

【全球行銷服務網】Global Marketing Network



70 Global Service Centers

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# BMC SERIES

## BMC專用注塑機 BMC Injection Molding Machine



# BMC系列產品定位 BMC Series Product Position

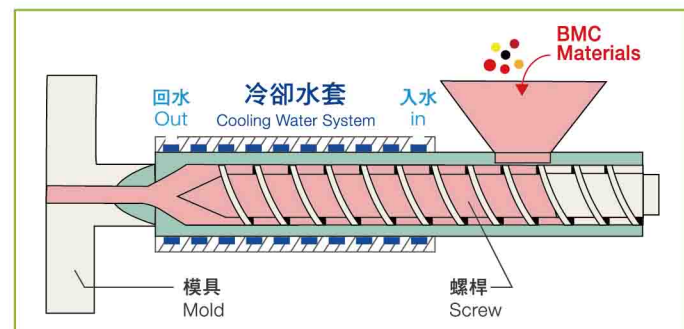


BMC屬於熱固性塑料的一種，具有耐高溫、耐燃性、耐蝕性、高機械強度、尺寸安定、電器絕緣等特性，廣泛用於汽車類零件、電子工業、家用電器及通訊器材的外殼及零件。

BMC (Bulk Molding Compounds) is a type of thermosetting plastic material which contains many properties including heat-resistance, flame-retardation, erosion-resistance, high mechanical strength, dimension stability and electrical insulation. It is widely used in numerous industries like automotive parts electronic component, household appliances and communication devices.

- 採BMC專用雙合金螺桿及料管，提供較佳的耐磨性和使用壽命。
- 程式整合澆口自動裁切功能。
- 冷卻水套集成在料管組內，確保BMC原料處於恆溫可控狀態。(圖 1)
- 車壁配置隔熱墊板，模溫控制更精準。(圖 2)
- 可搭配ACC蓄壓射出裝置，提供瞬間高速能量，進行高速射出成型。(圖 3)
- 選配模具抽真空迴路裝置（專利設計），使成型更精確，降低產品不良率。(圖 4)

- Adopt BMC special bi-alloy screw and barrel to provide a better wear resistance as well as longer life.
- Auto gate-cutting function is integrated in program.
- The cooling water system is integrated with barrel to ensure the constant temperature for the BMC material. (Figure1)
- The platen equipped with adiabatic spacer, it can let the mold temperature control more precise. (Figure 2)
- Optional** : Applied to Accumulator for high-speed injection, it can supply high-speed capacity in a very short time and proceed high-speed molding. (Figure 3)
- Optional** : Mold cavity vacuum equipment is optional, it can make molding more precise and decreasing defective rate of the product. (Figure 4)



