



**EMA-650 / EMA-500 / BW-650 / BR-650 / SU-1200 /  
SU-850 / SU-650 / S500 / S450 / S300 / ES-280 Series**



EYAN MACHINE TOOLS CO., LTD.

EYAN

### Self-challenging QC standard

向自我挑戰的品質標準

For EYAN, the data shown on the paper is only the basic requirement; the real objective is in the minds of EYAN staff.

Continuous self-challenge for success is the principle that each member of EYAN staff adheres to, and also a professional presentation without self-confinement.

對易研而言，躍然於紙上的數據只是最基本的要求，真正的目標在我們的心裡，不斷自我挑戰成功的激勵，才是易研每位員工僅以遵守的法則，不自我受限的專業表現。

### Self-challenging QC standard



### Holding an international mind; Making endless production 胸懷國際·創造無遠弗屆

Through twenty years efforts, received numerous domestic and international patents & awards, EYAN sets up a splendid foundation preparatory for marching toward to the 21th century.

At this moment, splendor is represented as a vision telescope, clearly showing us bright prospects.

The telescope expands our minds, showing us how broad the world is. With an endless mind, the future becomes boundless.

20年的努力，獲得無數國內外專利和獎項，奠定了一片輝煌，站在21世紀的國際舞臺上此刻，輝煌對我們的意義反而僅是手中一個望遠鏡的望遠鏡，透澈地觀察出未來的路與無窮的發展空間。

手中的望遠鏡開闊了我們的心胸，世界是如此寬廣，腳下的雄心更不顯落後，世界無疆界，心存多美，未來就有多寬。

### Holding an international mind: making endless production



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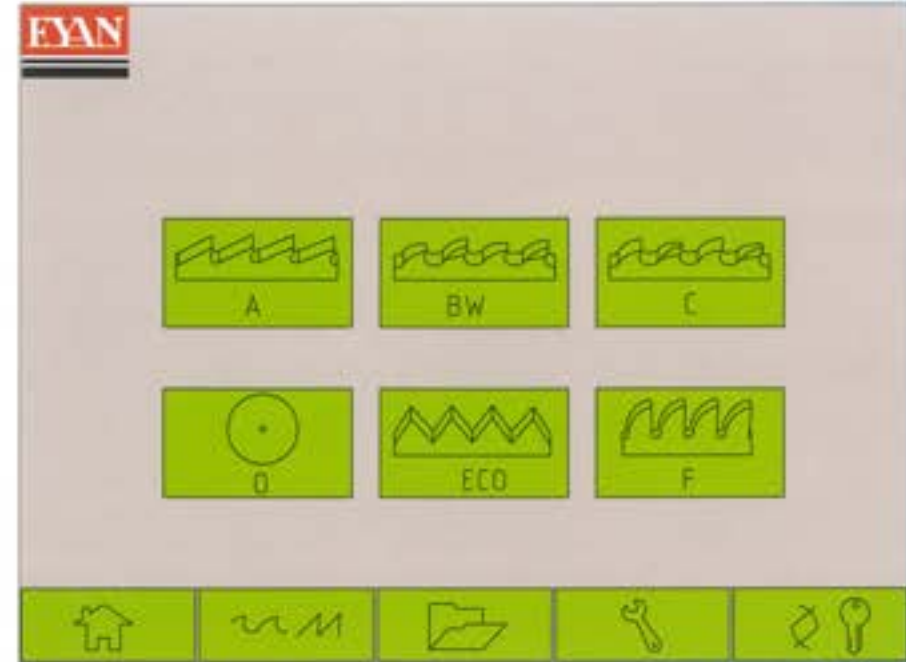


Double hand wheel design makes the operator can move Z axis & B axis at the same time to locate quickly. Also increase the grinding efficiency.  
手動パルサでZ軸とB軸を同時に動かせます。

### Patented Splash Guard 保護カバー

The elegant, fully-enclosed splash guard is standard equipment. The guard prevents dust pollution during wet sharpening, reduces noise, and provides an excellent working environment. The new designed and special window provides wider vision and easy to see the grinded object. It is easy to open the guard and convenient to change the saw blade.

全閉型保護カバーと湿式研磨で粉塵による汚れを防ぎ騒音を低減。  
大きな窓でワークが見やすい。カバーが開けやすい。



### ADVANCED CNC CONTROL CNC制御 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.

グラフィック表示のタッチパネル。  
フリクションソー用のF型歯とECO型歯を追加。  
4軸制御のCNC自動機。  
外径・歯数・歯丈・すくい角・逃げ角・送り速度・砥石回転速度・上下面取りの入力が可能で操作も簡単。

### TOOTH TYPE 研磨歯型

A	Bw	C	ECO	F	D
For grinding Copper pipe and Aluminum pipe.	For grinding Curved teeth. Grinding and Chamfering.	For the C type teeth with high-low difference.	For grinding ECO teeth type of Friction Saw Blade.	For grinding F teeth type of Friction Saw Blade.	For whole cutting off teeth could be ground off in one circle.
直線歯	曲線歯	高低歯	ECO型歯	フリクションソー用	外径研削

## FOUR AXES SERVO CONTROL 4軸サーボ制御

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シリーズは4軸サーボ制御のCNC丸鋸研磨機です。外径・歯数・研磨量、すくい角、逃げ角、上下面取りを自動運転。外装・歯数・研磨量、すくい角、逃げ角、上下面取りを自動運転。

### EMA-650 4A, EMA-500 4A 4 axes chamfering pictures 4軸面取り



Y axis grinding well picture  
Y軸研磨

Y axis down chamfering picture  
Y軸上面取り

Y axis up chamfering picture  
Y軸下面取り



### High Precision Grinding Wheel Spindle 高精度砥石スピンドル

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.

