



Constant Innovation

SANDSUN ISO 9001 CE

QUICK MOLD CHANGE SYSTEM
快速換模/台車系統

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壓鑄機

DIE CASTING MACHINE

射出成型機

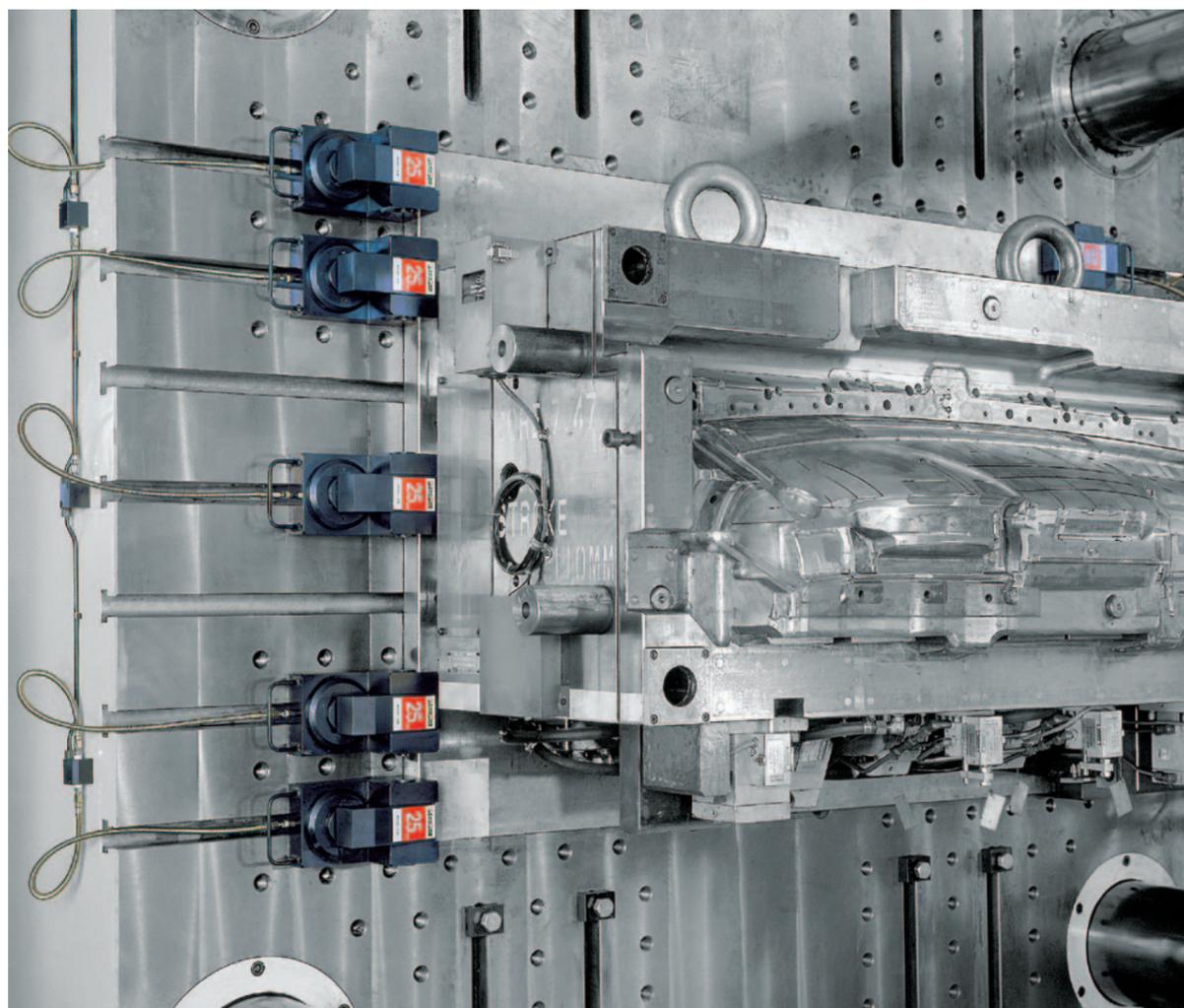
INJECTION MOLDING MACHINE

中空成型機

BLOW MOLDING MACHINE

QUICK MOLD CHANGE SYSTEM

It is an era for making high frequency mold change with multiple patterns and small quantity. In order to save time for the mold change and ensure the safety of the operation, it is just in time to apply Quick Mold Change System.



Safety function of system

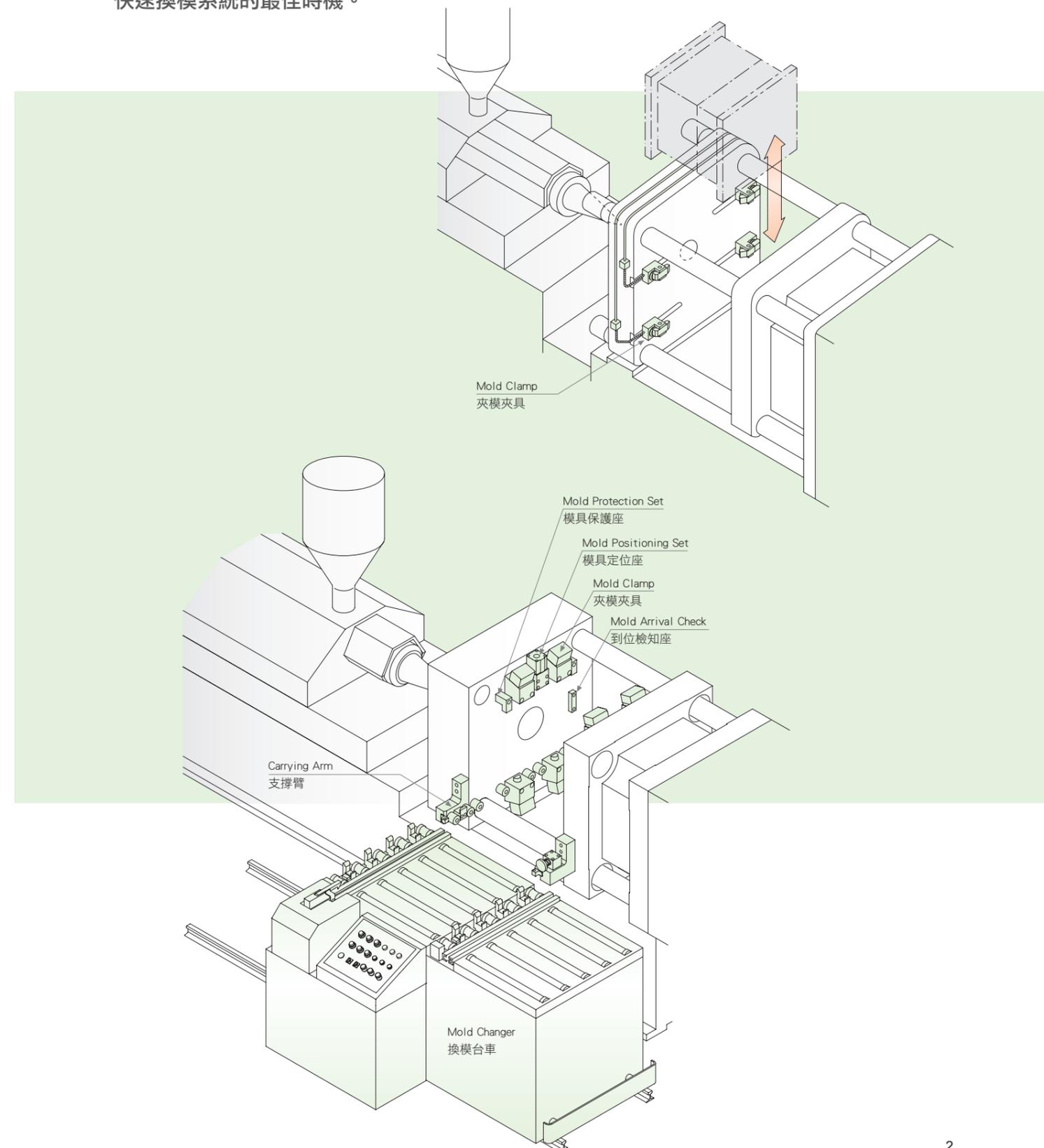
- Each hydraulic circuit has the function of checking and avoiding oil leaking.
- This system can add pressure automatically when the pressure reduction.
- Each hydraulic circuit has the function of inspection pressure and can be interlocked with the machine.
- It adopts the intersecting direction to clamp the mold.
- There are several functions to avoid operation error.

系統安全功能

- 各油壓迴路具有逆止防漏功能。
- 此系統具壓降時自動補壓功能。
- 各油壓迴路具低於安全壓力檢知功能，並與機台連線。
- 夾模採對角交叉方向鎖模控制。
- 操控具多項防呆功能。

快速換模 / 台車系統

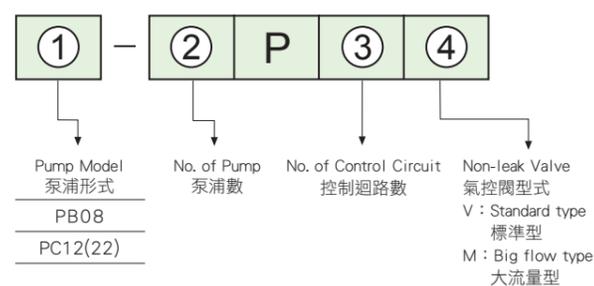
迎接少量多樣高頻率換模生產型態的時代，爭取換模時效、確保操作安全—正是導入快速換模系統的最佳時機。



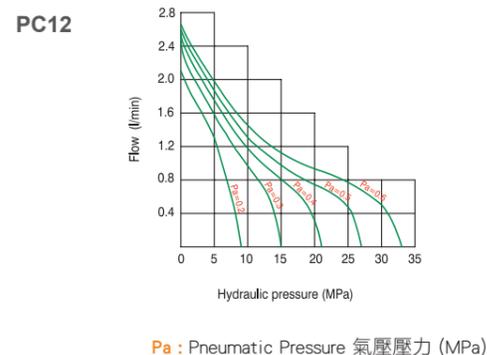
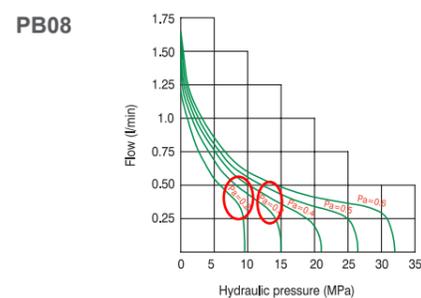


- The hydraulic pump is driven by air. Once the outlet hydraulic pressure reaches the setting pressure, it will stop pumping which won't waste any energy. The pressure would be added automatically if the outlet pressure is reducing. It consists of the function to keep the pressure continuously.
- 利用空氣壓力驅動泵浦，出口油壓達設定壓力即停止作動不需繼續消耗能源，出口壓力下降則自動補壓，具持續保持該壓力功能。

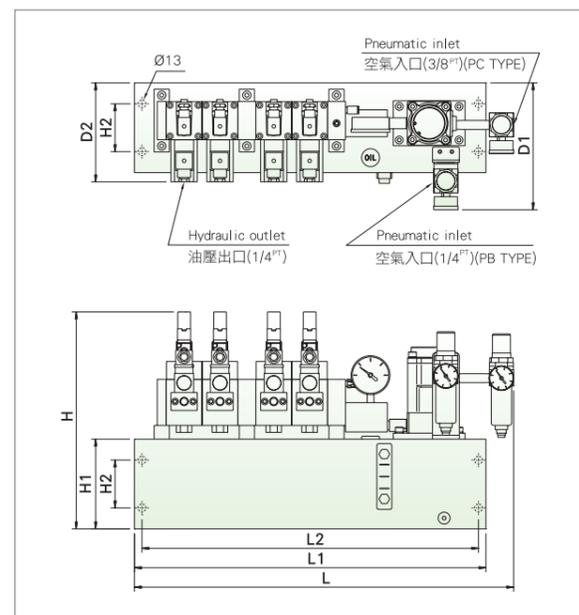
Model Selection 型式選定



Discharge Flow Characteristics 吐出量特性圖



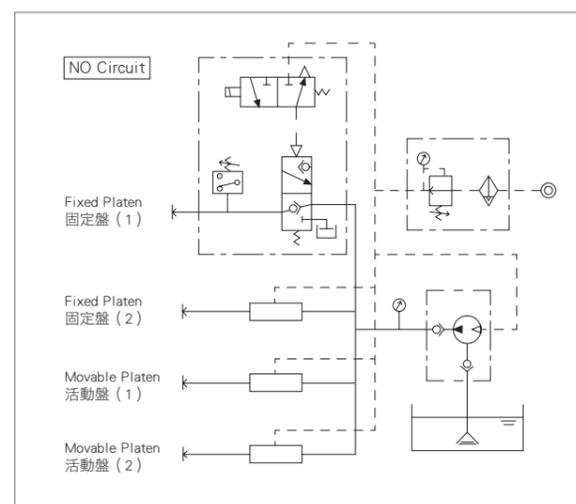
Outline Dimensions 外型尺寸



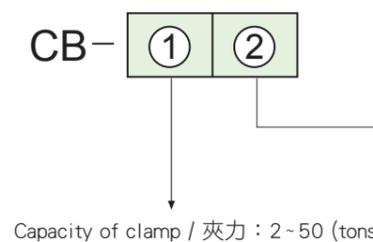
MODEL 型式	L	L1	L2	H	H1	H2	D1	D2	V
PB08-1P4V	-	588	563	367	150	80	235	-	10/
PC12-1P4V	650	588	563	367	150	80	-	175	10/
PC12-1P4V	650	588	563	417	200	80	-	225	17/
PCC1222-2P4M	990	868	843	417	200	80	-	225	27/

● V : Volume of oil tank (Liter) 油箱容量

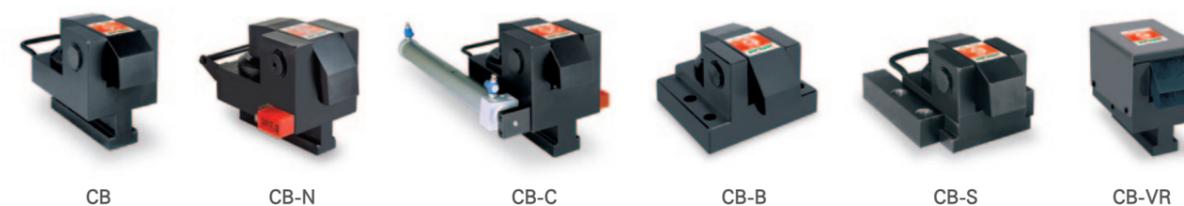
Circuit Control System 迴路控制系統



Model Selection 型式選定



- EMPTY : Standard type 無：標準式
- N : With sensor type 附近接開關 DC10~30V (NPN, 3-Wire)
- C : Pneumatic cylinder movable type 氣缸移動式
- B : Fixed type 固定式
- S : Slide movable type 導座式
- V : Heat-resistant type 耐高溫式 (無護蓋)



Instruction of Specification 規格說明

MODEL 型式	CB-2	CB-4	CB-6	CB-10	CB-16	CB-25	CB-50
Capacity of clamp 夾力 * tons	2	4	6	10	16	25	50
Total stroke (X) 總行程 (X) mm	8	8	8	8	8	8	10
Stroke of clamp (Y) 夾具行程 (Y) mm	3	3	3	3	3	3	4
Preserved stroke (Z) 預留行程 (Z) mm	5	5	5	5	5	5	6
Total volume of cylinder 油缸總容量 cc	7.5	13	21	38	55	98	220
The tolerance of the template thickness (H) 模板厚度允許公差 : (H) mm	±2	±2	±2	±2	±2	±2	±2

* Hydraulic Pressure 使用油壓壓力：24.5MPa (250kg/cm²) (3550psi)

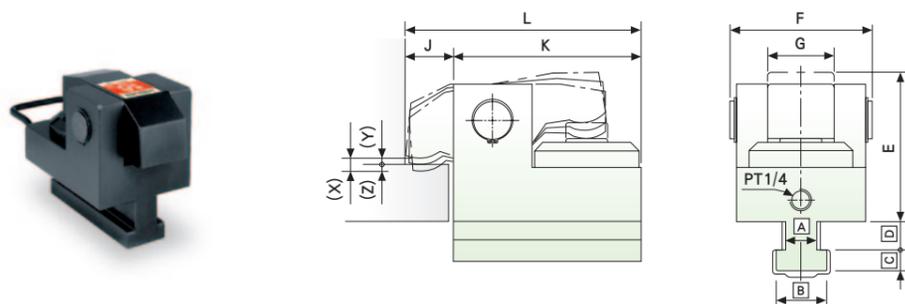
Selection of System Components 選用規範

MACHINE TONS 機台噸數	CLAMP 夾具	NO. OF CLAMP 夾具數量	PUMP UNIT 泵浦單元	HEIGHT OF TANK 油箱高度
100~150	CB-2	8	PB08-1P4V	150
150~250	CB-4	8		
280~350	CB-6	8		
380~550	CB-10	8		
550~850	CB-16	8		
850~1300	CB-16	12	PC12-1P4V	150
1300~1600	CB-25	8		
1800~2500	CB-25	16	PCC1222-2P4M	200
2600~3200	CB-25	20		
3300~4000	CB-50	12		

