

BLOWTECH

One stage injection stretch **Blow molding machine** automated die change system

▶ button-type, no loading or unloading mould screw



一步法 射出延伸
吹塑成型機

更換模具 自動化系統
不裝卸模具任何一根螺絲

- ▶ Unique ▶ Energy Efficient
- ▶ Simplification ▶ High quality, Diversified

ABOUT BLOWPLAS TECHNOLOGY

In reply to rapid increasing demands of PET bottle in the markets Blowplas Technology Co Ltd has put 20 years' experience and utmost efforts in developing latest technology and providing reliable servicing. Applicable products: cosmetics, pharmaceuticals, infusion bottles, detergent, mouth wash, baby feeding bottles, spice, salad dressing, food, liquor, PET Can, industrial containers Thanks to the restless efforts of the staff and personnel , Materials : **PET PET-G PLA PEN PP PP-SU TRITAN PC**. Blowplas is now in a position to provide customers throughout the world with the products highly competitive in performance quality and price and the global distribution and services network. From machine, molds to final product, Blowplas is the right partner you can trust and rely on.

荃葳工業有限公司擁有近二十年的注塑吹拉伸瓶技術研發製造經驗，成功推出新型一步法PET注吹拉伸瓶機，此種新型吹瓶機係針對10-500cc容量的化妝品、乳液、洗髮精、漱口水、嬰兒用奶瓶、藥品、農產品、食品容器以及大口徑廣口瓶等等少量多樣化產品來開發。本機可使用PET、PET-G、PLA、PEN、PP、PP-SU、TRITAN、PC等原料之吹瓶。荃葳亦擁有豐富的模具設計製造經驗，可提供自機械到模具一貫的服務，是您值得信賴的事業夥伴。





Unique / 獨創性

Multi-national patented process suitable for most thermoplastic applications **PET PET-G PLA PEN PP PP-SU TRITAN PC**

製程榮獲多國專利，適用於各種熱可塑性材料
PET PET-G PLA PEN PP PP-SU TRITAN PC

■ Simplification / 簡單化

Simple mechanical structure for dependable long-term use / 製程簡單，機械結構單純，穩定可靠

■ Economical / 經濟化

Minimized mold parts leading to more economic tooling cost / 模具最少化，模具開發費用最經濟有效降低成本

■ High quality, Diversified / 產品質感高多變化

Perfect for diversified and low volume orders of cosmetics, pharmaceuticals, infusion bottles, detergent, mouth wash, baby feeding bottles, spice, salad dressing, food, liquor, PET Can, industrial containers

適用於少量多樣產品，特殊造型設計，高單價；如化妝品、洗髮精、藥品、廣口瓶等容器

■ User Friendly / 親和性

Fully computerized touch screen provides user-friendly operation interface

全自動電腦觸控螢幕，操作簡便易學，免購買瓶胚或注塑機

■ Energy Efficient / 省能源

In-mold preconditioning, no extra heaters required.

胚體於模內直接調溫，無須額外加熱，利用胚體餘溫吹瓶成型

■ Standardized / 標準化

Standard air/hydraulic parts are widely available

大量採用標準零組件，取得容易，維修無負擔

■ Technical Support / 技術性

Providing know-how and service from tooling preform design to final products.

荃葳根據客戶多樣不同瓶型專業設計瓶胚，製造注塑模具；吹瓶模具提供一條龍服務



1 BT-3S SERIES

specification of model

CAVITY NUMBER 容器規格

Cavity Number (pcs)	2	3	4	6
模穴數				
Max. Neck Diameter	<38	<32	<28	<28
瓶最大口徑				
Max. Body Diameter	<110	<90	<70	<45
瓶最大外徑				
Max. Body Height	300	300	300	300
最大瓶高				
Productivity (bph)	400-500	550-650	800-1000	1200-1500
產能 (支/小時)				
Volume of Product(cc.)	1500	1000	500	200
產品容量(ml)				

► BLOWING PART / 吹瓶部分

Blow Mold Clamping Force 鎖模力	20 ton
Blow Mold Opening Stroke 開模行程	120 mm
Stretch Stroke 延伸行程	300 mm

