

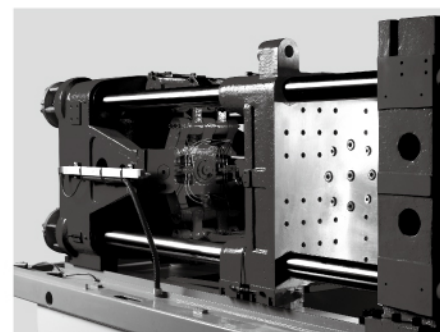




BIII系列機器特點 The feature of BIII series

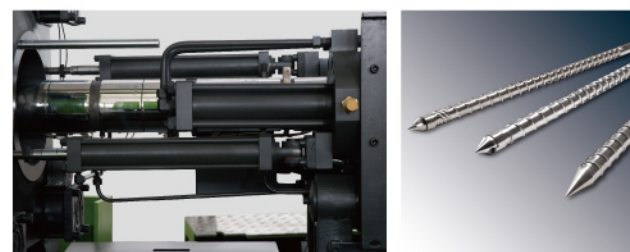
鎖模結構特點 The feature of clamping unit

- 採用有限元分析方法設計的高強度模板，有效的防止模板變形、斷裂
High strength platen designed by finite-element analysis is not easy to deform and breakage.
- 優化設計的機鉸結構，使整個鎖模結構運行更平穩、高效
Toggle parameter optimized by computer makes sure the clamping unit running more stable and efficient.
- 配備定量容積式自動潤滑裝置，延長機械部分的使用壽命
Quantitative cubage lubricate can prolong the life of machinery unit
- 機械、電氣、液壓三種安全防護措施，確保人身安全
Machinery, electric and hydraulic safeguard to make sure the personal safety.



射臺結構特點 The feature of injection unit

- 獨特的射出油缸結構，有效的降低射出回油背壓阻力，提高射出準確性，同時降低能耗；
Particular structure of injection cylinder can effectively decrease the resistance of oil returning back pressure, improve the veracity of injection and reduce energy consumption.
- 雙缸射移機構，保證射嘴良好對中性，防止漏料；
Double-cylinder injection move make sure the good centring of nozzle and prevent material leak.
- 多種螺桿結構配置，滿足不同制品成型要求；
Multiple screws can satisfy molding requirement of different products.
- 優化設計螺桿料筒組件，關鍵三小件採用日本進口熱作模具鋼材料，保證高溫條件下的高硬度、耐磨性的特點。
The screw is optimization designed and main parts with Japanese material make sure the high rigidity and inoxidability of screw.



液壓配置特點 The feature of hydraulic unit

- 變量泵的採用，比傳統定量泵節能30%以上，伺服動力系統的應用，降低能耗30%~80%，最大程度減少系統發熱量，降低冷卻水用量，同時提了機器的控制精度；
Variable pump can save energy more than 30% than quantitative pump; Servo system can reduce energy consumption 30%~80%, reduce whole hog the heat productivity and cooling water, and promote the control precision of machine.
- 全部採用進口液壓元器件，確保液壓系統精密、穩定、高效運行，減少故障發生率；
The hydraulic component is all import, make sure the hydraulic system running precise, stable and efficient, and reduce the fault rate.
- 配備精密旁路濾油器確保液壓油良好工作；配備電磁水閥對液壓油溫度進行智能開關控制；配備插裝邏輯閥油路提升液壓系統響應度，減小油路衝擊；
Bypass filter make sure the oil work well; Water valve can intelligent control the oil temperature; Oil-way with logic valve can improve the responsiveness of hydraulic system and reduce the impact of oil-way.
- 根據客戶需求選配背壓比例控制裝置，操作便捷，控制精確。
The function of proportional control backpressure is selective according to your requirement, operation is convenient and control is precise.



電氣配置特點 The feature of electric unit

- 溫度：8段溫度控制系統，各溫度段獨立PID演算程序；
Temperature: 8 segment control, and every one is independent PID calculation program.
- 開合模動作：多段分級動進行松退、加料、開模、關模動作；
Open and close mold movement: Multistage grading movement for decompression, charging, mold opening and closing.
- PLC功能：PLC高階梯形形式編輯，使機器的動作控制時序更加靈活；
PLC function: PLC program edit of high stepped appearance make the action control more quick.
- 操作模式：手動、半自動、全自動三種操作模式；
Operation mode: Manual operation, semi-automatic, full-automatic.
- 最大可擴展至700組模具參數存儲（100組以上須選配USB存儲裝置和SD/MMC記憶卡），便於存儲與備份；
Mold parameter save can extend maximum to 700 groups. (Please select USB memory storage and SD/MMC card if more than 100 groups)
- 多種生產計算功能，同時可選配良品與不良品統計功能；
Various calculation function for production, and statistics function of good products and rejects can be selected at the same time.
- 比例輸出曲線校正功能，線性輸入、輸出修正功能，以及動作上限壓力、流量的限定功能；
Calibration function of proportion output curve, amend function of linear input and output, and limit function of maximal pressure and flux of movement.
- 支持四組全能中子（抽芯或旋脫）功能；
Support four sets of core.
- 機械手聯接程序接口，電眼監控功能；
Routine interface of robot, and monitoring function of electric eye.



