



EMA-650/EMA-500 CNC 圓鋸片研磨機
CNC Circular Saw Blade Sharpening Machine

EMA

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CNC Circular Saw Blade Sharpening Machine



Double hand wheel design makes the operator can move Z axis & B axis at the same time to locate quickly. Also increase the grinding efficiency.

雙手輪的設計，Z軸和B軸同時移動，可快速定位；增加研磨效率。

Stainless Steel Half-lift Type Full Cover

全罩半掀式不鏽鋼護蓋

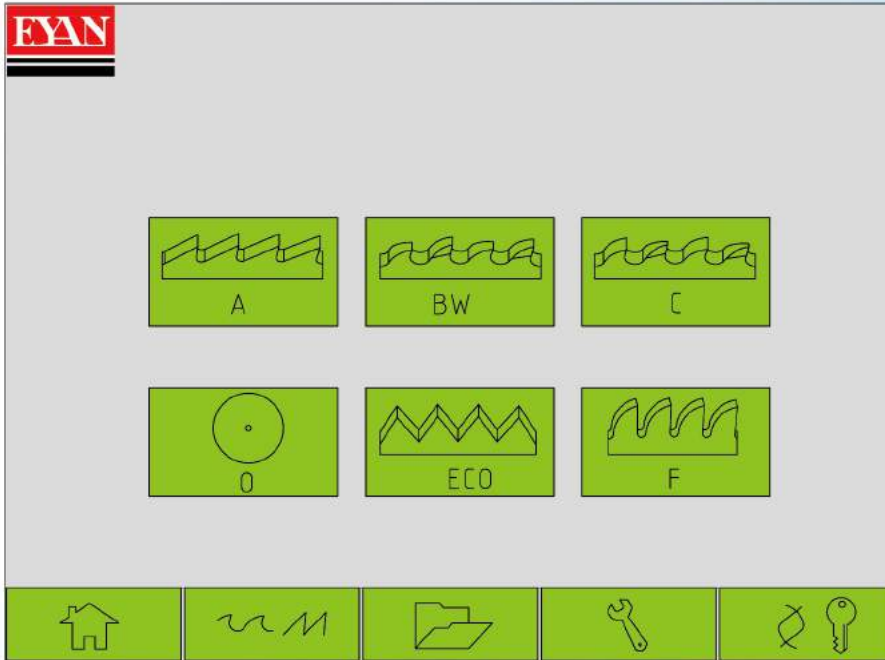
Stainless steel SU304 half-lift type full cover

全罩半掀式SU304不鏽鋼護蓋

All inner cover plate using SU304 stainless steel; not rust permanently.

所有內部板金蓋板均為SU304不鏽鋼材質，永不生鏽





ADVANCED CNC CONTROL 先進CNC控制
High Precision and Easy to Operate 精密、操控簡易







The newly designed touch screen with patented graphical display which makes no more language barriers. Any language speakers can learn quickly. Add F & ECO teeth type for friction saw blade. EMA models are the best choice for your working requirement.

In order to grind all teeth of the saw blade perfectly, it designed with CNC automatic machine with four axes control. Users can input all datas including diameter, teeth number, teeth height, cutting angle, back clearance angle, feed speed, grinding wheel rotation speed, and up-down chamfer in EMA series machines. Sawblade can be grinded fast and economical, the machine can easily be operated without needing skilled technician.

全新設計的觸控螢幕，專利的圖形顯示，不再有語言障礙，任何語言均可快速學習。全新的EMA-500、EMA-650除了原有的A、BW、C、O型齒外再新增加摩擦式齒型F和ECO齒型，使EMA機型更能符合您的工作需要。

為了完美地研磨鋸片的各個齒面，特別開發帶有四個CNC數控軸自動化機器，EMA系列機種，外徑、齒數、齒高、切削角、背隙角、進給速度、砂輪轉速，上下倒角全部數值化輸入，不但可經濟快速研磨鋸片，且不需要高級技術員，也可以輕易操作。