交換しやすい組み込み式スピンドル



Locking Device for Grinding Wheel Dismantling  
砥石取り外し用固定装置



Patented Sawblade Locking Device Design  
鋸固定装置

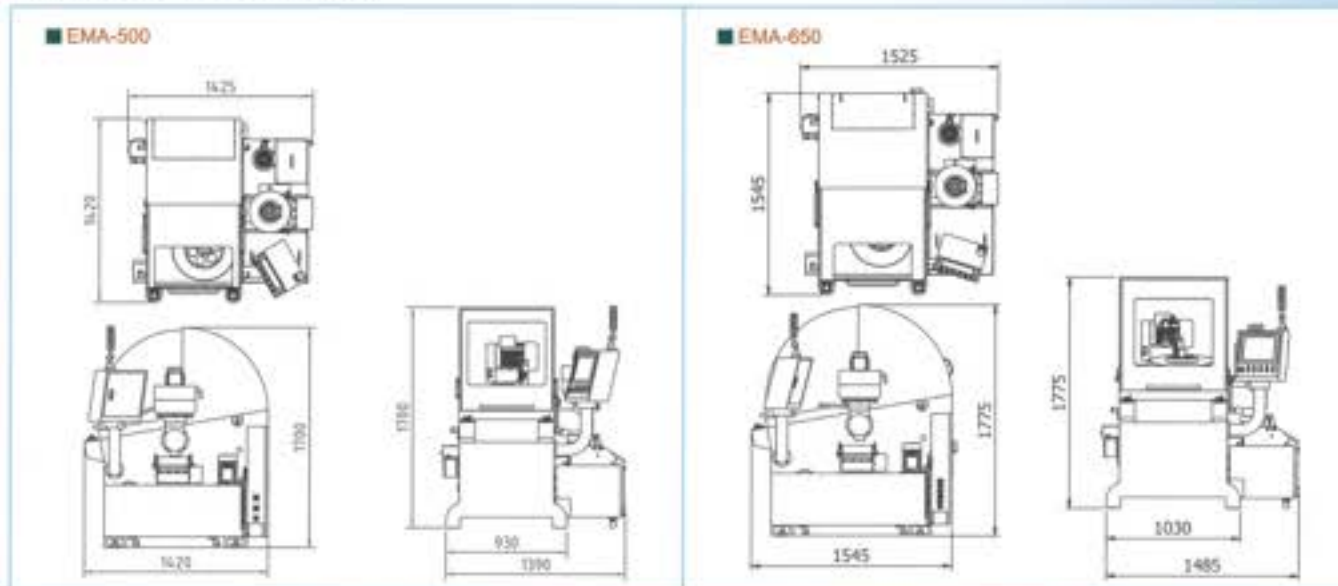
## SPECIFICATIONS 仕様

Item 項目	EMA-500 3A	EMA-500 4A	EMA-650 3A	EMA-650 4A
Grinding Range 研磨範囲	∅95-∅500 mm (Optional ∅45-∅120 mm) (38-120選配)	∅95-∅500 mm (Optional ∅45-∅120 mm) (38-120選配)	∅100-∅630 mm	∅100-∅630 mm
Chamfering Range 面取り範囲		165-500 mm		∅180-∅630 mm
Number of Teeth 研磨歯数	10-998 Teeth 歯	10-998 Teeth 歯	10-998 Teeth 歯	10-998 Teeth 歯
Sawblade Thickness 鋸厚	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm
Cutting Angle すくい角	0°-30°	0°-30°	0°-30°	0°-30°
Grinding Speed 研磨速度	1-60 Teeth / Min 歯 / 分	1-60 Teeth / Min 歯 / 分	1-60 Teeth / Min 歯 / 分	1-60 Teeth / Min 歯 / 分
Wheel Diameter 砥石外径	∅200 mm	∅200 mm	∅200 mm	∅200 mm
Wheel Bore 砥石内径	∅32 mm	∅32 mm	∅32 mm	∅32 mm
Wheel Thickness 砥石厚	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm	鋸厚 Max. 8 mm
Wheel Motor 砥石モータ	4.0 kw	4.0 kw	4.0 kw	4.0 kw
Wheel Speed 砥石回転速度	2500-6000 rpm	2500-6000 rpm	2500-6000 rpm	2500-6000 rpm
X-axis Motor X軸モータ	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服
Z-axis Motor Z軸モータ	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服
B-axis Motor B軸モータ	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服	AC Servomotor 伺服
Y-axis Motor Y軸モータ		AC Servomotor 伺服		AC Servomotor 伺服
Coolant pump Motor クーラントポンプモータ	1.6 kw	1.6 kw	1.6 kw	1.6 kw
Oil Mist Recycle Device オイルミスト回収装置	0.55 kw	0.55 kw	0.55 kw	0.55 kw
Iron Filter 鉄粉フィルタ	25 w	25 w	25 w	25 w
Power Require 消費電力	7.6 kw	8.4 kw	7.6 kw	8.4 kw
Net Weight 機械重量	870 kg	954 kg	968 kg	1002 kg
Packing Gross Weight 梱包重量	1264 kg	1342 kg	1362 kg	1425 kg
Packing Size 梱包寸法	186x173x206 cm	186x173x206 cm	197x198x225 cm	197x198x225cm

All specifications, dimensions and design characteristics shown in this catalogue are subject to change without prior notice. 記載の内容は通知なく変更することがあります。

EMA-500	EMA-650
<b>STANDARD ACCESSORIES 標準付属品</b> Sawblade Thickness Adjusting Seal ∅90 mm 鋸厚調整台 ∅90 mm Sawblade Clamp 鋸刃クランプ ∅150 mm Sawblade Clamp 鋸刃クランプ ∅200 mm Sawblade Clamp 鋸刃クランプ ∅250 mm Sawblade Clamp 鋸刃クランプ ∅300 mm Sawblade Clamp 鋸刃クランプ ∅350 mm Sawblade Clamp 鋸刃クランプ ∅400 mm Oil Mist Recycle Device オイルミスト回収装置 Iron Filter 鉄粉フィルタ Tool Box 工具箱 Cutting Oil 切削油 Diamond Dressing Bar ダイヤモンドドレッサ Grinding Wheel Dresser ホワイトストーン CBN Grinding Wheel ∅200 x 32 x 1.3T CBN砥石 ∅200 x 32 x 1.3T CBN Grinding Wheel ∅200 x 32 x 1.75T CBN砥石 ∅200 x 32 x 1.75T	<b>OPTIONAL ACCESSORIES オプション</b> Sawblade Thickness Adjusting Seal ∅35 mm 鋸厚調整台 ∅35 mm Sawblade Thickness Adjusting Seal ∅40 mm 鋸厚調整台 ∅40 mm Sawblade Clamp ∅25 mm 鋸刃クランプ ∅25 mm Sawblade Clamp ∅45 mm 鋸刃クランプ ∅45 mm Sawblade Clamp ∅90 mm 鋸刃クランプ ∅90 mm Sawblade Clamp ∅120 mm 鋸刃クランプ ∅120 mm Diamond Dressing Bar ダイヤモンドドレッサ Grinding Wheel Dresser ホワイトストーン Automatic Voltage Stabilizer 自動電圧安定装置 Cutting Oil 切削油 Lubricating Oil 潤滑油
<b>STANDARD ACCESSORIES 標準付属品</b> Sawblade Thickness Adjusting Seal ∅90 mm 鋸厚調整台 ∅90 mm Sawblade Clamp 鋸刃クランプ ∅150 mm Sawblade Clamp 鋸刃クランプ ∅200 mm Sawblade Clamp 鋸刃クランプ ∅250 mm Sawblade Clamp 鋸刃クランプ ∅300 mm Sawblade Clamp 鋸刃クランプ ∅350 mm Sawblade Clamp 鋸刃クランプ ∅400 mm Sawblade Clamp 鋸刃クランプ ∅450 mm Sawblade Clamp 鋸刃クランプ ∅500 mm Oil Mist Recycle Device オイルミスト回収装置 Iron Filter 鉄粉フィルタ Tool Box 工具箱 Cutting Oil 切削油 Diamond Dressing Bar ダイヤモンドドレッサ Grinding Wheel Dresser ホワイトストーン CBN Grinding Wheel ∅200 x 32 x 1.3T CBN砥石 ∅200 x 32 x 1.3T CBN Grinding Wheel ∅200 x 32 x 1.75T CBN砥石 ∅200 x 32 x 1.75T	<b>OPTIONAL ACCESSORIES オプション</b> Diamond Dressing Bar ダイヤモンドドレッサ Grinding Wheel Dresser ホワイトストーン Automatic Voltage Stabilizer 自動電圧安定装置 Cutting Oil 切削油 Lubricating Oil 潤滑油 Sawblade Clamp ∅90 mm 鋸刃クランプ ∅90 mm Sawblade Clamp ∅120 mm 鋸刃クランプ ∅120 mm

## Measurement 機械寸法



# BW 650 丸鋸面取り機

QUICK SAWBLADE CHAMFERING MACHINE

**Semi-automatic and vertical-type chamfering machine, Using Step-less speed variation, the grinding speed can be 30~180 teeth per minute.**

半自動縦型鋸刃面取り機・  
研磨速度 毎分30~180歯・

### Brand new design 新設計

- Meticulous design after years' relentless hard working. One professional class chamfering m/c.  
本機經過多年的精心設計・是一部專業級的鋸片倒角機。
- Patented CBN grinding wheels each on left and right, synchronized chamfer. Humanize vertical sawblade grinding way, you can operate the machine easily.  
左右2枚のダイヤモンドホイール・同期面取り・面取り幅が確認しやすい縦型鋸刃研磨方式・
- Semi-automatic chamfering machine is for grinding HSS SAWBLADE.  
HSS鋸刃の研磨に適しています・