BIII系列機器選型指南 Model selection guide of BIII series

BIII — 90 SVH

按電—液配備分為四種
According to electric-hydraulic configuration information, divide it into four series:

機器的噸位（鎖模力）
Machine model (Clamping force)

雙射移油缸，標配射臺
Double cylinder for injection movement, standard injection unit

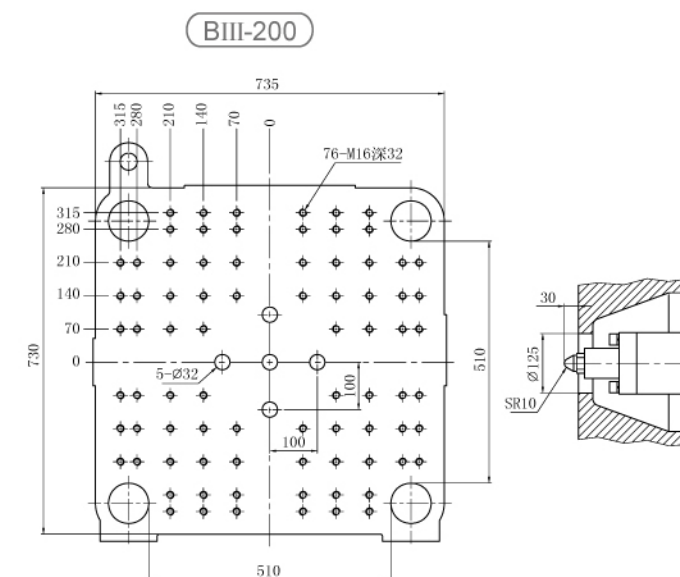
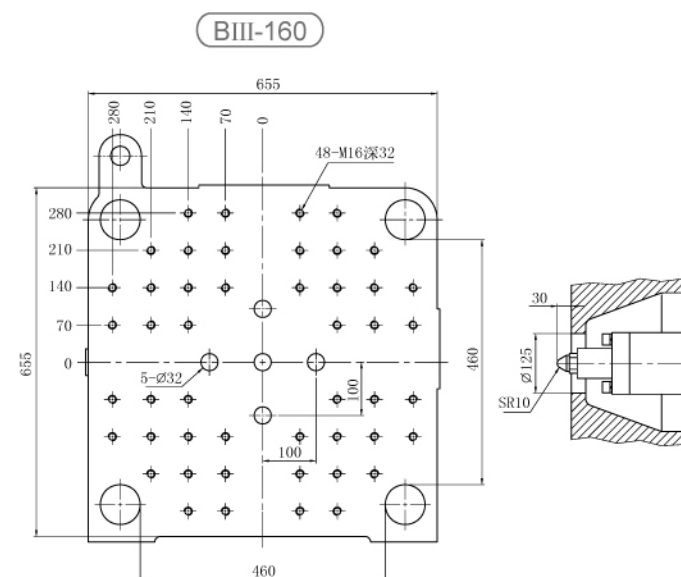
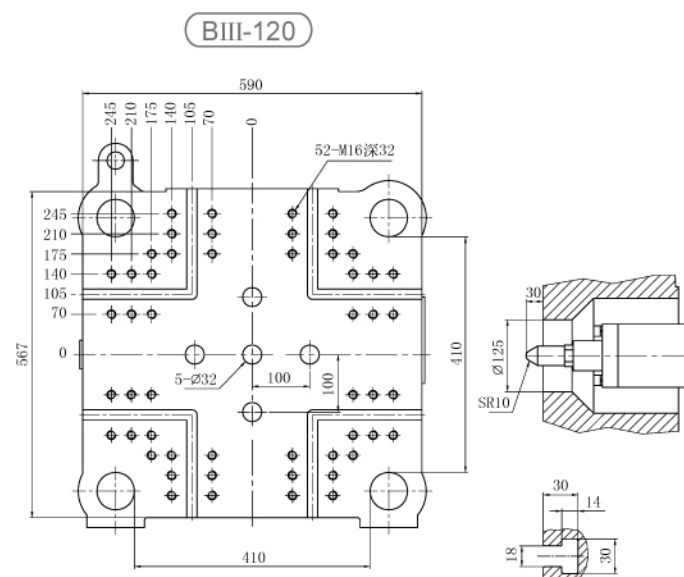
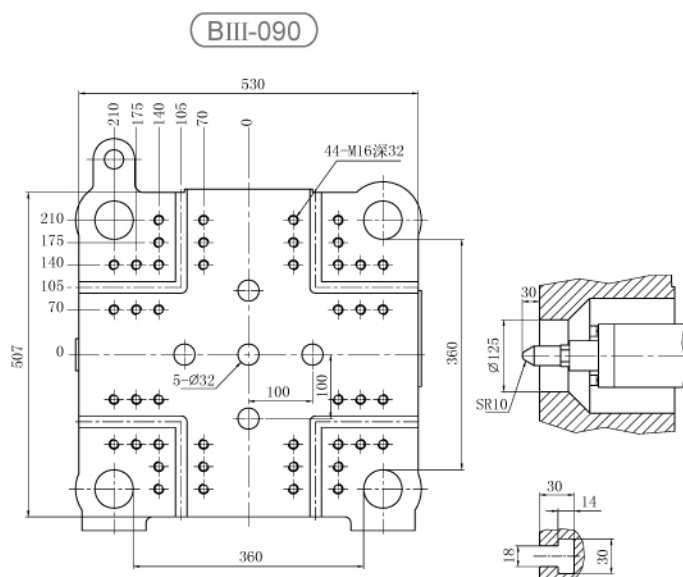
- V: 開環變量泵，可選機型90~680，8"彩色顯示器
Opened-loop variable pump, machine model is from 90 to 680, 8" color display
- SV: 標準伺服系統，可選機型90~680，8"彩色顯示器
Standard servo system, machine model is from 90 to 680, 8" color display
- EH: 閉環變量泵，可選機型90~1300，10"彩色顯示器
Closed-loop variable pump, machine model is from 90 to 1300, 10" color display
- SVH: 高檔伺服系統，可選機型90~1300，貝加萊電腦
Top grade servo system, machine model is from 90 to 1300, B&R computer