* If machine over 4000T, will planning customized. 機台噸數4000噸以上，依機台狀況客製化規畫。

CLAMP OUTLINE / DISTRIBUTION 夾具外型 / 配置

Model CB



Outline Dimensions 外型尺寸

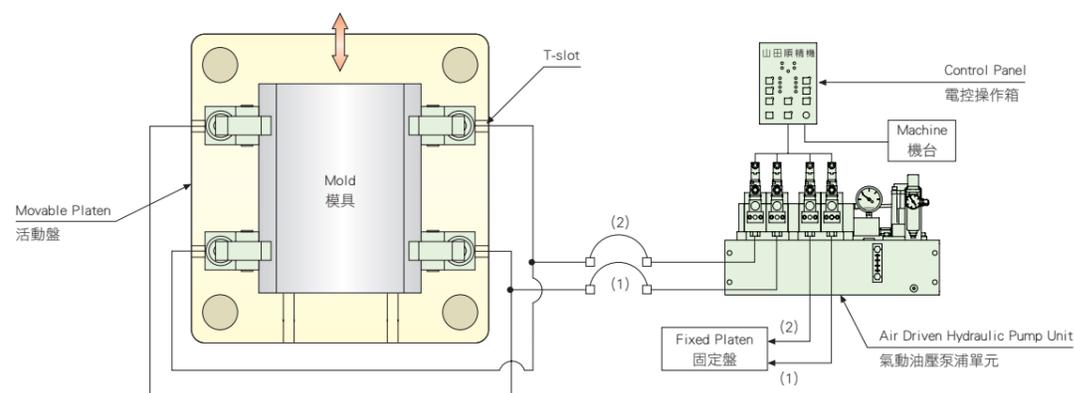
Unit : mm

MODEL 型式	L	K	J	min. E	F	G	min. C
CB-2	110	90	20	73	68	32	10
CB-4	134	110	24	77	79	40	12
CB-6	159	130	29	92	96	46	14
CB-10	189	159	30	114	117	54	16
CB-16	230	200	30	126	129	58	20
CB-25	265	235	30	148	156	70	23
CB-50	320	290	30	180	246	110	34

- The size of clamps **A** **B** **C** and **D** are made based on the size of T-slot.
- 夾具 **A** **B** **C** **D** 尺寸係配合T槽尺寸製作。

Vertical Loading / 上方換模

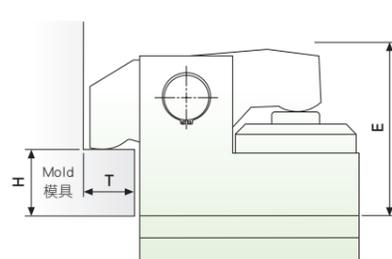
Platen with T-slot
台盤有T型槽



- Optional for position checking sensor 可選配定位檢知配備

The Requirement of Mold Dimension / 模具配合尺寸

Flange Type of Mold 模具標準型

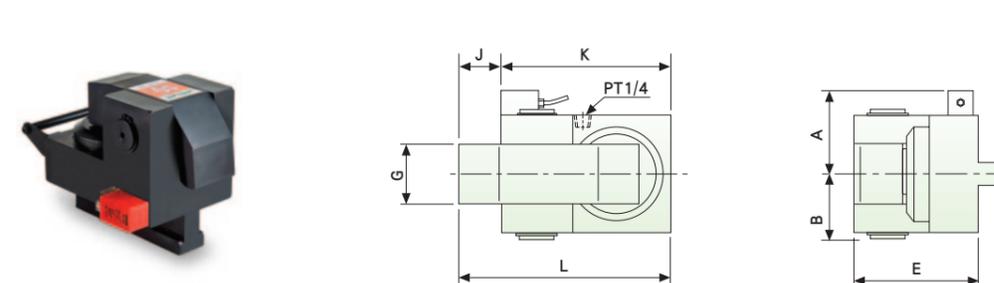


Unit : mm

MODEL 型式	E	T	H
CB-2	73	20	25
CB-4	77	24	25
CB-6	92	29	30
CB-10	114	30	40
CB-16	126	30	40
CB-25	148	30	45
CB-50	180	30	60

- The dimension is as minimum. 左側尺寸為min.
- If $H < \text{min size}$, it needs special design. H 如小於左述尺寸需特殊設計
- The template thickness : $H \pm 2\text{mm}$ 模板厚度 : $H \pm 2\text{mm}$

Model CB-N



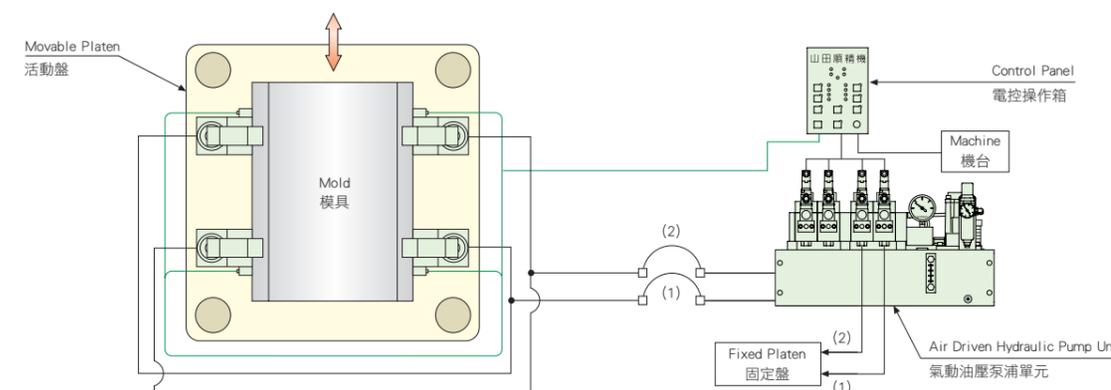
Outline Dimensions 外型尺寸

Unit : mm

MODEL 型式	A	B	min. E	G	J	K	L
CB-2N	48	34	73	32	20	90	110
CB-4N	61.5	39.5	77	40	24	110	134
CB-6N	70	48	92	46	29	130	159
CB-10N	80	58.5	114	54	30	159	189
CB-16N	86	64.5	126	58	30	200	230
CB-25N	99	78	148	70	30	235	265
CB-50N	144	123	180	110	30	290	320

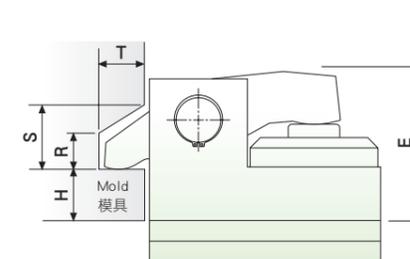
Vertical Loading / 上方換模

Platen with T-slots and manual clamp equipped with sensor.
台盤有T型槽，夾具加裝近接開關檢知



The Requirement of Mold Dimension / 模具配合尺寸

Concave Type of Mold 模具凹入型



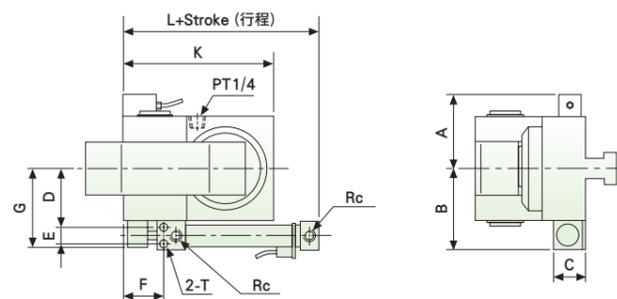
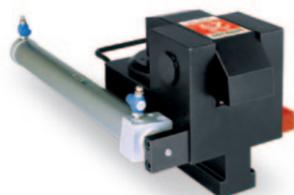
Unit : mm

MODEL 型式	R	S	T	H	E
CB-2	18	30	20	35	83
CB-4	18	32	24	35	87
CB-6	20	38	29	40	102
CB-10	22	40	30	50	124
CB-16	30	47	30	50	136
CB-25	45	62	30	50	160
CB-50	52	70	30	60	180

- The dimension is as minimum. 左側尺寸為min.
- If $H < \text{min size}$, the size of R and S need to be changed. H 如小於左述尺寸則R·S尺寸需更改
- The template thickness : $H \pm 2\text{mm}$ 模板厚度 : $H \pm 2\text{mm}$

CLAMP OUTLINE / DISTRIBUTION 夾具外型 / 配置

Model CB-C



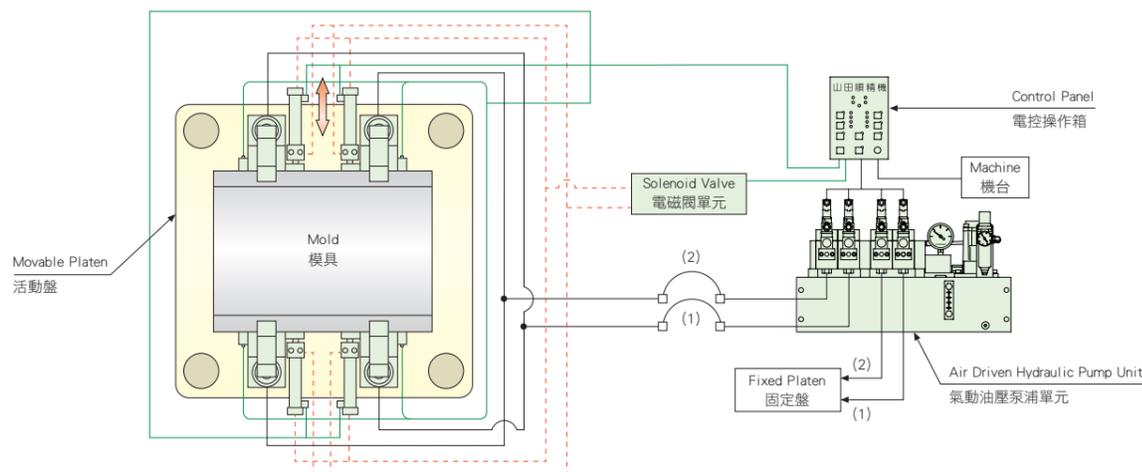
Outline Dimensions 外型尺寸

Unit : mm

MODEL 型式	A	B	C	D	E	F	G	K	L	Rc	Tapping(T) 台盤加工
CB-2C	48	68	28	41	20	57.5	66	90	131	1/8	M6×12D
CB-4C	61.5	73.5	28	46.5	20	57.5	71.5	110	131	1/8	M6×12D
CB-6C	70	86	34	55	24	61.5	82	130	135	1/8	M6×12D
CB-10C	80	104	40	66	30	48.5	101	159	129	1/8	M8×16D
CB-16C	86	119.5	50	73.5	36	50	117	200	141	1/8	M10×20D
CB-25C	99	133	50	87	36	50	130	235	141	1/8	M10×20D
CB-50C	144	261	100	138	110	62	219	290	192	3/8	M16×32D

Vertical Loading / 上方換模

Platen with T-slots and clamps moved automatically by pneumatic cylinder
台盤有T型槽，夾具採氣缸自動進退



• Another selection of clamping direction : left-right 可改為左右方向夾模

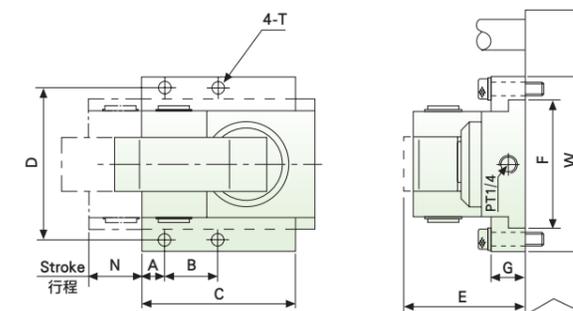
POWER CONTROL PANEL 動力控制箱



- This panel is applied to clamp CB-C type.
- Distribution of panel :
 - Air driven hydraulic pump unit.
 - Air solenoid valve unit.

- 夾具採CB-C型時，搭配此控制箱。
- 控制箱配置：
 - 氣動油壓泵浦單元。
 - 氣壓電磁閥單元。

Model CB-S



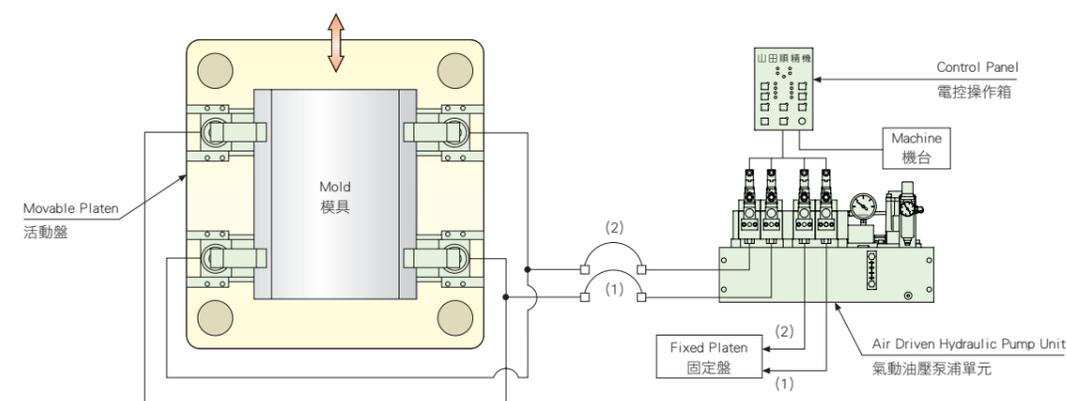
Outline Dimensions 外型尺寸

Unit : mm

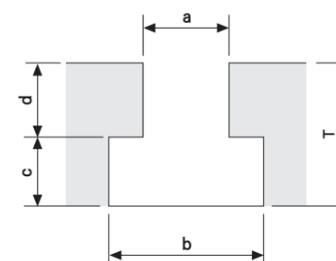
MODEL 型式	A	B	C	D	min. E	F	G	W	max. N	Tapping(T) 台盤加工
CB-2S	12	20	80	98	90	76	30	124	25	M10×20D
CB-4S	12	25	100	109	93	87	30	135	30	M12×24D
CB-6S	15	30	120	126	109	104	30	152	35	M12×24D
CB-10S	15	35	150	148	131	124	36	174	40	M14×28D
CB-16S	20	40	200	166	142	138	44	200	50	M18×36D
CB-25S	20	50	235	200	163	168	48	240	60	M22×45D

Vertical Loading / 上方換模

For Platen without T-slots and the sizes of mold are variable.
台盤無T型槽，模具尺寸不統一



Suggested Dimension of T-slot / Additional T-slots Platen T型槽 / 附加台盤建議尺寸

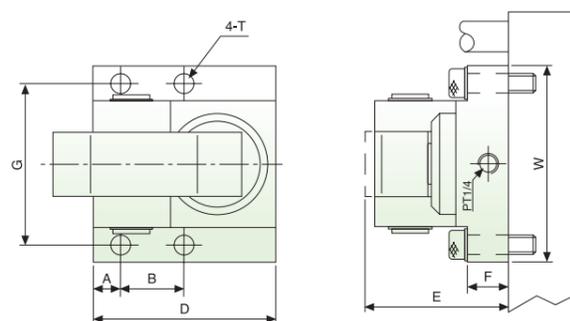


	T	a	b	c	d
CB-2	32	18	32	14	18±0.2
CB-4	40	22	37	16	24±0.2
CB-6	40	22	37	16	24±0.2
CB-10	44	28	48	18	26±0.2
CB-16	52	28	48	22	30±0.2
CB-25	61	36	56	25	36±0.2
CB-50	84	48	80	36	48±0.2

• T : the thickness of additional T-slot platen (min.) 附加台盤最小厚度

CLAMP OUTLINE / DISTRIBUTION 夾具外型 / 配置

Model CB-B



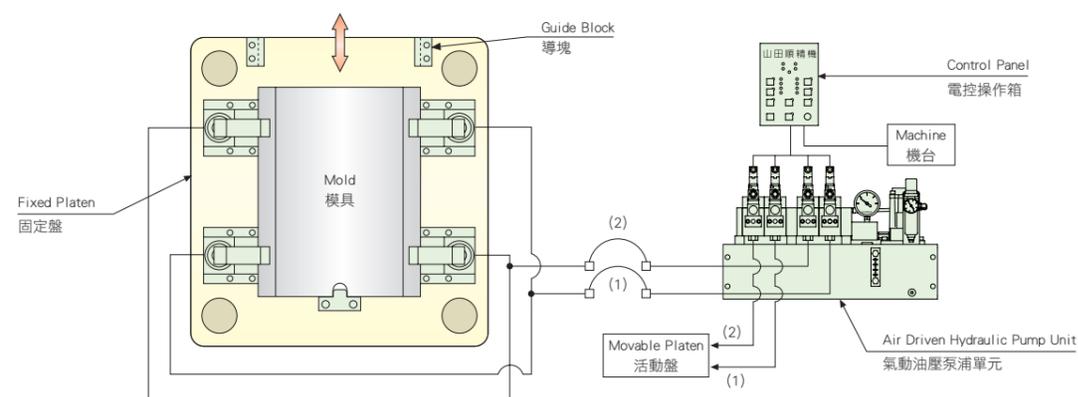
Outline Dimensions 外型尺寸

Unit : mm

MODEL 型式	A	B	D	F	G	min. E	W	Tapping(T) 台盤加工
CB-2B	12	35	90	20	84	90	106	M10×20D
CB-4B	12	40	110	25	95	93	117	M12×24D
CB-6B	15	45	130	30	115	109	140	M12×24D
CB-10B	15	55	159	30	135	131	160	M14×28D
CB-16B	20	65	200	30	158	142	192	M16×32D
CB-25B	20	80	235	30	184	163	218	M18×36D

Vertical Loading / 上方換模

For Platen without T-slots and the sizes of mold is unified.
台盤無T型槽，模具尺寸統一



• Suggest CB-S for movable platen 活動盤建議搭配CB-S型使用

Accessories / 相關配件

Air Driven Hydraulic Pump
氣動油壓泵浦

PB



PC



Non-leak Valve
氣控閥



Pump cover
泵浦護罩



Model CG



- CG Clamp is charactered in mechanical locking system. The holder of clamp can be shrunk into the clamp when unclamping. It can avoid interference between the holder and mold template.
- It is only applied on Mold Changer System.
- CG 夾具具有自鎖機構之特性，壓板可縮入夾具本體內。能避免開模時壓板與模具底板間的干涉。
- 此型只適用於搭配換模台車使用。