### Step-less speed variation 無段変速

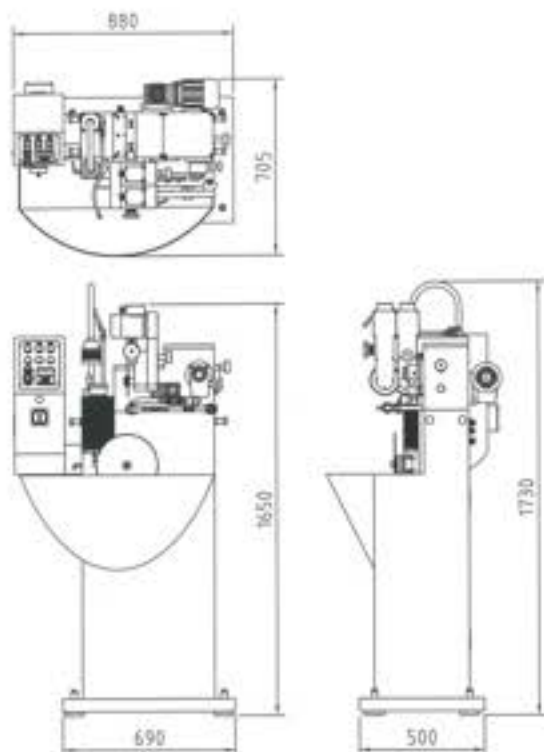
- Use frequency converter to control the speed of grinding. Therefore, grinding speed can be adjusted with the change of teeth pitch.  
インバータで研磨速度を制御・歯のピッチに合わせて研磨速度を調整できます・



Patent certificates  
特許証



### Measurement 寸法図



### Specifications 仕様

Grinding Range 研磨範圍	Ø150~650 mm
Teeth Pitch ピッチ	最大 Max. 25 mm
Saw Blade Thickness 鋸厚	最大 Max. 8 mm
Grinding Speed 研磨速度	30~120 teeth/min. 齒/分鐘
Grinding Wheel Diameter 磁石外徑	Ø125 mm
Grinding Wheel ID 磁石內徑	Ø 25 mm
Grinding Wheel Motor 磁石モータ	150 W
Transmission Motor 伝動モータ	0.25 KW
Grinding Wheel Speed (50Hz / 60Hz) 磁石回転速度	6600 rpm
Power Supply 消費電力	0.75 KW
Net Weight / Gross Weight 機械重量/総重量	288 / 348 kg
Packing Size 梱包寸法	88 x 108 x 192 cm

### Standard Accessories 標準付属品

Work Light 作業灯	1 pc 個
Bushing 内径カラ- 32/40mm	1 pc 個
Tool Box 工具箱	1 set 套
Instruction Manual 取扱説明書	1 copy 份
Diamond Grinding Wheel ダイヤモンドホイール	2 pc 片

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# BW 650 丸鋸面取り機

QUICK SAWBLADE CHAMFERING MACHINE



CBN grinding wheels each on left and right, synchronized chamfer. Quick chamfering which can cooperate to 5~6 sets of saw blade sharpening machine. This is the best machine for grinding company to save labor and reduce the cost.  
左右2枚のダイヤモンドホイール・同期面取り・初心者でも操作が簡単にでき・コストダウンを実現できます・



### Chamfering Examples 倒角加工例



Alternative Teeth 交互齒



High-low Teeth 高低齒

# BR 650 丸鋸ニック研磨機

SAWBLADE CHIP BREAK MACHINE

**Semi-automatic and vertical-type chip break slot grinding machine, allows for Variable grinding speed from 15-90/min.**

半自動縦型ニック研磨機、  
研磨速度 毎分15~19歯。

### Brand new design 新設計

- Meticulous design after years' relentless hard working. One professional class chip break m/c. 本機經過多年的精心設計，是一部專業級的鋸片刮溝機。
- Patented vertical grinding method, which allows you easy circumstance of operation. 縦型鋸刃研磨方式。
- Automatic chip breaker slot grinding machine is for grinding HSS-TCT sawblade. HSS-TCT鋸刃の研磨に適しています。
- BR is full automatic device, alternate grinding of interval teeth, quick set-up times and very ease to use, a slots precise mechanical adjustments. High frequency electrospindle with 40000rpm, it can make grinding wheel life longer, automatic shutdown on completion of operation, machine controlled does not use air, with simple operation. 一回の設定で交互に溝入れできる全自動機です。高周波スピンドル回転速度40000RPM。スピンドルはエア駆動ではありません。

### Step-less speed variation 無段変速

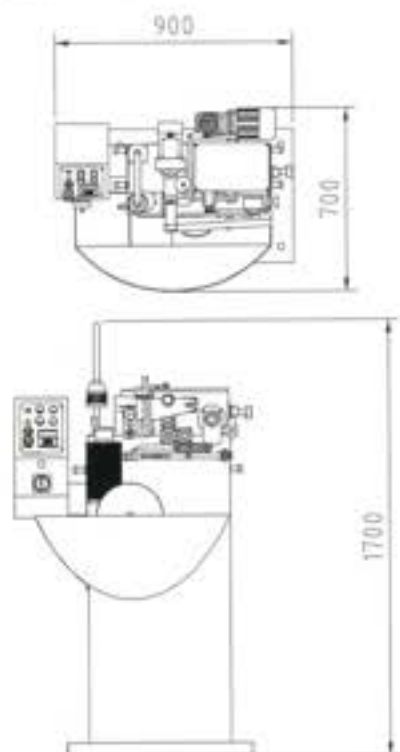
- Use frequency converter to control the speed of grinding. Therefore, grinding speed can be adjusted with the change of teeth pitch. インバータで研磨速度を制御。歯のピッチに合わせて研磨速度を調整できます。



Patent certificates  
特許証



### Measurement 寸法図



### Specifications 仕様

Grinding Range 研磨範囲	Ø140-650 mm
Teeth Pitch ピッチ	最大 Max. 25 mm
Saw Blade Thickness 鋸厚	最大 Max. 8 mm
Grinding Speed 研磨速度	15-60 teeth/min. 歯/分
Grinding Wheel Diameter 砥石外径	Ø30 mm
Grinding Wheel ID 砥石内径	Ø6mm
Grinding Wheel Motor 砥石モータ	370 W
Transmission Motor 伝動モータ	0.25 KW
Grinding Wheel Speed (50Hz/60Hz) 砥石回転速度	1000-40000 rpm
Power Supply 消費電力	0.75 KW
Net Weight / Gross Weight 機械重量/総重量	264 / 322kg
Packing Size 梱包寸法	88 x 108 x 185 cm

### Standard Accessories 標準付属品

Work Light 作業灯	1 pc 個
Bushing 内径カウ-32/40mm	1 pc 個
Tool Box 工具箱	1 set 套
Instruction Manual 取扱説明書	1 copy 份
Diamond Grinding Wheel ダイヤモンドホイール	3 PCS 片

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# BR 650 丸鋸ニック研磨機

SAWBLADE CHIP BREAK MACHINE



Saw blade chip breaker slot adjusting  
button 0.1-2.0 mm  
溝調整つまみ 0.1-2.0mm



Grinding wheel left and right adjusting  
button  
砥石左右調整つまみ



# SU1200/850/650

フリクションソー研磨機 FRICTION SAW BLADE SHARPENING MACHINE

## Professional class friction saw blade sharpening machine 專業級的摩擦式鋸片研磨機

### Superior innovation and brand new design 新設計

- A new generation design based on years practical experience and therefore create one professional class friction saw blade sharpening machine.  
本機經過多年的精心設計，是一部專業級的摩擦式鋸片研磨機。
- The patented vertical grinding direction allows you to operate it easy.  
縱型鋸刃研磨方式。簡單な操作で使うことができます。
- Brand new design: The vertical type friction saw blade sharpening machine is made with the thinking of operator as top priority. All adjustment levers have been properly arranged, which allows operator to adjust rather easily cutting angle, back clearance angle, teeth depth and pitch of saw blade. Therefore, grinding sharp saw blade became quick and precise.  
調整操作しやすい配置。