1 冷卻水套系統 Cooling Water System

# 標準及選購配備 Standard & Optional Accessories

● 標準配備 Standard ○ 選購配備 Option — 無 N/A

配備項目	ITEM	HN-150 BMC	HN-250 BMC	HN-300 BMC	HN-350 BMC	HN-530 BMC	HN-600 BMC
射出安全護罩	Safety cover for injection	●	●	●	●	●	●
BMC專用螺桿	Special Screw for BMC	●	●	●	●	●	●
雙合金螺桿、料管	Bi-alloy Screw/Barrel	○	○	○	○	○	○
多段數位背壓 (螢幕設定)	Multi-stage back pressure control (Screen set up)	●	●	●	●	●	●
多段數位背壓 (螢幕設定及顯示)	Multi-stage back pressure control (Screen set up and display)	○	○	○	○	○	○
蓄壓器高速射出	Accumulator for high-speed injection	○	○	○	○	○	○
射出閉迴路	Close-loop control for injection pressure & speed	○	○	○	○	○	○
落料口溫度顯示及控制	Temperature display & control of feeding gate	○	○	○	○	○	○
射出電阻尺	L/P for injection unit	●	●	●	●	●	●
餵料電阻尺	L/P for feeding unit	●	●	●	●	●	●
曲肘：無給油軸承	Oiliness bearing (Toggle)	●	●	●	●	—	—
曲肘：套鋼	Steel bearing (Toggle)	—	—	—	—	●	●
開關模比例閥控制	Proportional valve for mould open and close	○	○	○	○	○	○
模壁T型槽	T-slot platen	—	—	●	●	●	●
模壁T型墊板	T-slot board	○	○	—	—	—	—
隔熱墊板	Insulator sheets	●	●	●	●	●	●
活動式模定位圈	Check ring of mold (Replaceable)	—	●	●	●	●	●
固定式模定位圈	Check ring of mold (Non-replaceable)	●	—	—	—	—	—
安全踏板	Security Pad	—	—	—	—	—	—
曲肘電動注油器 (1組)	Auto lubrication system for toggle (1 set)	●	●	●	●	●	●
曲肘電動注油器 (2組)	Auto lubrication system for toggle (2 set)	—	—	—	—	—	—
曲肘潤滑油品-鋰基脂 (#00)	Toggle lubricating by grease (#00)	●	●	●	●	—	—
曲肘潤滑油品-多效齒輪油	Toggle lubricating by gear oil	—	—	—	—	●	●
車壁潤滑：電動注油器	Auto lubrication system (platen)	●	●	●	●	●	●
單中子 (一公)	Single core pull device	●	●	●	●	—	—
雙中子 (一公一母)	Double core pull device	○	○	○	○	●	●
轉牙裝置 (計時/計次)	Unscrew device by timer or counter	○	○	○	○	○	○
模具抽真空迴路裝置	Mould cavity vacuum equipment	○	○	○	○	○	○
夾模電阻尺	L/P for clamping unit	●	●	●	●	●	●
頂出電阻尺	L/P for ejection unit	●	●	●	●	●	●
兩個風托 (一公一母)	Air ejector sets	○	○	○	○	○	○
成品落下口	Article Collecting Channel	●	●	●	●	—	—
電動安全門	Automatic safety gate (Electric type)	—	—	—	—	●	●
水流分佈器 (銅製)	Water manifold (copper)	—	—	—	—	—	—
自封式磁性吸油過濾器	With check valve magnetic suction filter	—	—	—	—	●	●
伺服節能系統	Servo power-saving system	●	●	●	●	●	●
電眼檢出	Photo cell drop-out checking device	○	○	○	○	—	—
油溫顯示	Oil temperature display for hydraulic system	●	●	●	●	●	●
油溫省水閥控制	Water valve for hydraulic oil temperature control	○	○	○	○	○	○
油溫預熱功能	Oil temperature preheating function	○	○	○	○	○	○
FCS-6500S微電腦控制器 (彩色)	FCS-6500S controller (color screen)	●	●	●	●	●	●
資料保護鎖 (硬體鎖)	Data lock function (key)	●	●	●	●	●	●
機械手電氣接口	Robot electrical interface	○	○	○	○	○	○
電控穩壓器	Power stabilizer	○	○	○	○	○	○
三色警示燈	Three colors alam light	●	●	●	●	●	●
CE安全插座	CE safty socket	●	●	●	●	●	●
電源插座	Power socket (110V/220V)	○	○	○	○	○	○
主電源斷路器	Main power breaker	●	●	●	●	●	●
油壓、電氣雙重保護裝置	Dual safety device: hydraulic and electrical	●	●	●	●	●	●
機械安全桿保護裝置	Mechanical Safety bar Protection device	○	○	○	○	○	○
模溫機	Mold temperature controller	○	○	○	○	○	○
冷凍機 (料管用)	Chiller for barrel	●	●	●	●	●	●
吊桿組	Mold lifting hanger set	○	—	—	—	—	—
避震器	Anti-vibration mounting pad	●	●	●	●	●	●
填料台	Filling material stand	●	●	●	●	●	●
工具箱組	Tool box set	●	●	●	●	●	●
電氣及其他附件	Accessory for electrical and others	●	●	●	●	●	●

\* 模具加熱控制方式及附加配備製作方式另議。The ways of mold heating controlling and additional equipment making are considered separately.

\* 冷凍機附水流分佈器(料管用)。Chiller with water manifold. (for barrel)

\* 曲肘潤滑油品：150T~350T採用鋰基脂(#000)；470T~1000T採用多效齒輪油。Toggle lubricating: 150T~350T by grease (#000) ; 470T~1000T by gear oil.

