



高速三軸線性馬達 雕模放電加工機

3-AXIS HIGH SPEED LINEAR DRIVE DIE SINKER E.D.M



榮獲2013台灣精品獎殊榮
2013 TAIWAN EXCELLENCE AWARD



FEATURE 特 | 色 | 介 | 紹

三機一體省空間 Compact Floor Layout

三機一體設計，可節省佔地空間達10%以上，提升客戶工廠佔地使用率。
All-in-one design to save occupied space by 10%.

三軸高性能線性馬達 X, Y, Z Axis Linear Drive

高剛性結構設計，X、Y、Z三軸搭載高性能線性馬達，達成高速伺服、無背隙高精定位、高精度壽命之特點，搖動加工時提升整體軌跡路徑，確保加工時的外型精度。
Highly rigid column moving structure design attached with X、Y、Z axis Linear Motors to gain high speed, backlash-free, high precision machining.

氣壓平衡系統 Air Balance Spindle

放電主軸採用線性馬達及氣壓平衡系統，高響應靈敏伺服，對深溝及較小電極不易加工的排渣效果大幅改善，放電效率提升達3~4倍；氣壓平衡所需氣壓源，透過專利內循環設計可重覆使用，達成客戶節能效果。
Cutting speed can be increased up to 4 times and high responsiveness possible by Linear Motor and air balance system. It can have good machining result on tiny and deep hole, also rib job.

高親和性操作介面 User Friendly

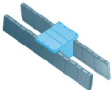

高親和性操作介面，使用者可直接呼叫內建 E code，輸入相關加工尺寸，即可立即進行複雜的各式加工模式，無需進行複雜的程式路徑編輯。
Friendly conversation window is available. Suitable working condition easily and quickly come up by just select the type of E code.

全新進化高速+節能迴路 High Speed+Energy Saving

採新一代HSC高速放電迴路與AES節能系統，透過可控的放電波形，可在同樣消耗情況下，提高加工速度30%，減少加工電源消耗45%。
Revolutionary Energy Saving HSC and ESC. Machining speed is enhanced by over 30% under identical low wear rate through controllable discharge wave.

- ⋄ 高速、高效率
HIGH MACHINING SPEED
- ⋄ 低電極消耗
LESS ELECTRODE WEAR
- ⋄ 高產能
HIGH PRODUCTIVITY

高速移動 HIGH SPEED MOVEMENT

	LINEAR Motor	Ball-Screw
Traverse Speed	18 - 21 m / min	2 - 5 m / min
Positioning Lag	NO	YES
Structure		

加工實例 HIGH PERFORMANCE EXAMPLE

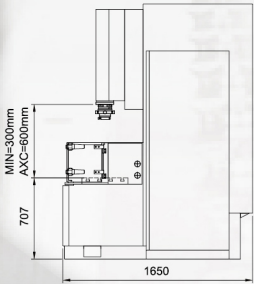
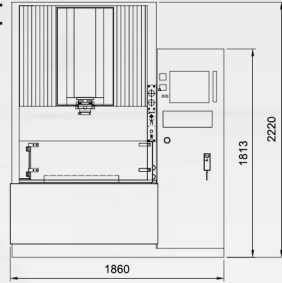
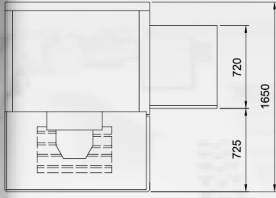


- 電極(Electrode)：銅(Cu) 60x60mm 2pcs
- 工件材質(Workpiece)：NAK80
- 加工深度(Depth)：2.70mm
- 加工時間(Machining Time)：13hr 05min
(Rough=3hr 35min; Finish=9hr 30min)
- 粗糙度(Roughness [Ra])：0.50µmRa

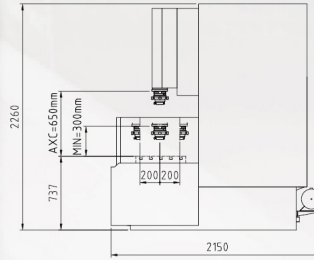
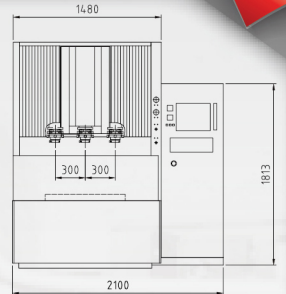
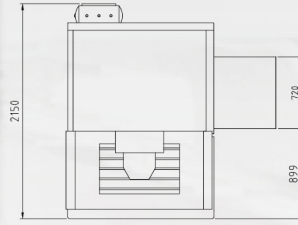


