

規格表 SPECIFICATIONS

桁架軸向 /// AXES ON GANTRY

項次 NO.	項目	ITEMS	規格	SPECIFICATIONS	備註	REMARK
1	直交軸數	ORTHOGONAL AXES	伺服三軸 X / Y / Z	SERVO DRIVE 3 AXES (X / Y / Z)	Z軸為選配	Z AXIS OPTIONAL
2	線速度 X	X AXIS LINEAR SPEED	120 m/min	120 m/min	0.75 kw	0.75 kw
3	線速度 Y	Y AXIS LINEAR SPEED	90 m/min	90 m/min	0.75 kw	0.75 kw
4	線速度 Z	Z AXIS LINEAR SPEED	45 m/min	45 m/min	0.4 kw	0.4 kw
5	重複精度	REPEATABILITY ACCURACY	±0.05 mm	+/- 0.05 mm		

電控操作 /// CONTROL SYSTEM

項次 NO.	項目	ITEMS	規格	SPECIFICATIONS	備註	REMARK
1	人機介面	HUMAN MACHINE INTERFACE	7" 彩色手持觸控	7" COLOR TOUCH PANEL, HAND-HELD		
2	控制模式	CONTROLLER	PLC	PLC		
3	語言顯示	LANGUAGE DISPLAY	中文 / 英文	CHINESE / ENGLISH		
4	位置控制	POSITION CONTROL	絕對型	ABSOLUTE ENCODER		
5	運動軌跡	MOTION TRACK	四軸曲線同動	SIMULTANEOUS CONTROL OF 4 AXES		

取置單元 /// PICK AND PLACE UNIT

項次 NO.	項目	ITEMS	PN	CL	CM	備註	REMARK
1	轉位動力	ROTATION DRIVE	空壓 / PNEUMATIC	伺服 / SERVO	伺服 / SERVO		
2	轉位角度	ANGLE OF ROTATION	90°斜軸 / 90° TILTING AXIS	360° C axis	360° C axis		
3	夾取動力	GRIPPING DRIVE	平行 / 角度 / 夾爪(2 / 3 / 4指) / 空壓 / 電動	CHOICE OF PARALLEL / ANGULAR / JAWS (2 / 3 / 4 FINGERS) / PNEUMATIC / ELECTRIC		依需求選用	
4	額定荷重	RATED PAYLOAD	3 kgf/set	6 kgf/set	10 kgf/set		

料倉單元 /// PARTS SUPPLY UNIT

項次 NO.	項目	ITEMS	SF	SD	SR
1	置料模式	PARTS PLACING MODE	直交陣列式 / ARRAY TYPE	直交陣列式 / ARRAY TRAY TYPE	垂直堆疊式 / VERTICAL STACKING TYPE
2	料盤規格	PARTS TRAY SIZES	350 x 300	600 x 480	Ø20 ~ Ø150
3	料站組數	SETS OF PARTS STATION	6 / 8 / 10	5 / 7	10 / 12 / 16
4	料盤移載	PARTS TRAY MOVEMENT	迴轉式 / ROTATING	雙層循環式 / DOUBLE-LAYER CIRCULATION	迴轉式 / ROTATING
5	移載驅動	MOVEMENT DRIVE	伺服馬達 / SERVOMOTOR	伺服馬達 / SERVOMOTOR	減速馬達 / SPEED-REDUCTION MOTOR
6	安全警覺	SAFETY ALARM	無盤檢知、過載保護 / LACK OF TRAY DETECTION. OVERLOAD PROTECTION		
7	選用配件	OPTION	成品輸送機 / 換向機構 / 換站移載機構		

◎ 如有任何客製需求，歡迎來電洽詢。 ◎ 本公司保有修改規格之權利，不另行通知。 ◎ When customized specifications are required, contact the manufacturer. Specifications shown in this catalog are subject to change without prior notice.

ESM PRECISION
Productive Solution

冠宸精密機械股份有限公司 ESM PRECISION MACHINERY CO., LTD.

41263 台中市大里區國中一路25巷25弄6號 No. 6, Aly. 25, Ln. 25, Guozhong 1st Rd., Dali Dist, Taichung City 412, Taiwan.
TEL: +886 - 4 - 2407 - 0659 ~ 0660 FAX: +886 - 4 - 2407 - 0508 E-mail: sales@esmprecision.com.tw http://www.esmprecision.com.tw

ESM PRECISION
Productive Solution

工業機械手臂時代的到來
品質源於專注 技術成就專業

桁架機械手臂

工業機器人應用

工廠自動化整合

專用設備規劃製造

GANTRY LOADER

APPLICATION
OF INDUSTRIAL ROBOT

FACTORY AUTOMATION
INTEGRATION

PLANNING AND MANUFACTURING
OF SPECIAL-PURPOSE MACHINES



冠宸精密結合機電專業技術團隊，秉持多年開發經驗，專注於機械設備與電控系統之研發應用。冠宸以卓越的研發實力及客製化能力，致力協助客戶於製造生產力之提升，可徹底滿足客戶對自動化加工之需求。

ESM combines a professional technical team of machinery and electric control experts with many years of development experience, focusing on the R & D and application of mechanical equipment and electrical control systems. With its outstanding R & D strength and customization capabilities, ESM is committed to assisting customers in improving manufacturing productivity, and can fully meet customers' needs for automated processing.