Model Selection 型式選定

CG-① B-②-③-④

- The capacity of clamp (4-50 ton) / 夾具能力
- Thickness of template (H±0.5mm)
模板厚度 (允許公差: H±0.5mm)
- The direction of piping and wiring connection
配管、配線接續方向
L : on the left side (as below drawing) / 在左側 (如下圖示)
R : on the right side / 在右側
U : on the upper side / 在上方
- Sensor voltage / 近接開關使用電壓
3 : DC10~30V (NPN, 3-Wire)
4 : DC10~30V (PNP, 3-Wire)

Instruction of Specification 規格說明

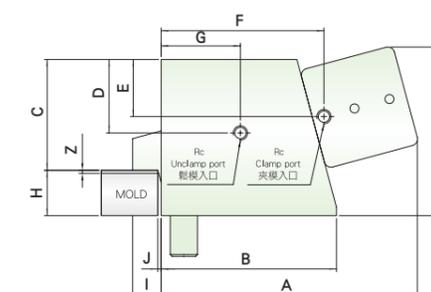
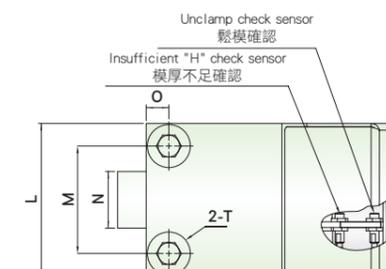
Unit : mm

MODEL 型式	CG-4B	CG-6B	CG-10B	CG-16B	CG-25B	CG-50B
Clamping force 夾力 * tons	4	6	10	16	25	50
Retaining force 保持能力 * tons	0.8	1.2	2	3.2	5	10
Preserved stroke (Z) 預留行程 (Z) mm	1.5		2			
Working temperature 工作溫度 °C	Max 70°C					

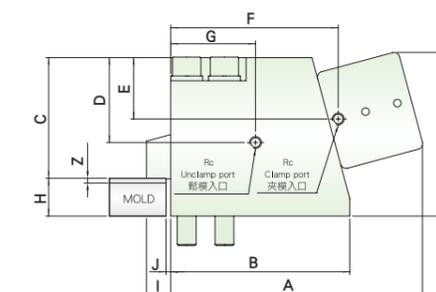
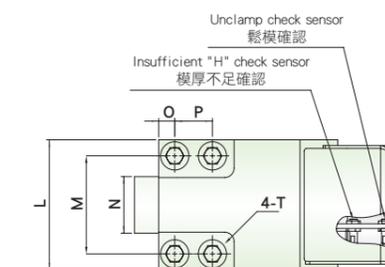
* Hydraulic Pressure 使用油壓壓力: 13.7MPa (140kg/cm²) (2000psi)

* No hydraulic pressure 在零壓力時

CG-4B~10B



CG-16B~50B



Unit : mm

MODEL 型式	A	B	C	D	E	F	G	I	J	L	M	N	O	P	Q	Rc	H±0.5	T
CG-4B	186	123	75	50	30	113	42	17	2	90	62	35	14	—	115	1/4	25	M16 x 32D
CG-6B	202	140	85	48	36	126	48	19	3	110	76	45	17	—	124	1/4	30	M20 x 40D
CG-10B	215	150	98	53	42	138	56	23	3	135	95	50	20	—	131	1/4	30	M24 x 48D
CG-16B	258	190	128	74	53	175	82	28	5	138	104	60	17	40	156	1/4	30	M20 x 40D
CG-25B	302	240	159	100	64	212	100	33	5	170	130	75	20	50	188	3/8	40	M24 x 48D
CG-50B	365	290	195	140	88	268	125	35	5	215	162	100	27	60	227	3/8	50	M33 x 65D

• H is the minimum size H為最小尺寸 • When H increases, the size of Q will be increased accordingly H增加時Q尺寸會等值增加



- Feature
 - Better safety design clamp.
 - Clamp with Build-in check valve, it can keep the pressure itself.
 - The clamp will not release, even if the hydraulic tube is damaged.
 - Separate clamp body design, easy for maintain and exchange.
 - Waterproof design for cylinder and piston.
- 特色
 - 更安全的夾具設計。
 - 夾具內建逆止閥，可獨立自行持壓。
 - 即使油管爆裂，夾具也不會鬆開。
 - 兩段式本體設計，維修更換本體更為便利。
 - 油缸、活塞防水設計。

Model Selection 型式選定



Capacity of clamp / 夾力: 2 - 25 (tons)

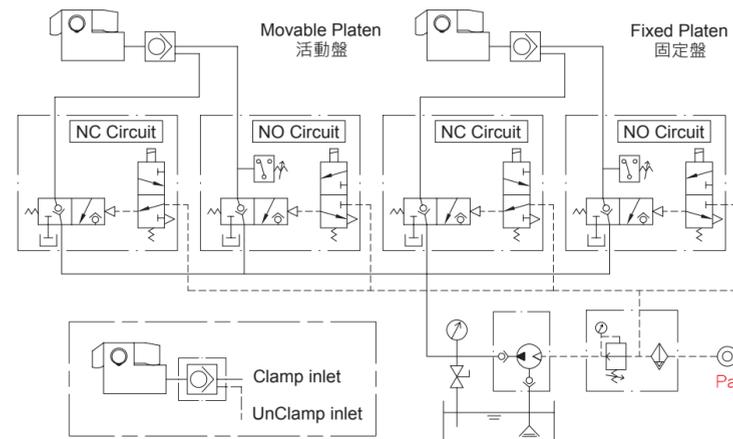
- **EMPTY** : Standard type
無：標準式
- **N** : With sensor type
附近接開關
DC10~30V (NPN, 3-Wire)
- **C** : Pneumatic cylinder movable type
氣缸移動式

Instruction of Specification 規格說明

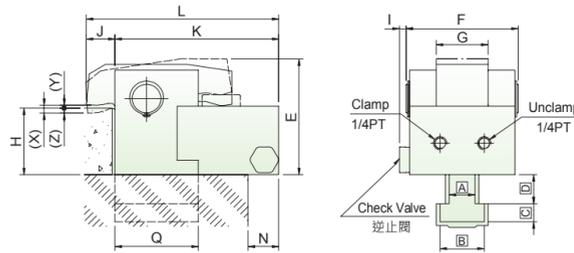
MODEL 型式	CBK-2	CBK-4	CBK-6	CBK-10	CBK-16	CBK-25
Capacity of clamp 夾力 * tons	2	4	6	10	16	25
Total stroke (X) 總行程 (X) mm	8	8	8	8	8	8
Stroke of clamp (Y) 夾具行程 (Y) mm	3	3	3	3	3	3
Preserved stroke (Z) 預留行程 (Z) mm	5	5	5	5	5	5
Total volume of cylinder 油缸總容量 cc	8	13	22	38	55	99
The tolerance of the template thickness (H) 模板厚度允許公差: (H) mm	±2	±2	±2	±2	±2	±2

* Hydraulic Pressure 使用油壓壓力: 24.5MPa (250kg/cm²) (3550psi)

Circuit Control System 迴路控制系統



Model **CBK**

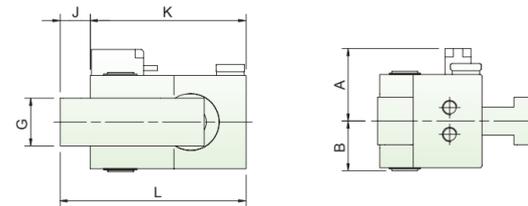


Outline Dimensions 外型尺寸

MODEL 型式	min. C	min. E	F	G	I	J	K	L	max. N	Q
CBK-2	10	73	68	32	9	20	106	126	15	46
CBK-4	12	85	79	40	9	24	124	148	20	61
CBK-6	14	100	96	46	9	29	149	178	25	80
CBK-10	16	119	117	54	8	30	171	201	30	87
CBK-16	20	133	129	58	8	30	202	232	35	108
CBK-25	23	150	156	70	8	30	235	265	40	128

Unit : mm

Model **CBK-N**

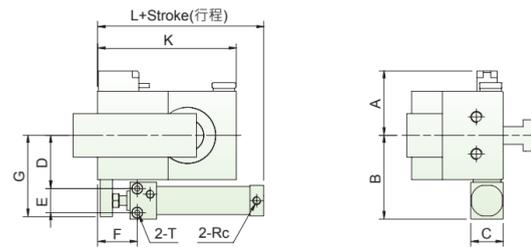


Outline Dimensions 外型尺寸

MODEL 型式	A	B	G	J	K	L
CBK-2N	52	56	32	20	106	126
CBK-4N	57.5	39.5	40	24	124	148
CBK-6N	70	48	46	29	149	178
CBK-10N	80	58.5	54	30	171	201
CBK-16N	85.5	64.5	58	30	202	232
CBK-25N	99	78	70	30	235	265

Unit : mm

Model **CBK-C**



Outline Dimensions 外型尺寸

MODEL 型式	A	B	C	D	E	F	G	K	L	Rc	Tapping(T) 台盤加工
CBK-4C	58	73.5	29	46.5	20	57.5	73.5	124	131	1/8	M6×12D
CBK-6C	70	86	34.5	55	24	61.5	82	149	135.5	1/8	M6×12D
CBK-10C	80	104	41.5	66	30	49	101	171	130	1/8	M8×16D
CBK-16C	86	119.5	52	73.5	36	50	112.5	202	141	1/8	M10×20D
CBK-25C	99	139	63.5	88	40	65	138.5	235	168	1/4	M10×20D

Unit : mm

The operating function

- Machine will be stopped automatically in case of operational errors.
- Mold change for single side is functioned with two-way operation only for avoiding operational errors.
- It is equipped with key switch to prevent operational errors.
- During mold changing, it will check the following steps automatically: Injection unit backward, Ejector backward, Manual mode, and Mold close as signal requirement for unclamping. It can avoid operational errors and possible damages.
- When changing molds or malfunction, it will send signals to stop machine opening/closing the mold.
- When the system is not in use, it can be separated from the control of machine. It can prevent clamp from clamping without mold existence and ensure the life time of mold clamp.
- This system adopts inbuilt non-voltage contacts to interlock with machines.

Remark: Please offer the signal contacts when placing order.



操控功能

- 具有誤操作停機保護功能。
- 具有單側換模二道操作防呆功能。
- 裝有鑰匙開關，避免人為誤操作。
- 鬆模時可依機台提供之：手動模式、射座後退、托模後退、關模完成(註)等動作信號作為鬆模條件，避免誤操作造成損傷。

- 換模或異常發生時，輸出信號通知機台禁止開關模。
- 不使用時可與機台脫離，避免夾具空夾確保夾具壽命。
- 與機台連線採用無電壓接點。

(註)：訂購時須告知機台可提供之信號接點。

MOLD FLIP DEVICE 模具翻轉機

Application : Injection molding machine、Blow molding machine、Die casting machine

適用於：射出機、中空成型機、壓鑄機。

Features:

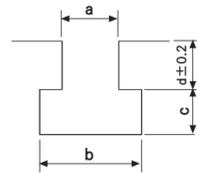
- Mold flip device could help in flipping the mold and shorten up the operation time of mold repairing and maintenance.
- Mold flip device is driven by electric hydraulic motor and move the mold through hydraulic power. Mold can be turned at any angle.
- Using mold flip device helps to raise work efficiency and avoid accidents at work place.
- If power shuts during mold flip, each hydraulic circuit is designed with the function of checking and avoiding oil leakage and the device will stop at the final stage.

特色：

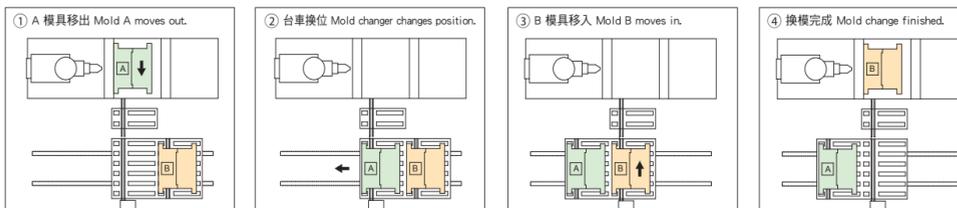
- 模具翻轉機用於輔助模具翻轉，又可達到縮短模具保養及維修工作時間。
- 模具翻轉機使用電動油壓馬達，以油壓力量翻轉模具。模具可作任意角度翻轉。
- 運用模具翻轉機可提高工作效率又可達到零工安意外。
- 翻轉過程中如發生斷電，各油壓迴路具逆止防漏功能，機台立即停止於最後狀態。



DATA REQUIRED FOR Q.M.C.S. 快速換模系統訂購所需資料

Company 訂購公司			
Machine Type 機台種類		Capacity 機型噸數	
<input type="checkbox"/> Injection molding machine / 射出機 <input type="checkbox"/> Vertical injection molding machine / 直立式射出機		<input type="checkbox"/> Die casting machine / 壓鑄機 <input type="checkbox"/> Blow molding machine / 中空成型機	
Machine Brand 機台廠牌		<input type="checkbox"/> New purchased / 新購 <input type="checkbox"/> Existing / 舊機	
Drawing 圖面 <input type="checkbox"/> Machine outline / 機台外型圖 <input type="checkbox"/> Platen drawing / 車壁圖			
Item 項目	Pump unit / 泵浦單元	Mold clamp / 夾模夾具	Remark / 備註
Model 型式			
Q'ty 數量			
1 Control Voltage / 控制電壓： <input type="checkbox"/> AC110V <input type="checkbox"/> AC220V <input type="checkbox"/> DC24V			
2 The thickness of template / 模具底板厚度 (H) : _____ mm			
3 Mold size / 模具尺寸 : Max : _____ (L) × _____ (W) Min : _____ (L) × _____ (W)			
4 Mold type / 模具： <input type="checkbox"/> Flange type / 標準型 <input type="checkbox"/> Concave type / 凹入型 (Please offer the size of concave area / 需提供凹入尺寸) S : _____ R : _____ T : _____			
5 Working temperature / 工作溫度 : _____ °C			
6 Mold with heating insulation platen / 模具附加隔熱板： <input type="checkbox"/> Yes (Please offer the thickness) / 有 (請提供厚度) <input type="checkbox"/> No / 沒有			
7 Clamping direction / 夾模方向： <input type="checkbox"/> Up-Down / 上-下 <input type="checkbox"/> Left-Right / 左-右			
8 When the clamping direction is up-down, is there any "Safety platform" ? 夾模方向為上-下時，機台是否有安全踏板？ <input type="checkbox"/> Yes (Please offer the installing drawing) / 有 (請提供安裝圖面) <input type="checkbox"/> No / 沒有			
9 Platen with other equipment / 台盤加裝其他配置： <input type="checkbox"/> Robot / 機械手 <input type="checkbox"/> others / 其它			
10 Please offer the following signal contact. / 請射出機提供以下訊號接點供鬆模確認： <input type="checkbox"/> Injection unit backward / 射座後退 <input type="checkbox"/> Ejector backward / 托模後退 <input type="checkbox"/> Manual mode / 手動模式 <input type="checkbox"/> Mold close / 關模完成 <input type="checkbox"/> No / 沒有			
11 T-slot / T槽尺寸：  Movable platen / 活動盤 a : _____ b : _____ c : _____ d : _____ (±0.2)			
Fixed platen / 固定盤 a : _____ b : _____ c : _____ d : _____ (±0.2)			
* For existing machine, please offer "d" size with the first decimal digit. * 舊機請提供d尺寸至小數點第一位。			
Others 其他 CE certificated required / 產品是否須CE認證 <input type="checkbox"/> Yes / 需要 <input type="checkbox"/> No / 不需要 Installation by Sandsun / 山田順需安裝 <input type="checkbox"/> Yes / 需要 <input type="checkbox"/> No / 不需要			

DATA REQUIRED FOR M.C.S. 換模台車系統訂購明細資料

Company 訂購公司		Quantity 數量
Machine Brand 機台廠牌		Capacity 機型噸數
1 Mold changer type / 台車所需型式： <input type="checkbox"/> Single machine and mold / 單機單模 <input type="checkbox"/> Single machine and twin molds / 單機雙模 <input type="checkbox"/> Twin machines and molds / 雙機雙模 <input type="checkbox"/> Multi-machines and twin molds / 多機雙模		
2 The way of mold movement / 模具移動方式： <input type="checkbox"/> Hook push-pull / 掛鈎推拉 (<input type="checkbox"/> Fixed hook set / 鈎模座固定 <input type="checkbox"/> movable hook set / 鈎模座移動) <input type="checkbox"/> Motor driven roller / 滾輪 <input type="checkbox"/> _____		
3 Main power supply / 動力電源： <input type="checkbox"/> AC 220V <input type="checkbox"/> AC 380V <input type="checkbox"/> AC _____ V (3Ø4W) <input type="checkbox"/> 60 Hz <input type="checkbox"/> 50 Hz		
4 Rail track construction / 台車行走軌道： <input type="checkbox"/> Buried under ground / 埋入式 <input type="checkbox"/> On the ground / 安裝地面 <input type="checkbox"/> On the bench / 台架上		
5 Rail track length / 行走軌道長度： <input type="checkbox"/> Min. length for mold changing / 最小換模距離 <input type="checkbox"/> _____ mm		
6 Operation / 操作方式： <input type="checkbox"/> Total automation / 全自動 <input type="checkbox"/> Manual / 手動		
7 Brand of parts such as sensor, motor / 零件廠牌： <input type="checkbox"/> Mostly made in Taiwan / 台製品牌為主 <input type="checkbox"/> Other requirement / 其它：_____		
8 Mold specifications / 模具規格： Max. mold weight / 模具最大重量 : _____ ton H1 : _____ mm (Fixed side / 固定側) H2 : _____ mm (Movable side / 活動側) W : _____ mm W1 : _____ mm Z : _____ mm L : Min : _____ mm Max : _____ mm D : Min : _____ mm Max : _____ mm		
9 Mold working temperature / 模具工作溫度 : _____ °C		
10 Mold position / 定位裝置 : <input type="checkbox"/> Yes (Please offer drawing) / <input type="checkbox"/> No. / 無		
11 The height of nozzle center to ground / 射嘴中心到地面高度 : _____ mm		
12 Heating insulation platen / 隔熱板 : <input type="checkbox"/> Yes (Please offer drawing and thickness) / 有 (提供板厚及外型圖) <input type="checkbox"/> No. / 無		
Remark 備註 : 1. Size (W), (W1), and (H) needs to be standardized. 尺寸W, W1 及H 需規格化。 2. There must be positioning device. 必須有定位裝置(如無時, 需配合加工)。 3. It is not allowed to heat the mold on MCS. 禁止於台車加熱模具。 4. IMMS has to be fixed on the ground with construction. 射出機須做土木工程固定於地面。		
Technical Data 技術資料		
Mold changer system-Mold changing procedures / 換模台車-換模流程圖：		
		

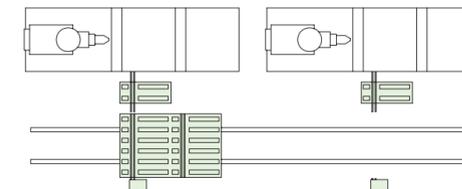
MOLD CHANGER SYSTEM 換模台車系統



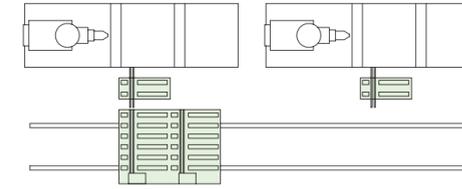
Feature

1. Shorten the operation time of mold change.
2. Auto position checking of mold changer moving.
3. Automatically check the stroke of mold open, arrival and positioning in the process of mold move-in.
4. Device for preventing mold sliding.

