

## D921X / D922X / D932X 超微粒鎢鋼塗層NC定點鑽頭

## NC Spot Drills

MG  
CarbideAlTiN  
X-NaNo

## Work Material

P	H	M	K	N	S
●	●	○	●	○	○

P 鋼鐵  
SteelH 硬化鋼 <38HRC  
Hardened SteelH 硬化鋼 <48HRC  
Hardened SteelM 不銹鋼  
Stainless SteelK 鑄鐵  
Cast IronN 銅  
CopperS 鈦合金  
TitaniumS 鎳  
NickelS 高溫合金  
High Temp Alloys

## Feature of product:

D921X NC 定點鑽60°

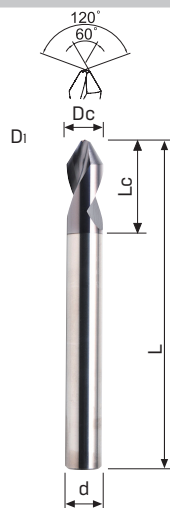
D922X NC 定點鑽90°

D932X NC 加長型定點鑽90°

雙鑽頂角設計提供高強度鑽尖。

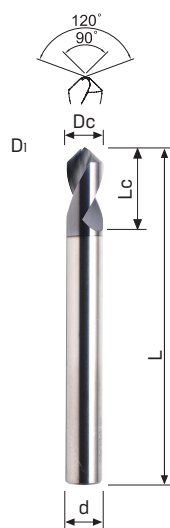
搭配AlTiN塗層增加耐磨性質，有效提升刀具壽命。

適用於各式鋼鐵材料定位鑽孔。



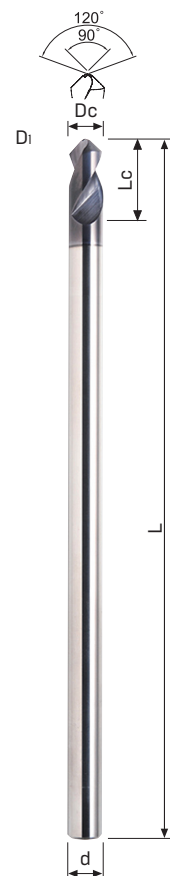
Code No. D921X-DC

Dc h6	Lc mm	L mm	d h6	D1 mm	60° D921X
0.5	1	38	3	0.15	●
1	2	38	3	0.3	●
2	4	38	3	0.6	●
3	6	50	3	1.0	●
4	8	50	4	1.5	●
6	12	70	6	2.0	●
8	16	80	8	2.5	●
10	20	90	10	3.0	●
12	24	110	12	4.0	●
16	32	120	16	5.0	●
20	40	130	20	6.0	●



Code No. D922X-DC

Dc h6	Lc mm	L mm	d h6	D1 mm	90° D922X
0.5	1	38	3	0.15	●
1	2	38	3	0.3	●
2	4	38	3	0.6	●
3	6	50	3	1.0	●
4	8	50	4	1.5	●
6	12	70	6	2.0	●
8	16	80	8	2.5	●
10	20	90	10	3.0	●
12	24	110	12	4.0	●
16	32	120	16	5.0	●
20	40	130	20	6.0	●



Code No. D932X-DC

Dc h6	Lc mm	L mm	d h6	D1 mm	90° D932X
3	9	75	3	1	●
4	12	100	4	1.5	●
6	15	150	6	2	●
8	20	150	8	2.5	●
10	25	200	10	3	●
12	30	200	12	4	●
16	40	250	16	5	●
20	45	250	20	6	●

## D921X / D922X / D932X 切削條件參考表

## Recommended Milling Conditions

## Borehole parameters 鑽孔參數

被削材 Work Material		GR.1 碳鋼 Carbon Steel		GR.2 低合金鋼 Low-alloyed Steel (~24HRC)		GR.3 高合金鋼 Hi-alloyed Steel (~30HRC)		GR.4 硬化鋼 Hardened Steel (30~38HRC)		GR.5 硬化鋼 Hardened Steel (38~48HRC)		GR.9 鑄鐵 Cast Iron	
切削速度 Vc m/min		40~85		40~85		40~85		20~30		15~25		65~100	
型號 Code No.	刃徑 Dc	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)	RPM 迴轉速度 (min-1)	Feed 進給速度 (mm/rev)
D921X/D922X-0.5	0.5	20,000	0.003~0.02	20,000	0.003~0.02	20,000	0.003~0.02	15,000	0.003~0.02	9,000	0.003~0.02	-	-
D921X/D922X-1	1	10,000	0.01~0.04	10,000	0.01~0.04	10,000	0.01~0.04	7,500	0.01~0.04	4,500	0.01~0.04	20,000	0.01~0.035
D921X/D922X-2	2	5,000	0.03~0.07	5,000	0.03~0.07	5,000	0.03~0.07	3,800	0.03~0.07	2,200	0.03~0.07	12,000	0.03~0.063
D921X/D922X/D932X-3	3	7,500	0.04~0.085	7,500	0.04~0.085	7,500	0.04~0.085	2,500	0.04~0.085	1,500	0.04~0.085	8,000	0.05~0.095
D921X/D922X/D932X-4	4	5,700	0.05~0.12	5,700	0.05~0.12	5,700	0.05~0.12	1,900	0.05~0.12	1,100	0.05~0.12	6,500	0.07~0.15
D921X/D922X/D932X-6	6	3,800	0.06~0.13	3,800	0.06~0.13	3,800	0.06~0.13	1,300	0.06~0.13	750	0.06~0.13	4,300	0.12~0.2
D921X/D922X/D932X-8	8	2,800	0.08~0.16	2,800	0.08~0.16	2,800	0.08~0.16	1,000	0.08~0.16	550	0.08~0.16	3,200	0.15~0.2
D921X/D922X/D932X-10	10	2,300	0.1~0.2	2,300	0.1~0.2	2,300	0.1~0.2	750	0.1~0.2	450	0.1~0.2	2,600	0.1~0.25
D921X/D922X/D932X-12	12	1,900	0.15~0.25	1,900	0.15~0.25	1,900	0.15~0.25	650	0.15~0.25	370	0.15~0.25	2,200	0.2~0.3
D921X/D922X/D932X-16	16	1,400	0.15~0.3	1,400	0.15~0.3	1,400	0.15~0.3	480	0.15~0.3	280	0.15~0.3	1,600	0.25~0.35
D921X/D922X/D932X-20	20	1,150	0.18~0.35	1,150	0.18~0.35	1,150	0.18~0.35	380	0.18~0.35	220	0.18~0.35	1,300	0.28~0.4

1. Please work with good rigidity / high precision facilities and collet chuck.
2. Please choose proper cutting fluid.
3. The cutting data is reference value only. Please adjust it according to your real working conditions.
4. If RPM is lower the reference value, the Feed rate [fz] and RPM should be reduced by the same proportion.
5. If vibration occurs during cutting, please reduce cutting parameter.

1. 請使用剛性好、精度高的設備和夾具。
2. 請選擇適用於工件材料的切削液。
3. 此切削條件表中的數值為切削條件的基準值，實際加工時，請考慮加工形狀、目的、使用機台等因素，對切削條件進行調整。
4. 如果機台轉速低於表中所列數值，則進給速度應與轉速按同一比例降低。
5. 切削加工時如果發生振顫，請降低切削條件。