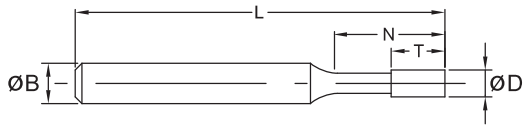


鑽石・氮化硼內孔磨棒 / Diamond & CBN Internal Points

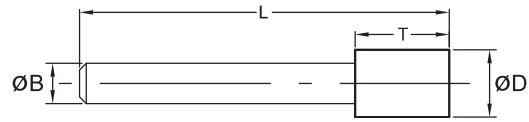


■ 本系列產品主要使用於各種內孔研磨、治具研磨或小孔徑之精密研磨。
鑽石適用於研磨鎢鋼、陶瓷、藍寶石、玻璃 ... 等。
氮化硼適用於研磨熱處理硬化後之各種合金鋼材。

■ Diamond internal points are used for jig, internal grinding, and precision grinding of small holes in carbide, ceramics, sapphire, glass etc.
CBN internal points are used similarly on tough, high carbon, high chrome harden steels.



Type A



Z

單位 / Unit : mm

| 編號 / Order no. | | Type | ϕD | T | N | L | ϕB | 粒度 Grit size |
|----------------|---------|------|----------|----|----|----|----------|-----------------|
| 鑽石/Diamond | 氮化硼/CBN | | | | | | | |
| ID-3003 | IB-3003 | A | 0.3 | 2 | 4 | 35 | 3.0 | #600 |
| ID-3004 | IB-3004 | A | 0.4 | 2 | 5 | 35 | 3.0 | #400 |
| ID-3005 | IB-3005 | A | 0.5 | 2 | 5 | 35 | 3.0 | #400 |
| ID-3006 | IB-3006 | A | 0.6 | 3 | 5 | 40 | 3.0 | #200 |
| ID-3007 | IB-3007 | A | 0.7 | 3 | 8 | 40 | 3.0 | #200 |
| ID-3008 | IB-3008 | A | 0.8 | 3 | 8 | 40 | 3.0 | #200 |
| ID-3009 | IB-3009 | A | 0.9 | 4 | 8 | 40 | 3.0 | #200 |
| ID-3010 | IB-3010 | A | 1.0 | 5 | 8 | 40 | 3.0 | #200 |
| ID-3015 | IB-3015 | A | 1.5 | 5 | 8 | 45 | 3.0 | #150 |
| ID-3020 | IB-3020 | A | 2.0 | 5 | 12 | 45 | 3.0 | #150 |
| ID-3025 | IB-3025 | A | 2.5 | 5 | 15 | 45 | 3.0 | #150 |
| ID-3030 | IB-3030 | A | 3.0 | 5 | 15 | 45 | 3.0 | #150 |
| ID-3040 | IB-3040 | B | 4.0 | 5 | - | 50 | 3.0 | #150 |
| ID-3050 | IB-3050 | B | 5.0 | 8 | - | 50 | 3.0 | #150 |
| ID-3060 | IB-3060 | B | 6.0 | 8 | - | 50 | 3.0 | #150 |
| ID-6040 | IB-6040 | A | 4.0 | 10 | 22 | 80 | 6.0 | #100 |
| ID-6050 | IB-6050 | A | 5.0 | 10 | 22 | 80 | 6.0 | #100 |
| ID-6060 | IB-6060 | A | 6.0 | 10 | 22 | 80 | 6.0 | #100 |
| ID-6070 | IB-6070 | B | 7.0 | 10 | - | 80 | 6.0 | #100 |
| ID-6080 | IB-6080 | B | 8.0 | 10 | - | 80 | 6.0 | #100 |
| ID-6090 | IB-6090 | B | 9.0 | 10 | - | 80 | 6.0 | #100 |
| ID-6100 | IB-6100 | B | 10 | 10 | - | 80 | 6.0 | #100 |
| ID-6120 | IB-6120 | B | 12 | 10 | - | 80 | 6.0 | #100 |
| ID-6140 | IB-6140 | B | 14 | 10 | - | 80 | 6.0 | #100 |
| ID-6160 | IB-6160 | B | 16 | 10 | - | 80 | 6.0 | #100 |
| ID-6180 | IB-6180 | B | 18 | 10 | - | 80 | 6.0 | #100 |

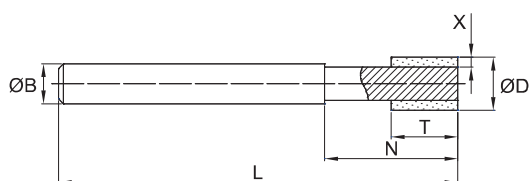
■ 標準粒度外，其他粒度請指明訂購。 / Grit size in the above table is standard for that item, others are available upon request.

陶瓷法CBN內孔磨棒 / Vitrified CBN Internal Points

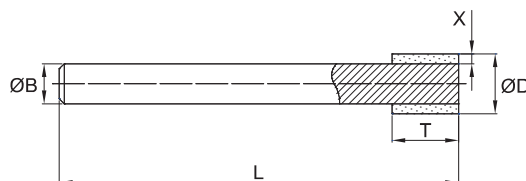


■ 陶瓷法 CBN 內孔磨棒主要使用於內孔研磨及治具研磨。氮化硼 (CBN) 適用於研磨高速鋼及各種熱處理硬化後之合金鋼材(濕磨)。

■ Vitrified CBN internal points are used for internal grinding and jig grinding of high speed steel and hardened alloy steel. (Wet Grinding)



Type A



Type B

規格 / Specifications:

單位 / Unit : mm

| 編號 Order no. | Type | ϕD | T | X | N | L | ϕB | 粒度 Grit size |
|-----------------|------|----------|----|-----|----|----|----------|-----------------|
| VIB-3040 | A | 4.0 | 6 | 1.0 | 12 | 60 | 3 | #200 |
| VIB-3050 | A | 5.0 | 6 | 1.5 | 12 | 60 | 3 | #200 |
| VIB-3060 | A | 6.0 | 6 | 2.0 | 12 | 60 | 3 | #200 |
| VIB-3080 | A | 8.0 | 8 | 3.0 | 12 | 60 | 3 | #200 |
| VIB-6100 | B | 10.0 | 8 | 2.0 | - | 80 | 6 | #200 |
| VIB-6120 | B | 12.0 | 10 | 3.0 | - | 80 | 6 | #200 |
| VIB-8140 | B | 14.0 | 12 | 3.0 | - | 80 | 8 | #200 |
| VIB-6140 | B | 14.0 | 12 | 4.0 | - | 80 | 6 | #200 |
| VIB-8160 | B | 16.0 | 12 | 4.0 | - | 80 | 8 | #200 |
| VIB-6160 | B | 16.0 | 12 | 5.0 | - | 80 | 6 | #200 |
| VIB-8180 | B | 18.0 | 12 | 5.0 | - | 80 | 8 | #200 |
| VIB-6180 | B | 18.0 | 12 | 6.0 | - | 80 | 6 | #200 |

■ 標準粒度外，其他粒度請指明訂購。

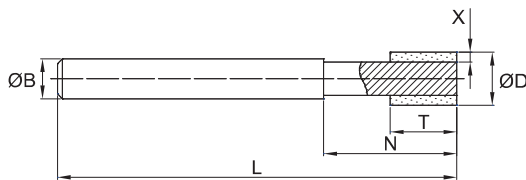
■ Grit size in the above table is standard for that item, others are available upon request.