SD雙層循環式陣列供料倉

- 廣泛應用於規則及異型材料之定位
- 立體結構設計，有助於提高置料量
- 適用於單次供料，且需高置料量之需求
- 可延伸多製程自動化流水線

SD Double Layer Circulated Array Tray Type Parts Supply Unit

- Widely applied for positioning of regular and irregular parts.
- Solid structure design helps to increase parts storage capacity.
- Suitable for single time of part supply and where high storage capacity is required.
- Can be extended with multi-process automated flow production line.

SF迴轉式陣列供料倉

- 廣泛應用於規則及異型材料之定位
- 在安全情況下，可不停機補料

SF Rotary Array Type Parts Supply Unit

- Widely applied for positioning of regular and irregular parts.
- Under a safety condition, supplying parts without stop of the machine is possible.



SR迴轉式堆疊供料倉

- 適用於規則盤形材料
- 多種供料應用配置
- 在安全情況下，可不停機補料

SR Rotary Stack Parts Supply Unit

- Suitable for regular disk shaped parts.
- Various parts supply deployment.
- Under a safety condition, supplying parts without stop of the machine is possible.



供集料輸送機

- 節律控制功能可客製
- 產線串接擴充可客製

Parts Supply And Collection Conveyor

- Customized control function is available.
- Customized production line linking and expanding is available.



桁架軸向

- 高刚性X軸橫樑經精密加工
- 獨創Y/Z軸模組化結構(專利)
- 雙立柱支撐設計，提供彈性化配置
- 可規劃多工序生產之擴充

取置轉位模組(C軸)

- 低背隙傳動結構

Pick and Place Swiveling Module (C axis)

- Driven by low backlash transmission mechanism

取置轉位模組(標配)

- 空壓驅動

Pick and Place Swiveling Module (Standard)

- Pneumatic drive

Axes on Gantry

- The high rigidity cross beam (X axis) is precision machined.
- Innovative modular structure on Y / Z axes (Patented).
- Double column support allows for flexible layout.
- Expansion for multi-process is available.



桁架機械手臂

工業機器人應用

工廠自動化整合

專用設備規劃製造

GANTRY LOADER

APPLICATION
OF INDUSTRIAL ROBOT

FACTORY AUTOMATION
INTEGRATION

PLANNING AND MANUFACTURING
OF SPECIAL-PURPOSE MACHINES

Angular Feed Parts Supply Device

- Suitable for supplying parts to the spindle on a sliding headstock lathe, which operates under a tool monerment machining mode.
- The shortest route design effectively shortens the parts supply internal and reduces installation space.
- Available to use together with various types of parts supply units.
- Applicable for a wide range of parts and factory layouts.

規格表 SPECIFICATIONS

輕量型桁架 LIGHT DUTY GANTRY LOADER

項次 NO.	項目	ITEMS	規格 SPECIFICATIONS	備註 REMARK
1	直交軸數	ORTHOGONAL AXES	SERVO DRIVE 3 AXES (X / Y / Z)	Z AXIS OPTIONAL (選配)
2	X軸線速度	X AXIS LINEAR SPEED	90 m/min	0.4 kw
3	Y軸線速度	Y AXIS LINEAR SPEED	90 m/min	0.4 kw
4	Z線速度	Z AXIS LINEAR SPEED	45 m/min	0.4 kw
5	重複精度	REPEATABILITY ACCURACY	±0.05 mm	
6	額定荷重	RATED PAYLOAD	1 kgf/set	

◎ 如有任何客製需求，歡迎來電洽詢。 ◎ 本公司保有修改規格之權利，不另行通知。 ◎ When customized specifications are required, contact the manufacturer. Specifications shown in this catalog are subject to change without prior notice.

斜進供料裝置

- 適用於走心式車床於走刀加工模式之主軸供料
- 最短路徑設計，可有效壓縮供料週期及安裝空間
- 可靈活搭配各式料倉
- 可廣泛運用於各式工件及工廠配置

桁架機械手臂

GANTRY LOADER

工業機器人應用

APPLICATION
OF INDUSTRIAL ROBOT

工廠自動化整合

FACTORY AUTOMATION
INTEGRATION

專用設備規劃製造

PLANNING AND MANUFACTURING
OF SPECIAL-PURPOSE MACHINES



ST雙塔循環式陣列供料倉

- 具有獨立循環之素材備料區及成品收集區
- 可擴充為自動循環產線
- 採用伺服馬達驅動循環式層架
- 專屬置料盤管理存放區

ST double turret circulated array type parts supply unit

- Designed with independently circulated raw material preparation area and finished product collection area.
- Available to expand to an automatic circulated production line.
- Employ servo motor to drive the circulated rack.
- Specially used parts tray management storage area.



規格表 SPECIFICATIONS

項次 NO.	項目	ITEMS	ST
1	置料模式	PARTS PLACING MODE	直交陣列式 / ARRAY TYPE
2	料盤規格	PARTS TRAY SIZES	600 x 480
3	料盤組數	SETS OF PARTS STATION	8 / 10
4	料盤移載	PARTS TRAY MOVEMENT	無限循環式 / INFINITE CIRCULATION
5	升降循環	ELEVATION CIRCULATION	伺服馬達 / SERVO MOTOR
6	移載驅動	MOVEMENT DRIVE	伺服馬達 / SERVO MOTOR

◎ 如有任何客製需求，歡迎來電洽詢。 ◎ 本公司保有修改規格之權利，不另行通知。
◎ When customized specifications are required, contact the manufacturer. Specifications shown in this catalog are subject to change without prior notice.