



SC 高硬度用不等分割不等導程 鎢鋼強力銑刀

End mill with unequal teeth spacing and variable leads to suppress chattering
For Carbon Steel, Alloy Steel, Hardened Steel

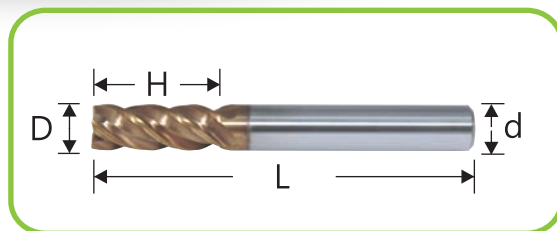
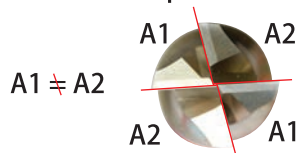
UMG
Carbide

4
Flutes

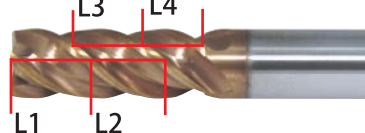
SC
Coated

HRC
55°

不等分割
Unequal teeth spacing



L1 ≠ L2 ≠ L3 ≠ L4 不等距導程
Variable leads



2.5D



D	H	d	L
3.0	7.5	4	50
4.0	10	4	50
5.0	12.5	6	50
6.0	15	6	50
8.0	20	8	60
10.0	25	10	75
12.0	30	12	75

3.0D



D	H	d	L
3.0	09	4	50
4.0	12	4	50
5.0	15	6	50
6.0	18	6	50
8.0	24	8	60
10.0	30	10	75
12.0	36	12	80



SG 不鏽鋼, 鈦合金用不等分割不等導程 鎢鋼強力銑刀

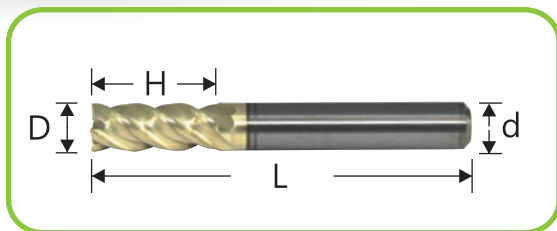
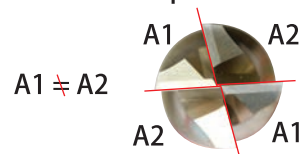
End mill with unequal teeth spacing and variable leads to suppress chattering
For Stainless Steel, Titanium Alloy, Nickel Alloy

UMG
Carbide

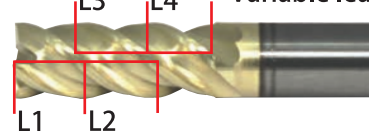
4
Flutes

SG
Coated

不等分割
Unequal teeth spacing



L1 ≠ L2 ≠ L3 ≠ L4 不等距導程
Variable leads



2.5D



D	H	d	L
3.0	7.5	4	50
4.0	10	4	50
5.0	12.5	6	50
6.0	15	6	50
8.0	20	8	60
10.0	25	10	75
12.0	30	12	75

3.0D



D	H	d	L
3.0	09	4	50
4.0	12	4	50
5.0	15	6	50
6.0	18	6	50
8.0	24	8	60
10.0	30	10	75
12.0	36	12	80



TJF 極細鎢鋼銑刀-2刃

Ultra Micro grain carbide end mills - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

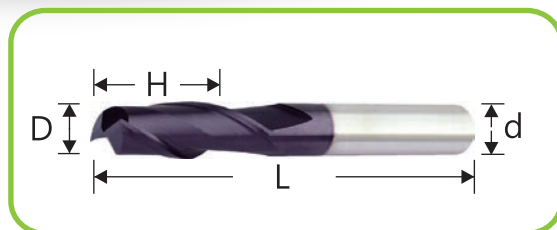
HRC
50°

TP1000
Coated

HRC
50°

ASC320
Coated

HRC
62°



D	H	d	L
0.3	0.6	4	53
0.4	0.8	4	53
0.5	1.5	4	53
0.6	1.5	4	53
0.7	2	4	53
0.8	2	4	53
0.9	2.5	4	53
1.0	3	4	53
1.0	3	6	53
1.5	4	4	53
1.5	4	6	53
2.0	5	4	53
2.0	5	6	53
2.5	8	4	53
2.5	8	6	53
3.0	10	3	53
3.0	10	4	53
3.0	10	6	53
3.5	10	6	53
4.0	11	4	53
4.0	11	6	53