樹脂法CBN內孔磨棒 / Resinoid CBN Internal Points

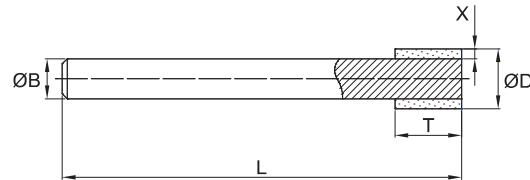


■ 樹脂法 CBN 內孔磨棒主要使用於內孔研磨及治具研磨。氮化硼 (CBN) 適用於研磨高速鋼及各種熱處理硬化後之合金鋼材。

■ Resinoid CBN internal points are used for internal grinding and jig grinding of high speed steel and hardened alloy steel.



Type A



Type B

規格 / Specifications:

單位 / Unit : mm

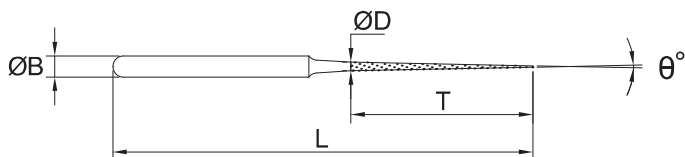
| 編號 Order no. | Type | $\varnothing D$ | T | X | N | L | $\varnothing B$ | 粒度 Grit size |
|-----------------|------|-----------------|----|------|----|----|-----------------|-----------------|
| RIB-3040 | A | 4.0 | 5 | 1.0 | 12 | 45 | 3 | #200 |
| RIB-3045 | A | 4.5 | 6 | 1.25 | 12 | 45 | 3 | #200 |
| RIB-3050 | A | 5.0 | 6 | 1.5 | 12 | 45 | 3 | #200 |
| RIB-6060 | A | 6.0 | 6 | 2.0 | 15 | 80 | 6 | #150 |
| RIB-6070 | A | 7.0 | 8 | 2.5 | 15 | 80 | 6 | #150 |
| RIB-6080 | A | 8.0 | 8 | 3.0 | 20 | 80 | 6 | #150 |
| RIB-6100 | A | 10.0 | 10 | 2.0 | 20 | 80 | 6 | #150 |
| RIB-6120 | B | 12.0 | 10 | 3.0 | - | 80 | 6 | #150 |
| RIB-6140 | B | 14.0 | 10 | 4.0 | - | 80 | 6 | #150 |
| RIB-6160 | B | 16.0 | 10 | 4.0 | - | 80 | 6 | #150 |
| RIB-6180 | B | 18.0 | 10 | 5.0 | - | 80 | 6 | #150 |
| RIB-6200 | B | 20.0 | 10 | 6.0 | - | 80 | 6 | #150 |

■ 標準粒度外，其他粒度請指明訂購。

■ Grit size in the above table is standard for that item, others are available upon request.



鑽石磨棒 / Diamond Taper Points



規格 / Specifications:

單位 / Unit : mm

| | ØD | T | θ° | ØB | L | 粒度 Grit size | 編號 Order no. |
|--|-------|----|-----|------|----|-----------------|-----------------|
| | Ø1.8 | 25 | 3.1 | Ø3.0 | 50 | #150 | 18PL |
| | Ø2.1 | 34 | 2.8 | Ø3.0 | 55 | #150 | 21PXL |
| | Ø3.0 | 25 | 6.4 | Ø3.0 | 60 | #150 | 30PL |
| | Ø4.8 | 26 | 9.6 | Ø3.0 | 55 | #150 | 48PL |
| | Ø1.5 | 26 | 2.3 | Ø3.0 | 60 | #150 | 15PL |
| | Ø2.0 | 48 | 1.9 | Ø3.0 | 70 | #150 | 20PXL |
| | Ø2.3 | 40 | 2.7 | Ø3.0 | 65 | #150 | 23PXL |
| | Ø2.5 | 45 | 2.6 | Ø3.0 | 70 | #150 | 25PXL |
| | Ø3.0 | 38 | 4.2 | Ø3.0 | 70 | #150 | 30PXL |
| | Ø6.0 | 33 | 10 | Ø6.0 | 60 | #120 | 60P10 |
| | Ø6.0 | 28 | 12 | Ø6.0 | 60 | #120 | 60P12 |
| | Ø6.0 | 23 | 14 | Ø6.0 | 60 | #120 | 60P14 |
| | Ø6.0 | 21 | 16 | Ø6.0 | 60 | #120 | 60P16 |
| | Ø6.0 | 17 | 20 | Ø6.0 | 60 | #120 | 60P20 |
| | Ø10.0 | 19 | 30 | Ø6.0 | 60 | #120 | 100P30 |