案例測試 Test of case

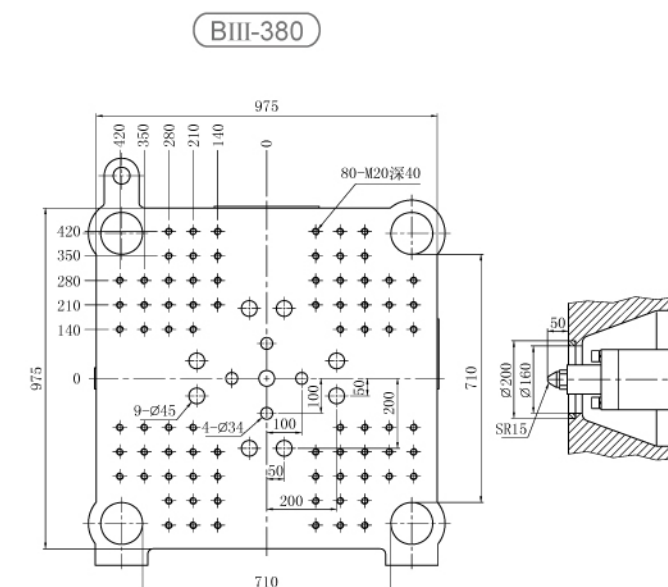
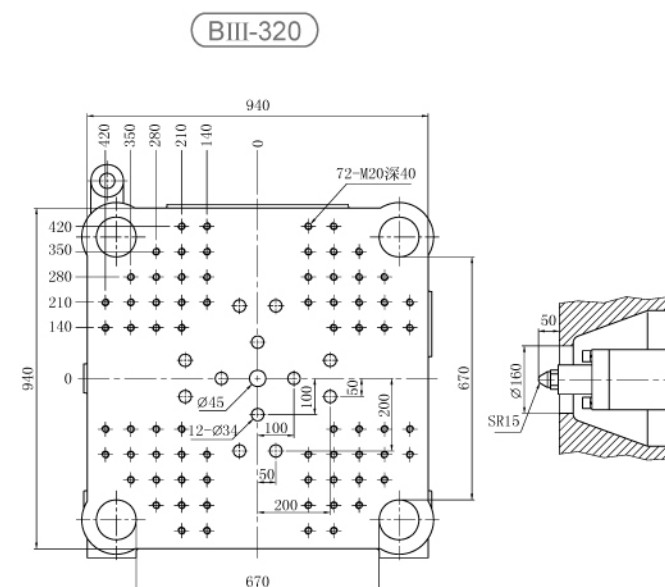
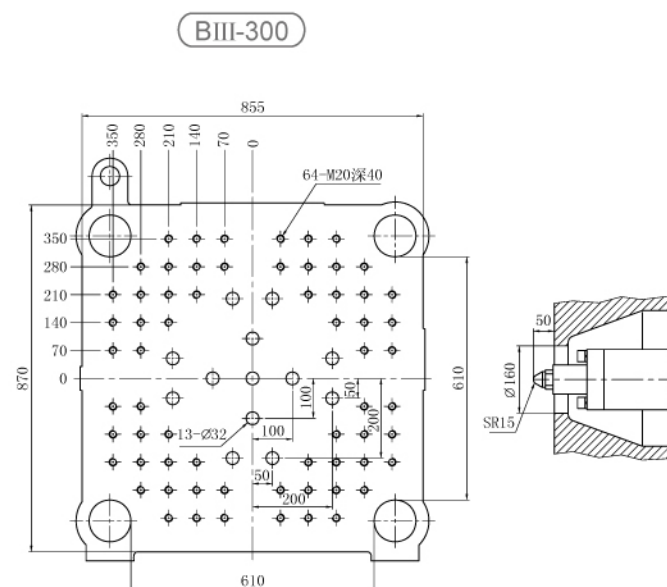
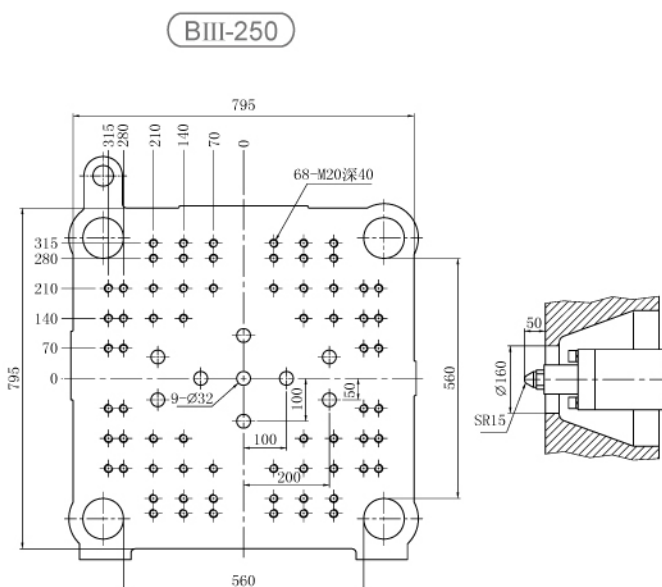
機 型 Model		120T傳統定量泵注塑機 120T with conventional quantitative pump	120T開環變量泵注塑機 120T with opened-loop variable pump	120T閉環變量泵注塑機 120T with closed-loop variable pump	120T伺服油壓機注塑機 120T with servo system
成型周期 Cycle	second	22	22	22	22
監測時間 Watching time	hour	3	3	3	3
合計模數 Total mold	shot	490	490	490	490
一小時耗電量 Electricity waste for one hour	kw/h	10.5	6.51	6.49	3.2
一年消耗電量 Electricity waste for one year	kw.h	91980	57027.6	56852.4	28032
一年生產所需電量 Cost for one year	RMB	73584	45622.08	45481.92	22425.6
改用伺服液壓動力控制系統節能效果 Energy-saving effect with servo system	%	0%	38.0%	38.19%	69%