TOOTH TYPE 研磨齒型

 <p>A</p>	 <p>BW</p>	 <p>C</p>	 <p>ECO</p>	 <p>F</p>	 <p>O</p>
<p>For grinding Copper pipe and Aluminum pipe.</p> <p>可研磨，切銅管、鋁管之A型齒。</p>	<p>For grinding Curved teeth. Grinding and Chamfering.</p> <p>可研磨，一般圓弧齒和倒角之BW型齒。</p>	<p>For the C type teeth with high-low difference.</p> <p>可研磨，具有高低差之C型齒。</p>	<p>For grinding ECO teeth type of Friction Saw Blade.</p> <p>可研磨，摩擦式鋸片之ECO型齒。</p>	<p>For grinding F teeth type of Friction Saw Blade.</p> <p>可研磨，摩擦式鋸片之F型齒。</p>	<p>For whole cutting off teeth could be ground off in one circle.</p> <p>可磨除斷齒，轉一圈即可將斷齒全部磨除。</p>

FOUR AXES SERVO CONTROL 四軸全伺服控制

EMA series machines are CNC sawblade sharpening machines with four axes servo control. Fully automatic operations for sawblade outer diameter, number of teeth, sharpening amounts, cutting angles, back clearance angles, and up-down chamfer. Humanized two handwheels make re-sharpen old teeth easy to operate.

EMA系列是一部四軸伺服控制CNC鋸片研磨機，外徑、齒數、研磨量、切削角、背隙角，上下倒角全部自動化。人性化的雙手輪設計，使你在翻修齒輪時更加簡單易操作。

EMA-650 4A, EMA-500 4A 4 axes chamfering pictures 4軸倒角示意圖



Y axis grinding well picture
Y軸研磨圖片



Y axis down chamfering picture
Y軸下面倒角圖片



Y axis up chamfering picture
Y軸上面倒角圖片



High Precision Grinding Wheel Spindle

高精密砂輪主軸

The high precision cartridge-type spindle is an advanced modular construction. This allows for complete spindle unit change, which does not require a highly skilled technician. The feature increases maintenance convenience and reduces the loss of machine down time.