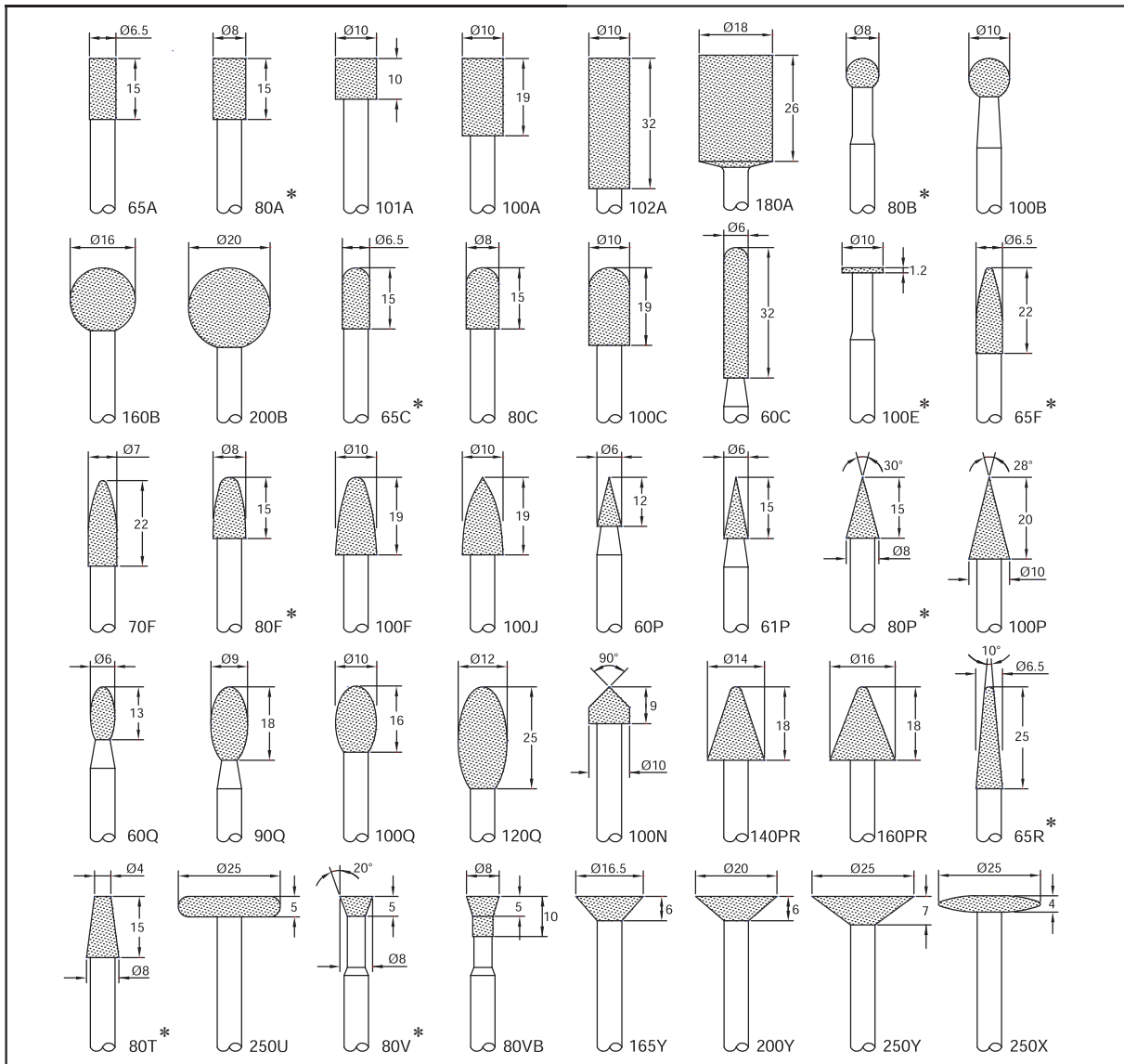
鑽石磨棒 / Diamond Mounted Points



BC Series - $\varnothing 6.0$ mm shank

- 粒度：#40, #60, #100為標準粒度，訂購時請指明。
例如：BC-65A, #40
- 柄徑： $\varnothing 6.0$ mm, 全長：60~65mm。
- Grit size available in #40, #60 and #100,
When ordering, please specify.
Ordering example: BC-65A, #40
- Shank diameter : $\varnothing 6.0$ mm, Total length : 60~65mm.

單位 / Unit : mm

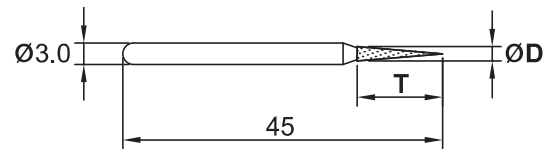


- BC-10 : 套裝10支組,含標示*號之磨棒各一支。訂購時請指明粒度,例如：BC-10, #60
- BC-10 : 10 pcs. Assortment set, contains one each of above points, which denoted by *。
Ordering example : BC-10, #60

鑽石磨棒 / Diamond Mounted Points



BM Series - $\varnothing 3.0\text{mm}$ shank

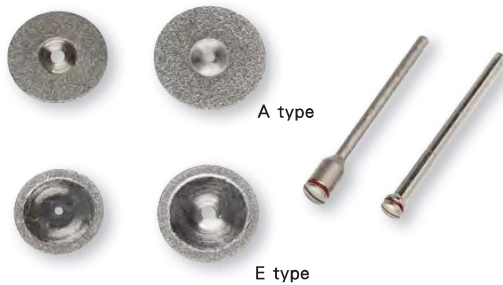


單位 / Unit : mm

| | | | | | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | | | |
| Order no. | 10A | 15A | 20A | 25A | 30A | 35A | 40A | 50A | 60A | 10C | 15C | 20C | 25C | 30C |
| $\varnothing D$ | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 5 | 6 | 1 | 1.5 | 2 | 2.5 | 3 |
| T | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 8 | 8 | 10 |
| Grit size | #150 | #150 | #120 | #120 | #120 | #120 | #120 | #100 | #100 | #150 | #150 | #120 | #120 | #120 |
| | | | | | | | | | | | | | | |
| Order no. | 35C | 40C | 50C | 60C | 20T | 30T | 30V | 13R | 14R | 15R | 20R | 30R | 20P | 30P |
| $\varnothing D$ | 3.5 | 4 | 5 | 6 | 2 | 3 | 3 | 1.2 | 1.5 | 1.5 | 2 | 3 | 2 | 3 |
| T | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 16 | 13 | 10 | 12 | 14 | 12 | 15 |
| Grit size | #120 | #120 | #100 | #100 | #120 | #120 | #120 | #150 | #150 | #150 | #150 | #120 | #150 | #150 |
| | | | | | | | | | | | | | | |
| Order no. | 40P | 50P | 60P | 20F | 30F | 40F | 50F | 60F | 30J | 40J | 50J | 60J | 10B | 15B |
| $\varnothing D$ | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 | 1 | 1.5 |
| T | 15 | 15 | 13 | 10 | 12 | 10 | 10 | 12 | 14 | 9 | 10 | 13 | - | - |
| Grit size | #150 | #150 | #150 | #120 | #120 | #120 | #100 | #100 | #120 | #120 | #120 | #100 | #200 | #150 |
| | | | | | | | | | | | | | | |
| Order no. | 20B | 25B | 30B | 40B | 50B | 60B | 80B | 30Q | 40Q | 50Q | 60Q | 20S | 30S | 40S |
| $\varnothing D$ | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 3 | 4 | 5 | 6 | 2 | 3 | 4 |
| T | - | - | - | - | - | - | - | 5 | 7 | 9 | 10 | 4 | 6 | 8 |
| Grit size | #150 | #120 | #120 | #120 | #100 | #100 | #100 | #120 | #120 | #100 | #100 | #120 | #120 | #120 |

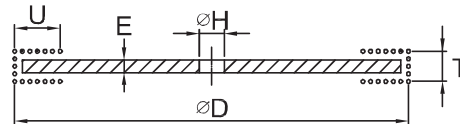
- BMS-30 : 30支綜合組，含以上有標示*記號磨棒各1支。
30 pieces assortment set, contains one each point which denoted by*.
- BMS-20 : 20支綜合組，組裝內容如下 / 20 pieces set, contains one each of below :
BM-10A, 15A, 20A, 25A, 30A, 35A, 15C, 20C, 25C, 30C,
20P, 30P, 15R, 20R, 30R, 20B, 30B, 20F, 30F, 20T.
- The tools with $\varnothing 1/8''$ shank or with CBN abrasive are available upon your request.