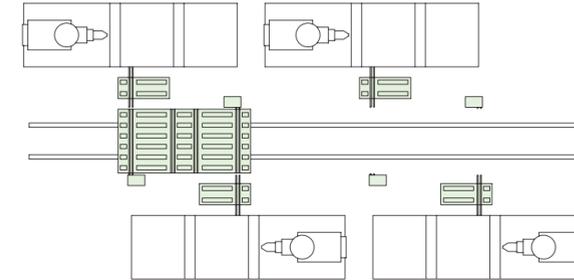
Multi-machines in one line (fixed hook set) 多機直列 (鈎模座固定)



Multi-machines in one line (movable hook set) 多機直列 (鈎模座移動)



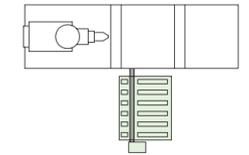
Multi-machines juxtaposed / 多機並列



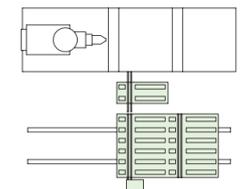
特色

1. 減少換模待機時間。
2. 台車移動自動對機台尋位。
3. 模具移入自動檢知開模行程、到及定位裝置。
4. 模具滑落防呆保護裝置。

Single machine and mold / 單機單模



Single machine and twin molds (fixed hook set) 單機雙模 (鈎模座固定)



* Customers are required to finish the following things before Mold Changer System installation.

1. Rail construction.
2. Standardize the mold template.
3. Process the mold positioning slot, the hole of fixed plate for hook set, and mold template chamfering.

* 裝機前客戶需完成以下事項

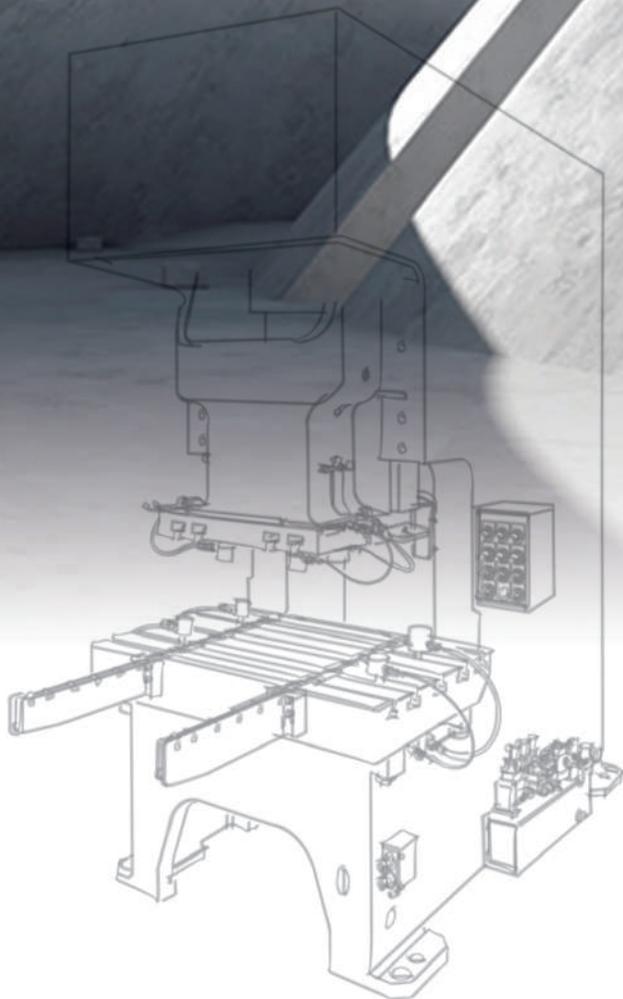
1. 軌道埋設工程。
2. 模具底板規格化。
3. 模具定位槽、拉模座孔位、模板倒角加工。



QUICK DIE CHANGE SYSTEM

快速換模系統

沖床 | 油壓機
PRESS | HYDRAULIC PRESS



It's an era for making high frequency of die changing with multiple patterns and small quantity. In order to save die changing time and ensure operational safety, it is just in time to apply Quick Die Change System.

迎接少量多樣高頻率換模生產形態的時代，爭取換模時效、確保操作安全—正是導入快速換模系統的最佳時機。



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DIE CART SYSTEM
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APPLICATION

適用於

- PRESS & HYDRAULIC PRESS
沖床、油壓機
- DIFFERENT AUTOMATIC MACHINE CLAMP SYSTEM
各種自動化機台夾持系統

DIE LIFTER 舉模滑軌

Model : DL, DB

- Hydraulic type
- Install in the T-slot or U-slot

DL、DB 型

- 油壓式
- 裝置於台盤 T 型槽或 U 槽

Model : DS

- Spring type
- Spread equally and install in the plate.

DS 型

- 彈簧式
- 平均分散於台盤上

Model : DLS

- Spring type
- Install in the T-slot or U-slot

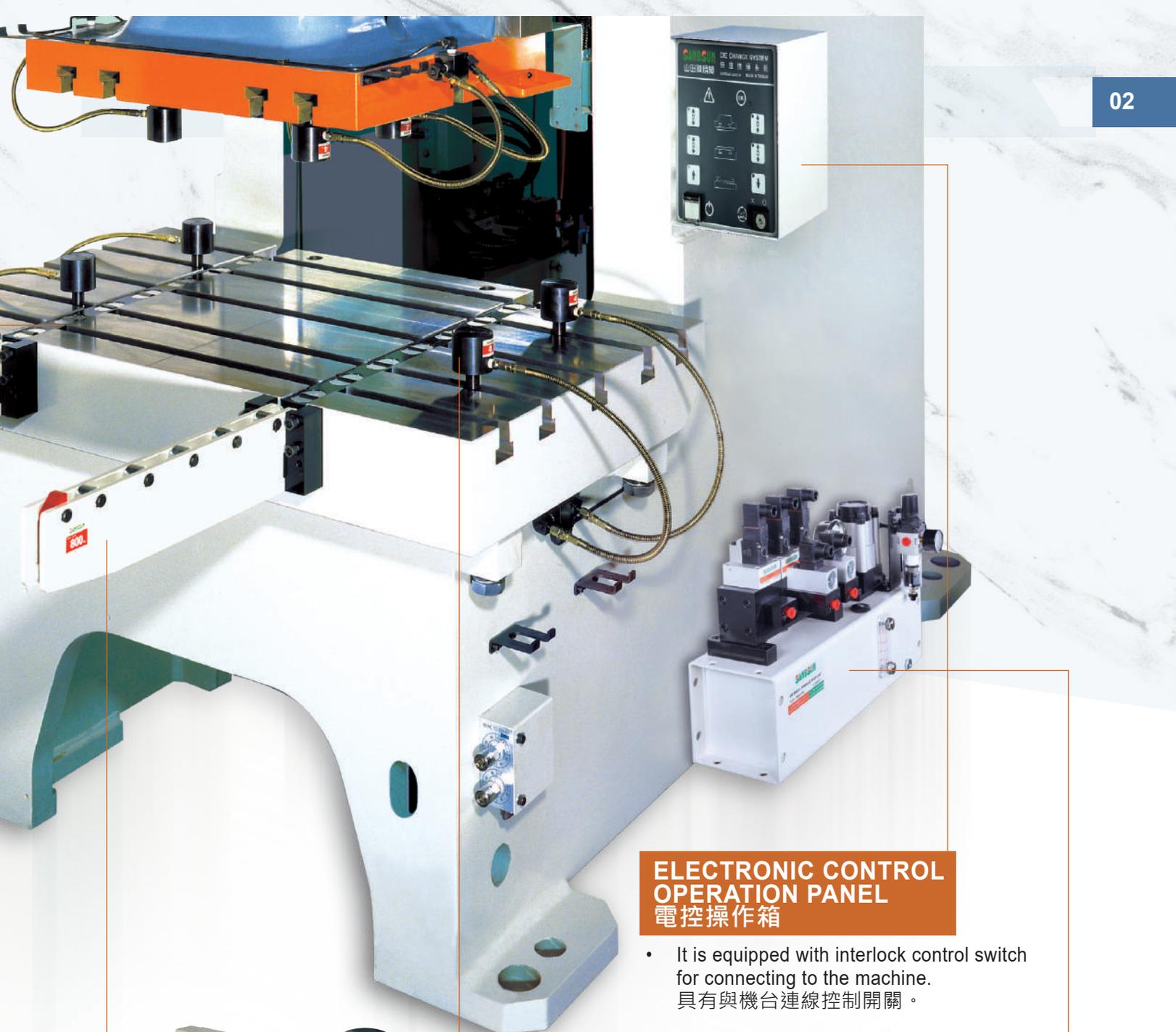
DLS 型

- 彈簧式
- 裝置於台盤 T 型槽或 U 槽



DIE ARM 移模支臂

- Can pull out and push in the die from the plate easily.
可使模具輕易從台盤拉出或推入。
- There are 4 easy operative ways for the storage when it is not used.
不用時配合操作方便有四種存放方式供選擇。



ELECTRONIC CONTROL OPERATION PANEL 電控操作箱

- It is equipped with interlock control switch for connecting to the machine.
具有與機台連線控制開關。
- It is designed with safety control device which prevents any operation error.
具有防止錯誤操作之安全控制。

AIR DRIVEN HYDRAULIC PUMP UNIT 氣動油壓泵浦單元

- Capable of pressure inspection and interlocking with machines.
具檢知功能可與機台連線。
- The movements between each devices will be pinned down mutually in order to ensure operational safety.
各配備之間的動作亦可互相牽制，以確保最佳操作安全。

DIE CLAMP 夾具

- Replacing the traditional method which uses screws to fix dies.
取代傳統用螺絲鎖模方式。
- Using T-slots to lock or fix directly on the plate.
利用台盤 T 型槽鎖固或直接固定於台盤。



THE CHOICE OF AIR DRIVEN HYDRAULIC PUMP UNIT 氣動油壓泵浦單元之選定

NUMBER OF CIRCUIT 迴路數	CHOICE STANDARD 選用依據	CONTROL MODEL 控制型式
1	Single. For the operation of the die clamp on the upper or lower die. 單一供上模或下模夾具	NO
1	The operations of the upper and lower die clamps use the same circuit. 上下模夾具使用同一迴路	NO
1	Single. For the operation of the die lifter. 單一供舉模滑軌	NC
2	Separated circuit operation for upper and lower die clamps. 上下模夾具各自迴路分開	NO
2	The same circuit operation for upper and lower die clamps. One circuit is for the operation of the die lifter. 上下模夾具使用同一迴路 一迴路供舉模滑軌	NO NC
3	Separated circuit operation for upper and lower die clamps. One circuit is for the operation of the die lifter. 上下模夾具各自迴路分開 一迴路供舉模滑軌	NO NC

Please refer to Page 4 for the details.
詳述請參閱 P4

THE CHOICE OF DIE CLAMP 夾具之選用

MODEL 選用型式	CHOICE STANDARD 選用依據														
<p>CA: The template with the U slot 模板有 U 型溝</p> <p>CB: The template without the U slot 模板無 U 型溝</p>	<ul style="list-style-type: none"> Total clamping force which the machine needs (ΣF) = machine capacity (tons) x15~20% The ratio of total clamping force is as follows: Upper clamp ($\Sigma F1$) = $\Sigma F \times 60\%$ Lower clamp ($\Sigma F2$) = $\Sigma F \times 40\%$ Each die clamping force (F) : according to the die clamp quantity (n) for each upper and lower die. Upper clamp $F = \Sigma F1/n$ (tons) Lower clamp $F = \Sigma F2/n$ (tons) <ul style="list-style-type: none"> 機台所需總夾力 (ΣF) = 機台能力 (噸數) x15~20% 總夾力 (ΣF) 分配比率： 上模夾力 ($\Sigma F1$) = $\Sigma F \times 60\%$ 下模夾力 ($\Sigma F2$) = $\Sigma F \times 40\%$ 每只夾具力 (F): 依上下模各使用夾具數 (n) 求得 上模夾具 $F = \Sigma F1/n$ (噸) 下模夾具 $F = \Sigma F2/n$ (噸) <table border="1"> <thead> <tr> <th>Bolt Size</th> <th>M16</th> <th>M18</th> <th>M20</th> <th>M24</th> <th>M30</th> <th>M38</th> </tr> </thead> <tbody> <tr> <td>Clamping force(ton)</td> <td>1-3</td> <td>2-4</td> <td>4-6</td> <td>6-10</td> <td>8-15</td> <td>15-20</td> </tr> </tbody> </table>	Bolt Size	M16	M18	M20	M24	M30	M38	Clamping force(ton)	1-3	2-4	4-6	6-10	8-15	15-20
Bolt Size	M16	M18	M20	M24	M30	M38									
Clamping force(ton)	1-3	2-4	4-6	6-10	8-15	15-20									

Please refer to Page 5~9 for the details.
詳述請參閱 P5 ~ P9

THE CHOICE OF DIE LIFTER 舉模滑軌之選用

MODEL 選用型式	CHOICE STANDARD 選用依據
DL / DB/ DS / DLS	<ul style="list-style-type: none"> The weight of dies and the operational request → Model of die lifter. The size of the plate → the length of the die lifter. The size of the T or U slot for installing the die lifter. <ul style="list-style-type: none"> 模具重量及使用需要 → 滑軌型式 台盤尺寸 → 滑軌長度 裝設滑軌之 T、U 形槽尺寸

Please refer to Page 10~12 for the details.
詳述請參閱 P10 ~ P12

THE CHOICE OF DIE ARM 移模支臂之選定

MODEL 選用型式	CHOICE STANDARD 選用依據
RC / RD / RE / RF / RS	<ul style="list-style-type: none"> The size of the die → the length of the arm The weight of the die → the maximum capacity of the arm The method of storage → the model of the arm <ul style="list-style-type: none"> 模具尺寸 → 支臂長度 模具重量 → 支臂最大荷重 收存方式 → 支臂型式

Please refer to Page 13~16 for the details.
詳述請參閱 P13 ~ P16

MODEL PB·PC

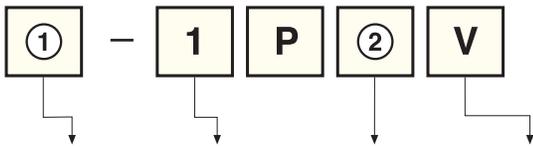


PB-1P1V



PB-1P3V

MODEL SELECTION 型式選定



Pump Model
泵浦型式

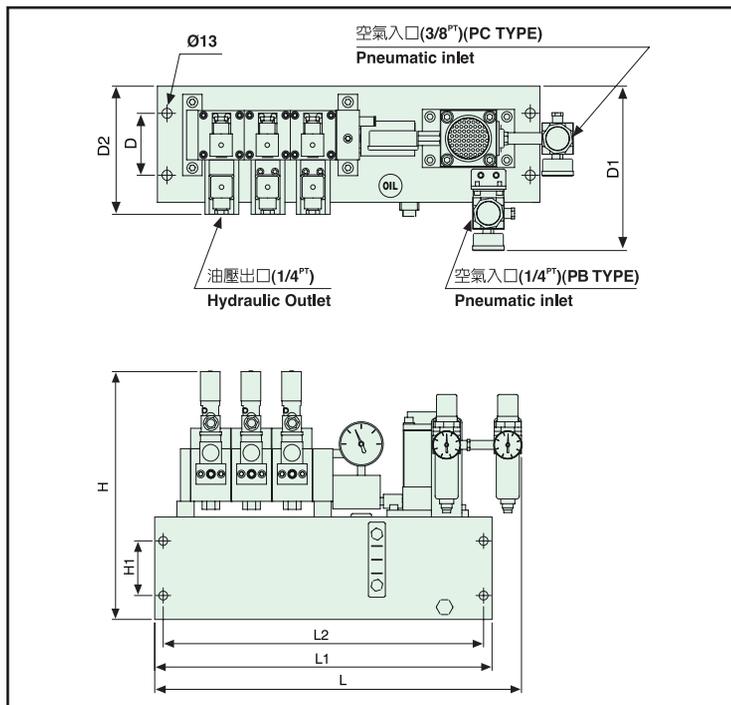
Pump/
泵浦 :1(pcs)