高精密彈筒式主軸，採用先進的模組化設計，提供整組更換式砂輪主軸，不需要高級技術人員，也可以輕易更換，增加你維修的方便性，更可以減少你停機的損失。



Locking Device for Grinding Wheel Dismantling
拆卸砂輪的剎車裝置



Patented Sawblade Locking Device Design
專利鋸片鎖緊裝置

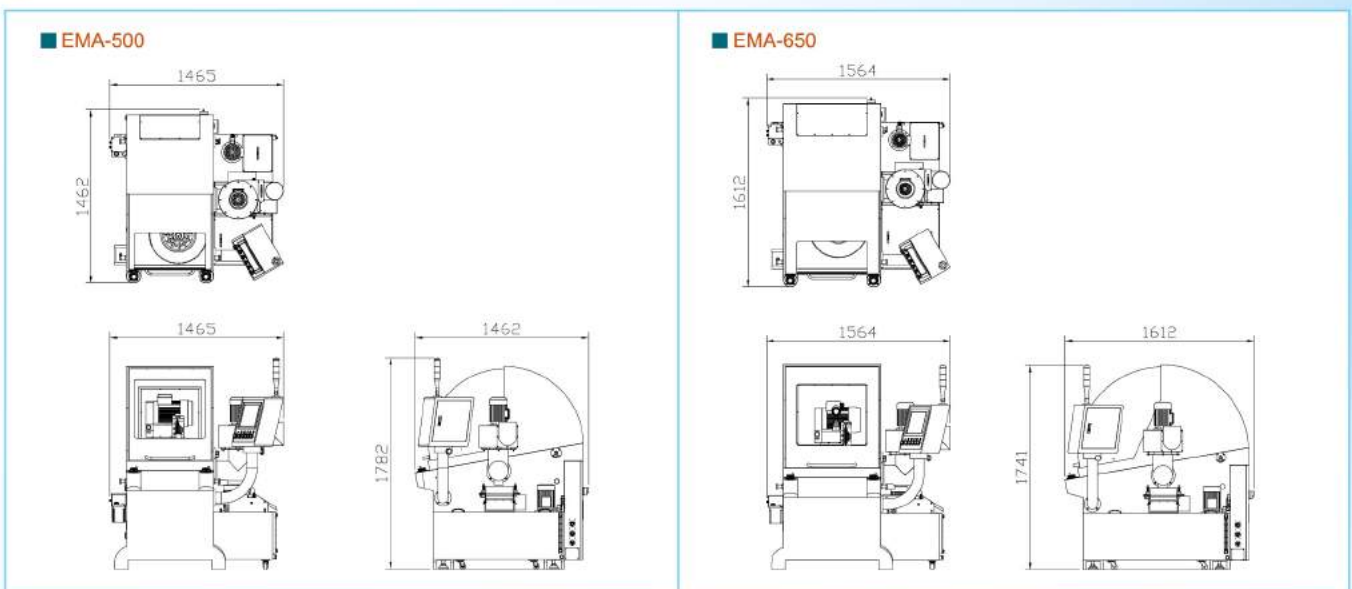
SPECIFICATIONS 規格表

Item 項目	EMA-500 3A	EMA-500 4A	EMA-650 3A	EMA-650 4A
Grinding Range 研磨範圍	Ø95~Ø500 mm (Optional Ø45~Ø120 mm) (45~120選配)	Ø95~Ø500 mm (Optional Ø45~Ø120 mm) (45~120選配)	Ø100~Ø650 mm	Ø100~Ø650 mm
Chamfering Range 倒角範圍		Ø155~Ø500 mm		Ø170~Ø650 mm
Number of Teeth 研磨齒數	10~998 Teeth 齒	10~998 Teeth 齒	10~998 Teeth 齒	10~998 Teeth 齒
Sawblade Thickness 鋸片厚度	最厚 Max. 8 mm	最厚 Max. 8 mm	最厚 Max. 8 mm	最厚 Max. 8 mm
Cutting Angle 切削角	0°~30°	0°~30°	0°~30°	0°~30°
Grinding Speed 研磨速度	1~60 Teeth / Min 齒 / 分	1~60 Teeth / Min 齒 / 分	1~60 Teeth / Min 齒 / 分	1~60 Teeth / Min 齒 / 分
Wheel Diameter 砂輪外徑	Ø200 mm	Ø200 mm	Ø200 mm	Ø200 mm
Wheel Bore 砂輪內徑	Ø32 mm	Ø32 mm	Ø32 mm	Ø32 mm
Wheel Thickness 砂輪厚度	最厚 Max. 8 mm	最厚 Max. 8 mm	最厚 Max. 8 mm	最厚 Max. 8 mm
Wheel Motor 砂輪馬達	4.0 kw	4.0 kw	4.0 kw	4.0 kw
Wheel Speed 砂輪轉速	2500~6000 rpm	2500~6000 rpm	2500~6000 rpm	2500~6000 rpm
X-axis Motor X軸馬達	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服
Z-axis Motor Z軸馬達	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服
B-axis Motor B軸馬達	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服	AC Servo motor 伺服
Y-axis Motor Y軸馬達		AC Servo motor 伺服		AC Servo motor 伺服
Coolant pump Motor 冷卻液馬達	1.6 kw	1.6 kw	1.6 kw	1.6 kw
Oil Mist Recycle Device 油霧回收器	0.55 kw	0.55 kw	0.55 kw	0.55 kw
Iron Filter 鐵屑過濾機	25 w	25 w	25 w	25 w
Power Require 使用總電力	9 kw	10 kw	9 kw	10 kw
Net Weight 淨重	870 kg	954 kg	968 kg	1002 kg
Packing Gross Weight 裝箱毛重	1264 kg	1342 kg	1362 kg	1425 kg
Packing Size 裝箱尺寸	188x173x206 cm	188x173x206 cm	197x198x225 cm	197x198x225cm

