



**RAPID DRILL
SERIES**

SPGX系列

設計特色

Tool Design Feature

高抗扭能力和全新表面處理的堅固鑽體，可承受更高的進給，效率更高。
High torsional resistance and new finishing strong body can sustain.

更大的容屑空間，良好的沖液角度，排屑更加流暢。
More higher feeding operation.

良好的刀片安裝角度，切削過程震動小，鑽孔精度和表面質量更優。
Excellent insert pocket design, high drilling precision and low vibration during operation.

雙螺旋內冷孔，冷卻和潤滑效果更優，鑽孔深度範圍更大。
Dual-helical coolant hole can make great drilling results.

刀片特色

Insert Feature



超細TiAlN基納米塗層，添加耐磨和耐高溫的稀有元素，綜合性能顯著提升。
TiAlN coating with high temperature resistant elements.

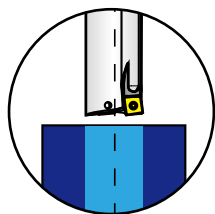
特殊的塗層處理技術，塗層和基體結合更牢固。
Special coating technique.

薄的PVD塗層，刃口鋒利。
Thin PVD coating make cutting edge sharp.

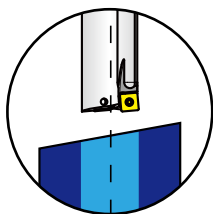
細晶體的碳化鎢基硬質合金，具有高的硬度和較強的韌性。
High hardness and high toughness.

塗層後特殊的表面處理技術，去除有害應力的同時提高了表面光潔度。
High surface finishing.

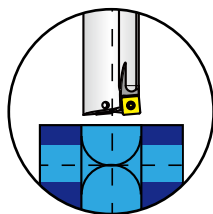
鑽孔功能示意 Application



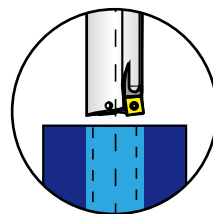
1 普通鑽孔
General Drilling



2 斜面鑽孔
Ramping Drilling

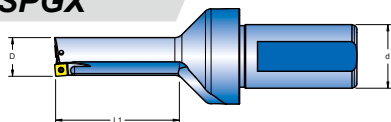


3 鑽交叉孔
Intersect Drilling



4 擴孔
Broach

SPGX



捨棄式快速鑽頭
SPGX Indexable rapid drill



零件 Parts

產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert	螺絲 Screw	旗型板手 Wrench	價格 Price	
		D	L1	d					
125SPGX-3D-25		12.5	37.5	25	SP □ □ 0502	CS20	T-6		
130SPGX-3D-25		13	39	25					
135SPGX-3D-25		13.5	40.5	25					
140SPGX-3D-25		14	42	25					
145SPGX-3D-25		14.5	43.5	25					
150SPGX-3D-25		15	45	25					
155SPGX-3D-25		15.5	46.5	25					
160SPGX-3D-25		16	48	25		CS20			
165SPGX-3D-25		16.5	49.5	25	SP □ □ 0502	CS22	T-6		
170SPGX-3D-25		17	51	25	SP □ □ 0602		T-7		
175SPGX-3D-25		17.5	52.5	25	SP □ □ 0502		T-6		
180SPGX-3D-25		18	54	25	SP □ □ 0602		T-7		
190SPGX-3D-25		19	57	25	SP □ □ 0602		T-7		
200SPGX-3D-32	●	20	60	32	SP □ □ 0602		T-7		
210SPGX-3D-32	●	21	63	32	SP □ □ 0602		T-7		
220SPGX-3D-32	●	22	66	32	SP □ □ 07T3	CS25	T-8		
230SPGX-3D-32	●	23	69	32					
240SPGX-3D-32	●	24	72	32					
250SPGX-3D-32	●	25	75	32					
260SPGX-3D-32	●	26	78	32					
270SPGX-3D-32	●	27	81	32					
280SPGX-3D-32	●	28	84	32					
290SPGX-3D-32	●	29	87	32	SP □ □ 0904	CS35	T-15		
300SPGX-3D-32	●	30	90	32					
310SPGX-3D-32	●	31	93	32					
320SPGX-3D-32	●	32	96	32					
330SPGX-3D-32	●	33	99	32					
340SPGX-3D-32	●	34	102	32					
350SPGX-3D-32	●	35	105	32				SP □ □ 1104	CS40
360SPGX-3D-32	●	36	108	32					
370SPGX-3D-32	●	37	111	32					
380SPGX-3D-32		38	114	32					
390SPGX-3D-32	●	39	117	32					
400SPGX-3D-32	●	40	120	32					
410SPGX-3D-32	●	41	123	32	SP □ □ 1405	CS45	T-15		
420SPGX-3D-32		42	126	32					
430SPGX-3D-40		43	129	40					
440SPGX-3D-40		44	132	40					
450SPGX-3D-40		45	135	40					
460SPGX-3D-40		46	138	40					
470SPGX-3D-40		47	141	40					
480SPGX-3D-40		48	144	40					
490SPGX-3D-40		49	147	40					
500SPGX-3D-40		50	150	40					