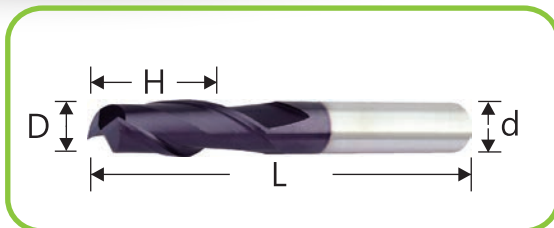
D	H	d	L
4.5	11	6	53
5.0	13	6	53
5.5	16	6	53
6.0-S	16	6	53
6.0-M	20	6	80
6.0-L	20	6	107
6.5	16	8	64
7.0	20	8	64
7.5	19	8	64
8.0-S	20	8	64
8.0-M	25	8	80
8.0-L	25	8	107
8.5	19	10	80
9.0	25	10	80
9.5	22	10	80
10.0	25	10	80
10.0-L	40	10	107
11.0	30	12	80
12.0	30	12	80
12.0-L	40	12	107



TJF 極細鎢鋼銑刀-4刃

Ultra Micro grain carbide end mills - 4 Flutes

- UMG Carbide
- 4 Flutes
- NC240 Coated
- HRC 50°
- TP1000 Coated
- HRC 50°
- ASC320 Coated
- HRC 62°



D	H	d	L
3.0	10	3	53
3.0	10	4	53
3.0	10	6	53
4.0	11	4	53
4.0	11	6	53
5.0	13	6	53
6.0-S	16	6	53
6.0-M	20	6	80
6.0-L	20	6	107
6.0-H	25	6	64
8.0-S	20	8	64

D	H	d	L
8.0-M	25	8	80
8.0-L	25	8	107
8.0-H	35	8	80
10.0	25	10	80
10.0-L	40	10	107
10.0-H	45	10	107
12.0	30	12	80
12.0-L	40	12	107
12.0-H	55	12	107
16.0	32	16	80
16.0-L	40	16	107



TJFR1 極細鎢鋼角R銑刀- 2/4刃

Ultra Micro grain carbide Corner Radius end mills - 2/4 Flutes

UMG
Carbide

2/4
Flutes

NC240
Coated

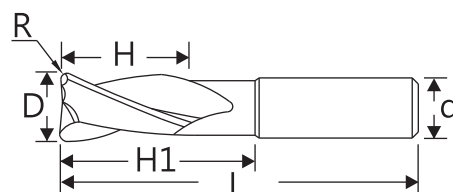
HRC
50°

TP1000
Coated

HRC
50°

ASC320
Coated

HRC
62°



D	R	H	H1	d	L	Flutes
1.0	0.2	2	6	4	53	2
1.5	0.2	3	6	4	53	2
2.0	0.2	4	6	4	53	4
3.0	0.2	6	-	4	53	4
3.0	0.5	6	-	4	53	4
4.0	0.2	8	-	4	53	4
4.0	0.5	8	-	4	53	4
6.0	0.2	12	-	6	53	4
6.0	0.2	12	24	6	80	4
6.0	0.5	12	-	6	53	4
6.0	0.5	12	24	6	80	4
6.0	1.0	12	-	6	53	4
6.0	1.0	12	24	6	80	4
8.0	0.2	16	-	8	64	4

D	R	H	H1	d	L	Flutes
8.0	0.2	16	30	8	107	4
8.0	0.5	16	-	8	64	4
8.0	0.5	16	30	8	107	4
8.0	1.0	16	-	8	64	4
8.0	1.0	16	30	8	107	4
10.0	0.5	20	30	10	80	4
10.0	0.5	20	35	10	107	4
10.0	1.0	20	30	10	80	4
10.0	1.0	20	35	10	107	4
12.0	0.5	25	32	12	80	4
12.0	0.5	25	32	12	80	4
12.0	1.0	25	36	12	107	4
12.0	1.0	25	36	12	107	4



TJF-R 極細鎢鋼球刀-2刃

Ultra Micro grain carbide Ball nose - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

