

HCW-CL Series



Energy-Saving Servo Pump Series



HWA CHIN MACHINERY FACTORY CO.,LTD.

HCW-CLSE Series

Microcomputer plastics injection molding machine

機械特點

Characteristic

■ 油電伺服系統

1. 與全電式射出機相同，有動作才有電力消耗，且電力僅供給所需之速度，不會造成電力的額外損耗，可達絕對省電之終極目標，約可比變排量幫浦省電40%，較定量幫浦省電60%。
2. 通過控制器及壓力感應器，回饋實際精密的速度與壓力控制。
3. 0.1sec 下應答時間及0.1%的重複性及直線性。
4. 油、機、電全方位整合成一單元，輸出更精密穩定。
閉環壓力控制：系統壓力輸出不受溫度變化而改變，低油溫或高油溫自動補償特點。
閉環速度控制：系統流量可依照需求輸出一定轉速，搭配齒輪泵，減少低速波動。
5. 節能省電，依據實際流量需求，輸出一定轉速，待機無負載時流量極少，無虛功輸出省電顯著，油溫不上升零件壽命增長。
6. 簡易調整校正的控制介面全數位式設定，依據性能需要，只要改變參數值，不必做繁瑣的電壓調整、節流孔更改等...，縮短調整校正工時。

■ Hybrid Servo System

1. Same as All-Electric Injection Molding Machine which has power consumption with machine operation. Besides, power simply supplies for required action without extra power waste which can achieve the purpose of energy saving. Servo Pump saves about 40% power compared to Variable Pump and 60% power compared to Fixed pump.
2. Servo Pump can be driving with actual feedback of precise speed and pressure through Driver and Pressure Sensor.
3. There is quick response with less than 0.1 second as well as high repetition precision and linearity less than 0.1%.
4. The integration of hydraulic-mechanism-electricity into one unit makes output more precise and stable.
closed-loop pressure control: output of system pressure is not changed by variation of temperature. It will compensate automatically if the oil temperature is too low or too high.
closed-loop speed control: system flow can output stable rotation speed per demand.
5. Energy saving with low noise. Servo Pump can output stable rotation speed according to actual flow demand. The flow is extremely low in order to save energy while machine is idles. Temperature of hydraulic oil is not risen and component durability will be extended.
6. Simple control interface for adjustment and calibration. Clients can just modify parameter without voltage adjustment, throttle adjustment and so on, and in order to shorten calibration time.



選擇樺欽·選擇最好
The Best Choice-"HWA CHIN"

塑膠射出成型機-省電節能新法寶-HCW-CL_{SE} Series
Plastic Injection Molding Machine.....
Your Choice for ENERGY SAVING ----- HCW-CL_{SE} Series



HWA CHIN MACHINERY FACTORY CO., LTD.

機械特色

Products' Features



STABLE
efficiency
HIGH

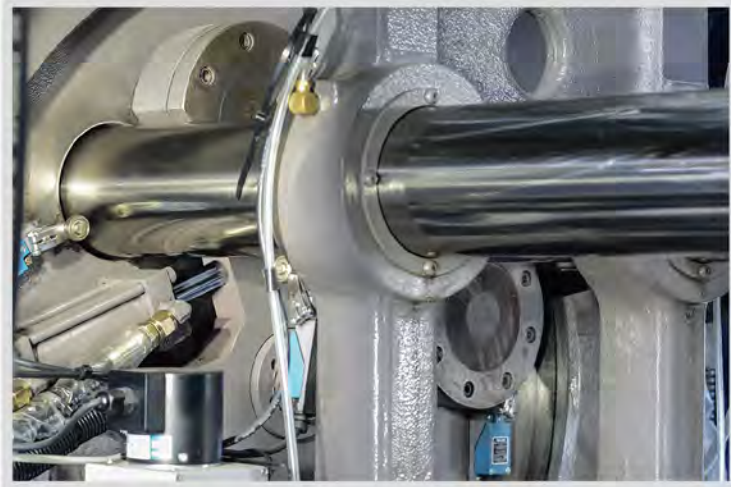
高性能射出單元

1. 優異之四缸射出系統，以符合各式之射出條件。
2. 性能卓越之油壓系統，可以提供穩定射出動作。
3. 可搭配快速方向閥，有效提升射出精度。
4. 入料可搭配電動直驅馬達，大幅降低生產週期時間。(加購)

