



DRILL GRINDING MACHINE (SINGLE WHEEL / TWIN WHEEL)
鑽頭研磨機(單砂輪 / 雙砂輪)

- MODEL • 078201300 SA-1300-110V • 078221300 SA-1300-220V MODEL • 078201302 SA-1302-110V • 078221302 SA-1302-220V
 • 078272000 SA-2000-110V • 078282000 SA-2000-220V • 078272002 SA-2002-110V • 078282002 SA-2002-220V
 • 078242500 SA-2500-110V • 078262500 SA-2500-220V • 078242502 SA-2502-110V • 078262502 SA-2502-220V



SA-1300 (Ø3-Ø13)
(Ø2 特別附件)



SA-1302 (Ø3-Ø13)
(Ø2 特別附件)



SA-2000 (Ø3-Ø20)
(Ø2 特別附件)



SA-2002 (Ø3-Ø20)
(Ø2 特別附件)



SA-2500 (Ø13-Ø26)
(Ø27-Ø30 特別附件)



SA-2502 (Ø13-Ø26)
(Ø27-Ø30 特別附件)

Easy
簡單

Accurate
精確

Fast
快速

Unit: mm

Order NO. 訂購編號	Model 型號	Dia. Capacity 直徑範圍	Angle Capacity 角度範圍	Power / 電源 (Single / 單相)	N.W. 淨重	G.W. 毛重	Fuse 保險絲 (規格型)	Wheel 鑽石砂輪	Collet 筒夾	Dimension 外型尺寸	Remark 備註
078201300	SA-1300	Ø3~13mm (Ø2 optional)	90°~144°(Ø6~13) 118°~135°(Ø2~6)	AC100~110V 50~60Hz	10kg	11kg	6A	CBN#200	ER-20	320x220x200	
078221300				AC220~240V 50~60Hz			3A				
078272000	SA-2000	Ø3~20mm (Ø2 optional)	90°~144°(Ø6~20) 118°~135°(Ø2~6)	AC100~110V 50~60Hz	16kg	17kg	8A	CBN#200	ER-25	415x240x220	
078282000				AC220~240V 50~60Hz			4A				
078242500	SA-2500	Ø13~26mm (Ø27~30 optional)	90°~144°(Ø13~26) 118°~135°(Ø27~30)	AC100~110V 50~60Hz	26kg	27kg	8A	CBN#140	ER-40	490x270x250	
078262500				AC220~240V 50~60Hz			4A				
078201302	SA-1302	Ø3~13mm (Ø2 optional)	90°~144° (Ø6~13) 118°~135° (Ø2~6)	AC100~110V 50~60Hz	12kg	13kg	6A	CBN #200	ER-20	350x250x220	
078221302				AC220~240V 50~60Hz			3A				
078272002	SA-2002	Ø3~20mm (Ø2 optional)	90°~144° (Ø6~20) 118°~135° (Ø2~6)	AC100~110V 50~60Hz	18kg	19kg	8A	CBN #200	ER-25	360x280x230	
078282002				AC220~240V 50~60Hz			4A				
078242502	SA-2502	Ø13~26mm (Ø27~30 optional)	90°~144° (Ø13~26) 118°~135° (Ø27~30)	AC100~110V 50~60Hz	29kg	30kg	8A	CBN #140	ER-40	420x310x270	
078262502				AC220~240V 50~60Hz			4A				



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FEATURES :

- Two wheels build in one machine. (Twin wheel), One side (CBN wheel) is suitable for HSS, The other side (Diamond wheel) is suitable for carbide drill.
- Easy operation, Precision grinding and cost saving.
- Hand held for easy movement and can operate inside and outside of the room.
- Use diamond wheel for long lasting service life and precise grinding angle.
- Built-in collet bracket for easy management collets.