No. of control circuit /
迴路數 :1, 2, 3, 4

V: Non-leak valve control
氣控閥控制

PB08

PC12

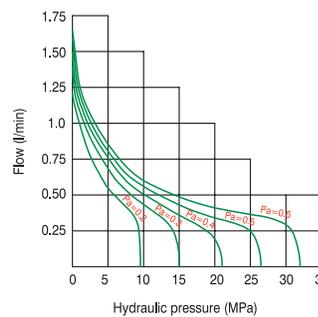


Model 型式	L	L1	L2	H	H1	D	D1	D2	Volume
PB08-1P1V	-	378	353	367	80	80	235	-	6L
PB08-1P2V	-	438	413	367	80	80	235	-	7L
PB08-1P3V	-	498	473	367	80	80	235	-	8L
PB08-1P4V	-	588	563	367	80	80	235	-	10L
PC12-1P3V	560	-	473	367	80	80	-	166	8L

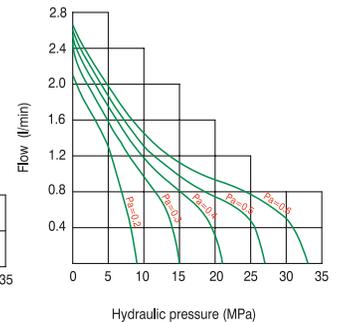
The air combination unit of Model PBO8 in the front, and Model PC12 on the right side.
註：PB08 型二點組合裝於前方·PC12 型裝於右側。

- The hydraulic pump is driven by air. Once the hydraulic pressure reaches the pressure setting, it stops pumping which is energy saving. Meanwhile, if the working pressure reduces, the pump would supply pressure automatically to keep working pressure continuously.
- The circuit control system is designed with the function of checking and avoiding oil leakage. If pneumatic pressure out, the hydraulic pressure still maintains.
- It is capable of pressure inspection and connecting to machines.
- It is suggested to adopt pump model PC12 when used with clamp model CA&CB-16 or 25.
- 利用空氣壓力驅動泵浦·出口油壓達設定壓力即停止作動·不需繼續消耗能源·出口壓力下降則自動補壓·具持續保持該壓力功能。
- 迴路控制系統具逆止功能·空氣壓力消失時油壓壓力可保持。
- 具壓力檢知功能·可與機台連線。
- 使用 CA 及 CB-16 或 25 型夾具建議使用 PC12 型泵浦。

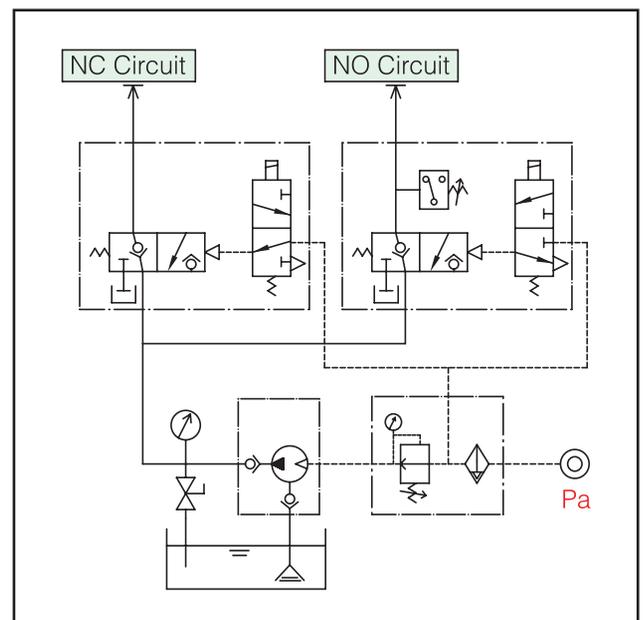
PB08



PC12

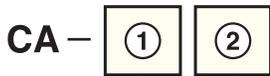


Pa : Pneumatic pressure 氣壓壓力 (MPa)



MODEL CA

MODEL SELECTION 型式選定



Capacity of clamp / 夾力: 1 ~ 25 (tons)

- **EMPTY** : Standard type
無標示: 標準式
- **C** : Pneumatic cylinder movable type
氣缸移動式
- **B** : Fixed type
固定式
- **V** : Temperature -resisting type
耐高溫式



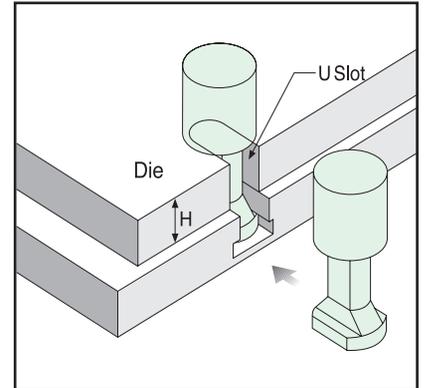
CA



CA-B

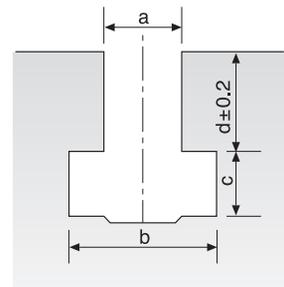


CA-C



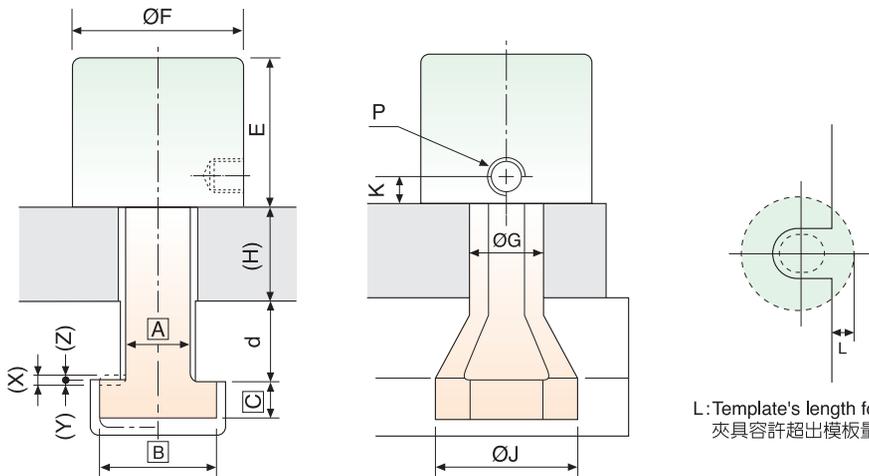
- Please indicate the size of T slot (a,b,c,d) and the thickness (H) of the template for the die when purchasing.
訂購時請指明 T 槽尺寸 (a,b,c,d) 及夾模處模板厚度 (H)

- T slot



Model 型式		CA-1	CA-2	CA-4	CA-6	CA-10	CA-16	CA-25
Capacity of clamp 夾力	*tons	1	2	4	6	10	16	25
Total stroke (X) 總行程 (X)	mm	6	8	8	8	8	8	8
Stroke of clamp (Y) 夾具行程 (Y)	mm	3	4	4	4	4	4	4
Preserved stroke (Z) 預留行程 (Z)	mm	3	4	4	4	4	4	4
Total volumn of cylinder 油缸總容量	cc	3	7	13	21	32	54	76
The tolerance of the template thickness (H) 模板厚度允許公差: H	mm	±1.5	±2	±2	±2	±2	±2	±2

* Hydraulic pressure 使用油壓壓力: 24.5MPa (250kg/cm²)(3550psi)



Unit:mm

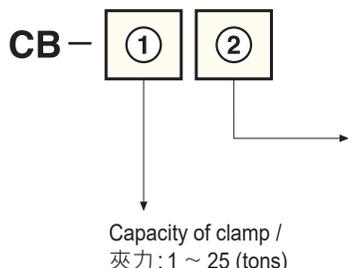
Model 型式	Ø F	E	Ø G	Ø J	max. H+d	max. L	min. a	K	P
CA-1	44	48	12	34	60	12	8	13.5	1/8PT
CA-2	53	52	16	48	80	17	12	12	
CA-4	65	58	23	58	90	20	16	15	
CA-6	82	65	30	64	100	25	18	15	1/4PT
CA-10	99	71	38	78	110	30	22	15	
CA-16	128	82	45	88	120	38	28	17	
CA-25	150	100	55	98	140	45	36	23	

- The sizes of clamps **A**, **B** and **C** are made based on the size of T slot.
夾具 **A** **B** **C** 尺寸係配合 T 槽尺寸製作
- If the thickness of clamp(H+d) is more than the max. value listed on the left, it will be regarded as special pattern.
夾緊處厚度 (H+d) 處出左述最大值 · 屬特殊式樣。

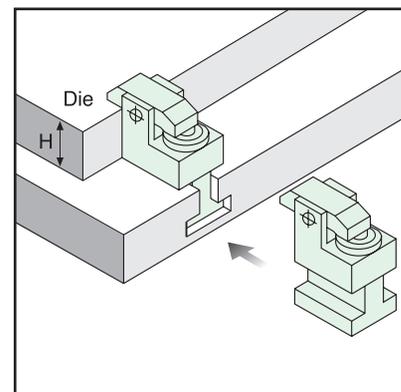
MODEL **CB**



MODEL SELECTION 型式選定



- **EMPTY** : Standard type
無標示: 標準式
- **C** : Pneumatic cylinder movable type
氣缸移動式
- **B** : Fixed type
固定式
- **V** : Temperature -resisting type
耐高溫式

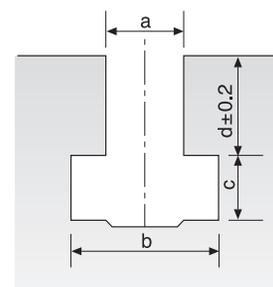


Unit:mm

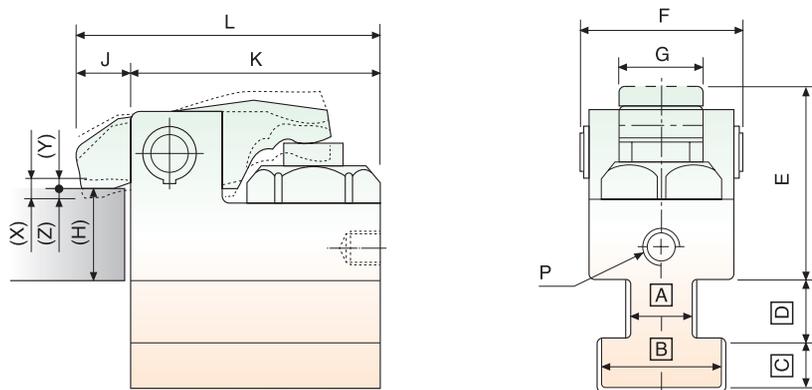
Model 型式		CB-1	CB-2	CB-4	CB-6	CB-10	CB-16	CB-25
Capacity of clamp 夾力	*tons	1	2	4	6	10	16	25
Total stroke (X) 總行程 (X)	mm	6	8	8	8	8	8	8
Stroke of clamp (Y) 夾具行程 (Y)	mm	2.5	3	3	3	3	3	3
Preserved stroke (Z) 預留行程 (Z)	mm	3.5	5	5	5	5	5	5
Total volumn of cylinder 油缸總容量	cc	3	7.5	13	21	38	55	98
The tolerance of the template thickness (H) 模板厚度允許公差: H	mm	±1.5	±2	±2	±2	±2	±2	±2

- Please indicate the size of T slot (a,b,c,d) and the thickness(H) of the template for the die when purchasing.
訂購時請指明 T 槽尺寸 (a,b,c,d) 及夾模處模板厚度 (H)

- T slot



* Hydraulic pressure 使用油壓壓力: 24.5MPa (250kg/cm²)(3550psi)



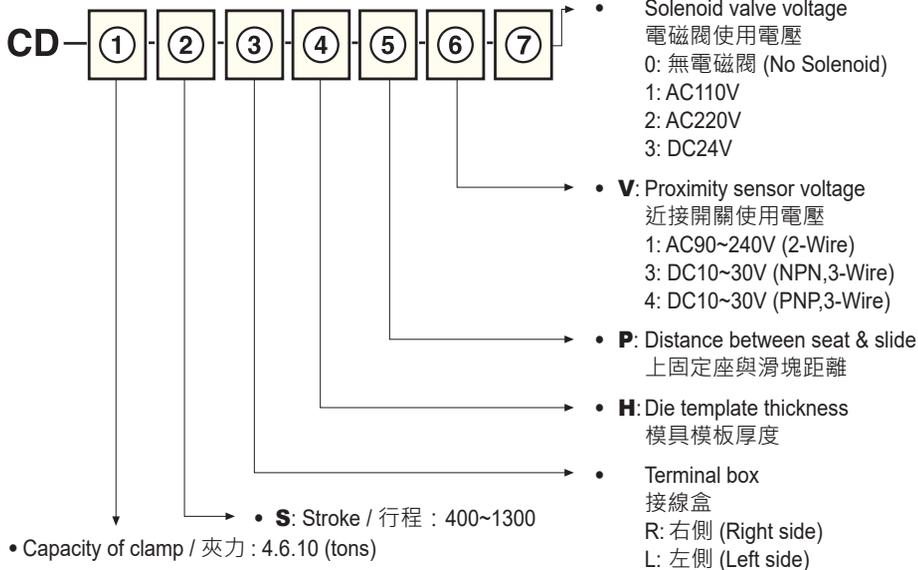
Unit:mm

Model 型式	L	K	J	min. (H)	min. E	F	G	min. a	min. c	P
CB-1	74.5	60	14.5	25	55	44	20	10	6.5	1/8PT
CB-2	110	90	20	25	73	68	32	14	10	
CB-4	134	110	24	25	77	79	40	18	12	
CB-6	159	130	29	30	92	96	46	22	14	1/4PT
CB-10	189	159	30	40	114	117	54	24	16	
CB-16	230	200	30	40	126	129	58	28	20	
CB-25	265	235	30	45	148	156	70	36	23	

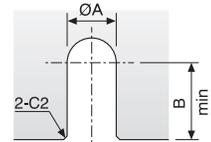
- The sizes of clamps **A** **B** **C** and **D** are made based on the size of T slot.
夾具 **A** **B** **C** **D** 尺寸係配合 T 槽尺製作

MODEL CD

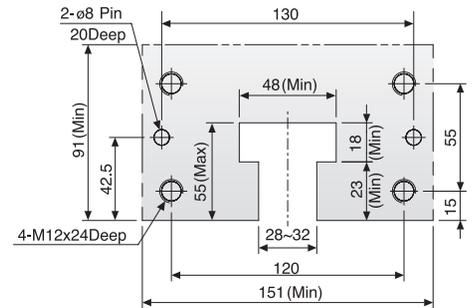
MODEL SELECTION 型式選定



- Processing dimensions for the die
模具加工尺寸

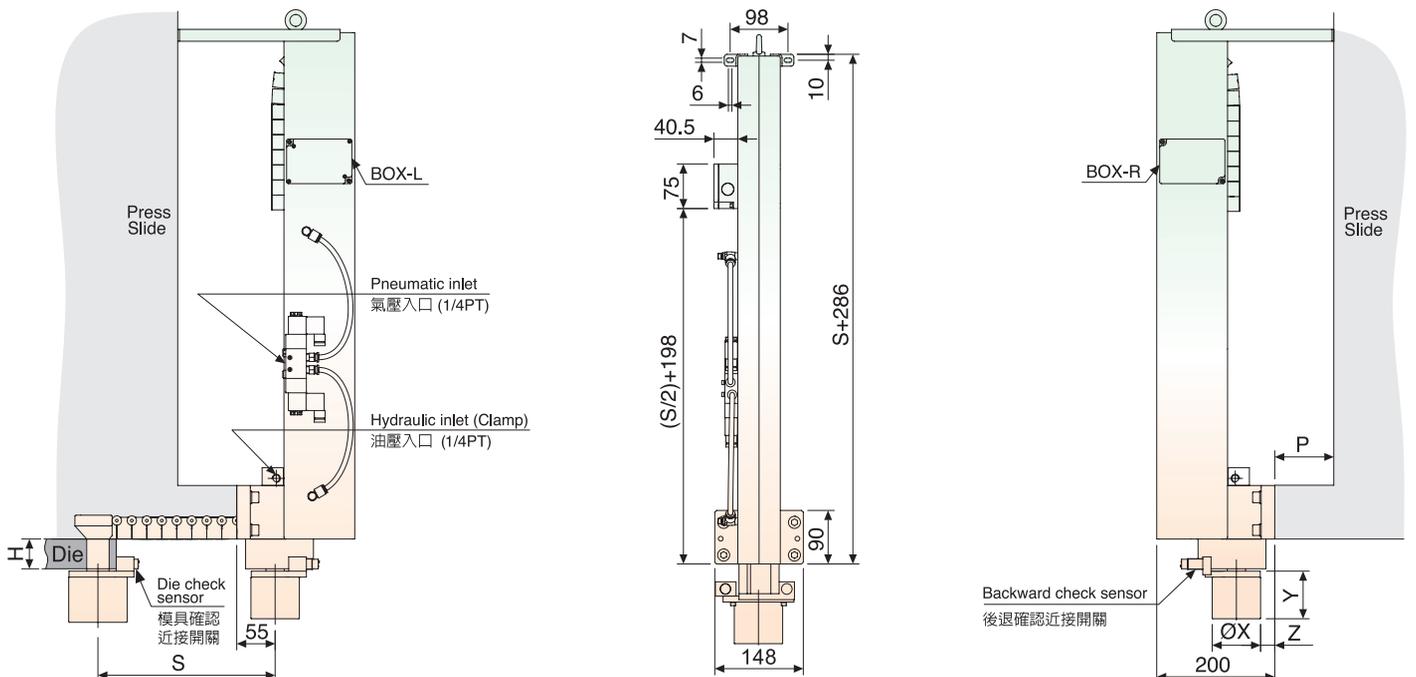


- Processing size for plate (T-slot)
台盤加工尺寸



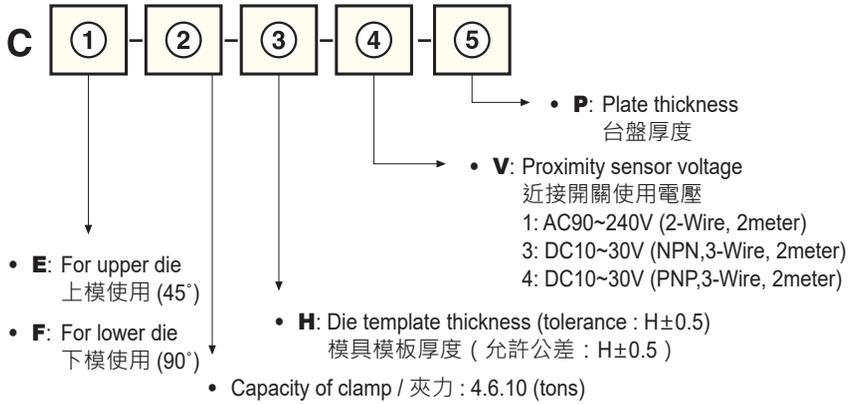
Model 型式		CD-4	CD-6	CD-10
Capacity of clamp / 夾力	tons	4	6	10
Hydraulic pressure / 油壓壓力	MPa (kg/cm ²)(psi)	24.5	(250)	(3550)
Pneumatic pressure / 氣壓壓力	MPa (kg/cm ²)(psi)	0.34~0.49	(3.5~5.0)	(50~71)
Moving speed / 移動速度	mm/s	300 (max)		
Total stroke / 夾具總行程	mm	8	8	8
Ø X	mm	65	82	99
Y	mm	73	80	86
Z	mm	23	14.5	6
Ø A	mm	28~32		
B min	mm	32	42	47