HIGH EFFICIENCY INJECTION UNIT

1. SUPERIOR FOUR-CYLINDER INJECTION SYSTEM WHICH APPLY TO VARIOUS INJECTION CONDITION.
2. SUPERIOR HYDRAULIC SYSTEM TO PROVIDE STABLE INJECTION PROCEDURE.
3. IMPROVE THE PRECISION OF INJECTION WITH DIRECTIONAL PROPORTION VALVE (OPTIONAL).
4. IN ORDER TO SHORTEN PRODUCE CYCLE TIME, CLIENTS CAN SELECT ELECTRIC MOTOR FOR FEEDING (OPTIONAL).

products features



直壓鎖模單元

- 1.較大的橫向(H)柱內尺寸，可安裝寬幅的模具。
- 2.開模行程較曲肘式多15%以上
- 3.採用4支高剛性鎖模桿傳輸鎖模力，受力分佈均勻，有效降低模壁變形量。

HYDRAULIC PISTON CLAMPING UNIT

1. FOR INSTALLING WIDER MOLD IN BIGGER HORIZONTAL DIMENSION (H) OF SPACE BETWEEN TIE BAR.
2. THE OPENING STROKE IS 15% MORE THAN TOGGLE CLAMPING UNIT.
3. FOUR HIGH-RIGIDITY RODS OF CLAMPING ARE USED TO TRANSMIT CLAMPING FORCE EVENLY AND IN ORDER TO REDUCE THE DEFORMATION OF PLATEN EFFECTIVELY.

FAST ONOR

最新專用微電腦控制系統

- 1.採用最新觸控螢幕，精確穩定的專用微電腦控制系統。
- 2.可記憶數百組完整的成型條件。
- 3.內含PID溫度控制系統，使溫度控制準確穩定。
- 4.機台裝配電阻尺，可精確有效地滿足各類射出成型需求。
- 5.可擴增電腦連線功能，達到整廠射出機資料管理。



QUALITY PROVEN CONTROL SYSTEM

1. ADOPTS THE NEWEST TOUCHSCREEN WITH MICROCOMPUTER CONTROL SYSTEM FOR ACCURACY AND STABILITY.
2. SEVERAL HUNDREDS MOLDING DATA CAN BE SAVED.
3. PID TEMPERATURE CONTROL MODULE ASSURES MAXIMUM STABILITY AND ACCURACY.
4. EQUIPPED WITH REPUTABLE TRANSDUCER IN ORDER TO ACHIEVE VARIOUS REQUIREMENT OF INJECTION MOLDING PRECISELY.
5. EXPANDABLE COMPUTER CONNECTION FUNCTION IN ORDER TO ACHIEVE MANAGEMENT OF INJECTION MOLDING DATA FROM EACH MACHINE.