鑽石切片 / Plated Diamond Disc



鑽石切片適用於切溝、切斷，研磨下列材質：玻璃、鋁鋼、陶瓷、石材、硬橡膠、FRP、碳纖維、石墨以及複合材料，...等。

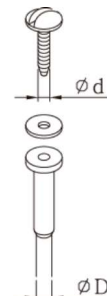
Diamond disc use for grooving, cutting, & grinding the following materials: glass, tungsten carbide, ceramic, stone, hard rubber, FRP, composite materials and graphite...etc.



| Order no. | Type | ØD | T | U | E | ØH | Grit | Mandrel |
|-----------|------|------|------|------|------|------|------|---------|
| 編號 | | (mm) | (mm) | (mm) | (mm) | (mm) | 粒度 | 軸柄 |
| BM-190E | E | 19 | 0.4 | 2 | 0.2 | 1.7 | #200 | A,B,C |
| BM-190A | A | 19 | 0.4 | 6 | 0.2 | 1.7 | #200 | A,B,C |
| BM-220E | E | 22 | 0.4 | 2 | 0.2 | 1.7 | #200 | A,B,C |
| BM-220A | A | 22 | 0.4 | 8 | 0.2 | 1.7 | #200 | A,B,C |
| BM-250E | E | 25 | 0.4 | 2 | 0.2 | 1.7 | #200 | A,B,C |
| BM-250A | A | 25 | 0.5 | 8 | 0.2 | 1.7 | #150 | A,B,C |
| BM-300E | E | 30 | 0.4 | 2 | 0.2 | 1.7 | #200 | A,B,C |
| BM-300A | A | 30 | 0.5 | 8 | 0.2 | 1.7 | #150 | A,B,C |
| BM-221E | E | 22 | 0.4 | 2 | 0.2 | 3.0 | #200 | D,E,F |
| BM-221A | A | 22 | 0.4 | 8 | 0.2 | 3.0 | #200 | D,E,F |
| BM-251E | E | 25 | 0.4 | 2 | 0.2 | 3.0 | #200 | D,E,F |
| BM-251A | A | 25 | 0.5 | 8 | 0.2 | 3.0 | #150 | D,E,F |
| BM-301E | E | 30 | 0.4 | 2 | 0.2 | 3.0 | #200 | D,E,F |
| BM-301A | A | 30 | 0.5 | 10 | 0.2 | 3.0 | #150 | D,E,F |

軸柄/Mandrel :

| Order no. | ØD | Ød | Order no. | ØD | Ød |
|-----------|-------|-----|-----------|-------|-----|
| A. AK234 | 2.34 | 1.7 | D. MK234 | 2.34 | 3.0 |
| B. AK300 | 3.0 | 1.7 | E. MK300 | 3.0 | 3.0 |
| C. AK318 | 3.175 | 1.7 | F. MK318 | 3.175 | 3.0 |





鑽石砂布 / Diamond Foils



- 鑽石砂布是以銅箔為基材，電著上一層鑽石粉，鑽石磨料佈滿整個銅箔表面。其特色為有較長之工具壽命，可以用刀片自由裁剪成所需尺寸及形狀，然後黏貼在各種工具上，成為您所需的自製工具。其優異的切削效果及多種粒度可供選擇，適合各種模具、鎢鋼、硬陶瓷、石材、玻璃等之研磨及拋光。另一種運用為將之黏在機器零件上增加耐磨耗及防止打滑。

Diamond powders are fully sprayed on the surface of copper foil, this features in longer tool life. The diamond foils can be cut to any shape & size easily, and stick on to your own tools, thus allowing for a whole range of tailored tools.

Aggressive cutting action and wide range of grit sizes produce fast cutting or polishing on hard steels of any hardness、tungsten carbides、stones、glass and hard ceramics...etc.

Other application of diamond foils is to stick on parts of machine to increase the wear resistant and avoid the sliding.

| 尺寸 Dimensions | 粒度與編號 / Grit size & Order no. | | | | | | | | |
|------------------|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | #120 | #150 | #200 | #300 | #400 | #600 | #800 | #1200 | #1800 |
| 10 x 100mm | XF-1012 | XF-1015 | XF-1020 | XF-1030 | XF-1040 | XF-1060 | XF-1080 | XF-1120 | XF-1180 |
| 50 x 100mm | XF-2012 | XF-2015 | XF-2020 | XF-2030 | XF-2040 | XF-2060 | XF-2080 | XF-2120 | XF-2180 |
| 100 x 100mm | XF-3012 | XF-3015 | XF-3020 | XF-3030 | XF-3040 | XF-3060 | XF-3080 | XF-3120 | XF-3180 |
| 200 x 200mm | XF-4012 | XF-4015 | XF-4020 | XF-4030 | XF-4040 | XF-4060 | XF-4080 | XF-4120 | XF-4180 |

說明：標準品全部將砂布背膠，只要撕下保護層即可使用。若特殊用途可指定無背膠砂布，自行用其他方式將砂布固著於所需之工具或零件上。

Remark : All standard foils come with PSA backing, when using, please remove the backing paper.

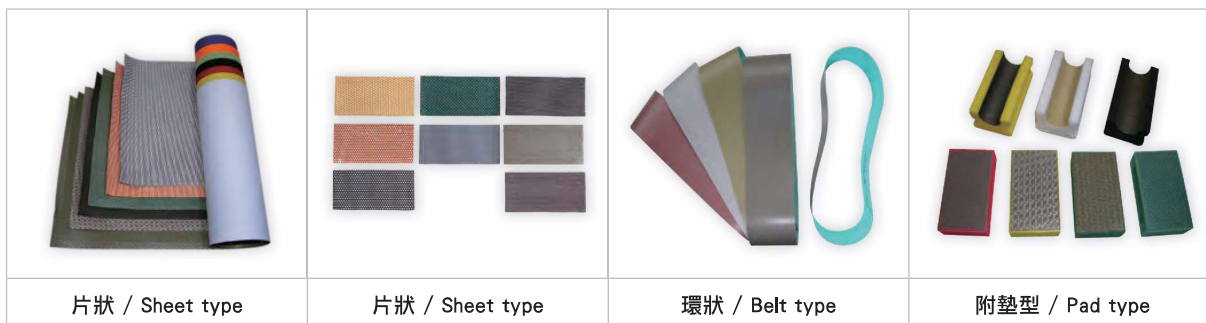
The foils without PSA backing are also available on demand. For special applications, the users may use his own method to stick the foil on to the tools or parts.