\* 機台模壁若加裝T型墊板，會使模厚及頂出行程的規格改變。If clamping unit adopting T-slot board, the "mold thickness" & "ejector stroke" dimensions will be different.

\* 外銷機台配置與內銷相同。





● 新式調模機構

調模機構與調模壁採整體式設計，使四支大柱受力均勻，鎖模力調整簡易準確。

● New Mold Adjusting Mechanism

The new mold adjusting platen mechanism design doesn't require its mounted nut for torque tuning and distributes force evenly on the tie bars.

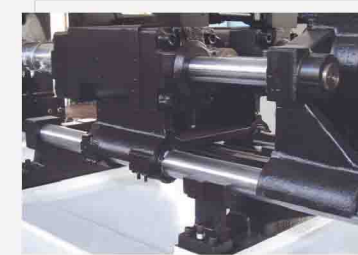


● 高端控制器

採用網路注塑機專用系統，人性化操作介面，系統反應速度高達1ms，精度更高、操作方便，擴展性更好。

● High-End Controller

Applying network control system capacity with user friendly operation interface and high speed central processor, which offers high response and easy extending.



● 新式專利射移結構

新型導柱式結構，跨距縮短，避免料管前傾及導柱下垂變形。使用二硫化鉬塗佈襯套，阻力小，移動快速，且永久免潤滑，潔淨度高。

● New Patented Injection Sliding Structure

The new pillar guiding plate structure is shortened to avoid barrel inclination and deformation. And with Molybdenum Disulfide coated bushings, it produces a less resistant, faster moving, very clean, oil-free injection sliding structure.



● 半閉迴路系統 (選購)

配置半閉路油壓控制系統，有效提升成型穩定性。

● Semi-closed Loop System (Optional)

Adopts a semi-closed loop hydraulic system to effectively promote molding stability.



● 自動潤滑系統

循環式電動注油系統，油量分配平均，潤滑效率高，增長曲肘壽命。

● Automatic Lubrication System

An automatic lubrication system circulates and distributes oil equally for greater efficiency in lubrication and enhanced toggle life.



● 數位背壓裝置

可直接從電控螢幕設定背壓，操作簡易。

● Digital Back Pressure Installation

The back pressure can be directly changed and set on the controller for easy operation.

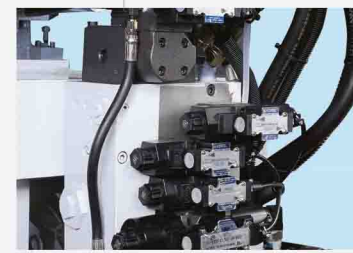


● 高剛性機架結構

精簡堅固之設計，經有限元素分析變形量及應力分佈，確保機架結構及強度達到最佳化，使BMC系列機種「穩如泰山」。

● Highly Rigid Structure Frame

Designed based on Finite Element Analysis (FEA) for Stress and Strain effects to ensure the BMC's excellent frame structure.