- 【測試產品】音像制品（原料：PS，重量：48.6g，壁厚：3.6mm，模出：1出2）
- 【測試條件】四種機器，正常生產數小時后，待油溫穩定在45℃，產品生產周期22s，連續生產3小時用電量。
- 【Production】Audio/vedio products(Material:PS, Weight:48.6g, Thickness: 3.6mm, Mold: 1 to 2)
- 【Condition】The electricity consumption of four different kinds of machine,after 3 hours running at oil temperature is 45℃ and cycle time is 22 sec.

机 型			BIII-090									BIII-120									BIII-160									BIII-200								
鎖 模 裝 置	鎖模力 kN	Clamping Force	900									1200									1600									2000								
	拉杆間距 mm	Space Between Tie-Bars	360×360									410×410									460×460									510×510								
	鎖模行程 mm	Clamping stroke	320									360									420									450								
	最大模厚 mm	Mould Thickness Max	380									430									510									550								
	最小模厚 mm	Mould Thickness Min	120									140									160									180								
	模板尺寸 mm	Size of Platen	530×507									590×567									655×655									735×730								
	頂出長度 mm	Ejector Stroke	70									90									120									120								
	頂出力 kN	Ejector Force	31									31									53									53								
頂針數	Ejector Quantity	5									5									5									5									
注 射 裝 置	螺杆直徑 mm	Screw Diameter	32	35			40			35	40			45			40	45			50			45	50			55										
	螺杆長徑比 L/D	Screw L/D ratio	23	21			18.4			24	21			18.7			23.6	21			18.9			23.3	21			19										
	理論射膠容積 cm³	Shot Size	117	140			183			153	200			253			253	320			395			365	450			545										
	實際射膠量 g(PS)	Shot Weight	108	129			168			141	184			233			233	294			363			336	414			501										
	oz		3.8	4.5			5.9			5.0	6.5			8.2			8.2	10.4			12.8			11.8	14.6			17.7										
	射膠壓力 MPa	Injection Pressure	219	183			140			235	180			142			228	180			146			221	179			148										
電 力 及 其 他	油箱容積 L	Oil Tank Capacity	110									140									170									280								
	電熱功率 kW	Heater Power	6.34									8.38									10.74									12.76								
	電熱區數	Tem Control zone	4+1									4+1									4+1									4+1								
	系統壓力 MPa	System Pressure Max	16									16									16									16								
	機器淨重 ton	Machine Weight	3.5									4.2									5.2									6.5								
	機器尺寸 L×W×H mm	Machine Dimension	4070×1115×1815									4450×1275×1855									5040×1280×2046									5435×1400×2155								
選 型 參 考	系列	Series	V&EH			SV			SVH			V&EH			SV			SVH			V&EH			SV			SVH			V&EH			SV			SVH		
	油泵輸量 L/min	Pump Output	67	65			74			84	80			80			105	100			112			130	115			130										
	電機功率 kW	Motor Power	11.0	8.7			11.0			15.0	8.7			11.0			18.5	12.0			20.0			22.0	18.2			20.0										
	射膠速度 mm/s	Injection speed	101	99			112			98	93			93			97	93			104			98	87			98										
	螺杆轉速 rpm	Screw Speed	6~191			6~185			6~211			5~210			5~200			5~200			5~194			5~186			5~208			4~216			4~191			4~216		
	螺杆直徑	Screw Diameter	32	35	40	32	35	40	32	35	40	35	40	45	35	40	45	35	40	45	40	45	50	40	45	50	40	45	50	45	50	55	45	50	55	45	50	55
	注射速率 cm³/s(PS)	Injection Rate	81.2	97.1	126.9	79.6	95.2	124.3	90.0	107.7	140.7	94.2	123.1	155.8	89.4	116.8	147.8	89.4	116.8	147.8	121.8	154.2	190.4	116.8	147.8	182.5	130.6	165.3	204.1	155.8	192.3	232.7	138.3	170.7	206.6	155.8	192.3	232.7
	g/s		74.7	89.4	116.7	73.2	87.6	114.4	82.8	99.1	129.4	86.7	113.2	143.3	82.3	107.5	136.0	82.3	107.5	136.0	112.1	141.9	175.1	107.5	136.0	167.9	120.2	152.1	187.8	143.3	176.9	214.1	127.2	157.1	190.1	143.3	176.9	214.1
	塑化能力 g/s(PS)	Plasticising Capacity	7.0	8.7	11.3	6.8	8.4	11.0	7.7	9.6	12.5	12.8	16.4	19.5	12.2	15.6	18.5	12.2	15.6	18.5	14.3	20.5	25.6	13.7	19.5	24.4	15.3	21.9	27.3	21.2	26.2	32.2	18.7	23.2	28.5	21.2	26.2	32.2

