		UN400A5		UN480A5							
	UN260A5		UN320A5		UN400A5		UN480A5							
外形尺寸 Machine Dimensions	UN260A5		UN320A5		UN400A5		UN480A5							

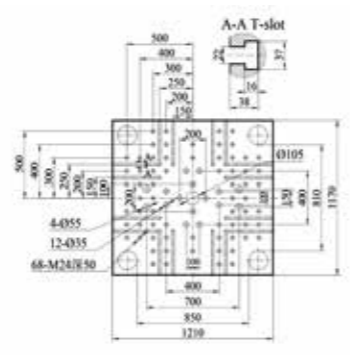
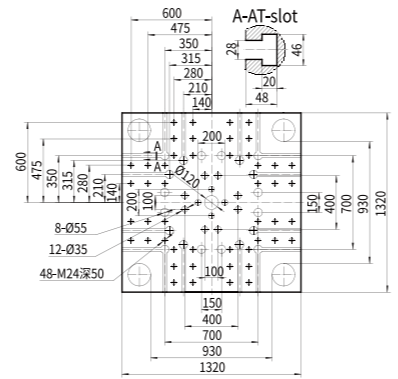
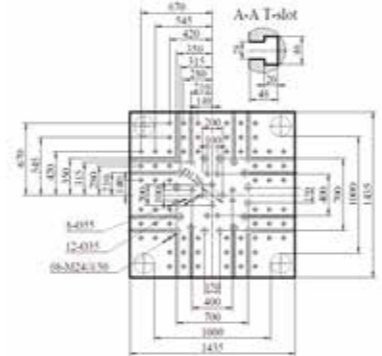
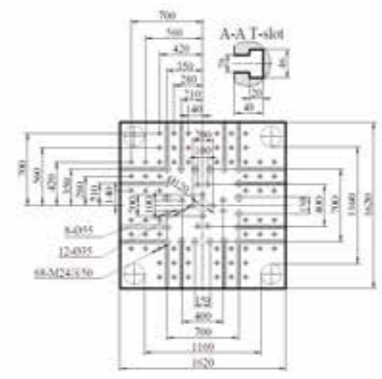
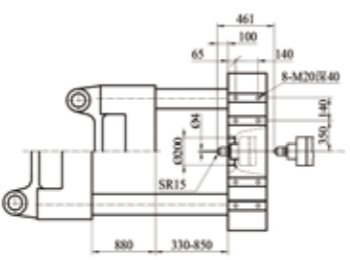
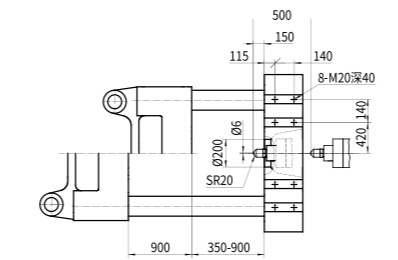
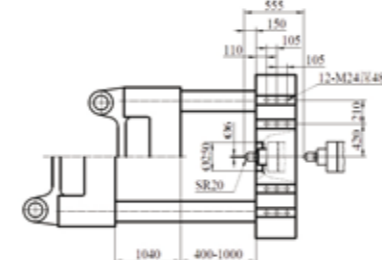
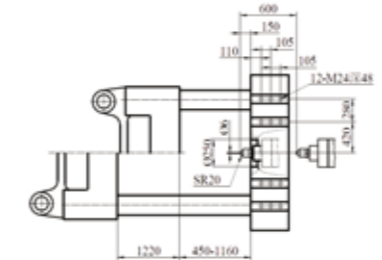
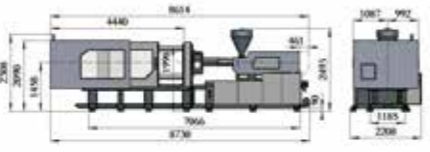
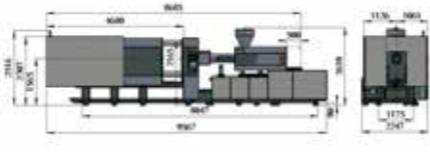
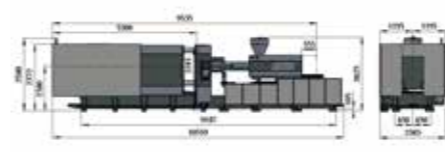
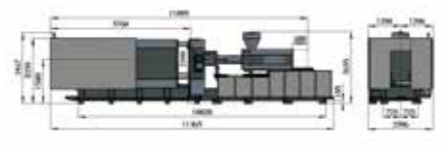
備註:

- 1.理論注射容積=注射機料筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

UN60A5~2600A5 技術參數表 (國產伺服泵系統)
Specifications of UN60A5 to UN2600A5 (Domestic servo pump system)