HCW-CLSE 系列規格表

Specification

機械型號 Machine Model		HCW-380CLSE						HCW-480CLSE					
鎖模單元 Clamping Unit													
鎖模力 Clamping Force	ton	400						550					
開模行程 Clamping Stroke	mm	1000						1100					
柱內間隔 Tie Bar Clearance(HxV)	mm	710x650						860x780					
模板尺寸 Platen Size	mm	1050x990						1240x1160					
模厚範圍 Range of Mold Height	mm	180-750						250-950					
頂出行程 Ejector Stroke	mm	180						240					
射出單元 Injection Unit		S11			S13			S15			S17		
螺旋桿直徑 Screw Diameter	mm	55	60	65	60	65	70	65	70	75	70	75	80
理論射出容積 Theoretical Shot Volume	cm ³	617	734	861	848	994	1153	1128	1308	1502	1539	1767	2010
射出重量 Shot Weight(PS)	g	555	660	775	763	894	1037	1010	1172	1345	1379	1583	1801
雙缸射出壓力 Injection Pressure	kg/cm ²	1629	1368	1166	1866	1590	1370	1723	1485	1294	1822	1587	1395
四缸射出壓力 Injection Pressure(four)	kg/cm ²	2110	1773	1511	2450	2087	1800	2220	1914	1667	2372	2067	1816
雙缸射出率 Injection Rate	cm ³ /sec	346	412	484	304	356	413	434	504	578	410	471	536
四缸射出率 Injection Rate(four)	cm ³ /sec	269	320	375	231	271	315	337	391	448	315	362	412
螺旋桿迴轉數 Screw Rotating Speed	rpm	0~240			0~200			0~225			0~130		
電熱容量 Heater Capacity	kW	12.5	18.5	18.5	16.2	19.8	19.8	19.9	27.1	27.1	27.4	31	31
電氣馬達(最大負載) PUMP MOTOR	kW	33-35			33-35			41-55			41-55		
泵浦最高使用壓力 System Pressure	kg/cm ²	140			140			140			140		
最大機械尺寸 Machine Size(LxWxH)	M	7.2x1.8x2.2			7.2x1.8x2.2			8.6x2.1x2.2			8.6x2.1x2.2		
機械重量 Net Weight	ton	11.9			12.4			20.6			20.8		

1. 射出量以ps為準，(螺桿斷面層x射出行程)x(比重)x(射出效率)
2. 電動馬達(最大負載)依選用品牌不同而有所區別，此數值非耗電量，而是馬達最大承載量
3. SE系列搭配日本製伺服泵系統
4. 本型錄規格及圖片僅供參考，實際配備若有不同，以實物配備規格為主