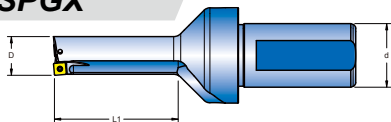
刀片資料

SP □ □ 0502 □ □ SP □ □ 0602 □ □ SP □ □ 07T3 □ □ SP □ □ 0904 □ □ ▶ 參考 AH、200 頁

Insert Detail

SP □ □ 0502 □ □ SP □ □ 0602 □ □ SP □ □ 07T3 □ □ SP □ □ 0904 □ □ ▶ Ref. Page-AH,200

SPGX



捨棄式快速鑽頭 SPGX Indexable rapid drill



RAPID DRILL SERIES

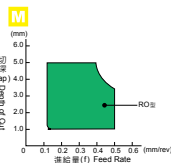
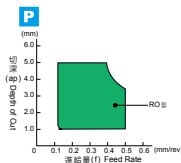
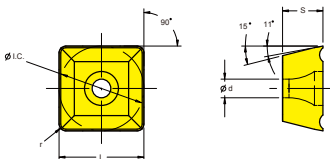
S

產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert	零件 Parts		價格 Price
		D	L1	d		螺絲 Screw	旗型板手 Wrench	
130SPGX-4D-25		13.0	52	25	SP 0502	CS20	T-6	
135SPGX-4D-25		13.5	54	25				
140SPGX-4D-25		14.0	56	25				
145SPGX-4D-25		14.5	58	25				
150SPGX-4D-25		15.0	60	25				
155SPGX-4D-25		15.5	62	25				
160SPGX-4D-25		16.0	64	25	SP 0602	CS22	T-7	
165SPGX-4D-25		16.5	66	25				
170SPGX-4D-25		17.0	68	25				
175SPGX-4D-25		17.5	70	25				
180SPGX-4D-25		18.0	72	25				
190SPGX-4D-25		19.0	76	25				
200SPGX-4D-32		20.0	80	32	SP 07T3	CS25	T-8	
210SPGX-4D-32		21.0	84	32				
220SPGX-4D-32		22.0	88	32				
230SPGX-4D-32		23.0	92	32				
240SPGX-4D-32		24.0	96	32				
250SPGX-4D-32		25.0	100	32				
260SPGX-4D-32	●	26.0	104	32	SP 0904	CS35	T-15	
270SPGX-4D-32		27.0	108	32				
280SPGX-4D-32	●	28.0	112	32				
290SPGX-4D-32	●	29.0	116	32				
300SPGX-4D-32		30.0	120	32				
310SPGX-4D-32	●	31.0	124	32				
320SPGX-4D-32		32.0	128	32	SP 1104	CS40	T-15	
330SPGX-4D-32		33.0	132	32				
340SPGX-4D-32	●	34.0	136	32				
350SPGX-4D-32	●	35.0	140	32				
360SPGX-4D-32		36.0	144	32				
370SPGX-4D-32		37.0	148	32				
380SPGX-4D-32		38.0	152	32				
390SPGX-4D-32		39.0	156	32				
400SPGX-4D-32		40.0	160	32				