鑽石砂布、網狀鑽石布之運用例：

Application Example of Diamond Foils & Diamond Cloth:



鑽石布 / Diamond Cloth



片狀 / Sheet type

片狀 / Sheet type

環狀 / Belt type

附墊型 / Pad type

The application of diamond power on a flexible cloth has allowed the development of a new generation of diamond tools.

This tools perform a more aggressive cutting action than any other abrasive tool, thanks to its flexibility and to the spacing between islands, the diamond cloth can be easily cut with scissors, thus allowing for a whole range of traditional abrasives only.

All diamond cloth products are color coded for easy identification of mesh and these series products can be in sheet, discs self-adhesive or velcro backing, or in belt type.

Applications :

The applications of diamond cloth are:
Wet grinding (lapping) harden steel of any hardness, tungsten carbide, hard ceramic coated steels, glass, hard ceramic, marble, granite and stone...etc, or for the lapping of mold and die.

鑽石布是將鑽石粉以電著法或樹脂結合法固著於帆布上,以前這種產品只有傳統砂布而已。

不同於傳統砂布的是,它有極佳的切削力,且在磨料與磨料間留有空隙作為研磨時逃屑用,因此研磨時不易塞目,且研磨後之工件表面非常均勻。

鑽石布可以用刀片或剪刀輕易地剪裁成所需要之尺寸,做成所需之工具。

鑽石布的粒度均以不同之顏色標示以資區別。它可為片狀亦可將之背膠作成環帶狀。

用途 :

鑽石布的運用很廣泛,例如:大理石,花崗石,等石材加工。任何硬度之硬質鋼材,碳化鎢,硬陶瓷披覆鋼材,硬陶瓷...等研磨,玻璃之倒角及磨邊,各種模具之研磨及拋光。

規格 / Specifications:

單位 / Unit : mm

| 粒度 Grit size | 標示顏色 Color | 結合劑 Bond Material | 尺寸與編號 / Dimensions & Order No. | | | |
|-----------------|---------------|----------------------|--------------------------------|-----------|-------------|-----------|
| | | | 50 X 100 | 100 X 100 | 1,170 X 295 | 690 X 295 |
| #60 | 綠色 / Green | 鎳 / Ni bond | XZ-1006N | XZ-2006N | XZ-5006N | - |
| #120 | 黑色 / Black | 鎳 / Ni bond | XZ-1012N | XZ-2012N | XZ-5012N | - |
| #200 | 紅色 / Red | 鎳 / Ni bond | XZ-1020N | XZ-2020N | XZ-5020N | - |
| #400 | 黃色 / Yellow | 鎳 / Ni bond | XZ-1040N | XZ-2040N | XZ-5040N | - |
| #600 | 白色 / White | 鎳 / Ni bond | XZ-1060N | XZ-2060N | XZ-5060N | - |
| #1000 | 藍色 / Blue | 鎳 / Ni bond | XZ-1100N | XZ-2100N | XZ-5100N | - |
| #500 | 白色 / White | 樹脂 / Resin Bond | XZ-1050R | XZ-2050R | - | XZ-6050R |
| #1000 | 藍色 / Blue | 樹脂 / Resin Bond | XZ-1100R | XZ-2100R | - | XZ-6100R |
| #8000 | 橙色 / Orange | 樹脂 / Resin Bond | XZ-1800R | XZ-2800R | - | XZ-6800R |

說明 / Remark :

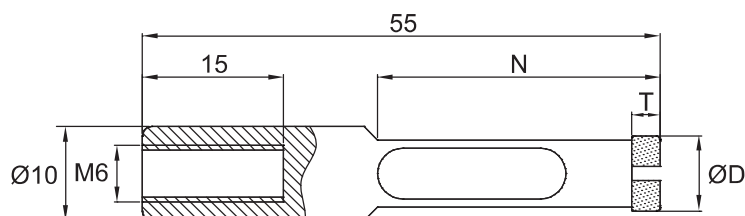
- 標準尺寸 50 X 100mm 及 100 X 100mm 均有背膠,若不背膠請指明。
 - 其他尺寸或形狀之鑽石布,請與我們業務人員聯絡。
1. Standard 50 X 100mm and 100 X 100mm come with PSA backing, others come without PSA backing, please specify.
2. Other size or type (shape), depend on your request.

電鑄鑽石鑽管 / Electroplated Diamond Core Drills



■ 此系列產品主要使用於FRP、超硬磁磚、人造花崗岩、花崗岩、拋光石英磚、瓷器、大理石、陶器、赤土陶器、玻璃、石墨、石材等材料之鑽孔。

■ **Electroplated Diamond Core Drills** are used for drilling FRP, hard tiles, artificial granite, granite, quartz, porcelain, marble, ceramic, terra cotta ceramic, glass, graphite, & stone.



規格 / Specifications:

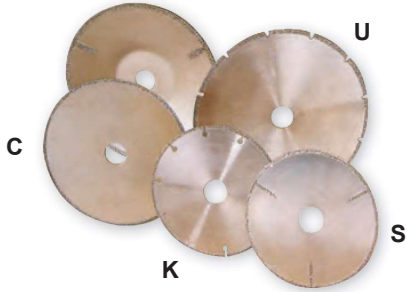
單位 / Unit : mm

| 編號 Order no. | ØD | | T | N | 粒度 Grit size | 備註 Note |
|-----------------|-------|-------|----|----|-----------------|--------------|
| | mm | inch | | | | |
| ESD-032 | 3.2 | 1/8" | 10 | 25 | #60 | Solid drills |
| ECD-050 | 5.0 | 3/16" | 3 | 30 | #60 | Core Drills |
| ECD-065 | 6.5 | 1/4" | 3 | 30 | #60 | Core Drills |
| ECD-080 | 8 | 5/16" | 3 | 30 | #60 | Core Drills |
| ECD-100 | 10 | 3/8" | 3 | 30 | #60 | Core Drills |
| ECD-130 | 13 | 1/2" | 3 | 30 | #60 | Core Drills |
| ECD-160 | 16 | 5/8" | 3 | 35 | #60 | Core Drills |
| ECD-191 | 19.05 | 3/4" | 3 | 35 | #60 | Core Drills |
| ECD-254 | 25.4 | 1" | 3 | 35 | #60 | Core Drills |

■ 標準粒度外，其他粒度請指明訂購。

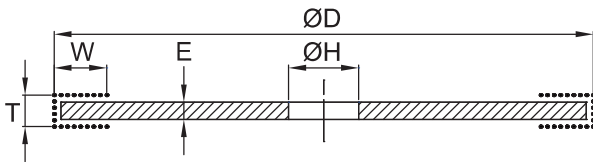
■ Grit size in the above table is standard for that item, others are available upon request.