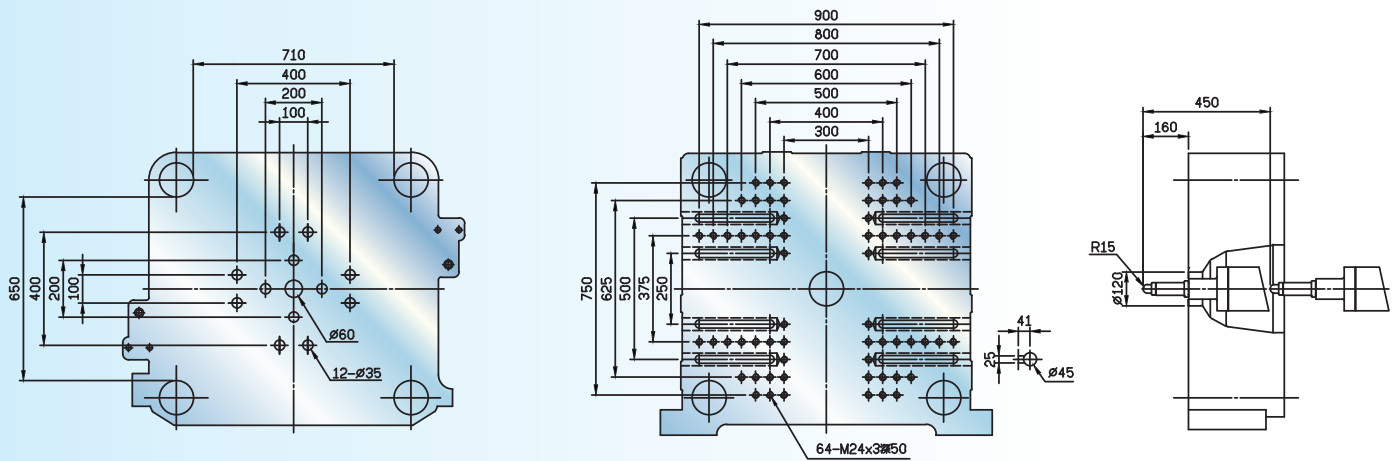
機械型號 Machine Model		HCW-620CLSE						HCW-820CLSE						HCW-1080CLSE					
鎖模單元 Clamping Unit																			
鎖模力 Clamping Force	ton	700						1000						1300					
開模行程 Clamping Stroke	mm	1200						1300						1450					
柱內間隔 Tie Bar Clearance(HxV)	mm	980x880						1100x1000						1220x1150					
模板尺寸 Platen Size	mm	1400x1300						1570x1470						1730x1660					
模厚範圍 Range of Mold Height	mm	275-1100						300-1200						300-1300					
頂出行程 Ejector Stroke	mm	300						300						320					
射出單元 Injection Unit		S17			S19			S19			S21			S21			S23		
螺旋桿直徑 Screw Diameter	mm	70	75	80	75	80	90	75	80	90	80	90	100	80	90	100	100	110	120
理論射出容積 Theoretical Shot Volume	cm ³	1539	1767	2010	1943	2211	2799	1943	2211	2799	2362	2990	3691	2362	2990	3691	4712	5701	6785
射出重量 Shot Weight(PS)	g	1379	1583	1801	1741	1981	2508	1741	1981	2508	2116	2679	3307	2116	2679	3307	4222	5108	6080
雙缸射出壓力 Injection Pressure	kg/cm ²	1822	1587	1395	1911	1680	1327	1911	1680	1327	2205	1742	1411	2205	1742	1411	2082	1721	1446
四缸射出壓力 Injection Pressure(four)	kg/cm ²	2372	2067	1816	2510	2206	1743	2510	2206	1743	2848	2250	1822	2848	2250	1822	2712	2241	1883
雙缸射出率 Injection Rate	cm ³ /sec	473	542	617	450	512	648	593	675	854	513	649	801	647	819	1012	684	828	985
四缸射出率 Injection Rate(four)	cm ³ /sec	362	416	473	343	390	494	451	513	650	397	503	621	500	633	782	525	636	757
螺旋桿迴轉數 Screw Rotating Speed	rpm	0~150			0~130			0~170			0~135			0~170			0~110		
電熱容量 Heater Capacity	kW	27.4	31	31	31.4			31.4			38			38			62.2		
電氣馬達(最大負載) PUMP MOTOR	kW	49-55			49-55			66-70			66-70			82-90			82-90		
泵浦最高使用壓力 System Pressure	kg/cm ²	140			140			140			140			140			140		
最大機械尺寸 Machine Size(LxWxH)	M	10.0x2.2x2.3			10.0x2.2x2.3			10.0x2.4x2.6			11.0x2.4x2.6			12.6x2.6x2.7			12.6x2.6x2.7		
機械重量 Net Weight	ton	26.2			26.5			43.8			44.3			53.6			54.1		

- 1.Injection weight is calculated by PS material.
- 2.The SE Series are equipped with Japan made servo system.
- 3.Design and specification are subject to change without prior notice.