特性 :

- 一台機械同時裝置有兩只砂輪，一只為CBN砂輪，可用於高速鋼(HSS)鑽頭，一只為鑽石砂輪，可用於碳化錳鑽頭，免除常換砂輪的困擾。
- 操作簡單，研磨精確，經濟實惠。
- 手提式設計，攜帶方便，室內、室外均可使用。
- 採用鑽石砂輪設計，砂輪壽命極長，研磨角度精確。
- 隱藏式筒夾盒設計，方便管理筒夾。
- 採用高效率AC馬達，頻率穩定，壽命佳。



Standard Accessories

- Collets :
SA-1300, 1302: ER-20 Ø3, Ø4, Ø5, Ø6, Ø7, Ø8, Ø9, Ø10, Ø11, Ø12, Ø13 x 11pcs
SA-2000, 2002: ER-25 Ø3, Ø4, Ø5, Ø6, Ø7, Ø8, Ø9, Ø10, Ø11, Ø12, Ø13, Ø14, Ø15, Ø16, Ø17, Ø18, Ø19, Ø20 x 18pcs
SA-2500, 2502: ER-40 Ø13, Ø14, Ø15, Ø16, Ø17, Ø18, Ø19, Ø20, Ø21, Ø22, Ø23, Ø24, Ø25, Ø26 x 14pcs
- Wheel :
CBN #200 x 1pc (SA-1300, SA-2000) (for HSS drill)
CBN #140 x 1pc (SA-2500) (for HSS drill)
CBN #200 x 1pc (for HSS drill), Diamond wheel #400 x 1pc (for Carbide drill) (SA-1302, SA-2002)
CBN #140 x 1 pc (for HSS drill), Diamond wheel #300 x 1pc (for Carbide drill) (SA-2502)
- 4 mm Hex. wrench x 1pc

標準附件

- 筒夾 :
SA-1300, 1302: ER-20 Ø3, Ø4, Ø5, Ø6, Ø7, Ø8, Ø9, Ø10, Ø11, Ø12, Ø13 x 11pcs
SA-2000, 2002: ER-25 Ø3, Ø4, Ø5, Ø6, Ø7, Ø8, Ø9, Ø10, Ø11, Ø12, Ø13, Ø14, Ø15, Ø16, Ø17, Ø18, Ø19, Ø20 x 18pcs
SA-2500, 2502: ER-40 Ø13, Ø14, Ø15, Ø16, Ø17, Ø18, Ø19, Ø20, Ø21, Ø22, Ø23, Ø24, Ø25, Ø26 x 14pcs
- 砂輪 :
CBN #200 x 1pc (SA-1300, SA-2000) (HSS鑽頭用)
CBN #140 x 1pc (SA-2500) (HSS鑽頭用)
CBN #200 x 1pc (HSS鑽頭用) ,
鑽石砂輪 #400 x 1pc (碳化錳鑽頭用) (SA-1302, SA-2002)
CBN #140 x 1pc (HSS鑽頭用) ,
鑽石砂輪 #300 x 1pc (碳化錳鑽頭用) (SA-2502)
- 4 mm 六角扳手 x 1pc

Optional Accessories

- Collets :
SA-1300, 1302: ER-20 Ø3.5, Ø4.5, Ø5.5, Ø6.5, Ø7.5, Ø8.5, Ø9.5, Ø10.5, Ø11.5, Ø12.5 x 10pcs
SA-2000, 2002: ER-25 Ø3.5, Ø4.5, Ø5.5, Ø6.5, Ø7.5, Ø8.5, Ø9.5, Ø10.5, Ø11.5, Ø12.5, Ø13.5, Ø14.5, Ø15.5, Ø16.5, Ø17.5, Ø18.5, Ø19.5 x 17pcs
SA-2500, 2502: ER-40 Ø13.5, Ø14.5, Ø15.5, Ø16.5, Ø17.5, Ø18.5, Ø19.5, Ø20.5, Ø21.5, Ø22.5, Ø23.5, Ø24.5, Ø25.5 x 13pcs (Ø27, Ø28, Ø29, Ø30)
- Wheel : (Diamond For Carbide drill)
Diamond wheel #400 x 1pc (SA-1300, SA-2000)
Diamond wheel #300 x 1pc (SA-2500)