電鑄鑽石鋸片 / Electroplated Diamond Cutters



■ 此系列產品主要使用於大理石、磁磚、FRP、碳纖或石墨等之切割。

■ **Electroplated Diamond Cutters** are used for cutting marble, tile, FRP., carbon or graphics.



- C: 連續式 / Continuous rim type
- S: 幅條式 / Spoke type
- U: U 溝式 / U-slot type
- K: 水滴溝式 / Key hole slot type

規格 / Specifications:

單位 / Unit : mm

| 編號 Order no. | øD | E | T | W | 型式 Type | øH | 粒度 Grit size |
|-----------------|-----|-----|-----|-----|------------|-------------------------------------|-----------------|
| SP-05008 | 50 | 0.8 | 1.8 | 2~3 | C,S,U | Depend on your request 訂購時，敬請指明。 | #40 |
| SP-06308 | 63 | 0.8 | 1.8 | 2~3 | C,S,U | | #40 |
| SP-10008 | 100 | 0.8 | 1.8 | 2~3 | C,S,U | | #40 |
| SP-11508 | 115 | 0.8 | 1.8 | 2~3 | C,S,U | | #40 |
| SP-11510K | 115 | 1.0 | 2.0 | 2~3 | K | | #40 |
| SP-12508 | 125 | 0.8 | 1.8 | 2~3 | C,S,U | | #40 |
| SP-15008 | 150 | 0.8 | 1.8 | 2~3 | C,S,U | | #40 |
| SP-15012 | 150 | 1.2 | 2.2 | 2~3 | C,S,U | | #40 |
| SP-17512 | 175 | 1.2 | 2.2 | 2~3 | C,S,U | | #40 |
| SP-20012 | 200 | 1.2 | 2.2 | 2~3 | C,S,U | | #40 |
| SP-25012 | 250 | 1.2 | 2.2 | 2~3 | C,S,U | | #40 |
| SP-30012 | 300 | 1.2 | 2.2 | 2~3 | C,S,U | | #40 |

■ 標準粒度外，其他粒度請指明訂購。

■ Grit size in the above table is standard for that item, others are available upon request.

鑽石與氮化硼砂輪 / Diamond & CBN Grinding Wheels

訂購砂輪時請指明下列事項：

1. 砂輪之形狀及各部尺寸：如1A1、14A1
2. 磨料種類：鑽石或氮化硼
3. 粒度：例如：#150
4. 集中度：例如：C-75
5. 結合劑：例如：樹脂結合劑或金屬結合劑
6. 冷卻方式：乾磨或濕磨
7. 數量及交期：
8. 轉速及加工條件：
9. 多數製造商都會在砂輪上標示以下資訊：

When ordering, please specify：

1. Shape & dimensions of wheel：Ex. 1A1, 14A1
2. Abrasive：Diamond or CBN
3. Grit size：Ex. #150
4. Concentration：Ex. C-75
5. Bond of wheel：Ex. Resin bond or Metal bond
6. Coolant：Dry or wet grinding
7. Quantity & Delivery date：
8. Spindle speed & grinding conditions：
9. Most of makers marked following information：

| SDC 磨料種類 Abrasive | 150 粒度 Grit Size | N 結合度 Grade | 75 集中度 Concentration | R 結合劑 Bond | 3.0 磨料層厚度 Rim thickness |
|---|------------------------|----------------------|----------------------------|------------------------|-------------------------------|
| D：天然鑽石 Natural diamond | #60 #80 | J 軟 / Soft L ↓ | 25 50 | R：樹脂結合 Resin bond | 1.0mm 1.5mm |
| SD：人造鑽石 Synthetic diamond | #100 #150 | N ↓ | 75 100 | M：金屬結合 Metal bond | 2.0mm 3.0mm |
| SDC：人造金屬披覆鑽石 Synthetic metal coating diamond | #200 #270 | P ↓ | 125 150 | P：電鑄法 Electroplated | 5.0mm 10.0mm |
| B：氮化硼 Cubic boron nitride (CBN) | #325 #400 | R 硬 / Hard | | V：陶瓷法 Vitrified | . . |
| BC：金屬披覆氮化硼 CBN with metal coating | #600 . | | | | . . |

使用鑽石與氮化硼時機 / Choosing Diamond or CBN ?

* 鑽石

- 碳化鎢，半燒結碳化鎢工具及另件
- 陶瓷工具及另件
- 氧化鐵等之磁性材料
- 耐火材料及其製品
- 石材、寶石及半寶石、貝殼
- 玻璃、石英、瓷器
- 矽、鍺等電子另件
- 碳、石墨及其製品
- 磁磚、瀝青、混凝土、石棉
- 塑膠、加強塑料 (F.R.P.)
- 耐磨耗披覆材料

* Diamond

- Tungsten carbide, presintered carbide metal tools & construction units.
- Oxide ceramic materials.
- Ferrite, ceramic magnetic materials.
- Refractory products.
- Stones, gem & semi-precious stones, shell.
- Glass, porcelain, quartz.
- Graphite, carbon.
- Tiles, asbestos, asphalt, concrete.
- Plastics, F.R.P.
- Wear resistant coatings.