### Patented saw blade thickness adjustment 鋸厚調整

- Saw blade thickness is clamped by two synchronic movement mechanisms at the same time. It can help the saw blade in the center position. Therefore, no need to adjust manually the thickness of saw blade. Besides, as saw blade is clamped well, the grinding noise can be lowered.  
鋸刃をしっかりクランプする機構で鋸厚を手動調整する必要がありません。

### Manual speed variation 無段変速

- The machine equipped with inverter which can control the speed of grinding.  
インバータで研磨速度を制御。
- The grinding speed can be adjusted with the change of teeth pitch.  
歯のピッチに合わせて研磨速度を調整できます。

### Tooth profile cam 齒型カム

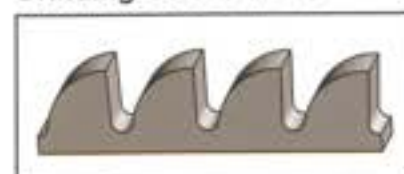
- Industrial class specialized tooth-profile cam was designed by high accurate calculation & simulation computer system. This makes your saw blade grinding done even more simply, quickly, and accurately.  
經過電腦精密計算模擬，所設計出的工業級的專業齒形凸輪，使你的鋸片研磨更為簡單、快速精準。
- Carbide tungsten is welded onto the end part of pushing jaw, which can reduce the wearing of feeding jaw to minimal possible extent and can reach accurate feeding.  
送り爪の先に超硬を使い耐摩耗性を高めています。
- All cast iron of this machine utilizes nodular cast iron (FCD-45). And they have been temper-treated to ensure the accuracy and enhance wear resistance.  
鑄鉄にはFCD材を使用し焼き戻し処理しており耐摩耗性を高めています。
- Main parts all utilize SKD 11 high carbide steel and have been through grinding and heat treatment.  
主要な部品にはSKD材を使用し熱処理および研磨処理しています。
- The spring for push arm is what has been reformed. With rotary spring, it won't get elastic fatigue easily (elasticity won't give in so easily). This can ensure the accuracy of feeding.  
アームのスプリングは回転式バネを使用し耐疲労性があります。
- Prop stand for feeding shaft of saw blade: Use high strength copper alloy as basic material with high-tech made solid lubricant added inside. It got features of high loading capacity and wearing resistance even without any need to apply lubricant additionally.  
鋸刃送り軸の支持台には固体潤滑剤が入っています。
- Feeding shaft use  $\varnothing 30\text{mm}$ ; enlarge axle center and heat treatment and grinding.  
 $\varnothing 30\text{mm}$  送り軸は、軸心を大きくして熱処理および研磨処理しています。

# SU1200

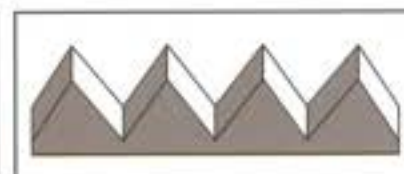
フリクションソー研磨機 FRICTION SAW BLADE SHARPENING MACHINE



### Grinding Series 研磨例



Friction Saw Blade フリクションソー



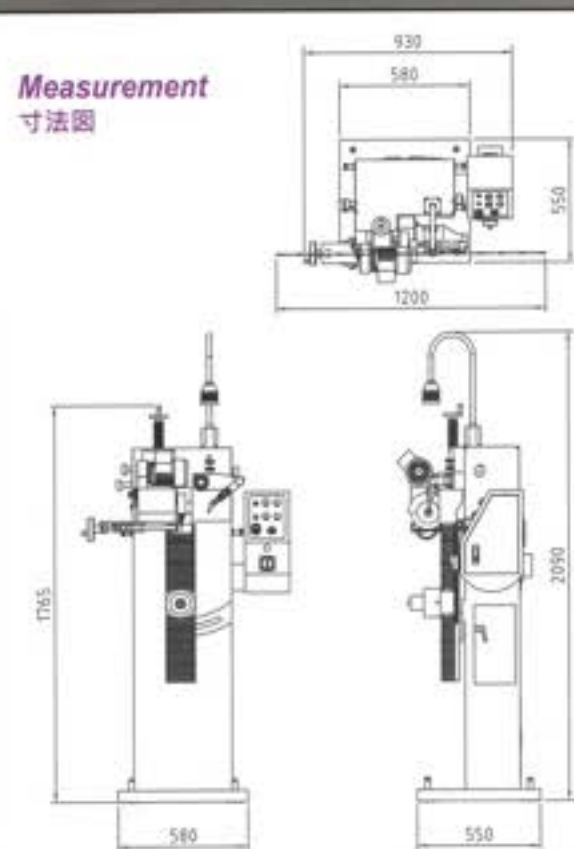
Friction Saw Blade ECO



Stepless speed variation adjustment button 無段階調整ポリコーム



### Measurement 寸法図



### Specifications 仕様

Grinding Range 研磨範圍	$\varnothing 450 \sim \varnothing 1200 \text{ mm}$
Teeth Pitch ピッチ	25 mm
Saw Blade Thickness 鋸厚	12 mm
Grinding Speed 研磨速度	10~100
Cutting Angle くい角	-5~+15
Grinding Wheel Diameter 砥石外径	$\varnothing 180 \text{ mm}$
Grinding Wheel Motor 砥石モータ	0.75 KW
Transmission Motor 伝動モータ	0.37 KW
Grinding Wheel Speed (50Hz / 60Hz) 砥石回転速度	3800/4500 rpm
Net Weight / Gross Weight 機械重量 / 総重量	285 / 395 KG
Package Size 梱包寸法	85x120x215 cm

### Standard Accessory 標準付属品

Work Light 作業灯	1 pc 個
Tool Box 工具箱	1 set 套
Instruction Manual 操作説明書	1 copy 份
Guide Plate 案内板	1 pc 片
Grinding Wheel 砥石	10 pcs 片