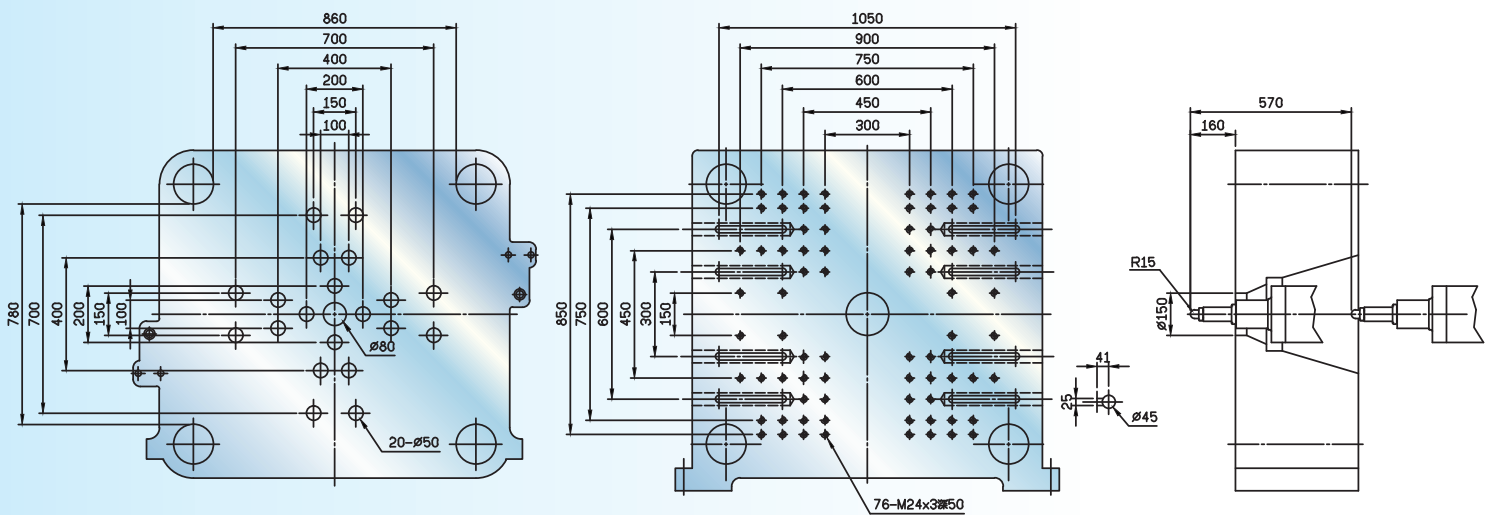
模具固定螺孔位置

Mold Platen Dimensions

HCW-380CL



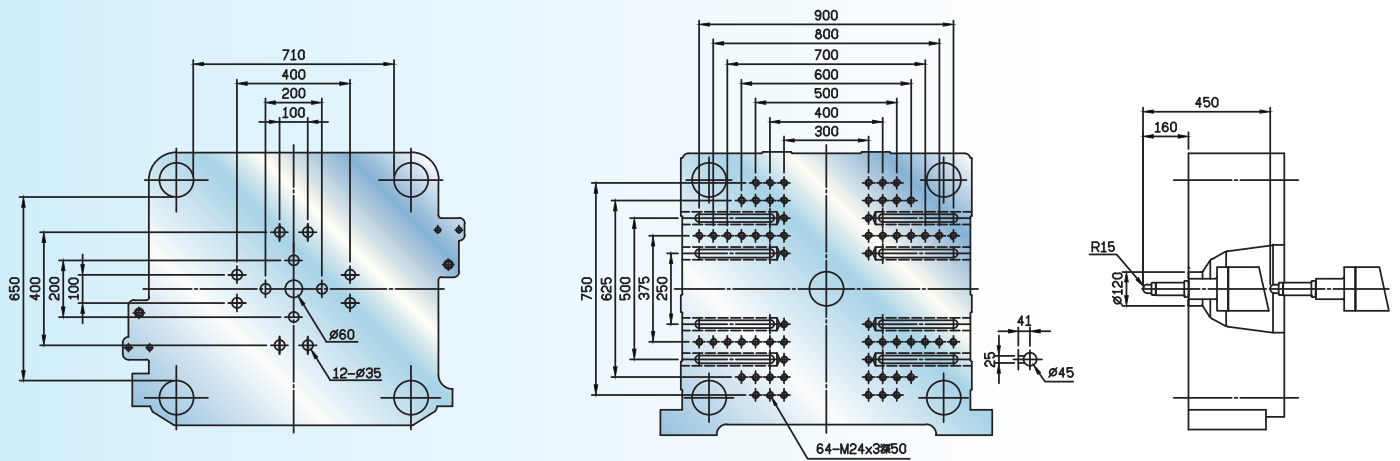
HCW-480CL



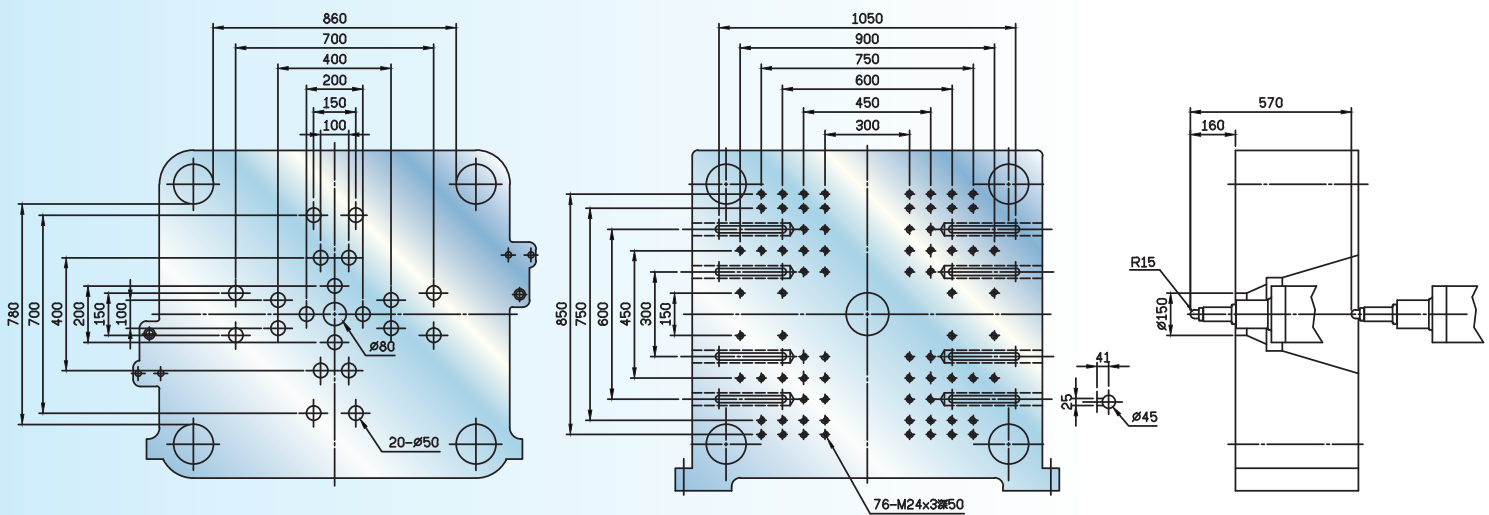
模具固定螺孔位置

Mold Platen Dimensions

HCW-380CL

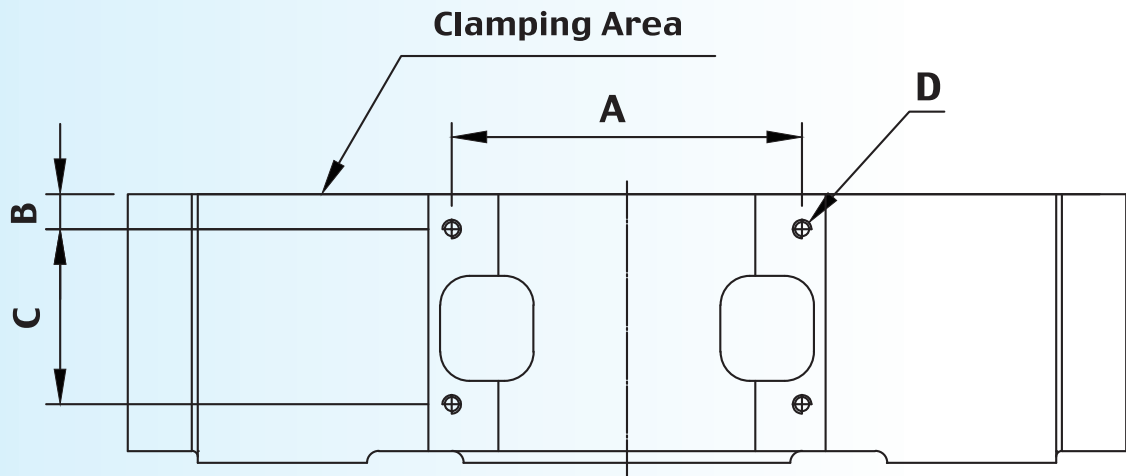


HCW-480CL

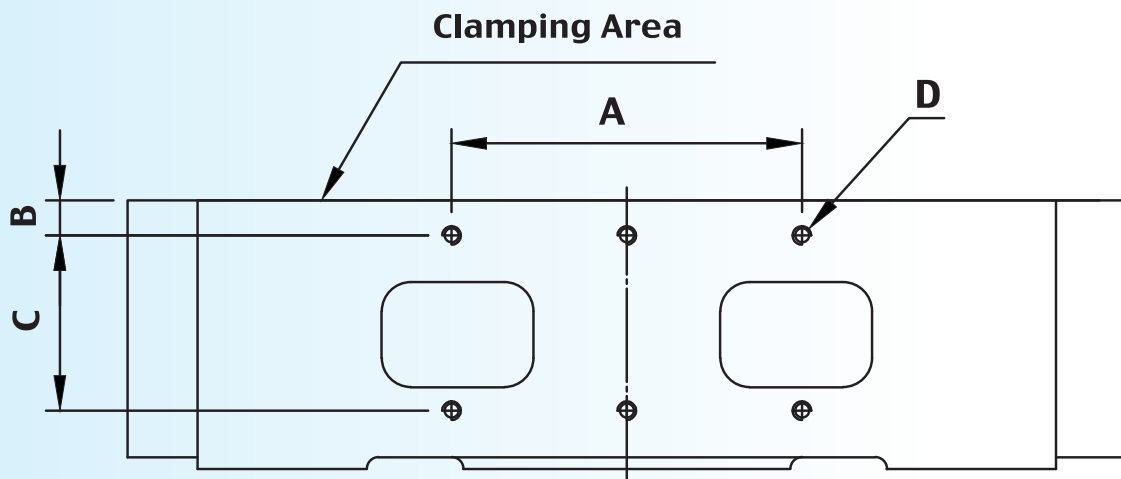


機械手固定孔位置

Hole Pattern For Robot



Model \ Item	A	B	C	D
HCW-380CL	350	40	240	4XM20 D40
HCW-480CL	400	50	300	4XM24 D50



Model \ Item	A	B	C	D
HCW-620CL	500	50	330	6XM24 D50
HCW-820CL	550	50	380	6XM24 D50
HCW-1080CL	600	50	430	6XM24 D50

行銷與技術服務

Sales And Service



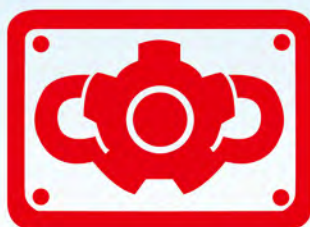
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本公司服務人員不定期接受專業講習和在職訓練，隨時提昇技術水準。

服務人員均具備機構、油壓、電控和射出成型技術方面的專業素養，可為客戶提供迅速完善的機器維護工作，使每一部樺欽製造的機械，都能即時成為客戶賺錢的利器。

Based on the concept of sales and service integration, our service network covers the whole country. Many factories trained independent distributors around the world stand ready to help customers solve various injection molding problems. Hwa Chin's front line sales staffs have outstanding technical knowledge.

Our experienced service engineers in different locations often return to the main factory for on-going seminars and routine training to keep up with technical improvements. Our service engineers professional knowledge in various aspects including mechanical, hydraulic, electrical control solution to customers and to provide a competitive edge for injection molding jobs.



樺欽機械廠有限公司

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