FLOOR LAYOUT 佔 | 地 | 面 | 積 | 圖

A5030L LINEAR MOTOR DRIVE 單位:mm



A6040L LINEAR MOTOR DRIVE 單位:mm



SPECIFICATION 機 | 械 | 規 | 格 | 表

項目(ITEMS)	單位(UNIT)	A5030L	A6040L
工作台規格(寬x深) Work Table Size (WXD)	mm	650x400	800x500
工作槽容積尺寸(寬x深x高) Work Tank Size (WXDXH)	mm	1100x640x400	1200x740x450
工作槽最大工作物尺寸(寬x深x高) Max. Job Load Size (WXDXH)	mm	850x550x300	1050x700x300
X, Y行程 Table Travel (X, Y)	mm	500x350	600x400
Z軸行程 Table Travel (Z)	mm	300	350
三軸驅動模式 X, Y, Z Axis Drive	mm	X, Y, Z軸線性馬達驅動 (X,Y,Z Axis By Linear Motor)	X, Y, Z軸線性馬達驅動 (X,Y,Z Axis By Linear Motor)
電極板至工作台面距離 Distance from Ram platen to work table	mm	300~600	250~600
最大電極重量 Max. Electrode Weight	kg	30	50
最大工作物重量 Max. Work-piece Weight	kg	1000	1500
機械本體外觀尺寸(寬x深x高) Outside Dimensions (WXDXH)	mm	1860x1650x2220	2100x2150x2260
機械淨重 Net Weight	kg	2230	3000
使用氣壓 Pneumatic Requirement	kgf/cm ²	6	6
配合油箱 For Dielectric Tank	—	DA53	DA64

選配件 (Optional Accessories)		
3支刀ATC	3 Pos. ATC	<input checked="" type="checkbox"/>
4支刀ATC	4 Pos. ATC	<input checked="" type="checkbox"/>
C軸	C-Axis	<input checked="" type="checkbox"/>
永久磁座	Magnet Base	<input checked="" type="checkbox"/>
自動進洩油	Auto Fill & Drain	<input checked="" type="checkbox"/>
B軸	B Axis	<input checked="" type="checkbox"/>
手動升降門	Manual Drop Door	<input checked="" type="checkbox"/>
鎢鋼迴路	Tungsten Circuit	<input checked="" type="checkbox"/>
油冷卻器	Oil Cooler	<input checked="" type="checkbox"/>
副箱	Booster	<input checked="" type="checkbox"/>

※B軸僅限於噴水環境下使用。
 ※50A和75A副箱最多可到300A。
 ※C軸和ATC有系統3R及EROWA品牌供選擇。
 Note:
 B Axis can be operated only under flushing circumstance
 50A and 75A Booster are offered for maximum 300A.
 System 3R and EROWA ATC and C Axis are offered as options.

電源箱(POWER SUPPLY UNIT)	單位(UNIT)	50N	75N
最大加工電流 Max. Machining Current	A	50	75
最大輸入電力使用 Max. Power Input	KVA	5	6
電極消耗比 Electrode Wear Rate	%	0.2	0.2
最佳表面精度 Bset Surface Roughness	µm/Ra	0.25	0.25
電源箱尺寸(寬x深x高) Outside Dimensions(wxdxh)	mm	內建(Built in)	內建(Built in)
電源箱淨重 Weight	kg	內建(Built in)	內建(Built in)

過濾箱(DIELECTRIC)	單位(UNIT)	DA53	DA64
加工液容量(Volume)	L	480	635
過濾系統(Fliter)	method	紙網(Paper Fliter)	
油泵馬力(Power)	HP	0.5	
淨重(Weight)	kg	內建(Built in)	
尺寸(Outside Dimensions)	mm	內建(Built in)	

※本公司隨時都在進行研究改進的工作，因此保有隨時更改設計、規格尺寸及接謝結構之權利。
 ※The manufacturer reserves the right to modify the design for specification, mechanisms, ...etc. to improve the performance of the machine without notice, all the specifications above are just for reference.