說明	DESCRIPTION	UNIT	UN560A5	UN650A5	UN800A5	UN1000A5								
國際標準規格	International specification	UNIT	3330/5600	4820/6500	6780/8000	9015/10000								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	1678.5	2050.5	2905	2216.7	2659	3664	3190	3770	5070	4319.8	5039.4	6748
實際注射量	Shot weight (PS)	g(克)	1544.2	1886.5	2673	2039.4	2446.3	3371	2934.8	3468	4664	3974.2	4636.2	6208
		oz(盎司)	54.5	66.5	94.4	71.9	86.3	119.1	103.7	122.5	164.8	139.9	163.2	219
螺絲直徑	Screw diameter	mm	76	84	100	84	92	108	92	100	116	100	108	125
注射壓力	Injection pressure	MPa	198.6	162.5	114.6	217.6	181.4	131	212.8	180.2	133.9	208.8	179.1	133.6
注射速率	Injection rate	g/s	378	462	655	423	507	699	533	630	847	642	749	1003
螺絲長度直徑比	Screw L:D ratio		22.1:1	20:1	20:1	21.9:1	20:1	20:1	21.7:1	20:1	20:1	21.6:1	20:1	20:1
最大注射速度	Max. injection speed	mm/s	91			83			87			89		
螺絲行程	Screw stroke	mm	370			400			480			550		
螺絲轉速	Screw speed(stepless)	r/min	0-140			0-143			0-136			0-115		
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN	5600			6500			8000			10000		
開模行程	Opening stroke	mm	850			900			1040			1220		
導柱內間距(W×H)	Space between tie bars	mm×mm	850×810			930×930			1000×1000			1160×1160		
模板最大距離	Max. daylight	mm	1700			1800			2040			2380		
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	330-850			350-900			400-1000			450-1160		
頂出行程	Ejector stroke	mm	220			280			280			320		
頂出孔數量	Ejector number		17			21			21			21		
頂出力	Ejector force	kN	166			182			182			274		
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa	17.5			17.5			17.5			17.5		
油泵馬達	Pump motor power	kW	60			36+39.4			39.4+55.4			55.4+55.4		
電熱功率	Heater power	kW	33.1/43			38/47			42/51			46.5/63.6		
溫度控制區數	Number of temp control zones		6			6			6			7		
其他 GENERAL														
干循環時間	Dry cycle time	S	5.5			6.5			7			8		
油箱容量	Oil tank capacity	L	760			1000			1150			1300		
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	8.73×2.21×2.49			9.57×2.25×2.61			10.51×2.38×2.63			11.37×2.60×2.66		
設計重量	Design weight	kg	18500			26000			35000			44000		
模板正面尺寸圖 Platen Dimensions (Front)														
模板側面尺寸圖 Platen Dimensions (Side)														
外形尺寸 Machine Dimensions														

備註:

- 1.理論注射容積=注射機筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

UN60A5~2600A5 技術參數表 (國產伺服泵系統)
Specifications of UN60A5 to UN2600A5 (Domestic servo pump system)

說明	DESCRIPTION	UNIT	UN1400A5	UN1800A5	UN2200A5	UN2600A5								
國際標準規格	International specification	UNIT	12053/14000	18471/18000	21215/22000	29880/26000								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	6339.8	7363.1	8588.3	10019	11559	13208.4	12385	14152	16036	17925	20313	24175
實際注射量	Shot weight (PS)	g(克)	5832.6	6774.1	7901.3	9217.5	10634.3	12151.7	11394.2	13019.8	14753.1	16491	18687	22241
		oz(盎司)	205.7	238.9	278.2	325.1	375.1	427.9	401.9	459.3	520.4	581.7	659.2	784.5
螺絲直徑	Screw diameter	mm	116	125	135	135	145	155	145	155	165	155	165	180
注射壓力	Injection pressure	MPa	190.1	163.7	140.4	184.3	159.8	139.8	171.3	149.9	132.3	166.7	147.1	123.6
注射速率	Injection rate	g/s	790	917	1070	1151	1328	1517	1379	1575	1785	1890	2142	2549
螺絲長度直徑比	Screw L:D ratio		22:1	20:1	20:1	23.6:1	22:1	20:1	23.5:1	22:1	20.6:1	23.4:1	22:1	20:1
最大注射速度	Max. injection speed	mm/s	81			87.4			90.7			108.9		
螺絲行程	Screw stroke	mm	600			700			750			950		
螺絲轉速	Screw speed(stepless)	r/min	0-106			0-117			0-100			0-116		
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN	14000			18000			22000			26000		
開模行程	Opening stroke	mm	1350			1560			1750			1950		
導柱內間距(W×H)	Space between tie bars	mm×mm	1310×1310			1560×1560			1850×1650			1950×1800		
模板最大距離	Max. daylight	mm	2700			3210			3570			3830		
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	600-1350			800-1650			850-1820			900-1880		
頂出行程	Ejector stroke	mm	380			400			430			430		
頂出孔數量	Ejector number		29			33			33			33		
頂出力	Ejector force	kN	303			303			460			460		
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa	17.5			17.5			17.5			17.5		
油泵馬達	Pump motor power	kW	60×2			55×3			60×3			60×4		
電熱功率	Heater power	kW	65.6/69.9			95			106.6			126.1		
溫度控制區數	Number of temp control zones		8			8			10			10		
其他 GENERAL														
干循環時間	Dry cycle time	S	9.5			13			16.5			17		
油箱容量	Oil tank capacity	L	1600			1900			2000			2300		
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	12.64×3.00×3.02			14.35×3.30×3.19			16.63×4.03×3.76			17.42×4.15×4.00		
設計重量	Design weight	kg	75000			108000			145000			190000		