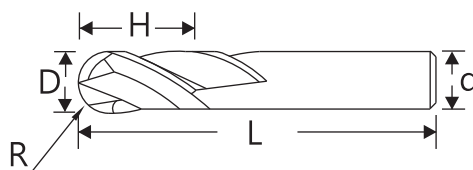
HRC
50°

TP1000
Coated

HRC
50°

ASC320
Coated

HRC
62°



R	D	H	d	L
0.2	0.4	0.8	4	53
0.25	0.5	1.0	4	53
0.3	0.6	1.2	4	53
0.4	0.8	1.6	4	53
0.5	1.0	2.5	4	53
0.6	1.2	2.4	4	53
0.75	1.5	4	4	53
0.8	1.6	4	4	53
1.0	2.0	4	4	53
1.0	2.0	4	6	53
1.25	2.5	6	4	53
1.25	2.5	6	6	53
1.5	3.0	6	3	53
1.5	3.0	6	4	53
1.5	3.0	6	6	53
1.5-L	3.0	6	6	80

R	D	H	d	L
1.75	3.5	8	6	53
2.0	4	8	4	53
2.0	4	8	6	53
2.0-L	4	8	6	53
2.5-S	5	12	6	53
2.5-M	5	12	6	80
3.0-S	6	12	6	53
3.0-M	6	12	6	80
3.0-L	6	12	6	107
4.0-S	8	16	8	64
4.0-M	8	16	8	107
5.0-S	10	20	10	80
5.0-M	10	20	10	107
6.0-S	12	24	12	80
6.0-M	12	24	12	107
8.0	16	32	16	107



TJF11 極細鎢鋼深溝銑刀- 2刃

Ultra Micro grain carbide Square for rib - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

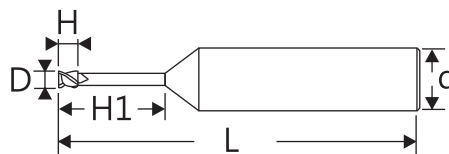
HRC
50°

TP1000
Coated

HRC
50°

ASC320
Coated

HRC
62°



D	H	H1	d	L
0.5	1	2	4	53
0.5	1	4	4	53
0.5	1	6	4	53
1	1.5	6	4	53
1	1.5	8	4	53
1	1.5	10	4	53
1	1.5	12	4	53
1.5	2.5	6	4	53
1.5	2.5	8	4	53
1.5	2.5	10	4	53
1.5	2.5	12	4	53
1.5	2.5	14	4	53
1.5	2.5	16	4	53
1.5	2.5	18	4	53
2.0	3	6	4	53

D	H	H1	d	L
2.0	3	8	4	53
2.0	3	10	4	53
2.0	3	12	4	53
2.0	3	14	4	53
2.0	3	16	4	53
2.0	3	18	4	53
2.5	4	8	4	53
2.5	4	12	4	53
2.5	4	16	4	53
3.0	4.5	8	4	53
3.0	4.5	10	4	53
3.0	4.5	12	4	53
3.0	4.5	16	4	53
3.0	4.5	18	4	53



TJF12 極細鎢鋼深溝銑刀-2刃

Ultra Micro grain carbide Ball nose for rib - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

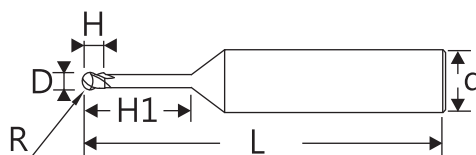
HRC
50°

TP1000
Coated

HRC
50°

ASC320
Coated

HRC
62°



R	D	H	H1	d	L
0.5	1	1.5	8	4	53
0.5	1	1.5	10	4	53
0.5	1	1.5	12	4	53
0.75	1.5	2.5	8	4	53
0.75	1.5	2.5	10	4	53
0.75	1.5	2.5	12	4	53
0.75	1.5	2.5	16	4	53
1.0	2	3	8	4	53
1.0	2	3	10	4	53
1.0	2	3	12	4	53

R	D	H	H1	d	L
1.0	2	3	16	4	53
1.0	2	3	20	4	53
1.25	2.5	4	8	4	53
1.25	2.5	4	10	4	53
1.25	2.5	4	12	4	53
1.25	2.5	4	16	4	53
1.5	3	4.5	8	4	53
1.5	3	4.5	10	4	53
1.5	3	4.5	12	4	53
1.5	3	4.5	16	4	53