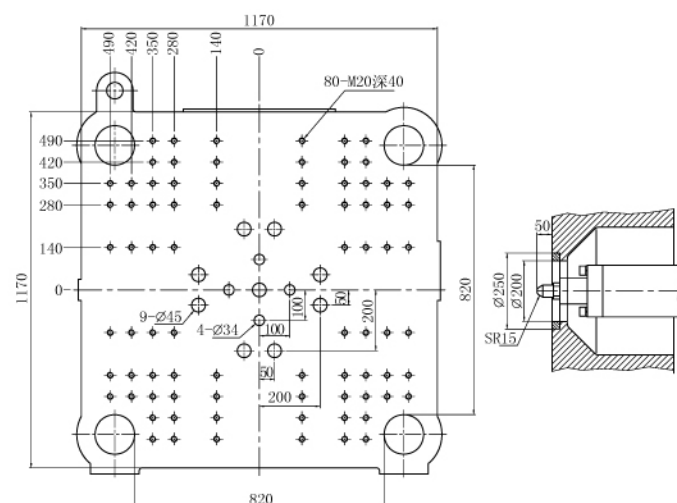


机型		BIII-250						BIII-300						BIII-320						BIII-380																			
鎖模裝置	鎖模力 kN	Clamping Force		2500						3000						3200						3800																	
	拉杆間距 mm	Space Between Tie-Bars		560×560						610×610						670×670						710×710																	
	鎖模行程 mm	Clamping stroke		500						550						640						650																	
	最大模厚 mm	Mould Thickness Max		600						650						700						720																	
	最小模厚 mm	Mould Thickness Min		200						240						250						280																	
	模板尺寸 mm	Size of Platen		795×795						855×870						940×940						975×975																	
	頂出長度 mm	Ejector Stroke		150						150						180						180																	
	頂出力 kN	Ejector Force		80						80						80						100																	
頂針數	Ejector Quantity		9						13						13						13																		
注射裝置	螺桿直徑 mm	Screw Diameter		50		55		60		55		60		65		55		60		65		65		70		75													
	螺桿長徑比 L/D	Screw L/D ratio		23.1		21		19.3		22.9		21		19.4		22.9		21		19.4		22.6		21		19.6													
	理論射膠容積 cm³	Shot Size		520		630		750		672		800		938		672		800		938		1070		1250		1434													
	實際射膠量 g(PS)	Shot Weight		478		580		690		618		736		863		618		736		863		984		1150		1319													
	oz			16.8		20.4		24.3		21.8		25.9		30.4		21.8		25.9		30.4		34.7		40.5		46.5													
	射膠壓力 MPa	Injection Pressure		217		179		150		215		178		152		215		178		152		204		176		153													
電力及其他	油箱容積 L	Oil Tank Capacity		285						345						345						410																	
	電熱功率 kW	Heater Power		15.33						18.13						18.13						22.01																	
	電熱區數	Tem Control zone		4+1						4+1						4+1						4+1																	
	系統壓力 MPa	System Pressure Max		16						16						16						16																	
	機器淨重 ton	Machine Weight		7.5						11						11.8						13																	
	機器尺寸 L×W×H mm	Machine Dimension		6000×1435×2232						6425×1550×2315						6500×1650×2315						7250×1695×2380																	
選型參考	系列	Series		V&EH		SV		SVH		V&EH		SV		SVH		V&EH		SV		SVH		V&EH		SV		SVH													
	油泵輸量 L/min	Pump Output		150		140		150		195		160		180		195		160		180		217		210		224													
	電機功率 kW	Motor Power		22.0		18.2		32.0		30.0		20.0		32.0		30.0		20.0		32.0		37.0		28.3		20*2													
	射膠速度 mm/s	Injection speed		90		84		90		103		85		95		103		85		95		85		82		88													
	螺桿轉速 rpm	Screw Speed		3~150		3~140		3~150		3~162		3~133		3~150		3~162		3~133		3~150		2~135		2~131		2~140													
	螺桿直徑	Screw Diameter		50	55	60	50	55	60	50	55	60	55	60	65	55	60	65	55	60	65	55	60	65	65	70	75	65	70	75	65	70	75						
	注射速率 cm³/s(PS)	Injection Rate		176.6	213.7	254.3	164.9	199.5	237.4	176.6	213.7	254.3	244.6	291.1	341.6	201.8	240.2	281.9	225.6	268.5	315.1	244.6	291.1	341.6	201.8	240.2	281.9	225.6	268.5	315.1	281.9	327.0	375.3	272.0	315.4	362.1	291.9	338.5	388.6
	g/s			162.5	196.6	234.0	151.7	183.5	218.4	162.5	196.6	234.0	225.0	267.8	314.3	185.7	221.0	259.4	207.5	247.0	289.9	225.0	267.8	314.3	185.7	221.0	259.4	207.5	247.0	289.9	259.4	300.8	345.3	250.2	290.2	333.1	268.5	311.4	357.5
	塑化能力 g/s(PS)	Plasticising Capacity		20.3	24.3	27.6	18.9	22.7	25.7	20.3	24.3	27.6	27.1	32.5	38.8	22.2	26.7	31.9	25.0	30.0	35.8	27.1	32.5	38.8	22.2	26.7	31.9	25.0	30.0	35.8	31.6	37.7	43.7	30.6	36.5	42.3	32.7	38.9	45.1