RAPID DRILL SERIES 推薦切削條件表 Recommended cutting condition

被削材 Work material	vc 切削速度 vc Cutting Speed m/min	Feed(aspect ratio=3D) Feed(m/rev)depending on drill Dia.(mm)					
		12~16	17~23	24~29	30~42	43~60	
P 碳鋼 Carbon Steel	60-150-180	0.04~0.08	0.04~0.08	0.04~0.08	0.04~0.08	0.04~0.08	
	130-190-250						
	80-140-200	0.04~0.10	0.04~0.12	0.05~0.16	0.08~0.18	0.10~0.22	
	合金鋼 Alloy Steel	60-150-180	0.04~0.10	0.04~0.10	0.04~0.12	0.04~0.14	0.04~0.14
		90-150-200	0.06~0.12	0.06~0.14	0.06~0.14	0.06~0.16	0.06~0.16
		50-100-150	0.04~0.10	0.06~0.12	0.08~0.16	0.08~0.18	0.08~0.22
		50-100-160	0.04~0.18	0.06~0.12	0.08~0.18	0.08~0.18	0.08~0.22
30-70-120		0.04~0.12	0.06~0.14	0.08~0.17	0.08~0.17	0.08~0.20	
M 不鏽鋼 Stainless Steel	40-90-150	0.04~0.10	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12	
		0.04~0.10	0.06~0.12	0.06~0.14	0.06~0.16	0.06~0.20	
	60-100-160	0.04~0.10	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12	
		0.04~0.10	0.04~0.12	0.06~0.14	0.06~0.14	0.06~0.14	
K 鑄鐵 Cast Iron	150-190-250	0.04~0.10	0.05~0.14	0.06~0.18	0.10~0.22	0.10~0.26	
	100-150-200	0.04~0.10	0.04~0.12	0.04~0.14	0.05~0.16	0.05~0.18	

SPGT 刀片
SPGT Insert



形狀 Shape	型號 Model No	尺寸 Dimension					塗層硬質合金 Carbide Coated							金屬陶瓷 Cermet	
		半徑 R	L	I.C	S	d	P	P	P	P	M	M	K		N
RO 中切削 Medium	SPGT050204-RO	0.4	5	5	2.38	2.2	DF133	DF233	DF333	BEF807	BEJ750	BEF706	BEG607	BEJ757	
	SPGT060204-RO	0.4	6	6	2.38	2.6									
	SPGT07T308-RO	0.8	7.94	7.94	3.97	2.8									
	SPGT090408-RO	0.8	9.8	9.8	4.3	4.2									

- 標準庫存。
- Standard Stocks

特徵、用途 Characteristics and Applications

受力均衡設計

Design

- 加工時的切屑阻力通過中心和外周刃均衡分布，而且使相互的位置系統最佳化，可進行穩定的孔加工。
- Cutting resistance during machining is balanced between central and peripheral inserts, and the relative position of each insert are optimised to provide stable drilling.

優異的切屑處理

Excellent Chip Management

- 在切屑槽中央部分形成的『切屑控制溝槽』，可有效控制切屑流出方向，按不同用途分開用 3 個種的斷屑槽，在各種各樣的被削材和加工條件下，明顯減少了切屑產生的問題。
- A "chip control groove" in the centre of the breaker allows the direction of chip evacuation to be controlled. Three separate purpose-designed breakers drastically reduce chip troubles with a variety of different work materials in a variety of different conditions.

型 Series	L 型 L Type	G 型 G Type	H 型 H Type
特徵 Feature	低速進給、切屑處理用 Low Feed / Chip Management	通用 General Purpose	刃尖強化型 Strong Edge Type

使用4個刀尖，降低成本

Economical, Four-Cornered Insert

- 中心刃、外周刃兼用刀片的设计，可使用內刃 2 個刀尖，外刃 2 個刀尖的共 4 個刀尖。
- Inserts can be used in either central or peripheral positions, with two corners for each position - a total of four corners.



實現加工的多樣性

Versatile Tool for a Variety of Machining Applications

- 刀體進行了特殊硬化表面處理，提高了耐久性，在擴孔和手搖鑽絲加工、外徑車削、內徑鏜孔等多種用途中可長時間穩定使用。
- A special hard surface treatment gives added durability, allowing stable, long-term drilling in a variety of applications including hole widening, spot facing, external turning, and internal boring.

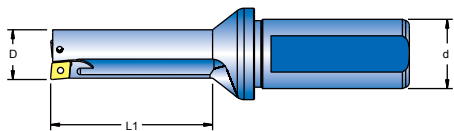
採用新材質 CEP300/CEK300 實現長壽命

New CEP300/CEK300 Grades Extend Tool Life



EDX 2D

捨棄式快速鑽頭
EDX Indexable rapid drill

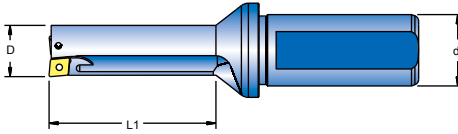





零件 Parts

產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert	螺絲 Screw	旗型扳手 Wrench	價格 Price
		D	L1	d				
EDX130D2S25	●	13.0	26	25	ED □□ 042004	CS18	T-6	
EDX135D2S25	●	13.5	27	25				
EDX140D2S25	●	14.0	28	25				
EDX145D2S25	●	14.5	29	25				
EDX150D2S25	●	15.0	30	25				
EDX155D2S25	●	15.5	31	25	ED □□ 052504	CS20	T-6	
EDX160D2S25	●	16.0	32	25				
EDX165D2S25	●	16.5	33	25				
EDX170D2S25	●	17.0	34	25				
EDX175D2S25	●	17.5	35	25				
EDX180D2S25	●	18.0	36	25				