備註:

- 1.理論注射容積=注塑機料筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

<p>模板正面尺寸圖 Platen Dimensions (Front)</p>				
<p>模板側面尺寸圖 Platen Dimensions (Side)</p>				
<p>外形尺寸 Machine Dimensions</p>				

UN60A5-V~1000A5-V 技術參數表 (閉環變量泵系統)

Specifications of UN60A5-V to UN1000A5-V (Closed-loop variable-displacement pump system)

說明	DESCRIPTION	UNIT	UN60A5-V	UN90A5-V	UN120A5-V	UN160A5-V	UN200A5-V	
國際標準規格	International specification	UNIT	190/600	295/900	420/1200	604/1600	895/2000	
射膠單元 INJECTION UNIT								
			A	B	A	B	C	
理論注射容積	Shot volume	cm ³	51.2	71.6	116.6	159	207	
實際注射量	Shot weight (PS)	g(克)	47.0	65.9	107	146	190.4	
		oz(盎司)	1.6	2.3	3.8	5.2	6.7	
螺絲直徑	Screw diameter	mm	22	26	30	35	40	
注射壓力	Injection pressure	MPa	373	267	252.8	185.6	142.2	
注射速率	Injection rate	g/s	38	53	69.6	94.8	123.5	
螺絲長度直徑比	Screw L:D ratio		20:1	20:1	24:1	20:1	20:1	
最大注射速度	Max. injection speed	mm/s	109		107		77.5	
螺絲行程	Screw stroke	mm	135		165		170	
螺絲轉速	Screw speed(stepless)	r/min	0-206		0-219		0-188	
鎖模單元 CLAMPING UNIT								
鎖模力	Clamping force	kN	600		900		1200	
開模行程	Opening stroke	mm	260		330		360	
導柱內間距(W×H)	Space between tie bars	mm×mm	310×310		360×360		410×410	
模板最大距離	Max. daylight	mm	590		710		810	
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	120-330		130-380		145-450	
頂出行程	Ejector stroke	mm	60		100		120	
頂出孔數量	Ejector number		1		5		5	
頂出力	Ejector force	kN	22		28		42	
動力/電熱 POWER UNIT								
最大系統壓力	Hydraulic system pressure	MPa	17.5		17.5		17.5	
油泵馬達	Pump motor power	kW	7.5		11		15	
電熱功率	Heater power	kW	4.8/5.5		6.9/7.8		10.9/12.1	
溫度控制區數	Number of temp control zones		4		4		4	
其他 GENERAL								
干循環時間	Dry cycle time	S	2.0		2.0		2.5	
油箱容量	Oil tank capacity	L	130		150		220	
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	4.22×1.14×1.84		4.49×1.22×1.88		4.82×1.30×1.92	
設計重量	Design weight	kg	2700		3300		3800	

<p>模板正面尺寸圖 Platen Dimensions (Front)</p>				
<p>模板側面尺寸圖 Platen Dimensions (Side)</p>				
<p>外形尺寸 Machine Dimensions</p>				

UN60A5-V~1000A5-V 技術參數表 (閉環變量泵系統)
Specifications of UN60A5-V to UN1000A5-V (Closed-loop variable-displacement pump system)

說明	DESCRIPTION	UNIT	UN260A5-V	UN320A5-V	UN400A5-V	UN480A5-V								
國際標準規格	International specification	UNIT	1269/2600	1885/3200	2693/4000	3330/4800								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	584.6	749.3	962.4	834	1071.3	1338.2	1198.4	1497	1828.8	1678.5	2050.5	2459.6
實際注射量	Shot weight (PS)	g(克)	537.8	689.4	885.4	767.3	985.6	1231.1	1102.5	1377.2	1682.5	1544.2	1886.5	2262.8
		oz(盎司)	19	24.3	31.2	27.1	34.8	43.4	38.9	48.6	59.3	54.5	66.5	79.8
螺絲直徑	Screw diameter	mm	53	60	68	60	68	76	68	76	84	76	84	92
注射壓力	Injection pressure	MPa	217.1	169.4	131.8	226.2	176.1	141	224.8	179.9	147.3	198.6	162.5	135.5
注射速率	Injection rate	g/s	176	227	291	248	318	397	247	309	378	396	484	581
螺絲長度直徑比	Screw L:D ratio		22.6:1	20:1	20:1	22.6:1	20:1	20:1	22.3:1	20:1	20:1	22.1:1	20:1	20:1
最大注射速度	Max. injection speed	mm/s	88			96.8			74			95		
螺絲行程	Screw stroke	mm	265			295			330			370		
螺絲轉速	Screw speed(stepless)	r/min	0-181			0-212			0-130			0-147		
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN	2600			3200			4000			4800		
開模行程	Opening stroke	mm	530			640			700			780		
導柱內間距(W×H)	Space between tie bars	mm×mm	610×570			710×670			760×710			830×810		
模板最大距離	Max. daylight	mm	1140			1300			1430			1590		
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm	195-610			220-660			240-730			260-810		
頂出行程	Ejector stroke	mm	160			170			210			220		
頂出孔數量	Ejector number		13			13			13			17		
頂出力	Ejector force	kN	77			77			110			110		
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa	17.5			17.5			17.5			17.5		
油泵馬達	Pump motor power	kW	22			37			37			45		
電熱功率	Heater power	kW	16.6/19			22.2/24.6			26.4/30.9			33.1/36.2		
溫度控制區數	Number of temp control zones		5			5			6			6		
其他 GENERAL														
干循環時間	Dry cycle time	S	3.0			3.8			4			4.5		
油箱容量	Oil tank capacity	L	335			445			570			760		
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m	6.24×1.64×2.39			6.96×1.85×2.50			7.73×2.16×2.45			8.47×2.21×2.49		
設計重量	Design weight	kg	7900			10700			15200			18000		
模板正面尺寸圖 Platen Dimensions (Front)														
	模板側面尺寸圖 Platen Dimensions (Side)													
		外形尺寸 Machine Dimensions												