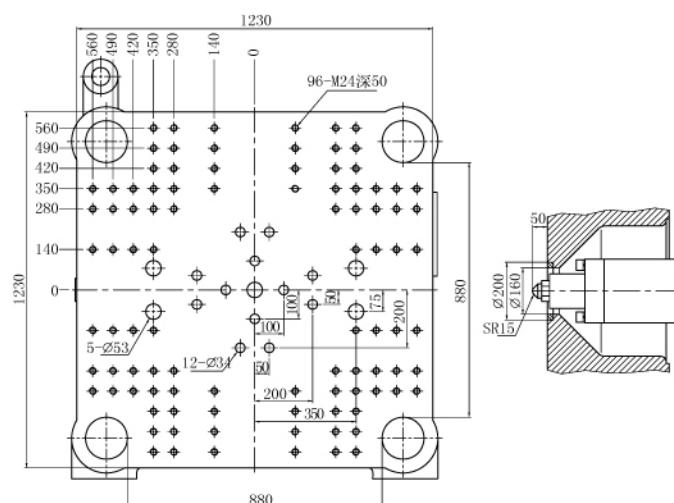


机型		B III-480												B III-580								B III-680								B III-850									
鎖模裝置	鎖模力 kN	Clamping Force		4800												5800								6800								8500							
	拉杆間距 mm	Space Between Tie-Bars		820×820												880×880								980×980								1060×1010							
	鎖模行程 mm	Clamping stroke		760												860								980								1050							
	最大模厚 mm	Mould Thickness Max		800												900								980								1100							
	最小模厚 mm	Mould Thickness Min		300												350								400								450							
	模板尺寸 mm	Size of Platen		1170×1170												1230×1230								1365×1365								1500×1450							
	頂出長度 mm	Ejector Stroke		180												200								230								250							
	頂出力 kN	Ejector Force		125												180								180								210							
	頂針數	Ejector Quantity		13												17								17								21							
注射裝置	螺桿直徑 mm	Screw Diameter		75		80		85		85		90		95		90		100		110		90		100		110													
	螺桿長徑比 L/D	Screw L/D ratio		21.3		20		18.8		21.2		20		18.9		21.1		20		19		21.1		20		19													
	理論射膠容積 cm³	Shot Size		1550		1765		1992		2426		2720		3030		2860		3530		4270		2860		3530		4270													
	實際射膠量 g(PS)	Shot Weight		1426		1624		1833		2232		2502		2788		2631		3248		3928		2631		3248		3928													
	oz			50.2		57.2		64.5		78.6		88.1		98.2		92.6		114.4		138.3		92.6		114.4		138.3													
	射膠壓力 MPa	Injection Pressure		182		160		142		190		170		152		207		168		147		207		168		138													
電力及其他	油箱容積 L	Oil Tank Capacity		530												835								900								900							
	電熱功率 kW	Heater Power		23.76												30.61								37.61								37.61							
	電熱區數	Tem Control zone		5+1												5+1								5+1								5+1							
	系統壓力 MPa	System Pressure Max		16												16								16								16							
	機器淨重 ton	Machine Weight		20												30								40								45							
	機器尺寸 L×W×H mm	Machine Dimension		7722×1900×2520												8834×2046×2645								9742×2200×2675								10000×2500×2700							
選型參考	系列	Series		V&EH		SV		SVH		V&EH		SV		SVH		V&EH		SV		SVH		EH		SVH															
	油泵輸量 L/min	Pump Output		270		250		260		367		320		330		434		400		400		434		400															
	電機功率 kW	Motor Power		45.0		31.0		20×2		30+22		20×2		32+20		37×2		28×2		32×2		37×2		32×2															
	射膠速度 mm/s	Injection speed		89		83		86		90		79		81		87		80		80		87		80															
	螺桿轉速 rpm	Screw Speed		2~135		2~125		2~130		1~122		1~106		1~110		1~124		1~114		1~114		1~124		1~114															
	螺桿直徑	Screw Diameter		75	80	85	75	80	85	75	80	85	85	90	95	85	90	95	85	90	95	90	100	110	90	100	110	90	100	110	90	100	110						
	注射速率 cm³/s(PS)	Injection Rate		393.0	447.1	504.8	366.5	417.0	470.7	379.7	432.1	487.8	510.4	572.3	637.6	448.1	502.3	559.7	459.4	515.0	573.9	553.2	683.0	826.4	508.7	628.0	759.9	553.2	683.0	826.4	508.7	628.0	759.9						
	g/s			361.6	411.4	464.4	337.2	383.6	433.1	349.4	397.5	448.7	469.6	526.5	586.6	412.2	462.1	514.9	422.6	473.8	527.9	508.9	628.3	760.3	468.0	577.8	699.1	508.9	628.3	760.3	468.0	577.8	699.1						
	塑化能力 g/s(PS)	Plasticising Capacity		64.2	69.7	75.2	59.4	64.5	69.7	61.8	67.1	72.5	68.5	76.3	83.2	59.7	66.6	72.5	61.6	68.6	74.8	81.2	90.2	100.3	74.8	83.1	92.5	81.2	90.2	100.3	74.8	83.1	92.5						