► INJECTION PART / 射出部分

Screw Diameter 螺桿外徑	28 mm
Theoretic Injection Volume 理論射出量	86 cm ³
Plasticizing Capacity(pet) 可塑化能力	25 Kg/hr
Screw Rotation Speed 螺桿轉速	0~100 r.p.m
Clamping Force 鎖模力	40 ton
Opening Stroke 開模行程	200 mm

► ELECTRICAL PART / 電器規格

Electric Power (Pump) 泵浦馬達	30 / 22.5 Hp/KW
Table Servo Motor 伺服馬達(轉盤)	2.2 / 1.65 Hp/KW
Heater 電熱	12.6 / 9.5 Hp/KW

► HYDRAULIC PART / 油壓規格

Oil Tank Capacity 油箱大小	250 Liter
System Max. Pressure 系統最大油壓	140 Kg/cm ²
Cooling Water Capacity 冷卻水流量	400 l/min

► AIR PART / 空壓單位

Operating Air Pressure 作動氣壓	9 Kg/cm ²
Processing Air Pressure 吹瓶氣壓	25 Kg/cm ²



► L:3700 x W:1820 x H:2890

2 BT-3J SERIES

specification of model

CAVITY NUMBER 容器規格

Cavity Number (pcs)	2	3	4
模穴數			
Max. Neck Diameter	83	63	40
瓶最大口徑			
Max. Body Diameter	110	90	60
瓶最大外徑			
Max. Body Height	300	300	300
最大瓶高			
Productivity (bph)	350-380	570-620	800-900
產能 (支/小時)			
Volume of Product(cc.)	1500	1000	500
產品容量(ml)			

► BLOWING PART / 吹瓶部分

Blow Mold Clamping Force 鎖模力	30 ton
Blow Mold Opening Stroke 開模行程	140 mm
Stretch Stroke 延伸行程	300 mm

► INJECTION PART / 射出部分

Screw Diameter 螺桿外徑	42 mm
Theoretic Injection Volume 理論射出量	194 cm ³
Plasticizing Capacity(pet) 可塑化能力	56 Kg/hr
Screw Rotation Speed 螺桿轉速	0~100 r.p.m
Clamping Force 鎖模力	90 ton
Opening Stroke 開模行程	200 mm

► ELECTRICAL PART / 電器規格

Electric Power (Pump) 泵浦馬達	30 / 22.5 Hp/KW
Table Servo Motor 伺服馬達(轉盤)	2.2 / 1.65 Hp/KW
Heater 電熱	12.6 / 9.5 Hp/KW

► HYDRAULIC PART / 油壓規格

Oil Tank Capacity 油箱大小	250 Liter
System Max. Pressure 系統最大油壓	140 Kg/cm ²
Cooling Water Capacity 冷卻水流量	600 l/min

► AIR PART / 空壓單位

Operating Air Pressure 作動氣壓	9 Kg/cm ²
Processing Air Pressure 吹瓶氣壓	25 Kg/cm ²



► L:3700 x W:1820 x H:2890

Remarks: The Specifications Are Subject To Change Without Notice As Machines Are Modified To Upgrade Performance.

附註：a.規格如有變動恕不另行通知 b.如有特殊規格需求請與我們洽詢聯絡

3

BT-4S SERIES

specification of model

CAVITY NUMBER 容器規格

Cavity Number (pcs)	3	4	6	8
模穴數				
Max. Neck Diameter	38	38	32	25
瓶最大口徑				
Max. Body Diameter	135	100	65	45
瓶最大外徑				
Max. Body Height	300	300	300	300
最大瓶高				
Productivity (bph)	600-700	800-1000	1200-1500	1800-2000
產能 (支/小時)				
Volume of Product(cc.)	2000	1500	600	200
產品容量(ml)				

BLOWING PART / 吹瓶部分

Blow Mold Clamping Force 鎖模力	30 ton
Blow Mold Opening Stroke 開模行程	220 mm
Stretch Stroke 延伸行程	300 mm

INJECTION PART / 射出部分

Screw Diameter 螺桿外徑	45 mm
Theoretic Injection Volume 理論射出量	223 cm ³
Plasticizing Capacity(pet) 可塑化能力	64 Kg/hr
Screw Rotation Speed 螺桿轉速	0~100 r.p.m
Clamping Force 鎖模力	80 ton
Opening Stroke 開模行程	200 mm