備註:

- 1.理論注射容積=注塑機料筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

UN60A5-I~1000A5-I 技術參數表 (日本油研泵系統)
Specifications of UN60A5-I to UN1000A5-I (Japan's Yuken servo pump system)

說明	DESCRIPTION	UNIT	UN260A5-I	UN320A5-I	UN400A5-I	UN480A5-I								
國際標準規格	International specification	UNIT	1269/2600	1885/3200	2693/4000	3330/4800								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	584.6	749.3	962.4	834	1071.3	1338.2	1198.4	1497	1828.8	1678.5	2050.5	2459.6
實際注射量	Shot weight (PS)	g(克)	537.8	689.4	885.4	767.3	985.6	1231.1	1102.5	1377.2	1682.5	1544.2	1886.5	2262.8
		oz(盎司)	19	24.3	31.2	27.1	34.8	43.4	38.9	48.6	59.3	54.5	66.5	79.8
螺絲直徑	Screw diameter	mm	53	60	68	60	68	76	68	76	84	76	84	92
注射壓力	Injection pressure	MPa	217.1	169.4	131.8	226.2	176.1	141	224.8	179.9	147.3	198.6	162.5	135.5
注射速率	Injection rate	g/s	203	260	334	214	275	343	291	363	444	387	473	568
螺絲長度直徑比	Screw L:D ratio		22.6:1	20:1	20:1	22.6:1	20:1	20:1	22.3:1	20:1	20:1	22.1:1	20:1	20:1
最大注射速度	Max. injection speed	mm/s		101			83			87			94	
螺絲行程	Screw stroke	mm		265			295			330			370	
螺絲轉速	Screw speed(stepless)	r/min		0-207			0-182			0-156			0-145	
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN		2600			3200			4000			4800	
開模行程	Opening stroke	mm		530			640			700			780	
導柱內間距(W×H)	Space between tie bars	mm×mm		610×570			710×670			760×710			830×810	
模板最大距離	Max. daylight	mm		1140			1300			1430			1590	
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm		195-610			220-660			240-730			260-810	
頂出行程	Ejector stroke	mm		160			170			210			220	
頂出孔數量	Ejector number			13			13			13			17	
頂出力	Ejector force	kN		77			77			110			110	
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa		17.5			17.5			17.5			17.5	
油泵馬達	Pump motor power	kW		28			31			31+9			31+17	
電熱功率	Heater power	kW		16.6/19			22.2/24.6			26.4/30.9			33.1/36.2	
溫度控制區數	Number of temp control zones			5			5			6			6	
其他 GENERAL														
干循環時間	Dry cycle time	S		2.8			3.2			4			4.5	
油箱容量	Oil tank capacity	L		335			445			570			760	
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m		6.24×1.64×2.39			6.96×1.85×2.50			7.73×2.16×2.45			8.47×2.21×2.49	
設計重量	Design weight	kg		7900			10700			15200			18000	
模板正面尺寸圖 Platen Dimensions (Front)														
	模板側面尺寸圖 Platen Dimensions (Side)													
		外形尺寸 Machine Dimensions												

備註:

- 1.理論注射容積=注射機料筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

UN60A5-I~1000A5-I 技術參數表 (日本油研泵系統)
Specifications of UN60A5-I to UN1000A5-I (Japan's Yuken servo pump system)