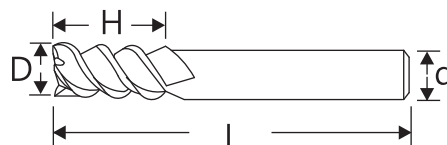


TJFA 極細鎢鋼鋁用銑刀- 2/3刃

Ultra Micro grain carbide Square for aluminum - 2/3 Flutes

UMG
Carbide

2/3
Flutes



D	H	d	L	Flutes
2.0	5	6	53	2
3.0	8	6	53	2
4.0	11	4	53	2
4.0	11	6	53	2
5.0	13	6	53	2
6.0	16	6	53	2

D	H	d	L	Flutes
6.0	16	6	53	3
8.0	19	8	64	3
10.0	25	10	80	3
12.0	30	12	80	3
16.0	32	16	80	3



TJFER 極細鎢鋼粗銑刀- 4刃

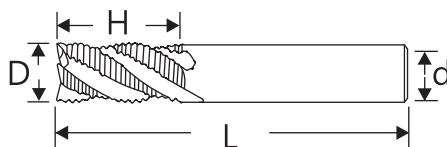
Ultra Micro grain carbide Rounghing Square - 4 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

HRC
50°



D	H	d	L
06	15	6	53
07	20	8	64
08	20	8	64
09	25	10	80

D	H	d	L
10	25	10	80
11	30	12	80
12	30	12	80



TJFT 極細鎢鋼斜度銑刀- 2刃

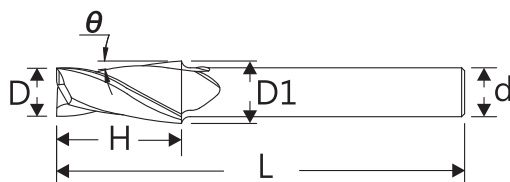
Ultra Micro grain carbide Taper Square - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

HRC
50



D	θ	H	D1	d	L
1	0.5	4	1.07	4	53
1	1.0	4	1.14	4	53
1	1.5	4	1.21	4	53
1	2.0	4	1.28	4	53
1	2.5	4	1.35	4	53
1	3.0	4	1.42	4	53
1	5.0	4	1.7	4	53
1	7.0	4	1.98	4	53
1	10.0	4	2.41	4	53

D	θ	H	D1	d	L
1.5	0.5	5	1.59	4	53
1.5	1.0	5	1.67	4	53
1.5	1.5	5	1.76	4	53
1.5	2.0	5	1.85	4	53
1.5	2.5	5	1.93	4	53
1.5	3.0	5	2.02	4	53
1.5	5.0	5	2.37	4	53
1.5	7.0	5	2.72	4	53
1.5	10.0	5	3.26	4	53

D	θ	H	D1	d	L
2	0.5	6	2.1	4	53
2	1.0	6	2.21	4	53
2	1.5	6	2.31	4	53
2	2.0	6	2.41	4	53
2	2.5	6	2.52	4	53
2	3.0	6	2.62	4	53
2	5.0	6	3.05	4	53
2	7.0	6	3.47	4	53
2	10.0	6	4	4	53

D	θ	H	D1	d	L
2.5	0.5	8	2.64	4	53
2.5	1.0	8	2.78	4	53
2.5	1.5	8	2.91	4	53
2.5	2.0	8	3.05	4	53
2.5	2.5	8	3.2	4	53
2.5	3.0	8	3.33	4	53
2.5	5.0	8	3.9	4	53
2.5	7.0	8	4.46	6	53
2.5	10.0	8	6	6	53



TJFT 極細鎢鋼斜度銑刀-2刃

Ultra Micro grain carbide Taper Square - 2 Flutes

UMG
Carbide

2
Flutes

NC240
Coated

HRC
50

D	θ	H	D1	d	L
3	0.5	10	3.17	6	53
3	1.0	10	3.35	6	53
3	1.5	10	3.52	6	53
3	2.0	10	3.69	6	53
3	2.5	10	3.87	6	53
3	3.0	10	4.05	6	53
3	5.0	10	4.75	6	53
3	7.0	12.4	6	6	53
3	10.0	10	6.53	8	64

D	θ	H	D1	d	L
4	0.5	15	4.26	6	53
4	1.0	15	4.52	6	53
4	1.5	15	4.79	6	53
4	2.0	15	5.04	6	53
4	2.5	15	5.31	6	53
4	3.0	15	5.57	6	53
4	5.0	15	6.62	8	64
4	7.0	16.3	8	8	64
4	10.0	17	10	10	80