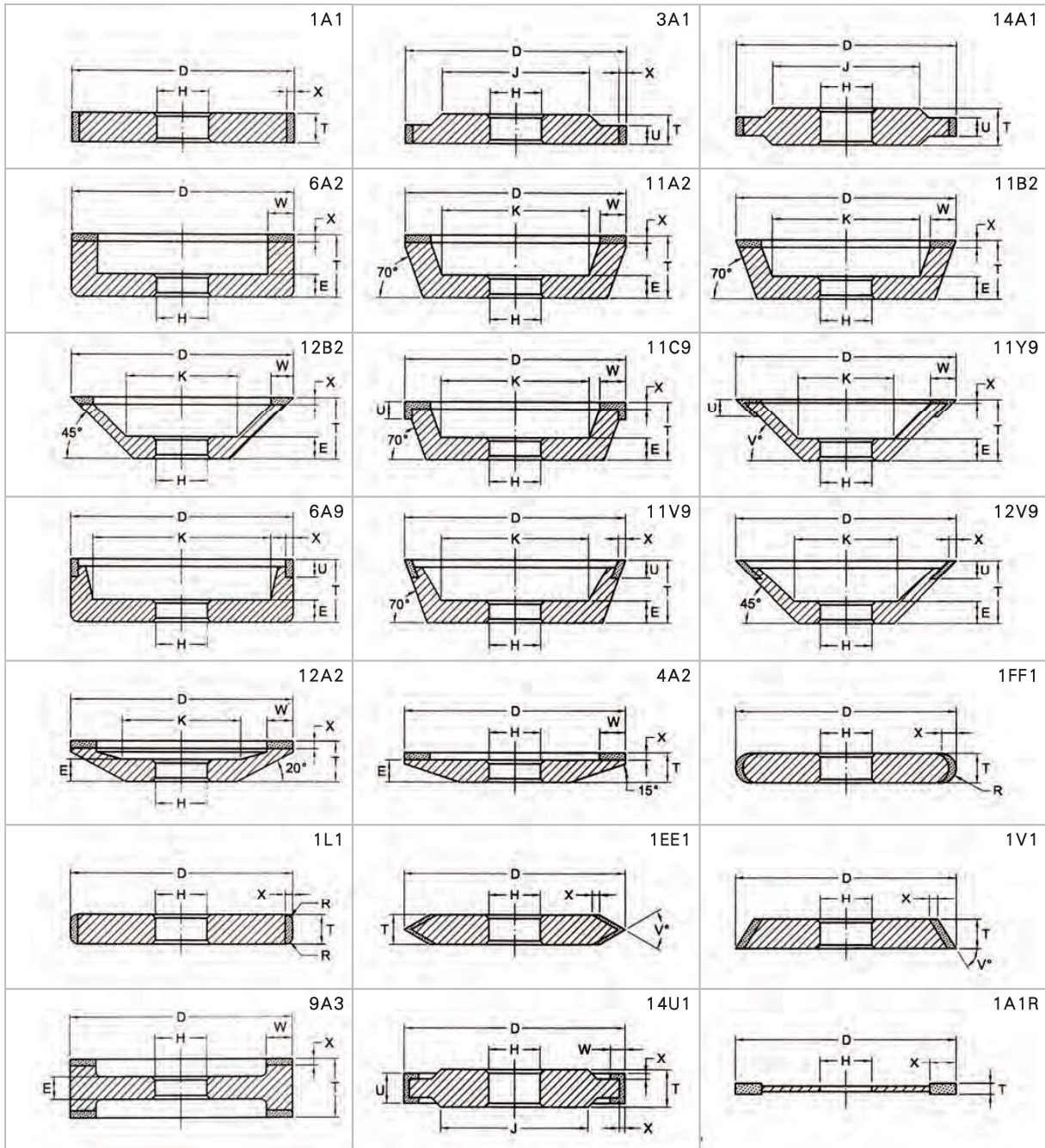
* 氮化硼

- SK, SKS, SKH等切削工具及另件
- SKD, Stellite等耐磨工具鋼材
- SCM, SNCM, SCr, SUJ等構造用鋼
- SUS (不鏽鋼)等之耐蝕金屬
- SUH鈦合金等之耐熱金屬
- 鑄鐵

* CBN

- High alloy steels.
- High speed tool steels.
- Hot & cold working steels.
- Tempering steels, Spring steel.
- Ball bearing steel.
- Cast iron.

砂輪形狀及尺寸標示 / Shape & Dimensions of wheels



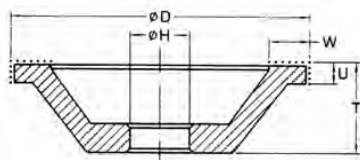
砂輪訂製方法 / How to order a wheel?

1. 若是重覆訂製,請告知工作單編號即可。 / For repeated order, just tell us the manufacturing number.
2. 若需我們為您設計砂輪,則請告知: / If you require us to design the wheels for you, please specify:
 - a.) 工件名稱,材質,硬度 / Name, materials, hardness of work-piece.
 - b.) 機器名稱,型式,轉速及馬力 / Name, type, horse power, spindle speed of machine.
 - c.) 加工條件及加工精度 / Grinding conditions.
3. 若自行設計砂輪,則告知如下例: / If you have your own design, please order as below:

14A1, 350D-10U-5X-25T-250J-127H, SDC 150N75R5.0, 溼磨 / Wet grinding

電鑄鑽石砂輪 / Electroplated Diamond wheels

11C9碗型砂輪

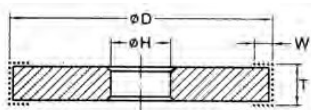


適合鑄鋼工具之研磨，成型用。

Ideal for carbide tool's grinding, forming and sharpening.

| 編號 Order no. | D | T | W | H | U | 粒度 Grit size |
|-----------------|-----|----|----|-------|---|-----------------|
| WC-1005A | 100 | 22 | 10 | 20 | 5 | #100* |
| WC-1005B | 100 | 35 | 10 | 20 | 5 | #100* |
| WC-1005C | 100 | 35 | 10 | 19.05 | 5 | #100* |
| WC-1605A | 100 | 35 | 16 | 20 | 5 | #200* |
| WC-2005A | 100 | 35 | 20 | 20 | 5 | #200* |

1A1U

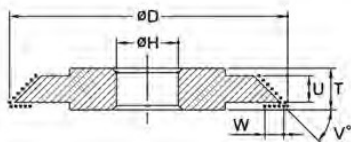


適合鑄鋼刀具之研磨，成型用。

Ideal for carbide tool's sharpening.

| 編號 Order no. | D | T | W | H | 粒度 Grit size |
|-----------------|-----|----|---|-------|-----------------|
| WS-6105A | 150 | 10 | 5 | 31.75 | #200* |
| WS-6105B | 150 | 10 | 5 | 12.70 | #200* |
| WS-6105C | 150 | 10 | 5 | 15.88 | #200* |

14Y1

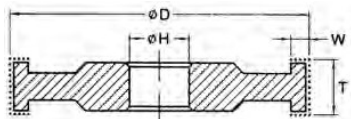


適合鑄鋼刀具之研磨，成型用。

Ideal for carbide tool's sharpening.

| 編號 Order no. | D | U | T | W | H | V° | 粒度 Grit size |
|-----------------|-----|---|----|---|-------|----|-----------------|
| WV-6645A | 150 | 6 | 10 | 5 | 12.70 | 45 | #200* |
| WV-6645B | 150 | 6 | 10 | 5 | 15.88 | 45 | #200* |
| WV-6660A | 150 | 6 | 10 | 5 | 12.70 | 60 | #200* |
| WV-6660B | 150 | 6 | 10 | 5 | 15.88 | 60 | #200* |

14A1,14A1U

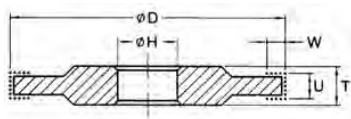


適合寶石、半寶石、石材研磨，成型用。

Ideal for carbide gem stone and stones grinding.

| 編號 Order no. | D | T | W | H | 粒度 Grit size |
|-----------------|-----|----|---|------|-----------------|
| WS-0625A | 150 | 25 | - | 25.4 | #60* |
| WS-0625B | 150 | 25 | 5 | 25.4 | #60* |