說明	DESCRIPTION	UNIT	UN560A5-I	UN650A5-I	UN800A5-I	UN1000A5-I								
國際標準規格	International specification	UNIT	3330/5600	4820/6500	6780/8000	9015/10000								
射膠單元 INJECTION UNIT														
			A	B	C	A	B	C	A	B	C	A	B	C
理論注射容積	Shot volume	cm ³	1678.5	2050.5	2905	2216.7	2659	3664	3190	3770	5070	4319.8	5039.4	6748
實際注射量	Shot weight (PS)	g(克)	1544.2	1886.5	2673	2039.4	2446.3	3371	2934.8	3468	4664	3974.2	4636.2	6208
		oz(盎司)	54.5	66.5	94.4	71.9	86.3	119.1	103.7	122.5	164.8	139.9	163.2	219
螺絲直徑	Screw diameter	mm	76	84	100	84	92	108	92	100	116	100	108	125
注射壓力	Injection pressure	MPa	198.6	162.5	114.6	217.6	181.4	131	212.8	180.2	133.9	208.8	179.1	133.6
注射速率	Injection rate	g/s	387	473	671	423	507	699	533	630	847	642	749	1003
螺絲長度直徑比	Screw L:D ratio		22.1:1	20:1	20:1	21.9:1	20:1	20:1	21.7:1	20:1	20:1	21.6:1	20:1	20:1
最大注射速度	Max. injection speed	mm/s		94			83			87			89	
螺絲行程	Screw stroke	mm		370			400			480			550	
螺絲轉速	Screw speed(stepless)	r/min		0-145			0-143			0-136			0-115	
鎖模單元 CLAMPING UNIT														
鎖模力	Clamping force	kN		5600			6500			8000			10000	
開模行程	Opening stroke	mm		850			900			1040			1220	
導柱內間距(W×H)	Space between tie bars	mm×mm		850×810			930×930			1000×1000			1160×1160	
模板最大距離	Max. daylight	mm		1700			1800			2025			2250	
容模量(最薄-最厚)	Mold thickness (Min-Max)	mm		330-850			350-900			400-1000			450-1160	
頂出行程	Ejector stroke	mm		220			280			280			320	
頂出孔數量	Ejector number			17			21			21			21	
頂出力	Ejector force	kN		166			182			182			274	
動力/電熱 POWER UNIT														
最大系統壓力	Hydraulic system pressure	MPa		17.5			17.5			17.5			17.5	
油泵馬達	Pump motor power	kW		31+17			31+31			31*2+17			31*3	
電熱功率	Heater power	kW		33.1/43			38/47			42/51			46.5/63.6	
溫度控制區數	Number of temp control zones			6			6			6			7	
其他 GENERAL														
干循環時間	Dry cycle time	S		5.5			6.5			7			8	
油箱容量	Oil tank capacity	L		760			1000			1150			1300	
外形尺寸(L×W×H)	Machine dimensions(L×W×H)	m×m×m		8.73×2.21×2.49			9.57×2.25×2.61			10.51×2.38×2.63			11.37×2.60×2.66	
設計重量	Design weight	kg		18500			26000			35000			44000	
模板正面尺寸圖 Platen Dimensions (Front)	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							
	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							
模板側面尺寸圖 Platen Dimensions (Side)	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							
	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							
外形尺寸 Machine Dimensions	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							
	UN560A5-I		UN650A5-I		UN800A5-I		UN1000A5-I							

備註:

- 1.理論注射容積=注塑機料筒截面積*注射行程
- 2.實際注射量=理論注射容積×0.92(以GPPS計算)
- 3.正常情況下改善規格參數,恕不另行通知
- 4.當您有成型PVC、PC、PMMA等工程塑料產品或有其他特殊要求時,敬請告知本公司

Note:

- 1.Shot volume=barrel sectional area×injection stroke.
- 2.Shot weight=shot volume*0.92(according to GPPS).
- 3.Specifications may be changed without prior notice.
- 4.Please inform us if you need to produce molded parts made from engineering plastics like PVC, PC and PMMA or if you have other special requirements.

UN60A5~560A5 標配選配表

	標準配置	備選配置
• 鎖模部分		
精密電子尺控制鎖模/頂針行程/射膠行程	●	
鎖模三大板/機鉸採用QT500-7A高剛性球墨鑄鐵	●	
歐標預留機械手安裝孔	●	
液壓驅動齒輪調模裝置	●	
機械/電氣雙重保護裝置	●	
免調節式機械安全鎖撞杆	●	
移動模板耐磨錳鋼帶軌道	●	
機鉸自動集中潤滑系統	●	
多種頂針控制功能可選	●	
T型槽、碼模孔複合模板	●	
一鍵式自動調模功能	●	
鎖模力按需自動調整功能(盟立電腦)	●	
頂針強制復位功能	●	
機門邊加裝防夾傷、緩衝條設計	●	
加裝特殊模具安裝孔		○
加裝模具隔熱板		○
加大頂出力		○
加大容模量		○
磁力模板		○
吊模架(60T-160T)		○
導柱採用自潤軸承		○
• 射膠/熔膠部分		
雙缸平衡注射系統	●	
低速大扭矩液壓馬達	●	
氮化合金鋼螺桿料筒	●	
料管節能環結構(專利設計)	●	
射嘴PID溫度控制	●	
雙射粘油缸	●	
全封閉式保溫罩	●	
射嘴防護罩(不帶電氣保護)	●	
螺桿防冷啟動功能	●	
自動清料功能	●	
熔膠前松退、熔膠後松退可選	●	
移動料斗裝置(60T-320T)	●	
熔膠三軸承傳動(260T以上)	●	
螺桿轉速檢測	●	
專用料管組(電鍍、合金、PC、PMMA、PBT、PA等)		○
料筒風冷裝置		○
射嘴防護罩(帶電氣保護)		○
彈簧自鎖射嘴		○
加大注射行程或加大(減少)一級射膠結構		○
陶瓷發熱圈		○
料筒保溫節能裝置(矽膠保溫、紅外線加熱)		○
• 液壓系統		
國產伺服泵系統(A5)	●	
閉環變量泵系統(A5-V)	●	
日本油研泵系統(A5-I)	●	
高精度實時旁路濾油器裝置	●	
低噪音節能型液壓回路	●	
進口名牌液壓控制閥	●	
進口名牌液壓密封件	●	
差動快速合模裝置(60T-320T)	●	
內置式冷卻器(60T-320T)	●	