● Limited sales for some areas

EDX 3D

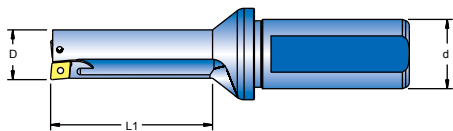
 捨棄式快速鑽頭
 EDX Indexable rapid drill


產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert 	零件 Parts		價格 Price
		D	L1	d		螺絲 Screw 	旗型扳手 Wrench 	
EDX125D3S25	●	12.5	37.5	25	ED □□ 042004	CS18	T-6	
EDX130D3S25	●	13.0	39	25				
EDX135D3S25	●	13.5	40.5	25				
EDX140D3S25	●	14.0	42	25				
EDX145D3S25	●	14.5	43.5	25				
EDX150D3S25	●	15.0	45	25				
EDX155D3S25	●	15.5	46.5	25	ED □□ 052504	CS20	T-6	
EDX160D3S25	●	16.0	48	25				
EDX165D3S25	●	16.5	49.5	25				
EDX170D3S25	●	17.0	51	25				
EDX175D3S25	●	17.5	52.5	25				
EDX180D3S25	●	18.0	54	25				
EDX185D3S25	●	18.5	55.5	25	ED □□ 063006	CS22	T-7	
EDX190D3S25	●	19.0	57	25				
EDX195D3S25	●	19.5	58.5	25				
EDX200D3S25	●	20.0	60	25				
EDX205D3S25	●	20.5	61.5	25				
EDX210D3S25	●	21.0	63	25				
EDX215D3S25	●	21.5	64.5	25				
EDX220D3S25	●	22.0	66	25				

● Limited sales for some areas

EDX 4D

捨棄式快速鑽頭 EDX Indexable rapid drill



零件 Parts

產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert	螺絲 Screw	旗型扳手 Wrench	價格 Price
		D	L1	d				
EDX130D4S25	●	13.0	52	25	ED □□ 042004	CS18	T-6	
EDX135D4S25	●	13.5	54	25				
EDX140D4S25	●	14.0	56	25				
EDX145D4S25	●	14.5	58	25				
EDX150D4S25	●	15.0	60	25				
EDX155D4S25	●	15.5	62	25	ED □□ 052504	CS20	T-6	
EDX160D4S25	●	16.0	64	25				
EDX165D4S25	●	16.5	66	25				
EDX170D4S25	●	17.0	68	25				
EDX175D4S25	●	17.5	70	25				
EDX180D4S25	●	18.0	72	25				


● Limited sales for some areas

推薦切削條件表 Recommended cutting condition

被削材 Work material		P			M	K
		軟鋼 (SS400) (Mild Steel)	炭素鋼 (S45C) (Carbon Alloy Steel)	合金鋼 (SCM400) (Alloy Steel)	不鏽鋼 (SUS304) (Stainless Steel)	鑄鐵 (FC250) (Cast Iron)
刃徑 Diameter(mm)	V(2D / 3D)	100-150-200	80-120-160	80-120-160	90-120-150	90-120-150
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.05-0.08-0.10	0.06-0.11-0.18	0.06-0.11-0.17	0.06-0.11-0.18	0.09-0.20-0.32

- ◆ (V=m/min, f=mm/刃) (下限值—推薦值—上限值) (Min.-Optimum-Max.)
- ◆ 工具回轉速度 (N)=[1000×切削速度 (V)]÷[3.14×工具直徑 (D)]
- ◆ 總進給 (F)=[每刃進給 (f)×工具刃數 (Z)×工具回轉速度 (N)]
- ◆ 使用快速鑽頭盡量由高壓中心出水，以增加刀片壽命及排屑良好。
- ◆ 使用在 CNC 車床時刀具中心點及機械主軸中心盡量平行。
- ◆ CNC 車床使用如須擴孔，刀片外刃必須和刀塔移動角度平行。
- ◆ Draining hi-pressure coolant thru spindle center while using the high speed drill will help extending inserts life and improving chip evacuation.
- ◆ While using CNC lathe, The cutting center point must parallel the spindle center of the machine.
- ◆ Hole widening by CNC lathe, the peripheral insert must parallel the moving angle of the tool turret.