D	θ	H	D1	d	L
5	0.5	20	5.34	6	53
5	1.0	20	5.7	6	53
5	1.5	20	6.04	6	53
5	2.0	20	6.39	8	64
5	2.5	20	6.74	8	64
5	3.0	20	7.1	8	64
5	5.0	20	8.5	10	80
5	7.0	20	9.91	10	80
5	10.0	20	12.05	12	80

D	θ	H	D1	d	L
6	0.5	20	6.35	8	64
6	1.0	20	6.7	8	64
6	1.5	20	7.05	8	64
6	2.0	20	7.4	8	64
6	2.5	20	7.75	8	64
6	3.0	20	8	8	64
6	5.0	20	10	10	80
6	7.0	20	10.91	12	80
6	10.0	20	13.05	12	80

D	θ	H	D1	d	L
8	0.5	25	8.44	10	80
8	1.0	25	8.87	10	80
8	1.5	25	9.31	10	80
8	2.0	25	9.74	10	80
8	2.5	25	10.18	12	80
8	3.0	25	10.62	12	80
8	5.0	25	12.37	12	90
8	7.0	25	14.14	12	90

D	θ	H	D1	d	L
10	0.5	35	10.61	12	107
10	1.0	35	11.22	12	107
10	1.5	35	11.83	12	107
10	2.0	35	12.44	12	107
10	2.5	35	13.06	12	107
10	3.0	35	13.67	12	107
10	5.0	35	16.12	16	107



TJFT-L 極細鎢鋼長刃斜度銑刀- 2刃

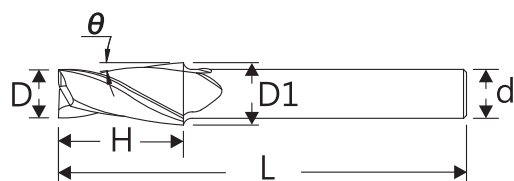
Ultra Micro grain carbide Taper Square - Long Flute

UMG
Carbide

2
Flutes

NC240
Coated

HRC
50



D	θ	H	D1	d	L
1	0.5	10	1.175	4	53
1	1.0	10	1.35	4	53
1	1.5	10	1.52	4	53
1	2.0	10	1.7	4	53
1	2.5	10	1.87	4	53
1	3.0	10	2.05	4	53

D	θ	H	D1	d	L
1.5	0.5	10	1.675	4	53
1.5	1.0	10	1.85	4	53
1.5	1.5	10	2.02	4	53
1.5	2.0	10	2.2	4	53
1.5	2.5	10	2.37	4	53
1.5	3.0	10	2.55	4	53

D	θ	H	D1	d	L
2	0.5	13	2.23	4	53
2	1.0	13	2.45	4	53
2	1.5	13	2.68	4	53
2	2.0	13	2.91	4	53
2	2.5	13	3.13	4	53
2	3.0	13	3.36	4	53

D	θ	H	D1	d	L
3	0.5	20	3.35	6	64
3	1.0	20	3.7	6	64
3	1.5	20	4.05	6	64
3	2.0	20	4.4	6	64
3	2.5	20	4.75	6	64
3	3.0	20	5.1	6	64

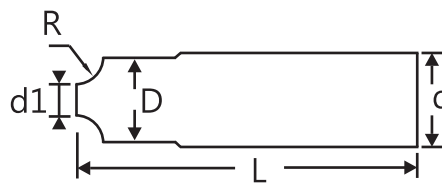


TWCR 鎢鋼外R銑刀

Micro grain carbide Corner rounding cutters

UMG
Carbide

2
Flutes



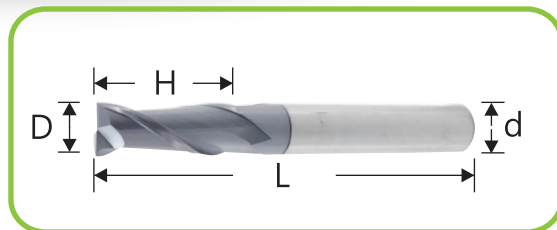
R	d1	D	d	L	Flutes
0.5	3	4.0	4	45	2
1.0	1.5	3.7	4	45	2
1.5	1.7	4.9	6	50	2
2.0	1.7	6.0	6	50	2
2.5	1.7	6.9	8	50	2
3.0	1.7	7.9	8	50	2