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記載の内容は通知なく変更することがあります。

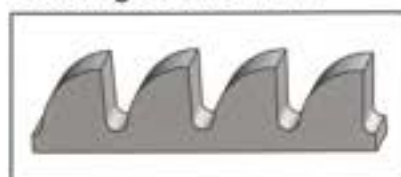


# SU850 フリクションソー研磨機

FRICITION SAW BLADE SHARPENING MACHINE



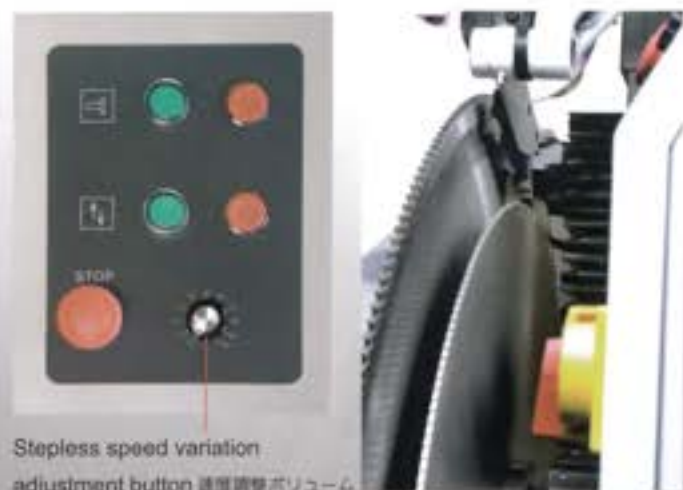
## Grinding Series 研磨例



Friction Saw Blade フリクションソー



Friction Saw Blade ECO



Stepless speed variation adjustment button 速度調整ボリューム

## Specifications 仕様

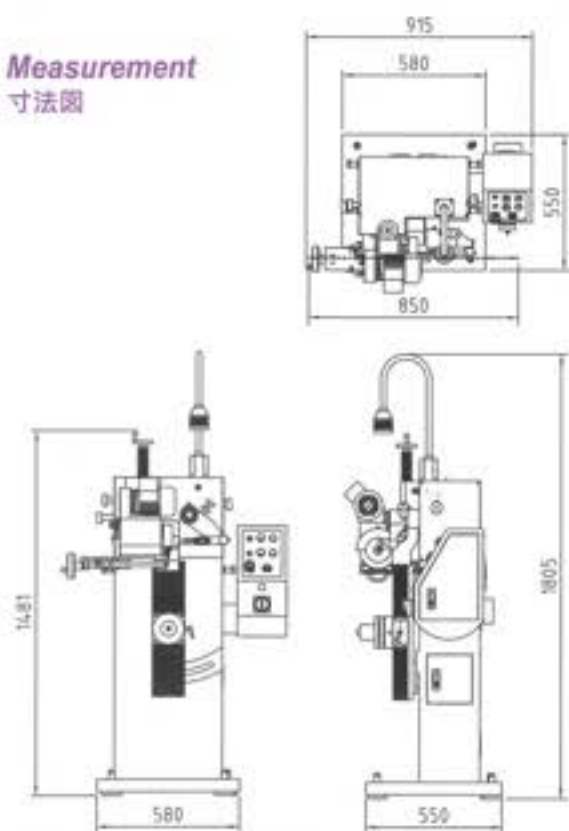
Grinding Range 研磨範囲	Ø350~Ø850 mm
Teeth Pitch ピッチ	25 mm
Saw Blade Thickness 鋸厚	12 mm
Grinding Speed 研磨速度	10~100
Cutting Angle すくい角	-5~+15
Grinding Wheel Diameter 砥石外径	Ø180 mm
Grinding Wheel Motor 砥石モータ	0.75 KW
Transmission Motor 伝動モータ	0.37 KW
Grinding Wheel Speed (50Hz/60Hz) 砥石回転速度	3800/4500 rpm
Net Weight / Gross Weight 機械重量/総重量	259 / 385 KG
Package Size 梱包寸法	85x113x176 cm

## Standard Accessory 標準付属品

Work Light 作業灯	1 pc 個
Tool Box 工具箱	1 set 套
Instruction Manual 操作説明書	1 copy 份
Guide Plate 案内板	1 pc 片
Grinding Wheel 砥石	10 pcs 片

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## Measurement 寸法図



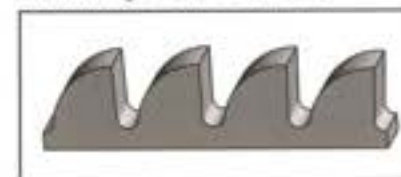
P13

# SU650 フリクションソー研磨機

FRICITION SAW BLADE SHARPENING MACHINE



## Grinding Series 研磨例



Friction Saw Blade フリクションソー



Friction Saw Blade ECO



Stepless speed variation adjustment button 速度調整ボリューム

## Specifications 仕様

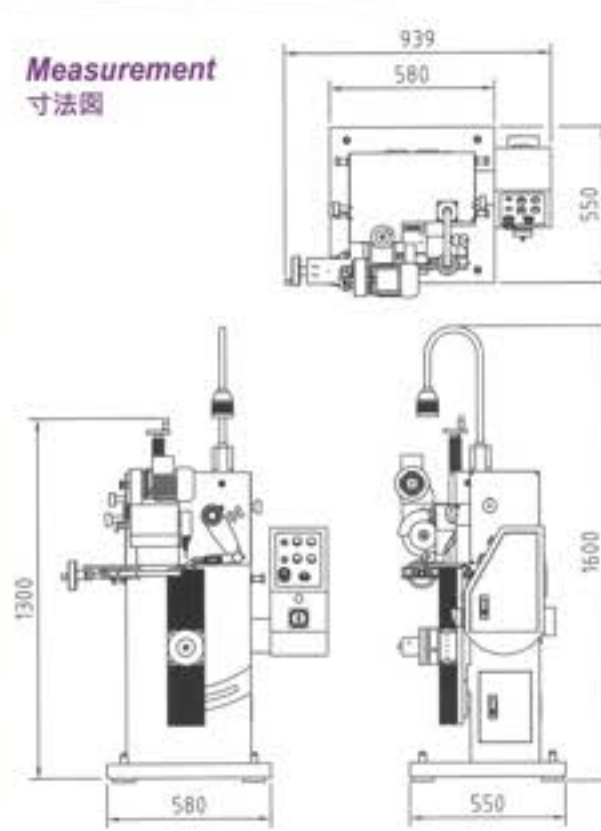
Grinding Range 研磨範囲	Ø250~Ø650 mm
Teeth Pitch ピッチ	25 mm
Saw Blade Thickness 鋸厚	12 mm
Grinding Speed 研磨速度	10~100
Cutting Angle すくい角	-5~+15
Grinding Wheel Diameter 砥石外径	Ø180 mm
Grinding Wheel Motor 砥石モータ	0.75 KW
Transmission Motor 伝動モータ	0.37 KW
Grinding Wheel Speed (50Hz/60Hz) 砥石回転速度	3800/4500 rpm
Net Weight / Gross Weight 機械重量/総重量	240 / 335 KG
Package Size 梱包寸法	85x113x165 cm

## Standard Accessory 標準付属品

Work Light 作業灯	1 pc 個
Tool Box 工具箱	1 set 套
Instruction Manual 操作説明書	1 copy 份
Guide Plate 案内板	1 pc 片
Grinding Wheel 砥石	10 pcs 片

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## Measurement 寸法図



P14

# S500 丸鋸研磨機

## SAWBLADE SHARPENING MACHINE

### Professional Saw blade Sharpening Machine 專業級的鋸片研磨機

#### Brand-new Design 機能紹介

- The patented, elegant, and fully-enclosed splash guard is standard accessory. The splash guard is designed to prevent from dust pollution during wet sharpening and reduces noise.  
全閉型保護カバーと湿式研磨で粉塵による汚れを防ぎ騒音を低減。
- The newly designed window provides wide vision and easy to view the grinding object. The splash guard is easy to open and convenient to change the saw blade. 大きな窓でワークが見やすい。カバーが開けやすい。
- This professional saw blade sharpening machine is well-designed based on our years of experience.  
本機經過多年的精心設計。是一部專業級的鋸片研磨機。
- Brand-new design: This sharpening machine is designed from the operator's point of view. The adjusting levers are arranged ideally for the operator to adjust easily the cutting angle, the back clearance angle, the teeth depth and teeth pitch of the saw blade. Therefore, the edgy saw blade can be ground out rapidly and precisely. 調整操作しやすい配置。

#### Stepless Change (Continuous Variable Speeds) 無段変速

- It uses the frequency inverter to control the grinding speed. Therefore, the grinding speed can be adjusted easily following the changes of the teeth pitch according to the requirement. It doesn't use the step pulley so there is no pulley consuming problem.  
インバータで研磨速度を制御。歯のピッチに合わせて研磨速度を調整できます。

#### The Adjustment Of Saw Blade Thickness 鋸厚調整

- The saw blade thickness is adjusted by a precision graduator, which can accurately adjust the center point of the saw blade.  
目盛りに合わせて鋸厚の中心を調整できます。

#### Sharpening Capability Of High-low Teeth 高低差研磨

- The difference of high-low teeth is adjusted by a control dial. The C type teeth with high-low difference can be ground out once.  
高低差をダイヤルで調整。C型歯で高低差を同時に研磨できます。