	標準配置	備選配置
開模剎車油路設計(160T-560T)	●	
油溫檢測及高低溫報警	●	
外露高壓油管配防爆鏈	●	
全機標配一組帶閘抽芯接口	●	
多組運水裝置並配快速插頭	●	
加大油泵、電機		○
加大熔膠馬達		○
同步頂出、抽芯、熔膠系統		○
高回應蓄能伺服注射系統		○
多組抽芯裝置		○
加裝液壓旋轉脫模裝置		○
熔膠比例背壓控制		○
玻璃管冷卻流量計		○
控制系統		
料管加熱強制保護	●	
輸入、輸出檢視畫面	●	
自動保溫及自動加熱設定功能	●	
射膠轉保壓方式:時間/位置/時間+位置	●	
10.4" TFT真彩色LCD顯示幕	●	
100組大容量工藝參數存貯空間, USB存儲介面	●	
中英雙操作語言	●	
雙色報警燈	●	
所有電子尺、弱電開關、換向電磁閥線加套防水、防鼠咬波紋管	●	
可設置多級密碼保護, 操作面板帶鎖鑰匙	●	
前、後機門急停開關保護	●	
質量數據過程控制介面	●	
生產統計過程控制(SPC)實時列表介面	●	
預留吹風、抽芯、頂退回保護等多種介面	●	
三組AC380V三相插座, 壹組AC220V多功能插座	●	
熱流道接口		○
氣動順序閥		○
電動旋轉脫模接口		○
吹氣帶閘裝置		○
氣輔注射裝置		○
中央(聯網)監控系統		○
前、後機門內光柵保護		○
三色報警燈		○
單相/三相電源插座		○
特殊電源電壓		○
更換電腦(KEBA電腦/巧塑88)		○
順序射膠接口		○
加裝電動門(400T-560T)		○
多種操作語言		○
• 其它配置		
說明書	●	
避震腳	●	
工具箱及工具一套, 精密濾芯一件	●	
碼模夾	●	
隨機備件(詳細見合同清單)	●	
乾燥機		○
自動上料機		○
冷水機		○
PET模具		○
薄壁包裝類模具		○

UN60A5~560A5 Standard and Optinal Features

	Standard	Optional
• Clamping Unit		
Precise transducer for clamping / ejector/injection stroke control	●	
Three platens / toggles made of highly-rigid ductile iron QT500-7A	●	
Pre-drilled robot mounting holes according to EUROMAP	●	
Hydraulic gear-type mold height adjusting device	●	
Mechanical /electrical safety devices	●	
Adjustment-free mechanical safety lock rod	●	
Wear-resistant manganese steel bands and supporting tracks for movable platen	●	
Automatic central lubrication system	●	
Multiple ejector function settings	●	
Platen with T-slots and mold mounting holes	●	
One-button automatic mold height adjustment	●	
Automatic clamping force adjustment as needed (Mirle controller)	●	
Forced ejector reset	●	
Anti-crushing bump strips on the safety gate edges	●	
Special mold mounting holes		○
Heat insulating plate of mold		○
Increased ejection force		○
Increased mold thickness		○
Magnetic platen		○
Mold lifting device(60T - 160T)		○
Self-lubricated bushes in tie bars		○
• Injection Unit		
Parallel double-cylinder injection system	●	
Low-speed high-torque hydraulic motor	●	
Nitrided alloy-steel screw and barrel	●	
Energy-saving groove design of barrel (patented design)	●	
Multi-stage PID nozzle and barrel temperature control	●	
Double-carriage cylinder	●	
Fully-closed heat retaining cover	●	
Nozzle safety cover (without electrical protection)	●	
Cold start protection	●	
Automatic material purge	●	
Selectable suck-back before or after plasticizing	●	
Movable hopper (60T-320T)	●	
Three-bearing drive shaft (clamp tonnage over 260T)	●	
Screw speed detection	●	
Dedicated barrel and screw assembly (electroplating, alloy, PC, PMMA, PBT, PA, etc)		○
Barrel air-cooling device		○
Nozzle safety cover (with electrical protection)		○
Spring shut-off nozzle		○
Increased injection stroke or one-size larger (smaller) injection unit		○
ceramic heater band		○
Barrel heat-retaining energy-saving device (silicone heat preservation, infrared heating)		○
• Hydraulic System		
Domestic servo pump system (A5)	●	
Closed-loop variable-displacement pump system (A5-V)	●	
Japan's Yuken servo pump system (A5-I)	●	
High-precision bypass oil filter	●	
Low-noise energy-saving hydraulic circuit	●	
Imported branded hydraulic valve	●	
Imported branded hydraulic seal	●	
Differential fast mold closing device (60T-320T)	●	
Built-in cooler (60T-320T)	●	