EM2 鎢鋼銑刀-2刃

Micro grain carbide end mills - 2 Flutes

MG Carbide 2 Flutes ALTiN Coated HRC 50°



D	H	d	L
1.0	3	04	50
1.5	4	04	50
2.0	6	04	50
2.5	8	04	50
3.0	9	03	50
3.0	9	04	50
3.5	10	04	50
4.0	11	04	50
4.5	13	06	50
5.0	13	06	50
5.5	13	06	50
6.0	16	06	50

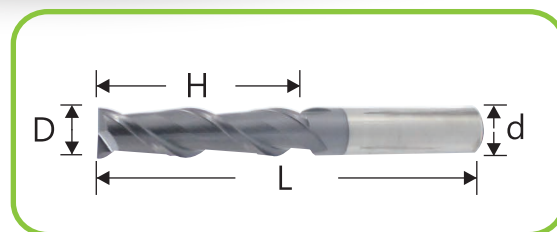
D	H	d	L
6.5	16	08	60
7.0	16	08	60
7.5	19	08	60
8.0	20	08	60
8.5	20	10	75
9.0	20	10	75
9.5	25	10	75
10.0	25	10	75
10.5	25	12	75
11.0	30	12	75
11.5	30	12	75
12.0	32	12	75



EML2 鎢鋼長刃銑刀-2刃

Micro grain carbide end mills - Long Flute -2F

MG Carbide 2 Flutes ALTiN Coated HRC 50°



D	H	d	L
3.0	15	04	75
4.0	20	04	75
5.0	25	06	75
6.0	30	06	100
7.0	30	08	100

D	H	d	L
8.0	40	08	100
9.0	40	10	100
10.0	50	10	100
11.0	50	12	100
12.0	50	12	100



EM4 鎢鋼銑刀-4刃

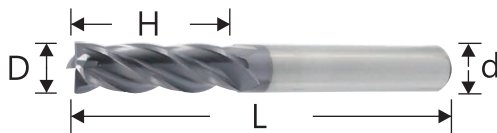
Micro grain carbide end mills - 4 Flutes

MG
Carbide

4
Flutes

ALTIN
Coated

HRC
50°



35°

D	H	d	L
1.0	3	04	50
1.5	4	04	50
2.0	6	04	50
2.5	8	04	50
3.0	9	03	50
3.0	9	04	50
3.5	10	04	50
4.0	11	04	50
4.5	13	06	50
5.0	13	06	50
5.5	13	06	50
6.0	16	06	50
6.0	18	06	50
6.5	16	08	60

D	H	d	L
7.0	16	08	60
7.5	19	08	60
8.0	20	08	60
8.0	24	08	60
8.5	20	10	75
9.0	20	10	75
9.5	25	10	75
10.0	30	10	75
10.5	30	12	75
11.0	30	12	75
11.5	30	12	75
12.0	32	12	75
12.0	36	12	75



EML4 鎢鋼長刃銑刀-4刃

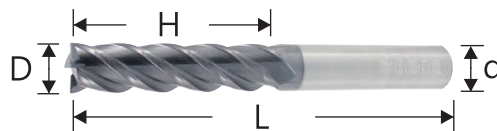
Micro grain carbide end mills - Long Flute -4F

MG
Carbide

4
Flutes

ALTIN
Coated

HRC
50°



35°

D	H	d	L
3.0	15	04	75
4.0	20	04	75
5.0	25	06	75
6.0	30	06	100
7.0	30	08	100

D	H	d	L
8.0	40	08	100
9.0	40	10	100
10.0	50	10	100
11.0	50	12	100
12.0	50	12	100



MB2 鎢鋼球刀-2刃

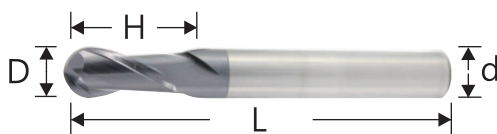
Micro grain carbide Ball nose - 2 Flutes

MG
Carbide

2
Flutes

ALTIN
Coated

HRC
50°



R	H	d	L
0.5	2.0	4	50
0.75	3.0	4	50
1.0	4.0	4	50
1.5	6.0	4	50
1.75	7.0	4	50
2.0	8.0	4	50
2.25	9.0	6	50
2.5	10.0	6	50