#### Tooth Shape Cam 歯型カム

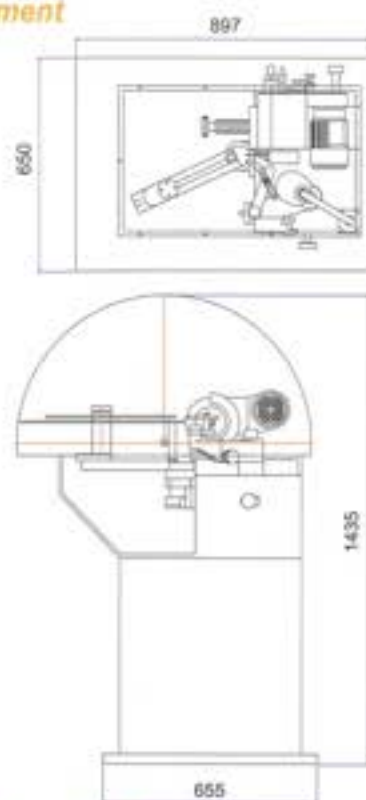
- The industrial and professional tooth shape cam is designed through an accurately calculated mimic process of the computer. It makes your saw blade grinding jobs simpler, faster and more accurate.  
經過電腦精密計算模擬。所設計出的工業級的專業齒形凸輪。使你的鋸片研磨更為簡單、快速精準。
- The grinding head can be adjusted up-and-down, so the chamfer angle can be ground out without changing the wheel.  
砥石を上下に調整できるので、砥石を取り替えずに面取りできます。
- The tungsten-carbide-tipped pushing jaw has maximum wear resistance to maintain the accurate feeding.  
送り爪の先に超硬を使い耐磨耗性を高めています。
- Casting of machine are made of ductile iron(FCD-45) for the best wear resistance, tempered and stress relief.  
鑄鉄にはFCD材を使用し焼き戻し処理しており耐磨耗性を高めています。
- All of the main parts are made of SKD 11 alloy steel, hardened and precision ground.  
主要な部品にはSKD材を使用し熱処理および研磨処理しています。



- The spring of push arm is reformed to ensure the precision of the feeding. Rotary type spring has better resistance from elasticity fatigue.  
アームのスプリングは回転式バネを使用し耐疲労性があります。
- The support base of the saw blade feeding shaft uses the high tensile brass alloy and embeds the high-tech-made solid lubricant inside. It features heavy load capacity and good wear-resistance to accomplish the oil-free feed function.  
鋸刃送り軸の支持台には固体潤滑剤が入っています。
- The enlarged 30mm feeding shaft is hardened and precision ground.  
φ30mm送り軸は、軸心を大きくして熱処理および研磨処理しています。

#### Measurement

##### 寸法図



#### Specifications 仕様

Grinding Range 研磨範囲	Optional accessories オプション	φ65-500mm φ35-100mm
Tooth pitch ピッチ		25 mm Max. 最大
Sawblade Thickness 鋸厚		8 mm under 以下
Grinding speed 研磨速度		30-135 teeth / min 歯/分
Cutting angle ずくい角		0-30
Grinding wheel diameter 砥石外径		φ150 mm
Grinding wheel motor 砥石モータ		0.37 KW
Transmission motor 伝動モータ		0.37 KW
Grinding wheel speed 50HZ/60HZ 砥石回転速度		3800 / 4500 rpm
Net weight/gross weight 機械重量/総重量		302 / 431 kg
Packing size 梱包寸法		113 x 92 x 160 cm

#### Standard Fittings 標準付属品

Work lamp 作業灯		1pc 個
Tool box 工具箱		1set 套
Operation Manual 操作説明書		1copy 份
Guide Plate 案内板		2pcs 片
Grinding wheel 砥石		10pcs 片

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## HIGH METICULOUS

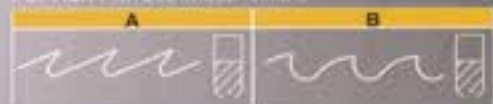


Chamfer diagram 側角示図

Chamfer diagram 側角示図

#### TOOTH TYPE 歯型

For Non Ferrous Metal 非鉄用



For Ferrous Metal 鉄用



Patent!

# S450 丸鋸研磨機

## SAWBLADE SHARPENING MACHINE

### Professional Class Sawblade Sharpening Machine 專業級的鋸片研磨機

#### Instruction of Functions 機能紹介

- A Firm Floor Model Machine 安定性が高いスタンド型
- Sharpening Capability of High-low Teeth 高低歯研磨
- It is adjusted by a control dial the teeth high-low difference. The C type teeth with high-low difference could be ground out the same time. 高低差をダイヤルで調整・C型歯で高低差を同時に研磨できます。

#### The Adjustment of The Sawblade Thickness 鋸厚調整

- The sawblade thickness is adjusted by a precision graduator. It could accurate adjust the center point of the sawblade 目盛りに合わせて鋸厚の中心を調整できます。

#### Variable Speed Switch 極数変換スイッチ

- The transmission motor could be changed from 4P into 8P freely by the variable speed switch. The maximum of 4P grinding speed is 180 teeth and the minimum of 8P grinding speed is 45 teeth.

極数変換スイッチで伝動モータの4極と8極を切り換えることができます。  
4極最高速度 毎分180歯・8極最低速度 毎分45歯。

#### Stepless Change 無段変速

- It uses the stepless change pulley, therefore, the grinding speed could be adjusted following the changes of the pitch per your need.

ベルト式無段変速機を使用・歯のピッチに合わせて研磨速度を調整できます。

#### Bran-new Design 新設計

- This machine is well-designed for years and it is a professional class sawblade sharpening machine. 本機經過多年的精心設計・是一部專業級的鋸片研磨機。
- Bran-new design; this sharpening machine is designed in the operator's position. All of the adjusting levers are arranged reasonably. In this way, the operator could adjust the cutting angle, the back clearance angle, the teeth depth and teeth pitch of the sawblade easily. Therefore, the edgy sawblade could be ground out rapidly and precisely.

調整操作しやすい配置。

#### Tooth Shape Cam 齒型カム

- Through an accurate calculated mimic process of the computer, the industrial class and professional tooth shape cam could be designed. In this way, it would make your grinding more simple, more fast and more accurate.

經過電腦精密計算模擬・所設計出的工業級的專業齒形凸輪・使你的鋸片研磨更為簡單・快速精準。

- The grinding head could do an up-and-down sawing, therefore, the chamfer angle could be ground out without changing the grinding wheel.

砥石を上下に調整できるので・砥石を取り替えずに裏取りできます。

- The tungsten carbide tipped pushing jaw provides maximum wear resistance to achieve the accurate feeding.

送り爪の先に超硬を使い耐摩耗性を高めています。

- Applying the ball black lead cast iron (FCD-45) to all the cast irons in this machine. Also, a tempered process is accomplished to ensure the accuracy and to increase the wear resistance.

鋳鉄にはFCD材を使用し焼き戻し処理しており耐摩耗性を高めています。

- All of the main parts uses SKD 11 high carbide steel. Also, the grinding and the heat treatment process are accomplished.

主要な部品にはSKD材を使用し熱処理および研磨処理しています。

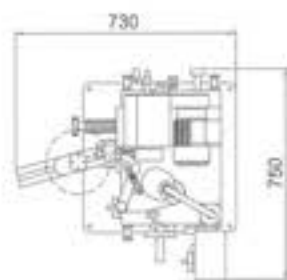
- The push arm spring is reformed. It uses rotary spring to avoid the elastic deformation of the spring and to ensure the precision of the feeding.

アームのスプリングは回転式バネを使用し耐疲労性があります。

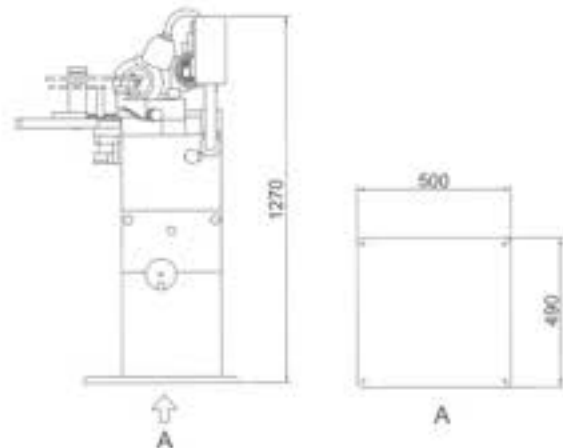
- Apply the high tensile alloy brass to the support of the sawblade feeding shaft and insert the high-tech-made concrete lubricant into it. It's specialty of high load carrying capacity and well wear-resistance could accomplish the oil-less feed function totally. 鋸刃送り軸の支持台には高強度黄銅が入っています。

- Using the feeding shaft in 30mm. The spindle is enlarged and the heat treatment process are accomplished.