	Standard	Optional
Hydraulic circuit design of mold opening stop (160T-560T)	●	
Automatic oil temperature detection and alarm	●	
Safety retention device for exposed high-pressure hydraulic hose	●	
A set of core puller connector with valve	●	
Mold water-cooling devices with fast connectors	●	
Multi-size larger pump and motor		○
Multi-size larger plasticizing motor		○
Synchronized ejection, core pulling and plasticizing system		○
High-response servo injection system with accumulator		○
Multiple sets of core puller		○
Hydraulic unscrewing device		○
Plasticizing proportional back pressure control		○
Glass-tube cooling water flowmeter		○
• Electrical System		
Forced barrel heating protection	●	
Input/output inspection	●	
Automatic heat retaining and automatic heating setting	●	
Ways of switching from injection to holding pressure: time / position / time + position	●	
10.4" TFT color LCD	●	
Memory space for up to 100 mold data sets, USB ports	●	
Chinese and English operating languages	●	
Two-color alarm light	●	
All transducers, weak-current switches and reversing solenoid valves enclosed by water-proof and rat-bite-proof corrugated pipes	●	
Multi-level password security and key-locked operation panel	●	
Front and rear safety gates with emergency stop protection	●	
PDP interface	●	
Statistical process control (SPC) interface	●	
Reserved interfaces for air blowing, core pulling, ejector back protection devices, etc.	●	
Three sets of 3-phase power socket, AC 380V and a set of multi-function power socket, AC 220V	●	
Hot runner interface		○
Pneumatic sequence valve		○
Interface for electric unscrewing device		○
Air blowing device with valve		○
Air-assisted injection device		○
Central (networked) monitoring system		○
Protective light grid of safety gates		○
Three-color alarm light		○
Single-phase / three-phase power socket		○
Special power supply voltage		○
Controller change (KEBA / Smart Mold88)		○
Sequential injection valve gate		○
Automatic safety door (400T-560T)		○
Multiple operating languages		○
• Other		
Operation manual	●	
Leveling pad	●	
A tool kit and a precise filter element	●	
Mold clamp	●	
Spare parts (details as per sales contract)	●	
Dryer		○
Auto loader		○
Chiller		○
PET Preform mold		○
Mold for thin-wall packaging application		○

	標準配置	備選配置
鎖模部份		
精密電子尺控制鎖模/頂針行程	●	
鎖模三大板/機鉸採用高剛性球墨鑄鐵	●	
電腦控制兩段頂出前進/後退動作	●	
頂針強制復位功能	●	
多種頂針控制功能可選	●	
液壓驅動齒輪調模裝置	●	
機械/電氣/液壓三重保護裝置	●	
移動模板耐磨錳鋼帶軌道	●	
自動集中潤滑系統	●	
T型槽	●	
標配EU18機械手安裝孔	●	
加大容模量(100/200mm)		○
加裝模具隔熱板		○
特殊模具定位孔		○
自動抽導柱裝置		○
導柱採用自潤軸承		○
射膠部份		
合金鋼氮化螺桿料筒		
射嘴PID溫度控制	●	
雙射移油缸	●	
螺桿防冷開機功能	●	
自動清料功能	●	
熔膠前松退、熔膠後松退可選	●	
多段料筒PID溫控	●	
射膠、熔膠故障報警功能	●	
精密電子尺控制射膠/熔膠行程	●	
注射速度、壓力、位置6段設定	●	
保壓速度、壓力、時間5段設定	●	
儲料速度、壓力、位置4段設定	●	
螺桿轉速檢測	●	
加長型射嘴(特工料管需要确认是否配加長型射嘴)	●	
射嘴防護罩(不帶電氣保護)	●	
數控比例背壓	●	
線性導軌	●	
專用螺桿組件(PET/PA/PC/PMMA/TPU/UPVC)		○
雙金屬料管組件		○
料筒吹風裝置		○
射嘴防護罩(可帶電氣保護)		○
彈簧自鎖射嘴		○
加裝上料架平台		○
加裝磁力架座(配磁力架)		○
電動熔膠		○
液壓自動封嘴		○
气动自动封嘴		○
液壓系統		
國產伺服泵系統(A5)	●	
閉環變量泵系統(A5-V)	●	
日本油研泵系統(A5-I)	●	
旁路精密濾油器	●	
系統壓力流量校準功能	●	
進口品牌液壓控制閥	●	
進口品牌密封元件	●	
液壓油溫檢測及高低溫報警	●	