ELECTRICAL PART / 電器規格

Electric Power (Pump) 泵浦馬達	40 / 30 Hp/KW
Table Servo Motor 伺服馬達(轉盤)	2.2 / 1.65 Hp/KW
Heater 電熱	15.6 / 11.6 Hp/KW

HYDRAULIC PART / 油壓規格

Oil Tank Capacity 油箱大小	260 Liter
System Max. Pressure 系統最大油壓	140 Kg/cm ²
Cooling Water Capacity 冷卻水流量	600 l/min

AIR PART / 空壓單位

Operating Air Pressure 作動氣壓	9 Kg/cm ²
Processing Air Pressure 吹瓶氣壓	25 Kg/cm ²



▶ L:4900 x W:3150 x H:3800

4 BT-4J SERIES

specification of model

CAVITY NUMBER 容器規格

Cavity Number (pcs)	2	3	4	6
模穴數				
Max. Neck Diameter	120	83	63	40
瓶最大口徑				
Max. Body Diameter	200	130	90	60
瓶最大外徑				
Max. Body Height	300	300	300	300
最大瓶高				
Productivity (bph)	240-280	500-550	800-900	1200-1500
產能 (支/小時)				
Volume of Product(cc.)	4000	2000	1500	600
產品容量(ml)				

► BLOWING PART / 吹瓶部分

Blow Mold Clamping Force 鎖模力	40 ton
Blow Mold Opening Stroke 開模行程	220 mm
Stretch Stroke 延伸行程	300 mm

► INJECTION PART / 射出部分

Screw Diameter 螺桿外徑	45 mm
Theoretic Injection Volume 理論射出量	270 cm ³
Plasticizing Capacity(pet) 可塑化能力	67 Kg/hr
Screw Rotation Speed 螺桿轉速	0~100 r.p.m
Clamping Force 鎖模力	200 ton
Opening Stroke 開模行程	200 mm

► ELECTRICAL PART / 電器規格

Electric Power (Pump) 泵浦馬達	50 / 37.5 Hp/KW
Table Servo Motor 伺服馬達(轉盤)	2.2 / 1.65 Hp/KW
Heater 電熱	15.6 / 11.6 Hp/KW

► HYDRAULIC PART / 油壓規格

Oil Tank Capacity 油箱大小	260 Liter
System Max. Pressure 系統最大油壓	140 Kg/cm ²
Cooling Water Capacity 冷卻水流量	600 l/min

► AIR PART / 空壓單位

Operating Air Pressure 作動氣壓	9 Kg/cm ²
Processing Air Pressure 吹瓶氣壓	25 Kg/cm ²



► L:4900 x W:3150 x H:3800

Remarks: The Specifications Are Subject To Change Without Notice As Machines Are Modified To Upgrade Performance.

附註：a.規格如有變動恕不另行通知 b.如有特殊規格需求請與我們洽詢聯絡

▶ Blowtech's One Stage Injection Stretch Blow Molding Machine Has Unique Manufacture Procedure

| 荃蕤工業有限公司此次推出的注吹拉伸瓶機具有獨特專利製程

▶ Automated die change system | 更換模具自動化系統

(button-type, no loading or unloading mould screw): Blowplas Technology Co., Ltd. demonstrated its full-service attitude and launched this system in response to the demand for efficient, low volume and diversified production, and in the face of high-frequency quick die replacement output loss. It has enabled our machine tools to be embedded in customer production structures entering the **Industry 4.0** and **Made In China 2025** fields.

(按鈕式，不裝卸模具任何一根螺絲)：針對少量多樣化生產效率的需求，面對高頻率模具更換產量流失現實問題，荃蕤公司展現全方位服務態度，推出此系統，促使我工作母機可植入客戶生產結構邁入中國製造2025及工業4.0之領域。

▶ Model BT is equipped with 2-station servo table and side-blow system

After injection the servo table rotates 180 degrees, a servo screw then transfers a neck plate with preforms to the side-blow station. Using side-blow system a bigger work space is available, and optional devices: gate trimmer and product conveyor etc can easily be mounted inside the machine. This model is good for small containers with short cycle time. Model BT-J, has the same benefits, but is for wide-mouth jar applications, and it's a stronger machine with higher injection clamping force.