特殊附件

- 筒夾 :
SA-1300, 1302: ER-20 Ø3.5, Ø4.5, Ø5.5, Ø6.5, Ø7.5, Ø8.5, Ø9.5, Ø10.5, Ø11.5, Ø12.5 x 10pcs
SA-2000, 2002: ER-25 Ø3.5, Ø4.5, Ø5.5, Ø6.5, Ø7.5, Ø8.5, Ø9.5, Ø10.5, Ø11.5, Ø12.5, Ø13.5, Ø14.5, Ø15.5, Ø16.5, Ø17.5, Ø18.5, Ø19.5 x 17pcs
SA-2500, 2502: ER-40 Ø13.5, Ø14.5, Ø15.5, Ø16.5, Ø17.5, Ø18.5, Ø19.5, Ø20.5, Ø21.5, Ø22.5, Ø23.5, Ø24.5, Ø25.5 x 13pcs (Ø27, Ø28, Ø29, Ø30)
- 砂輪 : (適合碳化錳鑽頭使用)
鑽石砂輪 #400 x 1pc (SA-1300, SA-2000)
鑽石砂輪 #300 x 1pc (SA-2500)



DRILL GRINDING MACHINE (SINGLE WHEEL / TWIN WHEEL)

鑽頭研磨機(單砂輪 / 雙砂輪)

A. Collet / 筒夾



Model 型號	Collet 筒夾	Standard 標準附件	Optional 特殊附件	Model 型號	Collet 筒夾	Standard 標準附件	Optional 特殊附件
SA-1300	ER20	ø3~ø13	ø2.5	SA-1302	ER20	ø3~ø13	ø2.5
SA-2000	ER25	ø3~ø20	ø2.5	SA-2002	ER25	ø3~ø20	ø2.5
SA-2500	ER40	ø13~ø26	ø27~ø30	SA-2502	ER40	ø13~ø26	ø27~ø30

B. Position & Length Pre-setting
長度及方位設定

- ① Against pin by clockwise direction.
- ② The drill to the bottom and clockwise direction to the
- ③ Stopper by turn lightly.
Clockwise direction tighten by hand (SA-2502 by handle)

- ① 整組順時鐘方向輕輕頂住直銷。
- ② 鑽頭輕輕頂到底且順時鐘方向輕輕頂住停止檔。
- ③ 順時鐘方向將筒夾螺帽鎖緊。
(SA-2502必須使用把手鎖緊)



C. Point Angle
先端角研磨

- ① The drill touch the wheel lightly.
- ② Clockwise & count clockwise by turn slowly.

- ① 整組慢慢送入，鑽頭輕輕接觸砂輪。
- ② 整組順時鐘及逆時鐘方向慢慢來回旋轉。



D. Chisel Edge Angle
逃隙角研磨

- ① The drill to the bottom and touch the wheel lightly.
- ② Clockwise & count clockwise direceion by turn slowly.