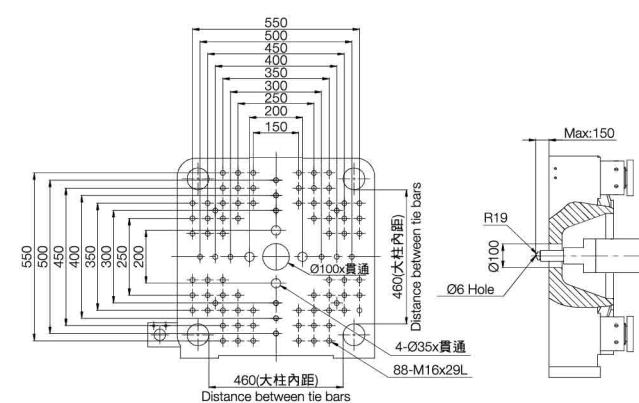
# 規格表 Specifications

ITEMS		UNIT	HN-150BMC	HN-250BMC	HN-300BMC
射出單元 Injection Unit	螺桿直徑	Screw diameter	mm	62	62
	射出行程	Screw stroke	mm	245	245
	理論射出容積	Theoretical shot volume	cm <sup>3</sup>	739	739
	理論射出量	Shot weight of injection (BMC)	gram	1331	1331
	射出壓力	Injection pressure	kgf/cm <sup>2</sup>	1675	1675
	射出速度	Injection speed	mm/sec	85	85
夾模單元 Mold Clamping Unit	閉模力	Mold clamping force	tonf	150	250
	夾模行程	Mold clamping stroke	mm	460	550
	模厚	Mold thickness	mm	130~520	160~640
	建議最小模具尺寸	Suggested min.mold dim. (H x V)	mm	299x299	364x364
	大柱內距	Tie bar spacing (H x V)	mm	460x460	555x555
	模盤尺寸	Mold platen (H x V)	mm	670x670	820x820
電氣單元 Electrical Equipment	頂出行程	Ejector stroke	mm	110	150
	最大油泵動力	Max. pump driving motor	kW	36.7	36.7
其他 Others	餵料容量	Feeding capacity	liter	30	30
	機械尺寸	Machine dimensions (L x W x H)	mm	6100x1330x3800	7000x1430x3900
	油箱容量	Oil tank capacity	liter	480	500
	機械重量	Machine weight	ton	9	12
	最高系統壓力	Max. system pressure	kgf/cm <sup>2</sup>	140	140

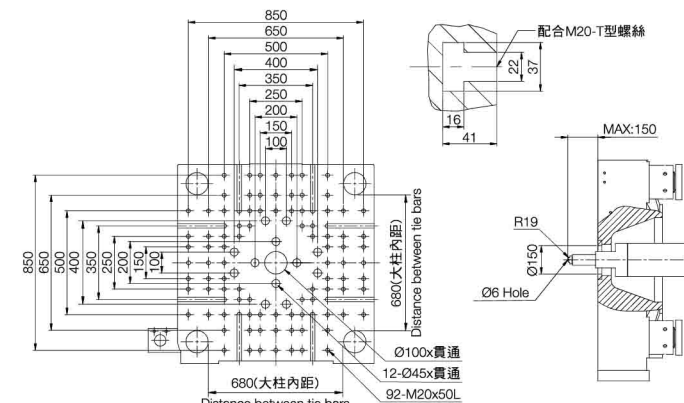
ITEMS		UNIT	HN-350BMC	HN-530BMC	HN-600BMC
射出單元 Injection Unit	螺桿直徑	Screw diameter	mm	68	76
	射出行程	Screw stroke	mm	245	280
	理論射出容積	Theoretical shot volume	cm <sup>3</sup>	889	1270
	理論射出量	Shot weight of injection (BMC)	gram	1601	2285
	射出壓力	Injection pressure	kgf/cm <sup>2</sup>	1393	1512
	射出速度	Injection speed	mm/sec	106	125
夾模單元 Mold Clamping Unit	閉模力	Mold clamping force	tonf	350	530
	夾模行程	Mold clamping stroke	mm	645	800
	模厚	Mold thickness	mm	190~770	350~880
	建議最小模具尺寸	Suggested min.mold dim. (H x V)	mm	429x429	525x525
	大柱內距	Tie bar spacing (H x V)	mm	680x680	840x830
	模盤尺寸	Mold platen (H x V)	mm	969x969	1240x1220
電氣單元 Electrical Equipment	頂出行程	Ejector stroke	mm	200	220
	最大油泵動力	Max. pump driving motor	kW	36.7	73.4
其他 Others	餵料容量	Feeding capacity	liter	30	60
	機械尺寸	Machine dimensions (L x W x H)	mm	8020x1960x3900	8500x2500x3910
	油箱容量	Oil tank capacity	liter	500	1200
	機械重量	Machine weight	ton	15	24
	最高系統壓力	Max. system pressure	kgf/cm <sup>2</sup>	140	140