φ30mm送り軸は・軸心を大きくして熱処理および研磨処理しています。



#### Measurement 寸法図



#### Specifications 仕様

Grinding Range 研磨範囲	Optional accessories オプション	Ø65-450mm Ø35-100mm
Tooth pitch ピッチ		25 mm Max. 最大
Sawblade Thickness 鋸厚		8 mm Under 以下
Grinding speed 研磨速度		72-143 teeth/min 113-223 歯/分
Cutting angle くい角		0-30°
Grinding wheel diameter 砥石外径		Ø150 mm
Grinding wheel motor 砥石モータ		0.37 KW
Transmission motor 伝動モータ		0.37 KW
Grinding wheel speed 50HZ/60HZ 砥石回転速度		3800/4500 rpm
Net weight/gross weight 機械重量/総重量		180 / 230 kg
Package size 梱包寸法		73 x 93 x 155 cm

#### Standard Fittings 標準付属品

Work lamp 作業灯		1pc 個
Tool box 工具箱		1set 套
Operation Manual 操作説明書		1copy 份
Guide Plate 案内板		2pcs 片
Grinding wheel 砥石		10pcs 片

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## HIGH METICULOUS



Chamfer diagram 齒取上研磨

Chamfer diagram 齒取下研磨

TOOTH TYPE 齒型  
For Non Ferrous Metal 非鉄用



For Ferrous Metal 鐵用



Grinding wheel tilting adjustment 砥石上下移動



High/Low teeth indicator meter 高低差量



Blade thickness adjustment 鋸厚調整



Stepless speed Adjustment 無段変速



High/Low teeth grinding adjustment 齒型切替

# S300 丸鋸研磨機

## SAWBLADE SHARPENING MACHINE

### Standard type circular sawblade sharpener 標準型鋼圓鋸片研磨機

#### Instruction of Functions 機能紹介

- Desktop type machine 卓上型
- Constant sharpening speed: 90 teeth/minute 研磨速度 毎分90歯
- It is applicable for grinding the straight teeth and the circular arc teeth. The teeth shape could be changed per your need only with a hex. Spanner. 直線歯および曲線歯を研磨・六角レンチ1本で歯型を変えることができます。
- It is suitable to select and purchase the special bantamweight clamping seat of the sawblade for this machine, thus the little sawblade in 30 diameter could be ground. オプションの取り付け台を使えばφ30の鋸を研磨できます。

#### Easy to operate and adjust 操作調整が簡単

- The clamping seat of the sawblade is reformed it endures the friction with special bearing to avoid the spring sheet's abrasion and to ensure the machine's sharpening accuracy and durable capability. 特殊なベアリングで摩擦に耐えられるよう改良されました。

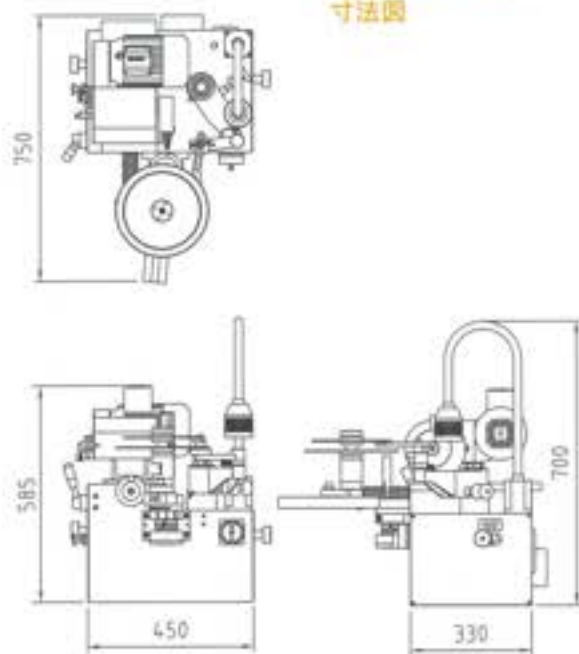
#### The Adjustment Of Saw Blade Thickness 鋸厚調整

- The saw blade thickness is adjusted by a precision graduator, which can accurately adjust the center point of the saw blade. 目盛りに合わせて鋸厚の中心を調整できます。

#### Tooth Shape Cam 歯型カム

- The industrial and professional tooth shape cam is designed through an accurately calculated mimic process of the computer. It makes your saw blade grinding jobs simpler, faster and more accurate. 經過電腦精密計算模擬・所設計出的工業級的專業齒形凸輪・使你的鋸片研磨更為簡單・快速精準。
- The grinding head can be adjusted up-and-down, so the chamfer angle can be ground out without changing the grinding wheel. 砥石を上下に調整できるので・砥石を取り替えずに面取りできます。
- The tungsten-carbide-tipped pushing jaw has maximum wear resistance to maintain the accurate feeding. 送り爪の先に超硬を使い耐摩耗性を高めています。
- Casting of machine are made of ductile iron(FCD-45) for the best wear resistance, tempered and stress relief. 鑄鉄にはFCD材を使用し焼き戻し処理しており耐摩耗性を高めています。
- All of the main parts are made of SKD II alloy steel, hardened and precision ground. 主要な部品にはSKD材を使用し熱処理および研磨処理しています。
- The spring of push arm is reformed to ensure the precision of the feeding. Rotary type spring has better resistance from elasticity fatigue. アームのスプリングは回転式バネを使用し耐疲労性があります。
- The support base of the saw blade feeding shaft uses the high tensile brass alloy and embeds the high-tech-made solid lubricant inside. It features heavy load capacity and good wear-resistance to accomplish the oil-free feed function. 鋸刃送り軸の支持台には高強度黄銅が入っています。
- The enlarged 30mm feeding shaft is hardened and precision ground. φ30mm 送り軸は・軸心を大きくして熱処理および研磨処理しています。

#### Measurement 寸法図



#### Specifications 仕様

Grinding Range 研磨範囲	Optional accessories オプション	Ø 65-300mm Ø 35-100mm
Tooth pitch ピッチ		25 mm Max. 最大
Tooth depth 歯丈		8 mm
Sawblade Thickness 鋸厚		8 mm Under 以下
Grinding speed 研磨速度	Constant speed 定速	90 teeth/min 歯/分
Cutting angle ずくい角		0-30°
Grinding wheel diameter 砥石外径		Ø 150 mm
Grinding wheel speed 50HZ/60HZ 砥石回転速度		3800/4500 rpm
Grinding wheel motor 砥石モータ		0.37 KW
Transmission motor 伝動モータ		0.37 KW
Net weight/gross weight 機械重量/総重量		130 / 160 kg
Package size 梱包寸法		75 x 68 x 72 cm

#### Standard Fittings 標準付属品

Work lamp 作業灯		1pc 個
Tool box 工具箱		1set 套
Guide Plate 案内板		1pc 個
Operation Manual 操作説明書		1copy 份
Grinding wheel 砥石		5pcs 片

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Applicable for 適用:  
HSS Steel Circular Sawblade  
HSS 高速鋼圓鋸片  
TCT Steel Circular Sawblade  
TCT 硬化複合鋼圓鋸片