OUTLINE DIMENSIONS 外型尺寸

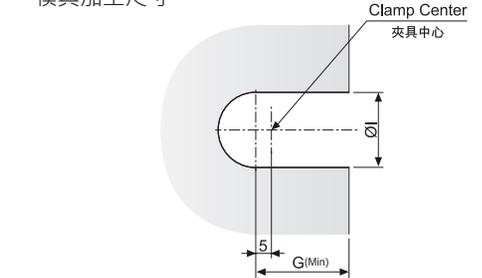


MODEL CE·CF

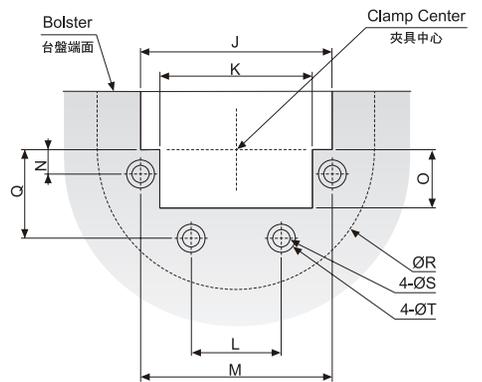
MODEL SELECTION 型式選定



CE CF



Processing size for plate 台盤加工尺寸

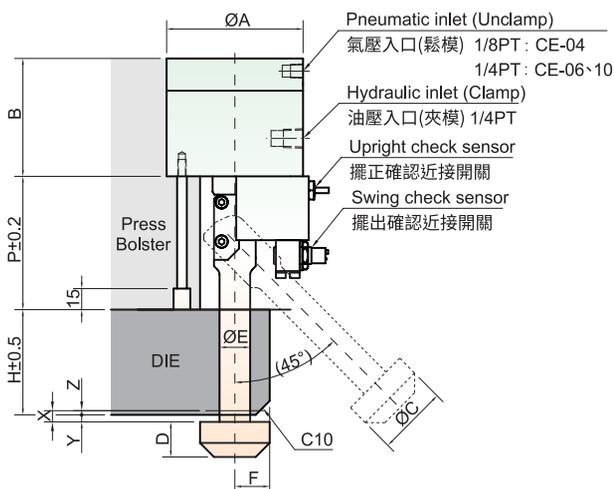


Model 型式		C □ -04	C □ -06	C □ -10
Capacity of clamp 夾力	tons	4	6	10
Hydraulic pressure 油壓壓力	MPa (kg/cm ²)(psi)	24.5	(250)	(3550)
Pneumatic pressure 氣壓壓力	MPa (kg/cm ²)(psi)	0.34~0.49	(3.5~5.0)	(50~71)
Total stroke of cylinder(X) 油缸總行程 (X)	mm	8	10	12
Stroke of clamp (Y) 夾具行程 (Y)	mm	5	7	9
Preserved stroke (Z) 預留行程 (Z)	mm	3	3	3

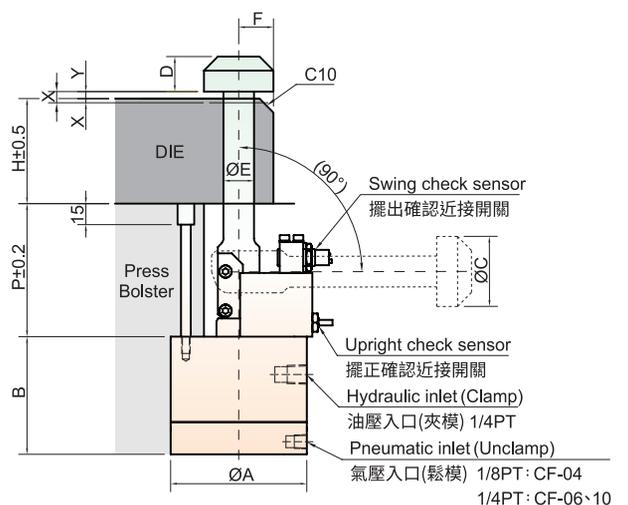
Model 型式	Ø A	B	Ø C	D	Ø E	F (max)	G	Ø I	J	K	L	M	N	O	P (min)	Q	Ø R	Ø S	Ø T
C □ -04	102	84	50	25	22	25	30	28	83	66	39	83	10.5	25	85	38	120	7	12
C □ -06	125	94	60	25	28	30	35	34	93	70	49	93	10.5	30	85	43	145	7	12
C □ -10	145	111	75	30	34	37.5	43	40	130	80	59	120	10.5	35	100	50	165	9	16

OUTLINE DIMENSIONS 外型尺寸

• MODEL CE



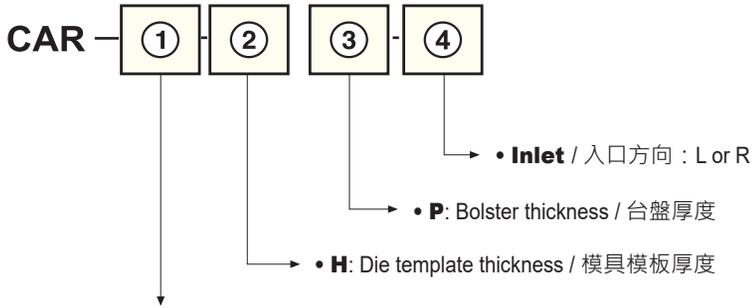
• MODEL CF



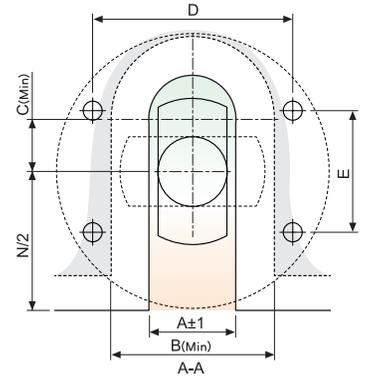
* Make sure that screws, washers, cutting chips or blank pieces do not enter the clamp. Otherwise, clamp does not operate smoothly and may be damaged.
嚴禁螺絲、華司、鐵屑、廢料等異物侵入夾具的內部。否則夾具將無法順暢動作，甚至會導致夾具的損壞。

MODEL **CAR**

MODEL SELECTION 型式選定



• Capacity of clamp / 夾力 : 4~16 (tons)



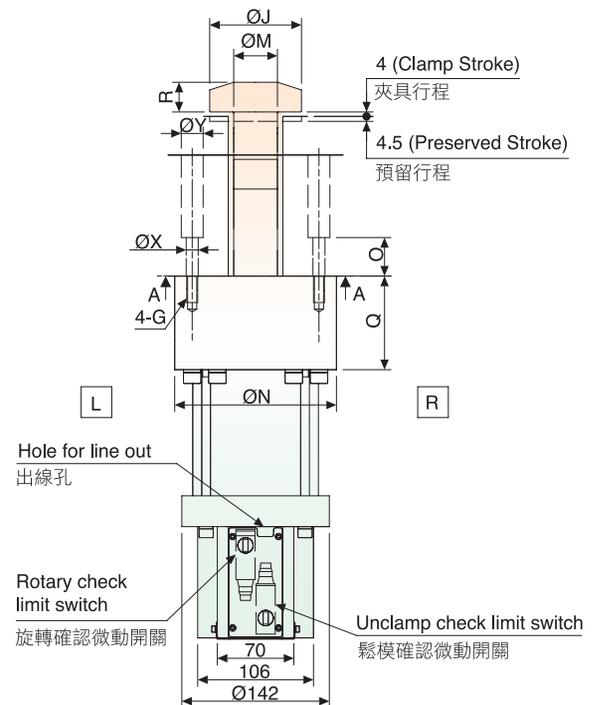
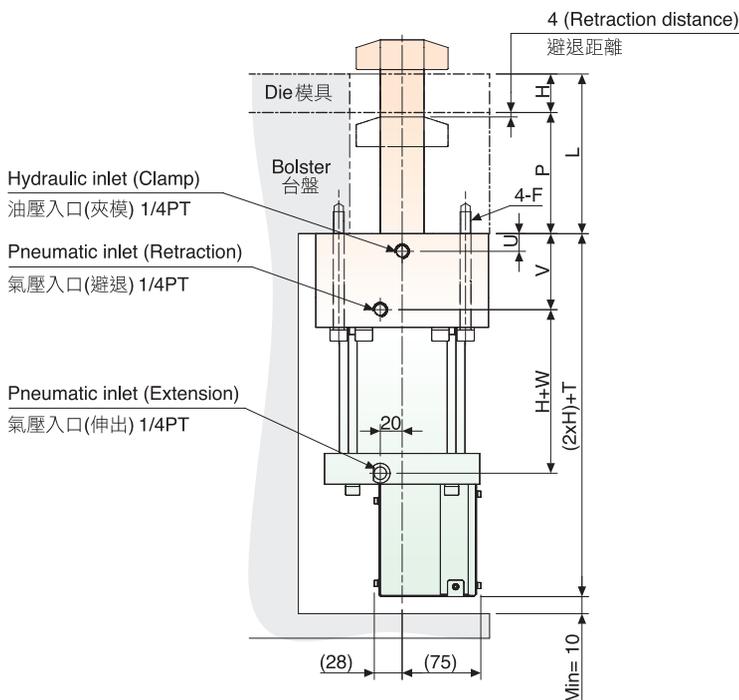
Model 型式	A±1	B (Min)	C (Min)	D	E	F	G	∅ J	∅ M	∅ N	Q	O	R	T	U	V	W	∅ X	∅ Y	P (Min)
CAR-04	35	70	20	112	70	M8×16D	M10×20D	59	25	148	84	35	17	240	16	68	104	12	20	80
CAR-06	40	75	25	112	70	M8×16D	M10×20D	64	32	148	84	35	22	250	16	68	109	12	20	80
CAR-10	50	95	30	116	70	M8×16D	M10×20D	84	40	158	85	70	27	260	16	69	110	12	20	90
CAR-16	60	110	35	118	72	M10×20D	M12×24D	99	50	168	95	80	32	280	16	79	119	14	23	100

* Hydraulic pressure 使用油壓壓力 : 18.2MPa (185kg/cm² (2625psi))

* Pneumatic pressure 使用氣壓壓力 : 0.34~0.49MPa (3.5~5.0 kg/cm²) (50~71psi)

* CAR-25 is customized product 為客製化產品

OUTLINE DIMENSIONS 外型尺寸

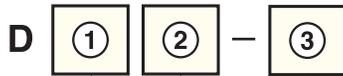


• Series product : Hydraulic cylinder device, straight pull clamping device.
系列產品 : 舉上油缸、直拉夾具、舉上直拉油缸

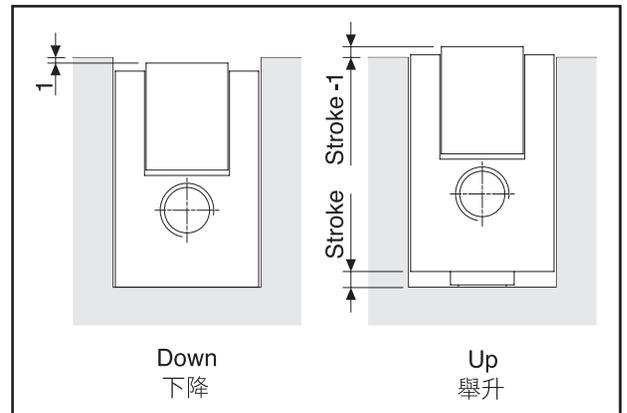
• Please contact with us once you need details.
如需要詳細資料，請連絡我們

MODEL DL•DB

MODEL SELECTION 型式選定



Model 型式		Width of Lifter 滑軌寬度		Length of Lifter 滑軌長度
L	Roller type 滾輪式	28	28 mm	200-1900
	Ball type 滾珠式	50	50 mm	200-2500
B	Roller type 滾輪式	80	80 mm	500-2500
	Ball type 滾珠式			



Model 型式	Capacity of Each Cylinder 每只油壓缸舉力	Full Stroke 全行程	Capacity Per Roller (kgf) 每只滾輪容許荷重 (DL)	Capacity Per Ball (kgf) 每只滾珠容許荷重 (DB)
			SS41 模具材質	SS41 模具材質
D □ 28	0.63 ton	3 mm	80	40
D □ 50	1.1 ton	3 mm	200	50
D □ 80	2.8 ton	3 mm	460	200

* Hydraulic pressure 使用油壓壓力 : 24.5MPa (250kg/cm²) (3550psi)

DIE LIFTER MODEL TYPE 滑軌類型

Model 型式	Application 適用	
Standard Die Lifter 標準式滑軌		Normal platen and die lifter can be fixed with platen. 一般台盤且滑軌固定於台盤上
Two Stepped Die Lifter 兩段式滑軌		Platen with hole in the middle and die lifter can be fixed on platen. 台盤有下料孔且滑軌固定於台盤上
Removable Die Lifter 抽取式滑軌		Normal platen or platen with hole in the middle and die lifter is removable via quick connector. 一般台盤或是台盤有下料孔，滑軌經由快速接頭可輕易裝卸於台盤上

11 DIE LIFTER (HYDRAULIC) 舉模滑軌 (油壓式)

MODEL DL•DB



Outline Dimensions 外型尺寸	D □ 28 Serial	D □ 50 Serial	D □ 50 Serial 用於 DL50-2100 以上的固定方式 For DL50-2100 or above	D □ 80 Serial
	Processing Size For Bolster (U-Slot) 台盤加工尺寸			

Length of Lifter 全長 (L)	D □ 28					D □ 50					D □ 80							
	DL28		DB28		Cylinders 油缸	DL50		DB50		Cylinders 油缸	DL80		DB80		Cylinders 油缸			
	Roller Qty. 滾輪數	Capacity 承載能力 (Kg)	Ball Qty. 滾珠數	Capacity 承載能力 (Kg)	Qty. 油缸數	Capacity 舉升能力 (Kg)	Roller Qty. 滾輪數	Capacity 承載能力 (Kg)	Ball Qty. 滾珠數	Capacity 承載能力 (Kg)	Qty. 油缸數	Capacity 舉升能力 (Kg)	Roller Qty. 滾輪數	Capacity 承載能力 (Kg)	Ball Qty. 滾珠數	Capacity 承載能力 (Kg)	Qty. 數量	Capacity 舉升能力 (Kg)
200	3	240	5	200	2	1260	2	400	4	200	2	2200						
300	5	400	7	280			3	600	6	300								
400	6	480	10	400			4	800	9	450								
500	8	640	12	480	3	1890	5	1000	11	550	3	3300	5	2300	6	1200	2	5600
600	9	720	15	600			6	1200	13	650			6	2760	7	1400		
700	11	880	17	680			7	1400	16	800			7	3220	9	1800	3	8400
800	12	960	20	800	4	2520	8	1600	18	900	4	4400	8	3680	10	2000		
900	14	1120	22	880			9	1800	20	1000			9	4140	11	2200	4	11200
1000	15	1200	25	1000	5	3150	10	2000	23	1150	5	5500	10	4600	13	2600		
1100	16	1280	27	1080			11	2200	25	1250			11	5060	14	2800		
1200	17	1360	30	1200			12	2400	27	1350			12	5520	15	3000	5	14000
1300	18	1440	32	1280	6	3780	13	2600	29	1450	6	6600	13	5980	17	3400		
1400	19	1520	35	1400			14	2800	31	1550			14	6440	18	3600		
1500	20	1600	37	1480			15	3000	33	1650			15	6900	19	3800	6	16800
1600	22	1760	40	1600	7	4410	16	3200	35	1750	7	7700	16	7360	21	4200		
1700	24	1920	42	1680			17	3400	38	1900			17	7820	22	4400		
1800	25	2000	45	1800			18	3600	40	2000			18	8280	23	4600		
1900	27	2160	47	1880	8	5040	19	3800	42	2100	8	8800	19	8740	24	4800	7	19600
2000							20	4000	44	2200			20	9200	26	5200		
2100					7	7700	21	4200	46	2300	7	7700	21	9660	27	5400		
2200							22	4400	48	2400			22	10120	28	5600		
2300							23	4600	50	2500			23	10580	30	6000		
2400					8	8800	24	4800	52	2600	8	8800	24	11040	31	6200	8	22400
2500							25	5000	54	2700			25	11500	32	6400		