# 模壁尺寸圖 Mold Platen Dimensions

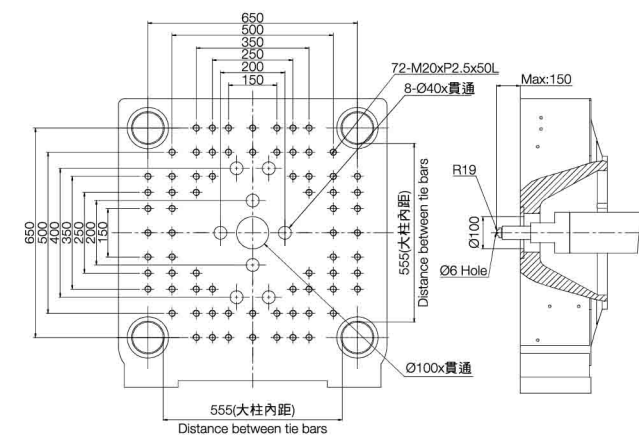
## HN-150BMC



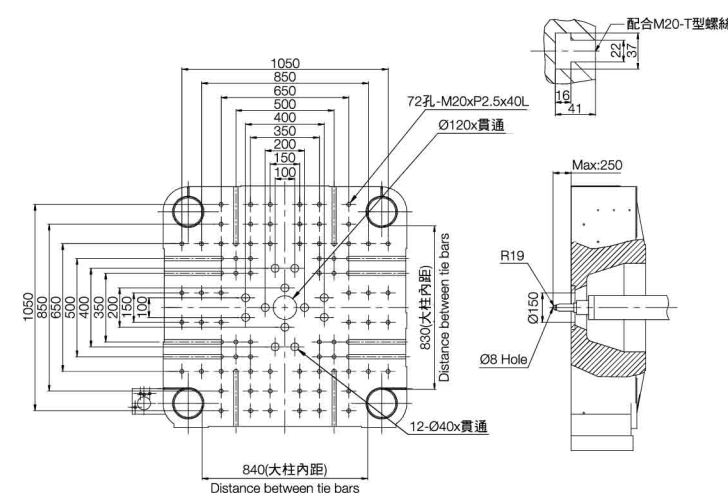
## HN-350BMC



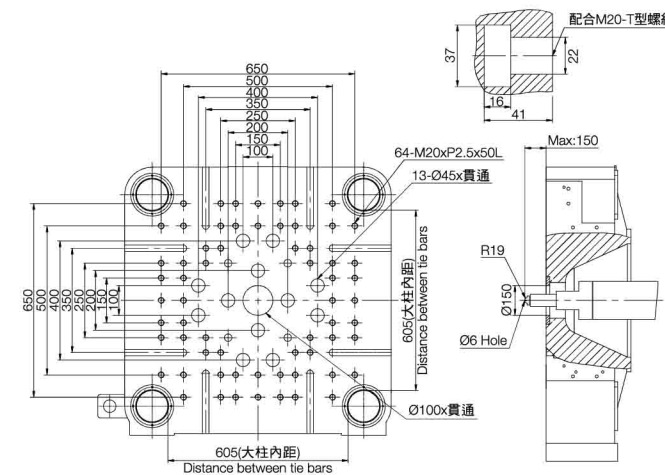
## HN-250BMC



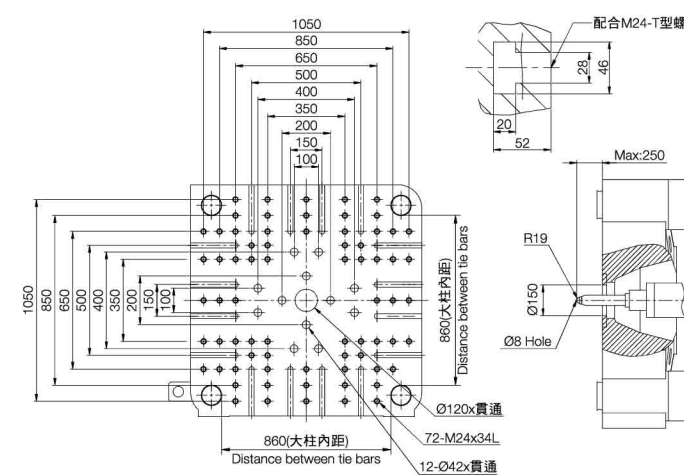
## HN-530BMC



## HN-300BMC



## HN-600BMC



本資料僅供參考。因產品不斷研究改良，設計變更時恕不另作通知。

The features are for your reference only. Due to continuous improvements, we reserve the right to amend any of the above specifications without prior notice.