全新兩工位伺服轉盤側吹式設計，可將模具數量降到最低，節省投資。瓶胚射出脫模之後，伺服轉盤旋轉180°，移載系統將瓶胚帶入轉盤側邊的吹瓶模。完成吹瓶後再帶回頂出位將產品頂出。此製程把設計簡單化，使機內有足夠的維修保養空間，也能輕易裝設瓶胚剪尾與成品輸送帶等設備，提升產品品質。BT-S標準型適用於一般產品，BT-J型具有較大鎖模力，適用於廣口瓶。



▶ Mold Cost – An Important Factor to Face | 模具開發費用低

In comparison to 3-station and 4-station designs a 2-station machine, that needs less neck cavities and has a more effective mold width, bringing cost savings. Mold costs are an important issue in running diversified and low volume products lines. The tooling/mold cost in our simple and innovative system is the lowest of all. A full mold set includes following parts.

一步法注吹延伸瓶製程適用於少量多樣化產品，而少量多樣化意味大量模具開發費用，兩工位伺服轉盤設計則可將模具費用降到最低。相較於四工位與三工位設計，荃蕤兩工位製程所需備模數量最少，模具費用最低。因為只有兩工位，在相同轉盤外徑情況下具有最大有效模寬，可以容納更多模穴數或更大瓶口徑，讓生產更具競爭性。

► Servo Pump System (Option) | 節能伺服泵系統(選配)

► Theoretical Efficiency Evaluate

理論效益評估

Traditional Oil Pressure 30 kw
傳統油壓 30 kw

Servo Oil Pressure 22 kw
伺服油壓 22 kw

Power Consumption/耗電	KWH	24.2 kw	8 kw
	1 day/天 (24hrs/小時)	581 kWh/度	192 kWh/度
	1 month/月 (22 days/日)	12778 kWh/度	4224 kWh/度
Calculation/用電計算	1 year/年 (12 months/月)	153336 kWh/度	50688 kWh/度
	saving / 1 year	153336-50688=102648 kWh	
Balance/差額	1 kWh/度 = 2.45(NT/元)	102648*2.45 = 252514 (NT/元)	

► Comparison of Power Consumption

耗電量比較表

Traditional Oil Pressure System
傳統油壓系統

Power Saving Oil Pressure System
節能油壓系統

Consumption/耗電 30min	12.1 kw	4 kw
Consumption/耗電 %	100%	33%
Power saving effect/節能效果	0%	67%

According the above theory, the effect on power saving is depended on using situation./以上理論顯示省電效果依使用情形會有不同效果

► Superiority 節能油壓系統之優勢

- It could recover the investment efficiently and transfer profit without declining efficiency and functions of machine depending on using to save power 30%-70%.
- The rising hydraulic temperature is slowly which can reduce specifications of cooling system and tank volume, increase service life of hydraulic fluid and oil pressure part, and decrease material and maintain expenses.
- There is a wide selection of specifications. It is getting more convenient and extending driver, which can make controllability get more stable and durable.
- Maximum flow of single system can be used more than 400L/min that lead to using a little set of power saving system among else brand. There are extremely different of level in the production cost.
- The system integration is simple and design is slightly changed.
- It offers stable functions and improves the quality of environment from low noise and quickly response.

依使用情況可省電30%~70%。在不降低機台效率與性能的情況下，快速回收投資成本並轉為獲利。

因為系統特性液壓油溫升較慢，可縮小冷卻系統規格與油箱體積，可以延長液壓油與油壓零件使用壽命，並減少材料使用與維修保養開支。

規格種類齊全，應用上更方便，且驅動器加大，使系統控制性能更穩定、更耐用。

單一系統最大流量可到400L/min以上，在大流量的應用可以比其他品牌使用更少套的節能系統，在生產成本上會有很大的落差，並可回饋給客戶。

系統導入容易，設計變更不大。

噪音值低，反應快速，可提供穩定的性能並改善工作環境品質。

▶ CUSTOMER AREA SOLD

已|銷|售|客|戶|區|域



HIGH QUALITY · DIVERSIFIED ARE RESPONSIBILITY OF BLOWTECH

高 質 感 · 多 變 化 · 是 荃 葳 的 責 任



BLOWTECH

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