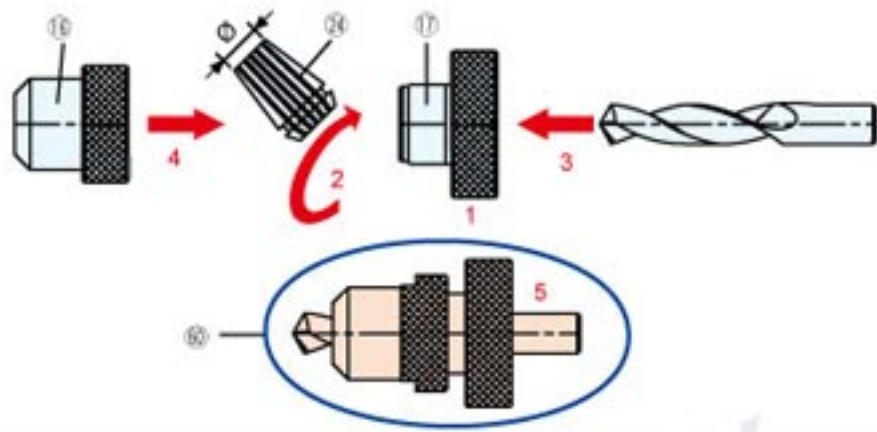
- ① 整組慢慢壓到底輕輕接觸砂輪。
- ② 整組順時鐘、逆時鐘來回慢慢旋轉。



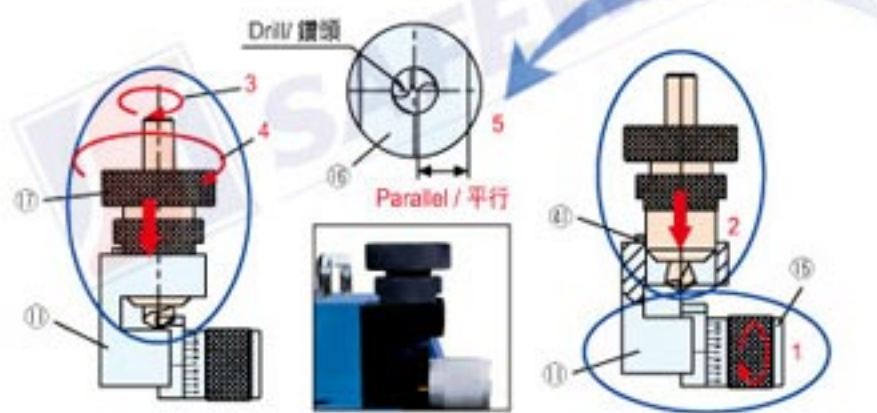


DRILL GRINDING MACHINE / OPERATION
鑽頭研磨機 / 操作說明

A. How to prepare for drill grinding / 如何完成鑽頭研磨前準備



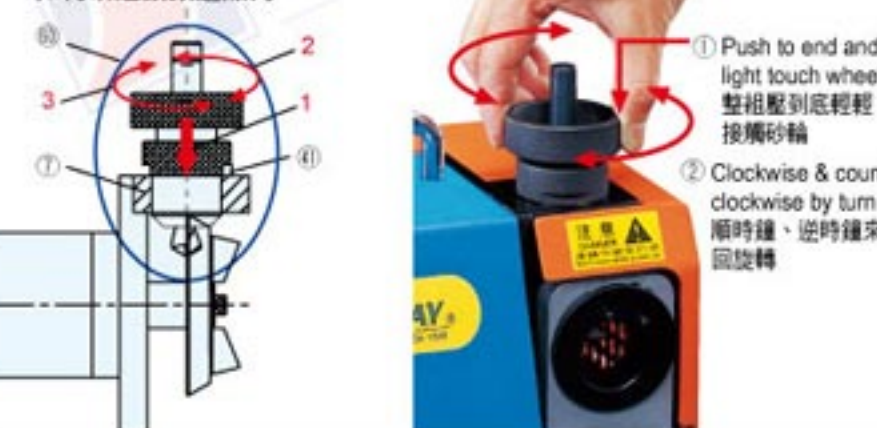
B. How to position the length and movement of the drill / 如何完成鑽頭長度及方位設定之準備



C. How to grind point angle / 如何研磨鑽頭先端角



D. How to grind drill chisel edge angle / 如何研磨鑽頭逃隙角



E. How to change grinding wheel / 如何更換鑽石砂輪



A. How to prepare for drill grinding:

1. Make sure of the drill diameter to choose the right Collet ⑫.
2. Lock collet into Collet Holder ⑬ properly.
3. Insert drill into collet with 35 mm extension, no tight locking.
4. Insert Collet Nut ⑭ into Collet ⑫ to lock Collet Holder ⑬. Operate slightly to turn the drill by hand.
5. Drill grinding preparation ends for Collet Chuck Set ⑮.

B. How to position the length and movement of the drill:

1. Adjust Scale ⑯ in line with the dia. of drill.
2. Put the whole set into Length Pre-Setting Bracket ⑰ (According to Step A1 - A4) and insert Pin ⑱ into the slot.
3. Turn Collet Chuck Set ⑮ clockwise to support against Pin ⑱ and turn drill clockwise until it touches drill cutting edge.
4. Tight Collet Holder ⑬ clockwise.
5. Take out of Collet Chuck Set ⑮ and make sure the cutting edge and collet holder slots are paralleled with each other. If not, the whole process must be repeated. Attention: if drill spiral is different, please reset the parallel and adjust Scale Ring ⑯ in line with diameter of drill.

C. How to grind point angle:

1. Put Collet Chuck Set ⑮ into Point Angle Bracket ⑲ and then insert the slot into the pin ⑱.
2. Push Collet Chuck Set ⑮ to light touch the wheel and turn clockwise and reverse about 5-6 times until grinding noise disappears.
3. Take out Collet Chuck Set ⑮ and turn it 180 degree. Repeat Step 1 and 2 to finish point angle grinding.