* Any specific size is available based on the needs of the customers.
可依客戶使用需要製作特殊規格

MODEL DS•DLS

MODEL SELECTION 型式選定



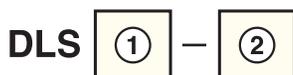
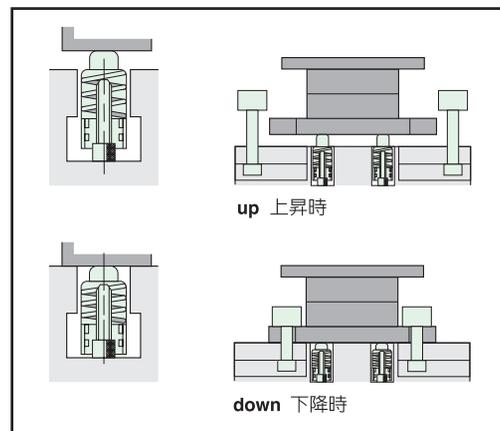
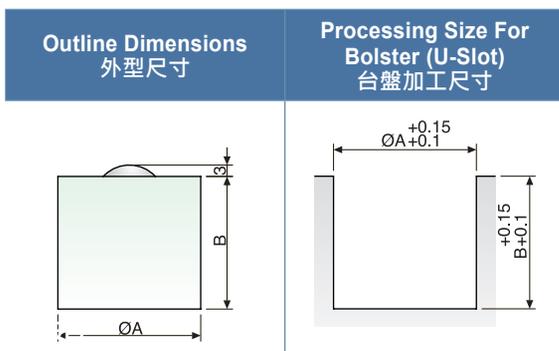
DS



DLS

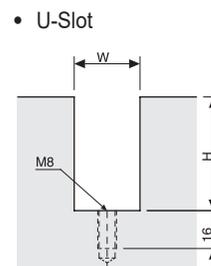
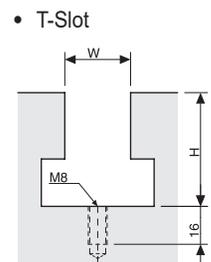
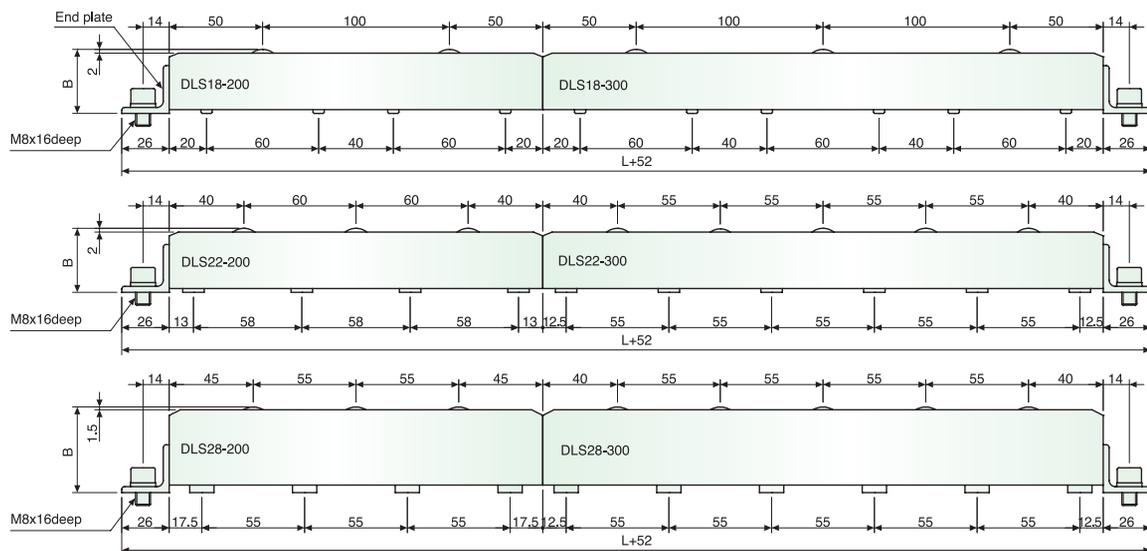


Capacity (Kg)	Ø A	B
100	Ø 38	35
200	Ø 45	42



(W) : 18, 22, 28 (mm) (L) : 200, 300 (mm)

- Please clearly indicate:
 1. the slot height
 2. the equipped length of every slot while ordering.
 3. quantity of end plate
- 訂購時請指明：
 1. 溝槽高度 (H)
 2. 每一溝槽裝配長度
 3. 固定端板數量



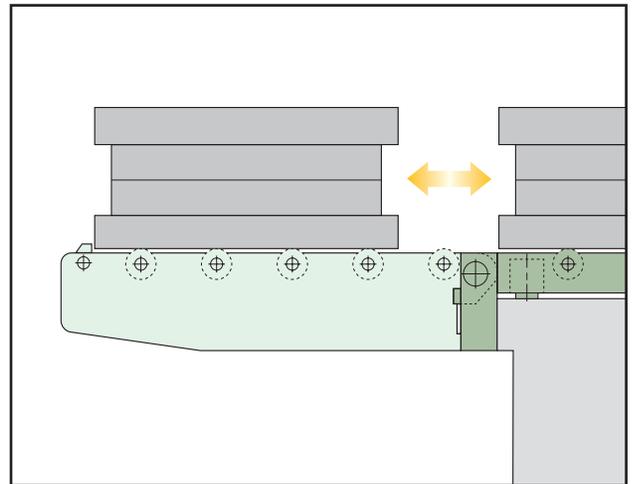
Model 型式	DLS18-200	DLS18-300	DLS22-200	DLS22-300	DLS28-200	DLS28-300
Capacity 每支舉力 (kg)	150	225	150	225	300	450
Width of slot 溝槽寬度 (W)	18		22		28	
Height of slot 溝槽高度 (H)	32~37		33~43		44~58	
Number of roller 滾輪數	2	3		5	3	5
Number of spring 彈簧數	4	6	4	6	4	6
Width of end plate 端板寬度	17			21		
Min. height of lifter 最小成品高度 (B)	32		32		43.5	

MODEL RC·RD·RE·RF·RS

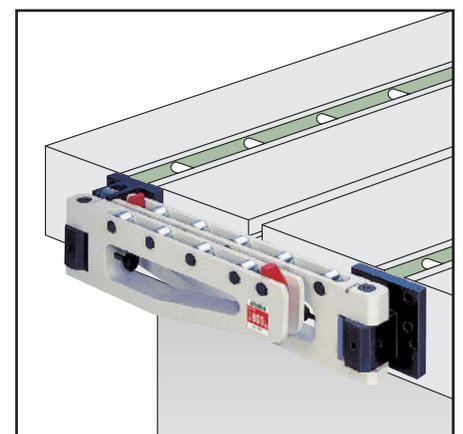
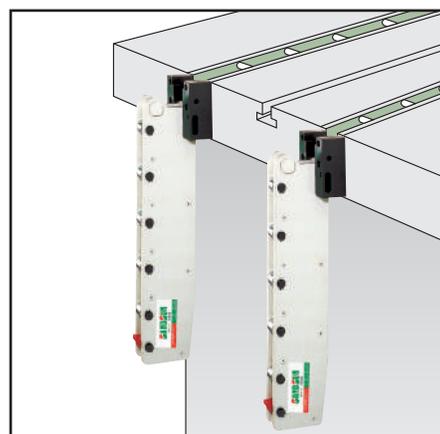
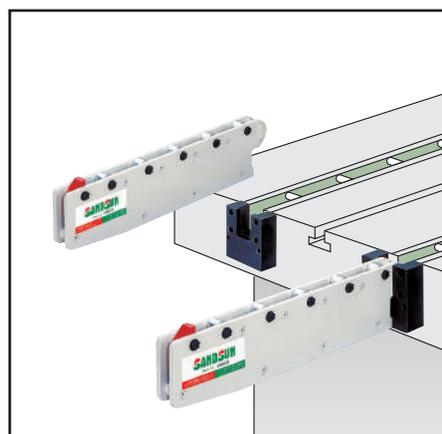
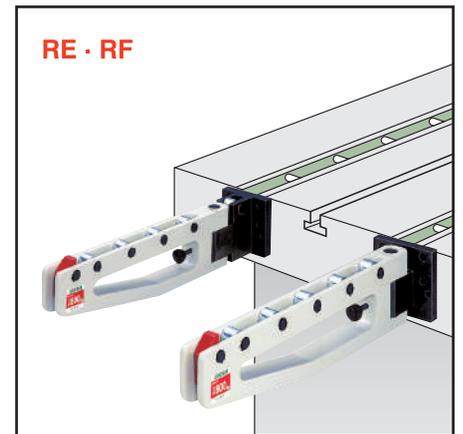
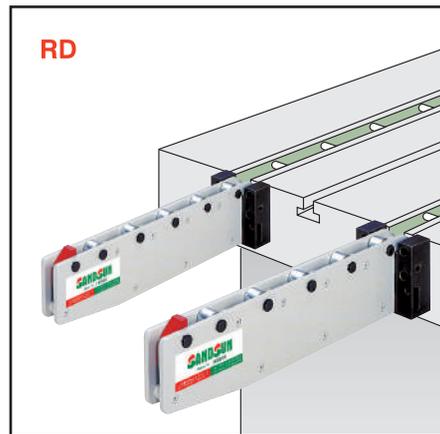
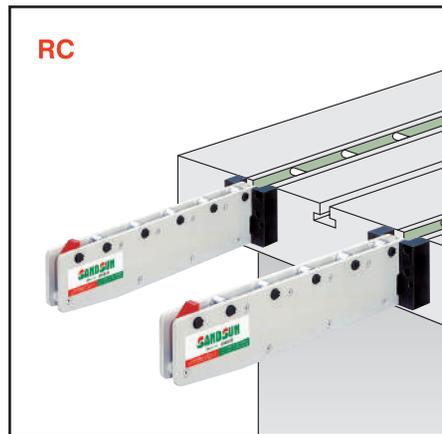
MODEL SELECTION 型式選定

R ① - ②

Model 型式	Storage Method 存放方式	Specification 規格
C	Dismantling 拆卸式	580
D	Hanging 折下式	760
E	Folding (short) 折疊式 (短座)	880
F	Folding (long) 折疊式 (長座)	990

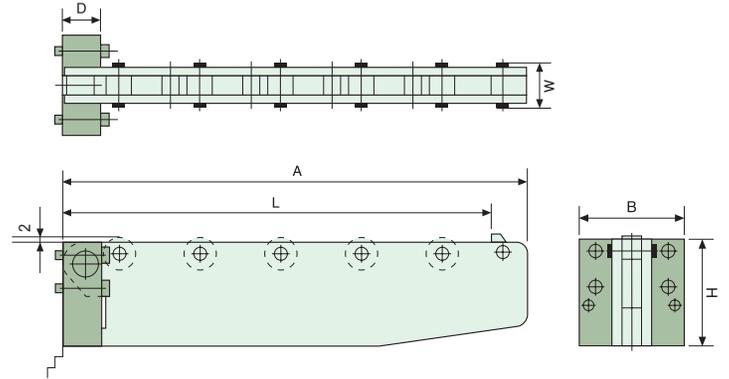


- The support should be changed into lengthening (S) model when using die arm cooperated with two-stepped die lifter. (Ex: RC-16A → RC-16SA · RC-16HA → RC-16HSA)
移模支臂配合二段式舉模滑軌使用時，固定座需改用加長 (S) 型。(例：RC-16A → RC-16SA · RC-16HA → RC-16HSA)



* Any specific model is available based on the needs of the customers.
特殊形式依實際需要另行訂製。

MODEL RC (DISMANTLING / 拆卸式)

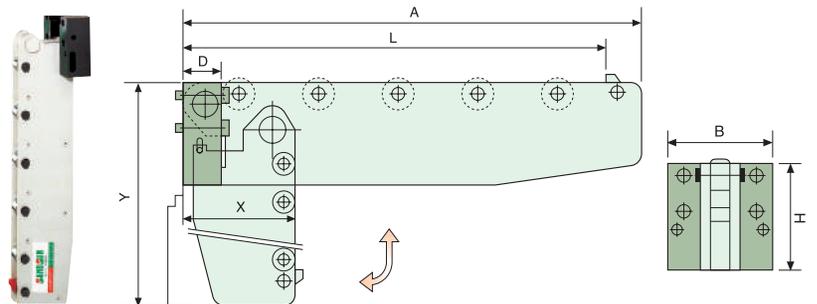


- The arm itself and the support in Model RC can be used separately.
RC 型支臂本體與固定座可分開個別使用。

Model 型式	Model of Support 固定座形式	Length of The Die 模具使用長 (L)	Capacity(kg) 承載能力 (kg)	Total Length(A) 總長 (A)	Width 寬度 (W)	Dimension Of Support 固定座尺寸			Hole Pattern For Installation 安裝孔位型式	Roller Q'ty 滾輪數
						D	B	H		
RC-580A	RC-12A	500	800	550	46	48	115	118	A Type	5
RC-760A		700	600	750				138		7
RC-880A	RC-14A	800	800	850				B Type	158	8
RC-990A	RC-16A	900	900	950					9	
RC-05125A	RC-14HA	500	1250	550	50	48	115	138	B Type	7
RC-05160A	RC-15HA		1600					148		
RC-05200A	RC-16HA		2000					158		
RC-07125A	RC-14HA	700	1250	750				138		9
RC-07160A	RC-16HA		1600					158		
RD-07200A	RC-18HA		2000					178		
RC-08125A	RC-16HA	800	1250	850				158		10
RC-08160A	RC-18HA		1600					178		
RC-08200A	RC-19HA		2000					188		
RC-09160A	RC-18HA	900	1600	950				178		11
RC-09200A	RC-20HA		2000					198		

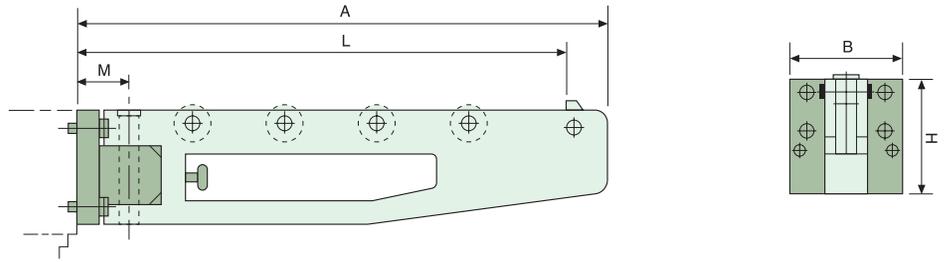
MODEL RD (HANGING / 折下式)

- The hanging length(Y) of Model RD should be less than the height between the plate and the ground.
選用 RD 型其折下之長度 (Y) 需小於台盤面距地面之高度。



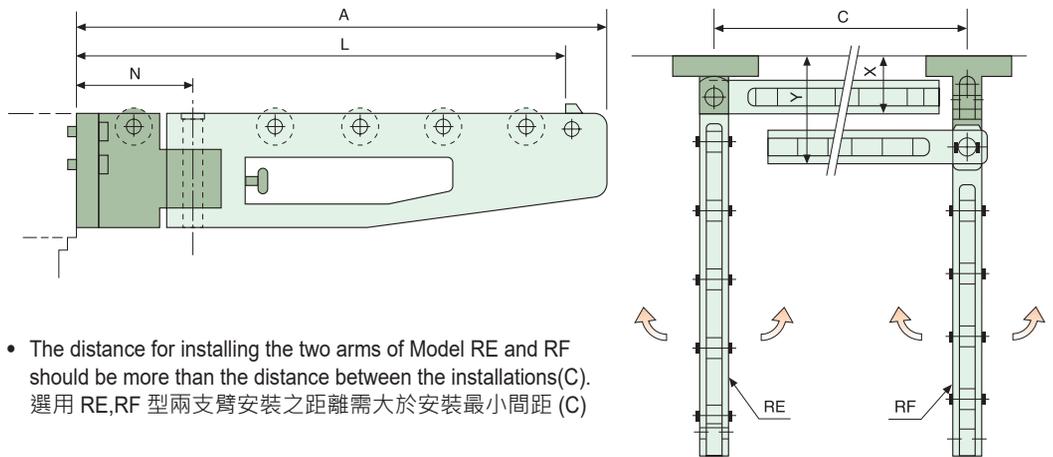
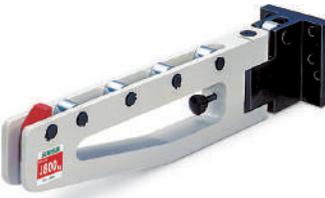
Model 型式	Model of Support 固定座形式	Length of The Die 模具使用長 (L)	Capacity(kg) 承載能力 (kg)	Total Length(A) 總長 (A)	Dimension Of Support 固定座尺寸			Hole Pattern For Installation 安裝孔位型式	Roller Q'ty 滾輪數	Dimension After Folding 折下尺寸	
					D	B	H			X	Y
RD-580A	RD-12A	500	800	550	52	115	118	A Type	5	145	630
RD-760A		700	600	750			7				830
RD-880A	RD-14A	800	800	850			B Type	138	8	165	950
RD-990A	RD-16A	900	900	950				9	158	9	185
RD-05125A	RD-14HA	500	1250	550	52	115	138	B Type	7	165	655
RD-05160A	RD-15HA		1600				148				665
RD-05200A	RD-16HA		2000				158				675
RD-07125A	RD-14HA	700	1250	750			138		9	165	855
RD-07160A	RD-16HA		1600				158			185	875
RD-07200A	RD-18HA		2000				178			205	895
RD-08125A	RD-16HA	800	1250	850			158		10	185	975
RD-08160A	RD-18HA		1600				178			205	995
RD-08200A	RD-19HA		2000				188			215	1005
RD-09160A	RD-18HA	900	1600	950			178		11	205	1095
RD-09200A	RD-20HA		2000				198			205	1095
									225	1115	