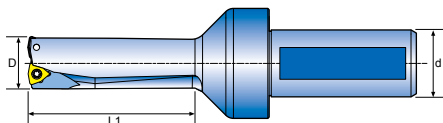
推薦刀片材質表 Recommended Grade of Insert




型號 Model No	P	P _M	P _M	K	K	K _M	P	P _M	K _N	寸法 R	圖解 Fig	刀片 Insert
	CEP100	CEP200	CEP300	CEK200	CEK300	CEK310	CEZ330	CEZ350	H1			
EDXT042004-L			●		●					0.4	1	
EDXT042004-G			●		●					0.4	1	
EDXT042004-H			●		●					0.4	1	
EDXT052504-L			●		●					0.4	1	
EDXT052504-G			●		●					0.4	1	
EDXT052504-H			●		●					0.4	1	

- ◆ 末尾 L: 輕切削 (Light) G: 範圍型 (General) H: 重切削 (Heavy)
- Limited sales for some areas

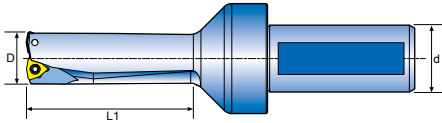


WCMX 3D

 捨棄式快速鑽頭
 WCMX Indexable rapid drill


產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert 	零件 Parts		價格 Price	
		D	L1(D×3)	d		螺絲 Screw 	旗型扳手 Wrench 		
15WCMX-3D-25	●	15	45	25	WC □□ 0302 □□	CS25	T-8		
16WCMX-3D-25	●	16	48						
17WCMX-3D-25	●	17	51						
18WCMX-3D-25	●	18	54						
19WCMX-3D-25	●	19	57						
20WCMX-3D-32	●	20	60		32	WC □□ 0402 □□	CS25	T-8	
21WCMX-3D-32	●	21	63						
22WCMX-3D-32	●	22	66						
23WCMX-3D-32	●	23	69						
24WCMX-3D-32	●	24	72						
25WCMX-3D-32	●	25	75	WC □□ 0503 □□		CS30	T-10		
26WCMX-3D-32	●	26	78						
27WCMX-3D-32	●	27	81						
28WCMX-3D-32	●	28	84						
29WCMX-3D-32	●	29	87						
30WCMX-3D-32	●	30	90	40	WC □□ 06T3 □□	CS35W	T-10		
31WCMX-3D-32	●	31	93						
32WCMX-3D-32	●	32	96						
33WCMX-3D-32	●	33	99						
34WCMX-3D-32	●	34	102						
35WCMX-3D-32	●	35	105		40	WC □□ 0804 □□	CS40	T-15	
36WCMX-3D-32	●	36	108						
37WCMX-3D-32	●	37	111						
38WCMX-3D-32	●	38	114						
39WCMX-3D-32	●	39	117						
40WCMX-3D-32	●	40	120						
41WCMX-3D-32	●	41	123						
42WCMX-3D-32	●	42	126						
43WCMX-3D-40	●	43	129						
44WCMX-3D-40	●	44	132						
45WCMX-3D-40	●	45	135						
46WCMX-3D-40	●	46	138						
47WCMX-3D-40	●	47	141						
48WCMX-3D-40	●	48	144						
49WCMX-3D-40	●	49	147						
50WCMX-3D-40	●	50	150						
51WCMX-3D-40	●	51	153						
52WCMX-3D-40	●	52	156						
53WCMX-3D-40	●	53	159						
54WCMX-3D-40	●	54	162						
55WCMX-3D-40	●	55	165						
56WCMX-3D-40	●	56	168						
57WCMX-3D-40	●	57	171						
58WCMX-3D-40	●	58	174						
59WCMX-3D-40	●	59	177						
60WCMX-3D-40	●	60	180						