D. How to grind drill chisel edge angle:

1. Put Collet Chuck Set ⑮ into Chisel Edge Angle Bracket ⑳ and then insert the slot into the pin ⑱.
2. Push Collet Chuck Set ⑮ to light touch the wheel and turn clockwise and reverse about 5-6 times until grinding noise disappears.
3. Take out Collet Chuck Set ⑮ and turn it 180 degree. Repeat Step 1 and 2 to finish grinding drill chisel edge angle on two drill chisel edge.

E. How to change grinding wheel:

1. Loose Knob ㉑ and open Cover ㉒.
 2. Loose Screw ㉓ with 4mm hexagonal wrench.
 3. Change the grinding wheel and install it back.
 4. Make sure Cover ㉒ is tightened with Knob ㉑.
- Attention: If Screw ㉓ is not tightened properly, the Cover ㉒ will not be fastened enough. It is dangerous to switch on the machine before the Knob ㉑ being tightened fully.

A. 如何完成鑽頭研磨前準備

1. 首先確認鑽頭直徑，再選擇筒夾 ⑫ 直徑。
2. 將已選筒夾以適當角度插入筒夾迫緊帽內 ⑬。
3. 鑽頭插入筒夾內，並伸出約35 mm左右，但不可鎖緊。
4. 筒夾環 ⑭ 套入筒夾 ⑫ 並鎖入筒夾迫緊帽 ⑬ 然後輕輕鎖入並保持鑽頭可用手旋轉。
5. 以上步驟即完成鑽頭研磨前準備 ⑮。

B. 如何完成鑽頭長度及方位設定之準備

1. 首先將刻度環 ⑯ 調到所須研磨鑽頭直徑一樣。
2. 將整組已準備好之鑽頭夾頭組 ⑮ (如A1-A4步驟)插入長度設定座 ⑰ 內，並將直銷 ⑱ 嵌入凹槽內。
3. 將整組鑽頭夾頭組 ⑮ 順時鐘方向旋轉至頂住直銷 ⑱ 同時將鑽頭順時鐘方向旋轉至頂住鑽頭刀刀為止。
4. 筒夾迫緊環 ⑬ 順時鐘方向將鑽頭鎖緊。
5. 將整組鑽頭夾頭組 ⑮ 取出，確認鑽頭先端刀刀與筒夾環凹槽是否平行，如沒有平行，要再重新設定一次。
注意：如鑽頭螺旋型式不一，請自行設定平行後，再將刻度環 ⑯ 數字調整與鑽頭直徑數字一樣。

C. 如何研磨鑽頭先端角

1. 將整組鑽頭夾頭組 ⑮ 再插入先端角研磨座 ⑲，並將凹槽嵌入直銷 ⑱ 內。
2. 將整組鑽頭夾頭組 ⑮ 輕輕接觸砂輪，並順時鐘、逆時鐘方向旋轉約5-6次研磨，直到沒有研磨聲音為止即可。
3. 將鑽頭夾頭組 ⑮ 取出，轉180°，再依上述1、2步驟重複研磨一次，即可完成鑽頭兩刀先端角。

D. 如何研磨鑽頭逃隙角

1. 將整組鑽頭夾頭組 ⑮ 再插入逃隙角研磨座 ⑳，並將凹槽嵌入直銷 ⑱ 內。
2. 將整組鑽頭夾頭組 ⑮ 輕輕接觸砂輪，並順時鐘、逆時鐘方向旋轉約5-6次研磨，直到沒有研磨聲音為止即可。
3. 將整組鑽頭夾頭組 ⑮ 取出，轉180°，再依上述1、2步驟重複研磨一次，即可完成鑽頭兩刀逃隙角。

E. 如何更換鑽石砂輪

1. 將本機右側旋扭 ㉑ 鬆開，並將側蓋 ㉒ 掀開。
2. 用4 mm六角扳手逆時鐘方向將螺絲 ㉓ 鬆開。
3. 更換新鑽石砂輪，再將螺絲鎖上即可。
4. 將側蓋 ㉒ 蓋好，並將旋扭 ㉑ 鎖緊。
注意：鑽石砂輪螺絲 ㉓ 未鎖緊，側蓋 ㉒ 未蓋好，旋扭 ㉑ 未鎖緊前，不可將電源打開，以免發生危險。