	標準配置	備選配置
低噪音液壓系統	●	
液壓油冷卻裝置	●	
高壓油管配防爆鏈	●	
油位檢測	●	
頭板標配1組抽芯預留一組抽芯接口	●	
二板標配1組抽芯預留一組抽芯接口	●	
獨立油溫控制系統		○
高响应伺服注射系統		○
高响应伺服開合模系統		○
同步頂出功能		○
同步熔膠功能		○
加大油冷卻器		○
加大一級油泵電機		○
加裝液壓抽芯		○
加裝液壓旋轉脫模		○
玻璃管冷卻流量計		○
油預熱功能		○
控制系統		
輸入/輸出監視功能	●	
自動保溫及自動加熱設定功能	●	
射膠轉保壓採用時間/位置/時間+位置控制	●	
動作斜率的獨立調整	●	
液壓抽芯/旋轉脫模程序界面	●	
工藝參數鎖定功能	●	
10.4" TFT彩色LCD顯示幕	●	
100組工模參數存貯空間	●	
中英雙操作語言	●	
機械手界面(中國標準)	●	
雙色警示燈	●	
三組AC380V三相插座	●	
加裝電動門(1000Ton以上)	●	
電動旋轉脫模介面及裝置		○
熱流道介面及接口		○
氣輔注射裝置及接口		○
三色報警燈		○
單相/三相電源插座		○
工模吹風		○
特殊電源電壓		○
更換電腦(KEBA電腦/巧塑88)		○
鎖模力檢測及顯示		○
中央(聯網)監控系統		○
其他配置		
說明書	●	
可調防震墊腳	●	
工具箱及工具一套,精密濾芯一件	●	
普通料斗	●	
隨機備件(詳細見合同清單)	●	
模具溫度控制器		○
自動上料機		○
除濕機		○
冷水機		○
乾燥料斗		○
PET模具		○
薄壁包裝類模具		○

	Standard	Optional
• Clamping Unit		
Precise transducer for clamping / ejector strpke control	●	
Three platens and toggles made from highly-rigid ductile iron	●	
2-stage ejector forward / backward controlled by industrial computer	●	
Forced ejector-back function	●	
Various ejection function settings	●	
Hydraulic gear-type mold height adjusting device	●	
Mechanical / Electrical / Hydraulic safety devices	●	
Wear-resistant manganese steel bands and supporting tracks for movable platen	●	
Automatic centralized lubrication system	●	
T-slot platen	●	
EUROMAP 18 robot interface	●	
Increased mould thickness (100/200mm)		○
Heat insulating plate for mold		○
Special mould fixing hole		○
Automatic tie bar extraction device		○
Self-lubricated bushes in tie bars		○
• Injection Unit		
Nitrided alloy-steel screw & barrel		
Nozzle PID temperature control	●	
Double-carriage cylinder	●	
Screw cold start protection function	●	
Automatic material cleaning function	●	
Selectable suck-back before or after plasticizing	●	
Multi-stage barrel PID temperature control	●	
Automatic injection and plasticizing failure alarm	●	
Precise transducer for injection / plasticizing control	●	
6 stage injection speed / pressure / position control	●	
5 stage holding pressure speed / pressure / time control	●	
4 stage plasticizing speed / pressure / time control	●	
Screw speed detection	●	
Extended nozzle	●	
Nozzle cover (without safety switch)	●	
Proportional back pressure control	●	
Linear guide rail	●	
Screw component for special applications (PET/PA/PC/PMMA/TPU/UPVC)		○
Bi-metallic screw component		○
Blowing device of barrel		○
Nozzle cover (with safety switch)		○
Spring shut-off nozzle		○
Ladder for materials feeding		○
Magnetic grate base (with magnetic grates)		○
Electrically-driven plasticizing		○
Hydraulic shut-off nozzle		○
Pneumatic shut-off nozzle		○
• Hydraulic System		
Domestic servo pump system (A5)	●	
Closed-loop variable-displacement pump system (A5-V)	●	
Japan's Yuken servo pump system (A5-I)	●	
Precision by-pass oil filter	●	
Automatic system pressure and flow adjustment	●	
Imported hydraulic valve	●	
Imported seals	●	
Oil temperature detection and alarm	●	

	Standard	Optional
Low-noise hydraulic control system	●	
Hydraulic oil cooling device	●	
Safety retention device for high-pressure hydraulic hose	●	
Oil level detection	●	
A set of core pull device with extra connector for fixed platen	●	
A set of core pull device with extra connector for moving platen	●	
Independent oil temperature control system		○
High response servo injection system		○
High response servo mold open and close system		○
Ejecting during mold opening		○
Plasticizing during mold opening		○
Enlarged oil cooler		○
Enlarged pump and motor		○
Extra hydraulic core pulling		○
Extra hydraulic unscrewing		○
Water regulator		○
Oil pre-heating function		○
• Control System		
Input / output inspection	●	
Automatic heat retaining and automatic heating setting	●	
Time / position / time + position control of switchover to hold pressure	●	
Independent adjustment of slope	●	
Core-pulling/ unscrewing interface	●	
Molding data locking function	●	
10.4" TFT color LCD	●	
100 sets of molding data storage	●	
Chinese and English operating languages	●	
Robot interface (Chinese standard)	●	
Two-color alarm light	●	
Three sets of 3-phase AC 380V socket	●	
Extra automatic safety door (for clamp tonnage over 1000T)	●	
Electrical unscrewing device interface		○
Hot runner interface and connector		○
Air-assisted injection device and connector		○
Three-color alarm light		○
Single-phase / three-phase power socket		○
Air bow device		○
Special power supply voltage		○
Controller change (KEBA / Smart Mold88)		○
Clamping force testing and display		○
Central (networked) monitoring system		○
• Other		
Operation manual	●	
Leveling pad	●	
A tool kit and a precise filter element	●	
Standard hopper	●	
Spare parts (details as per sales contract)	●	
Mold temperature controller		○
Auto loader		○
Dehumidifier		○
Chiller		○
Drying hopper		○
PET preform mold		○
Mold for thin-wall packaging application		○