WCMX 4D

 捨棄式快速鑽頭
WCMX Indexable rapid drill


產品型號 Model No	在庫 Stock	寸法 Dimension (mm)			刀片 Insert	零件 Parts		價格 Price			
		D	L1(D×4)	d		螺絲 Screw	旗型板手 Wrench				
17WCMX-4D-25	●	17	68	25	WC □□ 0302 □□	CS25	T-8				
18WCMX-4D-25	●	18	72								
19WCMX-4D-25	●	19	76								
20WCMX-4D-32	●	20	80								
21WCMX-4D-32	●	21	84	32	WC □□ 0402 □□	CS25	T-8				
22WCMX-4D-32	●	22	88								
23WCMX-4D-32	●	23	92								
24WCMX-4D-32	●	24	96								
25WCMX-4D-32	●	25	100								
26WCMX-4D-32	●	26	104								
27WCMX-4D-32	●	27	108					WC □□ 0503 □□	CS30	T-10	
28WCMX-4D-32	●	28	112								
29WCMX-4D-32	●	29	116								
30WCMX-4D-32	●	30	120								
31WCMX-4D-32	●	31	124	40	WC □□ 06T3 □□	CS35W	T-10				
32WCMX-4D-32	●	32	128								
33WCMX-4D-32	●	33	132								
34WCMX-4D-32	●	34	136								
35WCMX-4D-32	●	35	140								
36WCMX-4D-32	●	36	144								
37WCMX-4D-32	●	37	148								
38WCMX-4D-32	●	38	152								
39WCMX-4D-32	●	39	156								
40WCMX-4D-32	●	40	160								
41WCMX-4D-32	●	41	164								
42WCMX-4D-32	●	42	168								
43WCMX-4D-40	●	43	172					WC □□ 0804 □□	CS40	T-15	
44WCMX-4D-40	●	44	176								
45WCMX-4D-40	●	45	180								

推薦切削條件表 Recommended cutting condition

被削材 Work material		P			M	K
		軟鋼 (SS400) (Mild Steel)	炭素鋼 (S45C) (Carbon Alloy Steel)	合金鋼 (SCM400) (Alloy Steel)	不鏽鋼 (SUS304) (Stainless Steel)	鑄鐵 (FC250) (Cast Iron)
刃徑 Diameter(mm)	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.06-0.10	0.04-0.06-0.10	0.04-0.06-0.10	0.04-0.07-0.10	0.04-0.07-0.10
12~14.5	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.07-0.10	0.04-0.09-0.12	0.06-0.08-0.10	0.04-0.07-0.10	0.06-0.07-0.10
15~22.5	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.08-0.10	0.08-0.12-0.14	0.06-0.09-0.12	0.04-0.08-0.10	0.04-0.10-0.14
23~34	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.10-0.12	0.08-0.15-0.18	0.06-0.10-0.14	0.04-0.10-0.12	0.06-0.10-0.14
35~48	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.10-0.12	0.08-0.15-0.18	0.06-0.10-0.14	0.04-0.10-0.12	0.06-0.10-0.14
49~60	V(2D / 3D)	100-150-200	60-100-160	80-120-160	80-100-120	80-120-160
	V(4D)	100-140-200	60-80-120	80-100-120	80-110-140	110-140-160
	f	0.04-0.08-0.10	0.08-0.12-0.14	0.06-0.09-0.12	0.04-0.08-0.10	0.06-0.10-0.14

◆ (V=m/min, f=mm/刃)。(下限值—推薦值—上限值) (Min.-Optimum-Max.)

◆ 工具回轉速度 (N)=[1000×切削速度 (V)]÷[3.14×工具直徑 (D)]

◆ 總進給 (F)=[每刃進給 (f)×工具刃數 (Z)×工具回轉速度 (N)]

◆ 使用快速鑽頭盡量由高壓中心出水，以增加刀片壽命及排屑良好。

◆ 使用在 CNC 車床時刀具中心點及機械主軸中心盡量平行。

◆ CNC 車床使用如須擴孔，刀片外刃必須和刀塔移動角度平行。

◆ Draining hi-pressure coolant thru spindle center while using the high speed drill will help extending inserts life and improving chip evacuation.

◆ While using CNC lathe, The cutting center point must parallel the spindle center of the machine.

◆ Hole widening by CNC lathe, the peripheral insert must parallel the mowing angle of the tool turret.

推薦刀片材質表 Recommended Grade of Insert

型號 Model No	P	P _M	P _M	K	K	K _M	P	P _M	K _N	寸法 R	圖解 Fig	刀片 Insert
	ACP100	CEP300	ACP300	ACK200	CEK300	ACZ310	ACZ330	ACZ350	H1			
WCMX030208FN		●			●	●	●			0.8	1	
WCMX040208FN		●			●	●	●			0.8	1	
WCMT050308FN		●			●	●	●			0.8	1	
WCMT06T308FN		●			●	●	●			0.8	1	
WCMT080412FN		●					●			1.2	1	