TOOTH TYPE 歯型  
For Non Ferrous Metal 非鉄用



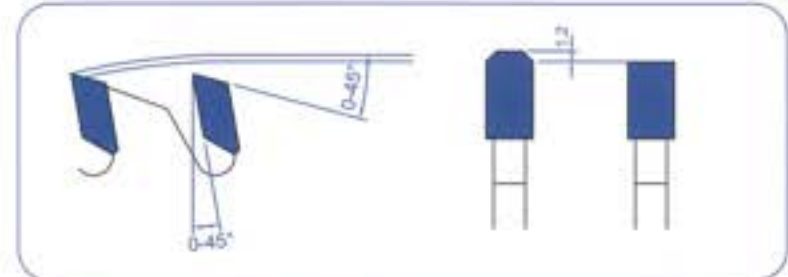
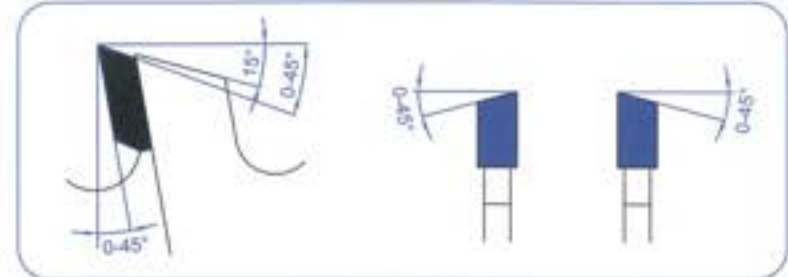
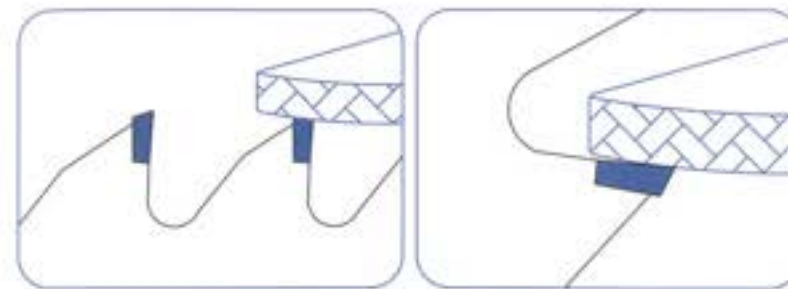
Standard Fittings Ø60  
標準付属品 Ø60

Specifications Ø30  
オプション Ø30

# ES 280 チップソー研磨機

## CARBIDE TIPPED SAW BLADE GRINDER

- Specially designed for grinding carbide saws easily and efficiently.  
手動式スクイ角ニグ角研磨機。
- High accuracy and easy set-up of center of the blade thickness.  
刃厚の中心に合わせやすい。
- Parallelism of saw seat  $\pm 0.005$  mm and with good durability.  
鋸台の平行度  $\pm 0.005$  mm。
- With years of manufacturing professional grinders, this Carbide Tip Saw Blade Grinder increases users' working efficiency.  
以累積多年製造研磨機之專業經驗・生產頂齒鋸片研磨機・提高使用者之工作效率。
- Set-up characteristic: for complete self-set-up or as complement device for other machines.  
安裝特色-它能被使用於完全安裝或補充其他機器。



Saw Blade Tip Positioning Device  
鋸先端位置決め装置

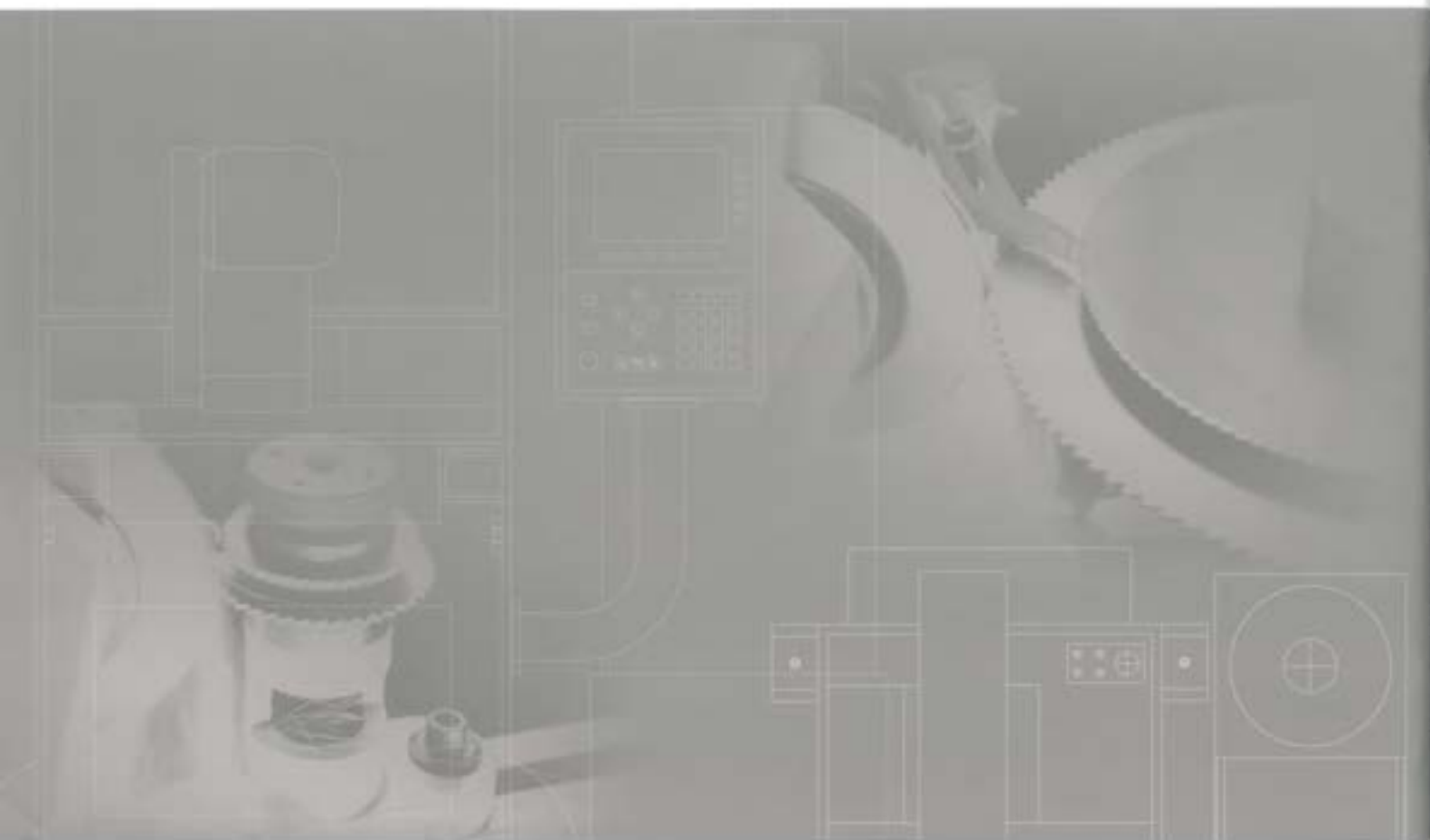
### Specifications 仕様

Grinding Range 研磨範圍	∅155 ~ ∅900 mm
Grinding Wheel Size 砥石外徑	∅150
Speed of Grinding Wheel 砥石回轉速度	5000 rpm
Grinding Power 砥石モータ	1 HP
Eccentric Motor 偏心モータ	40 W
Coolant Pump Motor ケーラントポンプモータ	1/8 HP
Machine Size 機械寸法	115 x 70 x 150 cm
Packing Size 梱包寸法	131 x 88 x 155 cm
Net Weight 機械重量	310 kg
Gross Weight 總重量	370 kg

### Standard Accessories 標準付属品

SDC Grinding Wheel ダイヤモンドホイール	1 pc 片 (∅150D x 2X x 15T x 16H)
Cutting Oil 切削油	4 liters 公升
Tool Kit 工具	1 set 組
Operation Manual 操作說明書	1 copy 本

CARBIDE TIPPED SAW BLADE GRINDER



## 易研精密機械有限公司

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