14A1U

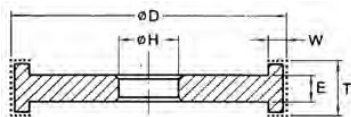


適合鐵粉心之研磨，成型用。

Ideal for ferrite core grinding.

| 編號 Order no. | D | U | T | E | W | H | 粒度 Grit size |
|-----------------|-----|---|----|-----|---|-------|-----------------|
| WS-7063A | 175 | 6 | 10 | - | 3 | 31.75 | #200* |
| WS-7073A | 175 | 7 | 10 | - | 3 | 31.75 | #200* |
| WS-7083A | 175 | 8 | 10 | - | 3 | 31.75 | #200* |
| WS-7093A | 175 | 9 | 10 | - | 3 | 31.75 | #200* |
| WS-7103A | 175 | - | 10 | 9.8 | 3 | 31.75 | #200* |
| WS-7113A | 175 | - | 11 | 10 | 3 | 31.75 | #200* |
| WS-7123A | 175 | - | 12 | 10 | 3 | 31.75 | #200* |
| WS-7133A | 175 | - | 13 | 10 | 3 | 31.75 | #200* |
| WS-7143A | 175 | - | 14 | 10 | 3 | 31.75 | #200* |
| WS-7153A | 175 | - | 15 | 10 | 3 | 31.75 | #200* |
| WS-7163A | 175 | - | 16 | 10 | 3 | 31.75 | #200* |

9A1U

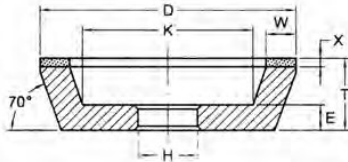


說明 / Note : “*” 標準粒度,其餘粒度請指明訂購。

“*” Standard grit size, others depend on your request.

樹脂鑽石砂輪 / Resinoid Diamond & CBN Wheels

11A2

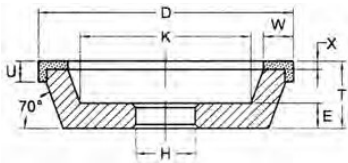


適用於工具磨床，鑄鋼刀具研磨及成型。

Apply on tool grinding machine, to grind or form the carbide tools.

| 編號 Order no. | D | W | X | T | H | 粒度 Grit size |
|-----------------|-----|----|---|----|-------|-----------------|
| RD-04082A | 100 | 8 | 2 | 40 | 20 | SDC-150* |
| RD-04103A | 100 | 10 | 3 | 30 | 20 | SDC-200* |
| RD-04103C | 100 | 10 | 3 | 30 | 19.05 | SDC-200* |

11C9

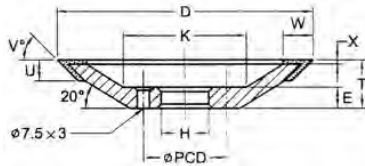


適用於工具磨床，鑄鋼刀具研磨及成型。

Apply on tool grinding machine, to grind or form the carbide tools.

| 編號 Order no. | D | W | X | U | T | H | 粒度 Grit size |
|-----------------|-----|---|---|---|----|----|-----------------|
| RD-04815A | 100 | 8 | 1 | 5 | 40 | 20 | SDC-150* |

12Y9C

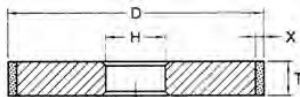


適用於自動車床刀具研磨機、鑄鋼車刀研磨。

For tool grinding machine, to sharpen the carbide turning tools.

| 編號 Order no. | D | W | U | X | T | H | V° | 形狀 Shape | 粒度 Grit size |
|-----------------|-----|---|---|---|----|----|-----|-------------|-----------------|
| RD-05815A | 125 | 8 | - | 1 | 16 | 25 | - | 12A2C | SDC-400* |
| RD-05815B | 125 | 8 | 5 | 1 | 16 | 25 | 60° | 12Y9C | SDC-600* |
| RD-05815C | 125 | 8 | 5 | 1 | 16 | 25 | 45° | 12Y9C | SDC-400* |

1A1

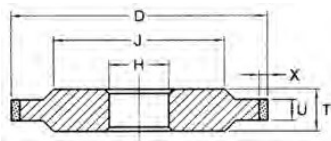


適用於平面磨床、研磨鑄鋼、陶瓷(SDC)或硬化鋼材(BC)。

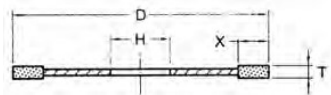
Apply on surface grinding machine, to grind carbide(SDC) or hardened steels(BC).

| 編號 Order no. | D | U | X | T | H | 形狀 Shape | 粒度 Grit size |
|-----------------|-----|---|---|----|-------|-------------|-----------------|
| RD-06033A | 150 | 3 | 3 | 10 | 31.75 | 14A1 | SDC-150* |
| RB-06033A | 150 | 3 | 3 | 10 | 31.75 | 14A1 | BC-150* |
| RD-06063A | 150 | 6 | 3 | 10 | 31.75 | 14A1 | SDC-150* |
| RB-06063A | 150 | 6 | 3 | 10 | 31.75 | 14A1 | BC-150* |
| RD-06083A | 150 | 8 | 3 | 10 | 31.75 | 14A1 | SDC-150* |
| RD-06103A | 150 | - | 3 | 10 | 31.75 | 1A1 | SDC-150* |
| RB-06103A | 150 | - | 3 | 10 | 31.75 | 1A1 | BC-150* |
| RD-07063A | 175 | 6 | 3 | 10 | 31.75 | 14A1 | SDC-150* |
| RD-07103A | 175 | - | 3 | 10 | 31.75 | 1A1 | SDC-150* |
| RB-07103A | 175 | - | 3 | 10 | 31.75 | 1A1 | BC-150* |
| RB-07133A | 175 | - | 3 | 13 | 31.75 | 1A1 | BC-150* |

14A1



1A1R



適用於平面磨床(ø31.75孔)或沖頭切斷機(ø19.05孔)，

用於切斷鑄鋼、陶瓷(SDC)或硬化鋼材(BC)。

Apply on surface grinding machine or cutting machine, to cut the carbide, ceramics(SDC) or hardened steels(BC)

| 編號 Order no. | D | T | X | H | 粒度 Grit size |
|-----------------|-----|-----|---|-------|-----------------|
| RD-06017A | 150 | 1.0 | 7 | 31.75 | SDC-120* |
| RB-06017A | 150 | 1.0 | 7 | 31.75 | BC-120* |
| RD-06017B | 150 | 1.0 | 7 | 19.05 | SDC-120* |

說明 / Note: “*” 標準粒度,其餘粒度請指明訂購。

“*” Standard grit size, others depend on your request.