MODEL RE (FOLDING / 折疊式)



- Model RE itself can be turned left or right for storage.
RE 型可單獨任意左右旋轉存放使用

MODEL RF (FOLDING / 折疊式)

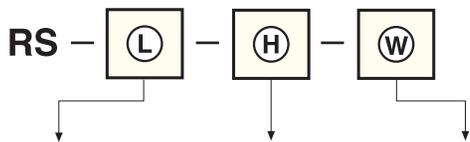


- The distance for installing the two arms of Model RE and RF should be more than the distance between the installations(C).
選用 RE,RF 型兩支臂安裝之距離需大於安裝最小間距 (C)

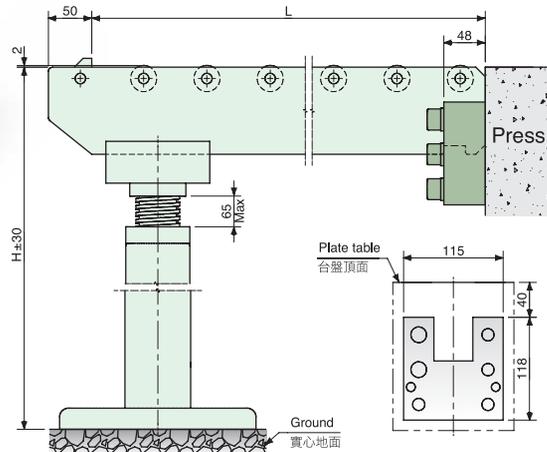
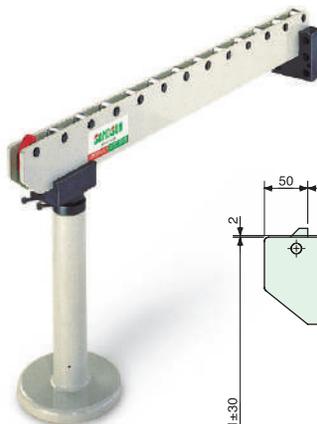
Model 型式	Length Of The Die 模具使用長 (L)	Capacity(kg) 承載能力 (kg)	Total Length(A) 總長 A(mm)	MIN.Distance For Installation 安裝最小間距 C(mm)	Dimension After Folding 折下尺寸		Dimension Of Support 固定座尺寸		Roller Q'ty 滾輪數	M	N	Hole Pattern For Installation 安裝孔位型式
					X	Y	B	H				
RE,RF-580A	500	800	550	525	87	150	115	118	5	57	120	A Type
RE,RF-760A	700	600	750	725				7				
RE,RF-880A	800	800	850	825				138	8			
RE,RF-990A	900	900	950	925				158	9			
RE,RF-05160A	500	1600	550	525	87	150	115	148	7	57	120	B Type
RE,RF-05200A		2000						158				
RE,RF-07160A	700	1600	750	725				9				
RE,RF-07200A		2000						178				
RE,RF-08160A	800	1600	850	825				10				
RE,RF-08200A		2000						188				
RE,RF-09160A	900	1600	950	925				178	11			
RE,RF-09200A		2000						198				

MODEL RS (SUPPORTER / 支柱式)

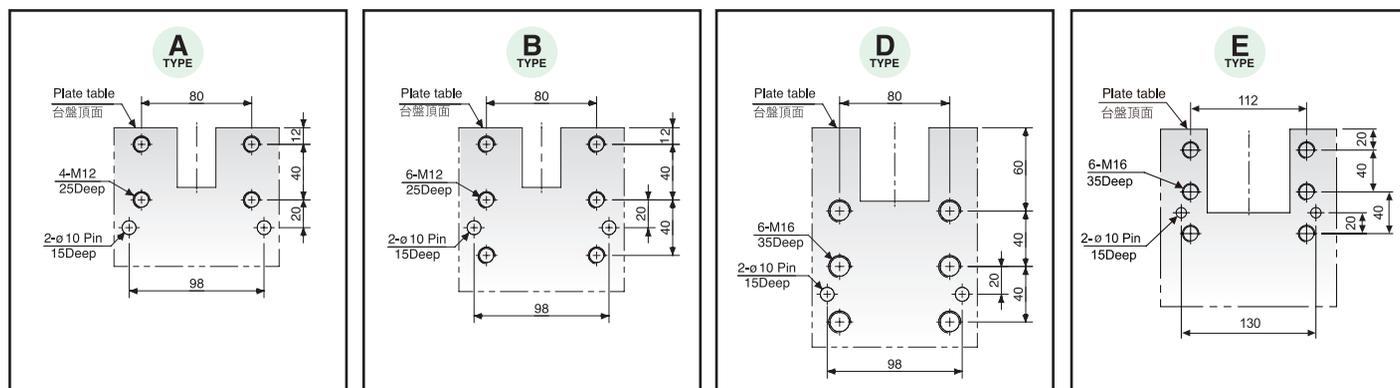
MODEL SELECTION 型式選定



- Use length 使用長度
- The height between the plate and the ground 地面距機台盤面高度
- Die weight 模具重量
- Please clearly indicate the above information while ordering. 訂購時請指明以上資料
- Adopt D Type to install hole pattern. 安裝孔位型式採用 D TYPE
- Capacity of Model RS is 3000 (KG)/PC 選用 RS 型式 · 單支承載能力為 3000 (KG)



HOLE PATTERN FOR INSTALLATION 安裝孔位型式



- Apply for DL/DB80 Die Lifter 搭配 DL/DB80 滑軌使用

ACCESSORIES 相關配件

- NON-LEAK VALVE 氣控閥



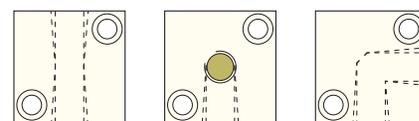
- CLAMP BRACKET 夾具存放架



CA

CB

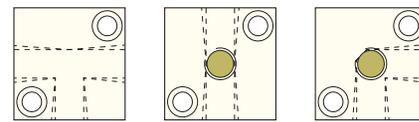
- TUBE CONNECTER MODEL 分油座型式



ST-B20

ST-B21

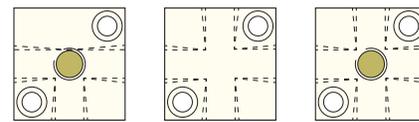
ST-B22



ST-B30

ST-B31

ST-B32



ST-B40

ST-B41

ST-B50

- ROTARY JOINT 迴轉接頭



- TUBE CONNECTER 分油座



Application 適用於

Press 、 Hydraulic press 、 Forging machine.
沖床、油壓機、鍛造機

Feature 特色

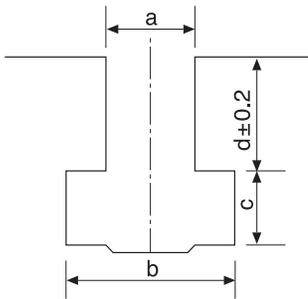
1. Mold Flip device using electric hydraulic motor, move up-down and flip mold through hydraulic power.
2. Using the Mold Flip device can raise work efficiency and also reach zero accident happens.
3. If power shut during mold flip, each hydraulic circuit is designed with the function of checking and avoiding oil leakage and the device will stop at the final stage.
4. Shorten the operation time of mold repair.
5. Mold Flip device helps the die to be flip. It has the inspection function of die loading and die move-in position.

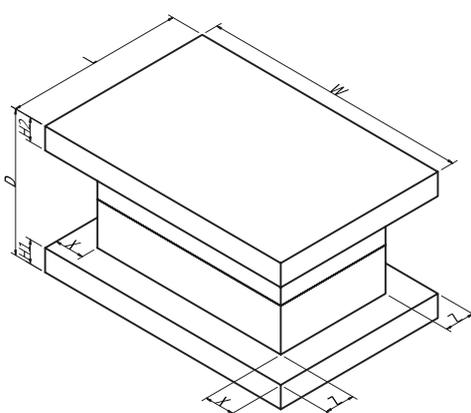


1. 模具翻轉機使用電動油壓馬達，以油壓力量升降及翻轉模具。
2. 運用模具翻轉機可提高工作效率又可達到零工安意外。
3. 翻模過程中如發生斷電，各油壓迴路具逆止防漏功能，機台立即停止於最後狀態。
4. 減少模具維修時間。
5. 模具翻轉機用於輔助模具翻轉，並有檢知以及定位裝置。

WORKING PROCESS & FUNCTION 作業流程與機能

<p>Die in 模具移入</p> <p>Flip device move down 翻轉裝置下降</p> <p>Lock the upper die with screws 上模鎖螺絲固定</p>	<p>Flip device move up 翻轉裝置上升</p> <p>Take lower die out 下模移出</p>	<p>Flip upper die by 180 degree 上模翻轉 180 度</p> <p>Drop the upper die to the height for maintenance or replacement 上模下降至維修 / 更換高度</p>
<p>Raise upper die and flip 上模上升翻轉</p> <p>Lower die in 下模移入</p>	<p>Flip device move down 翻轉裝置下降</p> <p>Release the screws of the upper die 鬆開上模螺絲</p>	<p>Flip device move up 翻轉裝置上升</p> <p>Take the die out 模具移出</p>

Customer 客戶名稱			
Machine Brand 機台廠牌		Machine Capacity 機台噸數	
Drawing for slide and bolster 上、下台盤圖面		<input type="checkbox"/> Yes, please offer it. 有·請提供 / <input type="checkbox"/> No. 沒有 <input type="checkbox"/> U-slot on the platen 台盤有 U 型槽 : <input type="checkbox"/> Yes. 有 Height 高度 : _____ mm / <input type="checkbox"/> No. 沒有	
Die Data 模具資料		1. U-slot on the platen 模具有 U 型槽 <input type="checkbox"/> Yes 有 <input type="checkbox"/> No 沒有 2. Working temperature 作業溫度 : _____ °C	
Item 品名	Model 規格	Qty 數量	Description 說明
Air Driven Hydraulic Pump Unit 氣動油壓泵浦單元			Control voltage 控制電壓 : <input type="checkbox"/> AC110V <input type="checkbox"/> AC220V <input type="checkbox"/> DC24V
Die Clamp 夾具	Upper 上模		The thickness of the template(H) 模具鎖模板厚度 (H): _____ mm
	Lower 下模		The thickness of the template(H) 模具鎖模板厚度 (H): _____ mm
Die Lifter 舉模滑軌			1. Max. die weight 最大模具重量 : _____ kg 2. There is hole with bolster 台盤有下料孔 <input type="checkbox"/> YES 是 <input type="checkbox"/> Removable Type (With quick connector) 抽取式 (含油壓快速接頭) <input type="checkbox"/> Two Stepped Type 兩段式 <input type="checkbox"/> NO 否 <input type="checkbox"/> Standard Type 標準式 3. Die Dimension 模具尺寸 (mm) : Max: _____ (L)x _____ (W) Min: _____ (L)x _____ (W) (L: left-right 左 - 右 W: front-back 前 - 後)
Die Arm 移模支臂			Max. die weight 最大模具重量 : _____ kg
Support of Die Arm 移模支臂固定座			Additional 追加
Others 其他	Install by Sandsun 山田順安裝 : <input type="checkbox"/> Yes 是 <input type="checkbox"/> No 否		
	CE certificated required CE 認證 : <input type="checkbox"/> Yes 是 <input type="checkbox"/> No 否		
T-slot / T 型槽尺寸			Slide 滑塊 : (mm) a : _____ b : _____ c : _____ d : _____ (±0.2)
			Bolster 台盤 : (mm) a : _____ b : _____ c : _____ d : _____ (±0.2)
	* The size of "d" should be measured to first digit after decimal point. d 尺寸請實量至小數點第一位或要求加工 ± 0.2mm		
Remark 備註			

Company 公司	Contact 聯絡人	Tel 電話
Die (Tooling) Dimensions / 模具尺寸 		Die Weight 模具重量 Max 最重 : ton
		D Min 最小 : mm Max 最大 : mm
		L Min 最小 : mm Max 最大 : mm
		W (Should be unified 需統一) mm
		H1 (Should be unified 需統一) mm
		H2 (Should be unified 需統一) mm
		Die Edge Z (Min 最小) mm
		Die Edge X (Min 最小) mm
		Position Device 定位裝置 <input type="checkbox"/> Yes (Please offer drawing) 是 (請提供圖面) <input type="checkbox"/> No 沒有
		Remark 備註 1. Size (W) and (H) should be unified. 尺寸 (W) 和 (H) 必須統一 2. There must be positioning device on die. 模具必須有定位裝置
Die Cart Type 台車型式	<input type="checkbox"/> Single Machine and Die 單機單模 <input type="checkbox"/> Multi-machines and Twin Dies 多機雙模 <input type="checkbox"/> Single Machine and Twin Dies 單機雙模 <input type="checkbox"/> Others 其他	
The Way of Die Movement 模具移動方式	<input type="checkbox"/> Hook push/pull 掛勾推拉 <input type="checkbox"/> Hand push 手推	Die Change Operation 換模操作方式 <input type="checkbox"/> Automatic 全自動控制 <input type="checkbox"/> Semi-Automatic 半自動控制 <input type="checkbox"/> Manual 手動控制
Main Power Supply 電源供應	<input type="checkbox"/> AC220V <input type="checkbox"/> AC _____ V (3 Ø 4W) <input type="checkbox"/> AC380V <input type="checkbox"/> 60Hz <input type="checkbox"/> 50H	
Construction of Rail Track 台車軌道型式	<input type="checkbox"/> Under ground 埋入式 <input type="checkbox"/> On the ground 地面上 <input type="checkbox"/> On the bench 台架上	Control Box 電控箱位置 <input type="checkbox"/> On the Cart 台車上 <input type="checkbox"/> On the ground 地面上
Length of Rail Track 軌道長度	<input type="checkbox"/> Min. die changing length 最小換模距離 <input type="checkbox"/> Custom 自訂 _____ M	Type of Operation Panel 操作面板型式 <input type="checkbox"/> Button & Switch 按鈕開關 <input type="checkbox"/> HMI 人機介面
Required Parts Brand 零件廠牌要求	<input type="checkbox"/> No required 無要求 <input type="checkbox"/> Yes (Please offer detail) 有 · 請提供資訊	Required PLC Brand PLC 廠牌要求 <input type="checkbox"/> No required 無要求 <input type="checkbox"/> Yes (Please offer detail) 有 · 請提供資訊
Drawings Required From Customers 客戶需提供圖面	1. Platen drawing (slide and bolster) 沖床台盤圖面 (上滑塊及下台盤) 2. Machine outline drawing 機台外型圖 3. Factory layout drawing 工廠佈置圖 (機台佈置圖)	
Remark 備註		



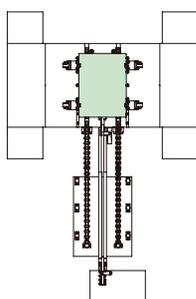
Feature 特色

1. Shorten the operation time of die change.
2. Auto position checking of die cart moving.
3. Die moving guide and position detection function.
4. Device for preventing die sliding.

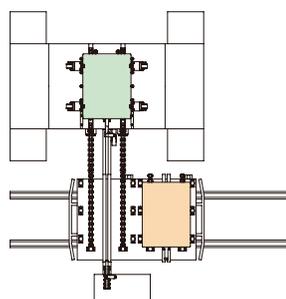
1. 減少換模待機時間。
2. 台車移動自動對機台尋位。
3. 模具移入導正及到位置檢知功能。
4. 模具滑落防呆保護裝置。

DIE CART TYPE 台車型式

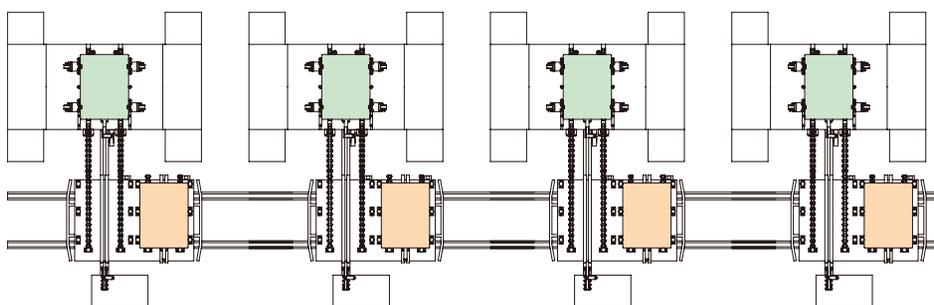
Single Machine and Die 單機單模



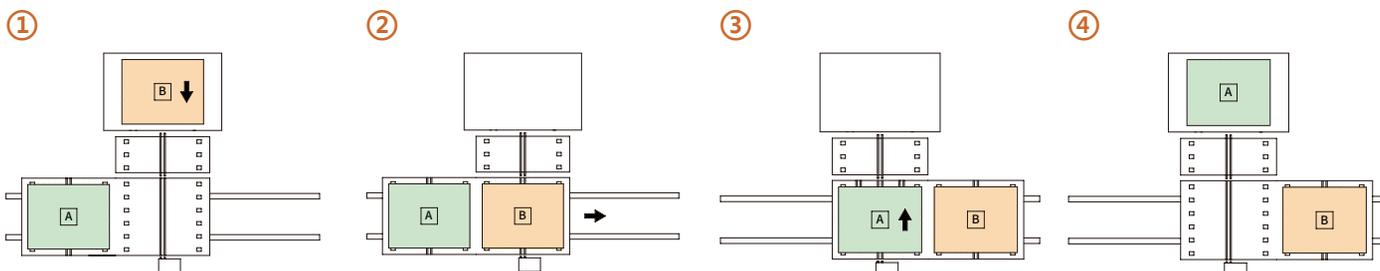
Single Machine and Twin Dies 單機雙模



Multi-machines and Twin Dies 多機雙模



DIE CART CHANGING PROCEDURES 台車換模流程



① Die B move out
B 模具移出

② Die cart changes position
台車換位

③ Die A move in
A 模具移入

④ Die change finished
換模完成