



HOMEMADE LINEAR MOTOR 全國首創自製線性馬達 PRECISION WEDM 精密級線切割機-MV SERIES

Technology innovation, and development of economize on energy.

科技創新 / 節能開發

▲ Remote Monitoring Function(OPTIONAL) 遠端監控功能(選配)

Adapt PC Based CNC controller, 15" TFT for easy operation. Those support intranets, download, and upload, of NC program. Real Time Simulator allows you to see up-to-date machining status.

採用PC BASED CNC控制器, 15吋液晶螢幕, 操作方便, 可支援區域網路連線, 可直接由網路上傳下載加工程式, 配遠端監控技術, 可以掌握最新機台使用狀況。

▲ Energy saving of design 綠色節能設計

The convention type is to leak the thermal energy by resistance. Now, in order to get the energy recovery, CHMER use DC-DC current transformer technology that can reduce the thermal energy by resistance. It is 20% saving energy.

放電迴路因電感產生感應高壓, 過去採用電阻洩放, 現改良為DC-DC變流器, 使能源回收再利用並減少電阻產生高熱。

放電電源可以節省20%左右能源。

▲ In-House- Linear Motor capability(OPTIONAL) 高精度自製線性馬達(選配)

CHMER In-House Linear motor, it is the Non-touch linear motion system. So it has no the problem of backlash cause by Balls crews. Also it reaches the close loop collocating with high resolution linear scale. So it guarantees the performance of high press ion and long life-span.

採用自製線性馬達以無接觸直接驅動, 克服滾珠螺桿傳動會有摩擦進而產生背隙問題。

搭配高解析度光學尺全閉迴路伺服, 實現高精度加工及長壽命使用保證。

▲ Revolutionary 4th Generation AWT(OPTIONAL) 全新第四代超高速自動穿線(選配)

They are advanced technology and high speed automatic wire threading, condensed structures. Adapt high performance servo motor. Capable of threading in water and at break location, not return back to start point.

Moreover it is only 6 seconds for wire threading. (workpiece 50mm).

先進高速自動穿線: 構造最精簡, 採用AC無刷伺服馬達, 當加工發生斷線或需移孔加工時, 無需回起割點或洩水。穿線速度能在六秒內穿過(50mm厚度)。

▲ Construction design 結構設計

High rigidity and accuracy T type structure design with separate x and y axis reduces motor load and interference in x and y during movement.

機台採高剛性、高精度,X軸座與Y軸座獨立分開之結構設計, 減輕馬達負荷, 並減少X、Y軸重疊設計, 移動時有影響精度情形。

▲ Simplified and modulated circuit design 電源箱模組化設計

This makes easy maintenance due to modulated circuit board design, just change the PCB when trouble occurred.

電控箱採用盒裝模組化, 最容易維修、服務之設計, 降低維修技術需求與成本。

規格表 Specification

機械本體 MACHINE BODY / 機型 MODEL		MV 532S (L)	MV 643S (L)
X,Y行程	X,Y axis (mm)	500x300	600x400
U,V,Z行程	U,V,Z axis (mm)	90x90x250	120x120x300
最大工作物	Max.size of working piece (WxDxH mm)	845x600x240	1000x700x290
最大工件重量	Max. weight of working piece (kgw)	400	500
X,Y進給速度	XY feed rate (mm/min)	Max.800	Max.800
馬達系統	Motor system (axis)	AC SERVO MOTOR/ linear motor	AC SERVO MOTOR/ linear motor
線徑(標準)	Wire diameter range (mm)	φ 0.15~0.3(φ 0.25)	φ 0.15~0.3(φ 0.25)
最大送線速度	Max. wire feed rate (mm/sec)	300	300
線張力	Wire tension(gf)	300~2500	300~2500
最大切割斜度/工件厚度	Max. taper angle(°) /workpiece thickness (mm)	± 14.5° /80(wide-angled nozzle, DA+DB=15mm)	± 21° /100(wide-angled nozzle, DA+DB=15mm)
本體外觀尺寸	Outside dimension (WxDxH mm)	3100*2600*2100	3300*2800*2200
機械淨重	N.W. (kgw)	4800	5200
加工電源 / Power supply unit			
迴路方式	Circuit system	Power MOS Transistor	Power MOS Transistor
最大輸出電流	Max. output current	25A	25A
電流選擇	IP select	10	10
休止時間	Off time select	50	50
過濾裝置 / Working Fluid Supply Unit			
過濾容量	Tank Capacity	650L	760L
過濾方式	Filter Element	Paper	Paper
離子樹脂過濾器	Ion Exchange Resins	14L	14L
水質控制	Conductivity Control	Auto	Auto
液溫度控制	Fluid Temperature Control	Auto	Auto
CNC裝置 / CNC UNIT			
輸入方式	DATA INPUT	Keyboard,USB,Ethernet	Keyboard,USB,Ethernet
螢幕顯示	DISPLAY	15 Inch Color	15 Inch Color
制御方式	Control system	32 bit,1-CPU,Semi Closed Loop	32 bit,1-CPU,Semi Closed Loop
控制軸數	Control axis	X,Y,U,V,Z(5 Axis)	X,Y,U,V,Z(5 Axis)
設定單位	Measurement resolution	0.001mm	0.001mm
最大指令值	Max. command value	± 9999.999mm	± 9999.999mm
補間	Movement measuring system	Linear/Circular	Linear/Circular
命令	Command system	ABS /INC	ABS /INC
加工速度控制	Machining feed control	Servo / Const.Feed	Servo / Const.Feed
圓形倍率	Scaling	0.001~9999.999	0.001~9999.999
加工條件記憶	Machining EDM Condition Memory	1000~9999	1000~9999
最大耗電量	Total AC Power Input	3 Phase 220 ± 10% / 13KVA	3 Phase 220 ± 10% / 13KVA

標準配備 Standard Accessories

- 垂直校正器 Auto Vertical Alignment Jig
- 變壓器 Transformer
- AC 無電解電源 AC Power

- 冷卻器 CHILLER
- 工作夾具 Fixture
- 節能迴路 ENERGY SAVING OF CIRCUIT

選配 optional

- 0.1 mm 線徑 0.1 mm Wire unit
- 大型供線輪組 Wire feeder unit
- 自動剪線器 Wire Chopper
- 光學尺 Glass Linear scale

- B 軸加工(第六軸加工) B AXIS (6th AXIS Function)
- AC-μ 微細電源 AC-μ Circuit
- X,Y軸線性馬達驅動 X,Y AXIS linear motor
- 遠端監控 Remote Monitoring Function
- 自動穿線系統 Auto Wire Threading (AWT)



CHMER EDM

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