All specifications, dimensions and design characteristics shown in this catalogue are subject to change without prior notice.
機械規格尺寸若有變更，本公司有修改的權力，不另行通知。

EMA-500		EMA-650	
STANDARD ACCESSORIES 標準附件	OPTIONAL ACCESSORIES 選購附件	STANDARD ACCESSORIES 標準附件	OPTIONAL ACCESSORIES 選購附件
Sawblade Thickness Adjusting Seat Ø90 mm. 鋸片厚度調整座 Ø90 mm. Sawblade Clamp 鋸片夾緊盤 Ø150 mm Sawblade Clamp 鋸片夾緊盤 Ø200 mm Sawblade Clamp 鋸片夾緊盤 Ø250 mm. Sawblade Clamp 鋸片夾緊盤 Ø300 mm. Sawblade Clamp 鋸片夾緊盤 Ø350 mm. Sawblade Clamp 鋸片夾緊盤 Ø400 mm. Oil Mist Recycle Device 油霧回收器 Iron Filter 鐵屑過濾機 Tool Box 工具箱 Cutting Oil 切削液 Diamond Dressing Bar 鑽石修整石 Grinding Wheel Dresser 白色修利石 CBN Grinding Wheel Ø200 x 32 x 1.3T CBN砂輪 Ø200 x 32 x 1.3T CBN Grinding Wheel Ø200 x 32 x 1.75T CBN砂輪 Ø200 x 32 x 1.75T	Sawblade Thickness Adjusting Seat Ø35 mm. 鋸片厚度調整座 Ø35 mm. Sawblade Thickness Adjusting Seat Ø65 mm. 鋸片厚度調整座 Ø65 mm. Sawblade Clamp Ø35 mm. 鋸片夾緊盤 Ø35 mm. Sawblade Clamp Ø65 mm. 鋸片夾緊盤 Ø65 mm. Sawblade Clamp Ø90 mm. 鋸片夾緊盤 Ø90 mm. Sawblade Clamp Ø120 mm. 鋸片夾緊盤 Ø120 mm. Diamond Dressing Bar 鑽石修整石 Grinding Wheel Dresser 白色修利石 Automatic Voltage Stabilizer 穩壓器 Cutting Oil 切削液 Lubricating Oil 滑道油	Sawblade Thickness Adjusting Seat Ø90 mm. 鋸片厚度調整座 Ø90 mm. Sawblade Clamp 鋸片夾緊盤 Ø150 mm Sawblade Clamp 鋸片夾緊盤 Ø200 mm. Sawblade Clamp 鋸片夾緊盤 Ø250 mm. Sawblade Clamp 鋸片夾緊盤 Ø300 mm. Sawblade Clamp 鋸片夾緊盤 Ø350 mm. Sawblade Clamp 鋸片夾緊盤 Ø400 mm. Sawblade Clamp 鋸片夾緊盤 Ø450 mm. Sawblade Clamp 鋸片夾緊盤 Ø500 mm. Oil Mist Recycle Device 油霧回收器 Iron Filter 鐵屑過濾機 Tool Box 工具箱 Cutting Oil 切削液 Diamond Dressing Bar 鑽石修整石 Grinding Wheel Dresser 白色修利石 CBN Grinding Wheel Ø200 x 32 x 1.3T CBN砂輪 Ø200 x 32 x 1.3T CBN Grinding Wheel Ø200 x 32 x 1.75T CBN砂輪 Ø200 x 32 x 1.75T	Diamond Dressing Bar 鑽石修整石 Grinding Wheel Dresser 白色修利石 Automatic Voltage Stabilizer 穩壓器 Cutting Oil 切削液 Lubricating Oil 滑道油 Sawblade Clamp Ø90 mm 鋸片夾緊盤 Sawblade Clamp Ø120 mm 鋸片夾緊盤

Measurement 機械尺寸圖





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