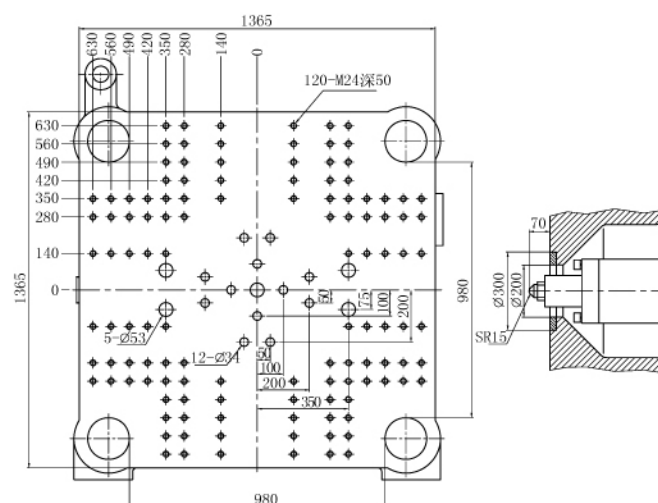
BIII-480



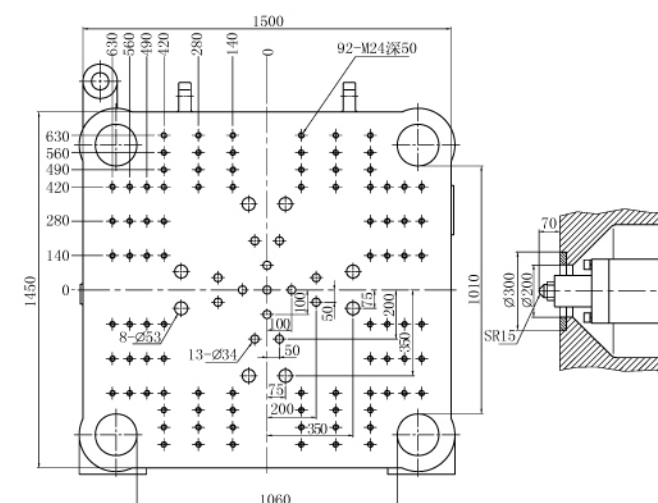
BIII-580



BIII-680

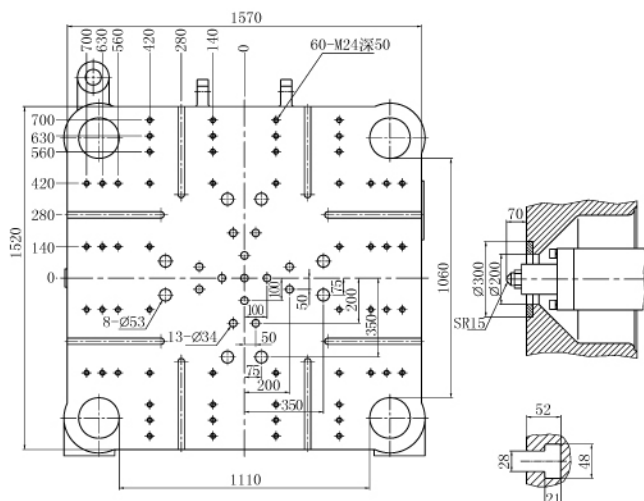


BIII-850



机型		BIII-1000						BIII-1300						
鎖模裝置	鎖模力 kN	Clamping Force	10000						13000					
	拉杆間距 mm	Space Between Tie-Bars	1110×1060						1360×1260					
	鎖模行程 mm	Clamping stroke	1150						1350					
	最大模厚 mm	Mould Thickness Max	1200						1300					
	最小模厚 mm	Mould Thickness Min	450						600					
	模板尺寸 mm	Size of Platen	1570×1520						1900×1800					
	頂出長度 mm	Ejector Stroke	250						330					
	頂出力 kN	Ejector Force	210						280					
	頂針數	Ejector Quantity	21						25					
注射裝置	螺杆直徑 mm	Screw Diameter	100	110	120	110	120	130						
	螺杆長徑比 L/D	Screw L/D ratio	23	21	19.2	21.8	20	18.4						
	理論射膠容積 cm³	Shot Size	4139	5000	5950	5460	6500	7620						
	實際射膠量 g(PS)	Shot Weight	3808	4600	5474	5023	5980	7010						
	oz		134.1	162.0	192.7	176.9	210.6	246.8						
	射膠壓力 MPa	Injection Pressure	212	175	147	209	176	150						
電力及其他	油箱容積 L	Oil Tank Capacity	1000						1000					
	電熱功率 kW	Heater Power	46.9						58					
	電熱區數	Tem Control zone	5+1						5+1					
	系統壓力 MPa	System Pressure Max	16						16					
	機器淨重 ton	Machine Weight	48						60					
	機器尺寸 L×W×H mm	Machine Dimension	11300×2600×2900						12500×3200×3100					
選型參考	系列	Series	EH			SVH			EH			SVH		
	油泵輸量 L/min	Pump Output	540			500			585			570		
	電機功率 kW	Motor Power	30+30+18.5			18.2×3+18.5			30+30+22			18.2×3+22		
	射膠速度 mm/s	Injection speed	84			78			76			75		
	螺杆轉速 rpm	Screw Speed	1~100			1~100			1~100			1~100		
	螺杆直徑	Screw Diameter	100	110	120	100	110	120	110	120	130	110	120	130
	注射速率 cm³/s(PS)	Injection Rate	659.4	797.9	949.5	612.3	740.9	881.7	721.9	859.1	1008.3	712.4	847.8	995.0
	g/s		606.6	734.0	873.6	563.3	681.6	811.2	664.1	790.4	927.6	655.4	780.0	915.4
	塑化能力 g/s(PS)	Plasticising Capacity	83.0	102.0	125.0	83.0	102.0	125.0	103.0	122.0	145.0	103.0	122.0	145.0

(BIII-1000)



(BIII-1300)