R	H	d	L
2.75	11.0	6	50
3.0	12.0	6	50
3.5	14.0	8	60
4.0	16.0	8	60
4.5	18.0	10	75
5.0	20.0	10	75
5.5	22.0	12	75
6.0	24.0	12	75



MB2L 鎢鋼長柄球刀-2刃

Micro grain carbide Long shank Ball nose - 2 Flutes

MG
Carbide

2
Flutes

ALTIN
Coated

HRC
50°



R	H	d	L
0.5	2.0	4	75
0.75	3.0	4	75
1.0	4.0	4	75
1.5	6.0	4	75
2.0	8.0	4	75

R	H	d	L
2.5	10.0	6	75
3.0	12.0	6	100
4.0	16.0	8	100
5.0	20.0	10	100
6.0	24.0	12	100



MR4 鎢鋼圓鼻刀-4刃

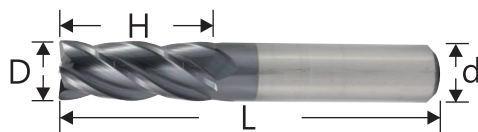
Micro grain carbide Corner Radius end mills - 4 Flutes

MG
Carbide

4
Flutes

ALTIN
Coated

HRC
50°



D	R	H	d	L
1.0	0.2	03	4	50
2.0	0.2	06	4	50
3.0	0.5	08	4	50
4.0	0.5	10	4	50
6.0	0.5	15	6	50
6.0	1.0	15	6	50

D	R	H	d	L
8.0	0.5	20	8	60
8.0	1.0	20	8	60
10.0	0.5	25	10	75
10.0	1.0	25	10	75
12.0	0.5	30	12	75
12.0	1.0	30	12	75

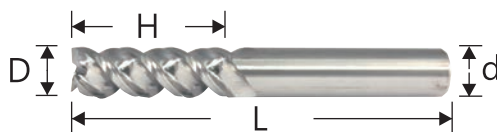


AS3 R溝鎢鋼強力鋁用銑刀

Square Type - Power Cutting 3 Flutes For Aluminum

MG
Carbide

3
Flutes



D	H	d	L
2.0	06	04	50
2.5	7.5	04	50
3.0	09	04	50
4.0	12	04	50
5.0	15	06	50

D	H	d	L
6.0	18	06	50
8.0	24	08	60
10.0	30	10	75
12.0	36	12	75
16.0	45	16	100
20.0	50	20	100

* Long Flutes

D	H	d	L
6.0	25	6	75
8.0	32	8	75
10.0	45	10	100
12.0	50	12	100
16.0	80	16	150
20.0	80	20	150

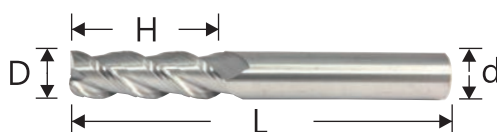


AE3 鎢鋼鋁用銑刀

Square Type 3 Flutes For Aluminum

MG
Carbide

3
Flutes



D	H	d	L
3.0	09	3	50
3.0	09	4	50
4.0	12	4	50
5.0	15	6	50
6.0	18	6	50
8.0	24	8	60
10.0	30	10	75
12.0	36	12	80

* Long Flutes

D	H	d	L
3.0	12	6	75
4.0	16	6	75
5.0	20	6	75
6.0	25	6	75
8.0	32	8	75
10.0	45	10	100
12.0	50	12	100

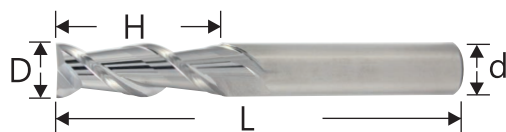


AL3D 超精加工鏡面鋁用刀

Ultra finishing aluminum end mills

MG
Carbide

2
Flutes



* 無橫向加工拉紋



D	H	d	L
3	9	6	50
4	12	6	50
5	15	6	50
6	18	6	50

D	H	d	L
8	24	8	60
10	30	10	75
12	36	12	75

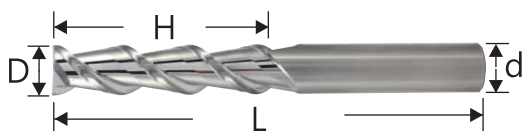


AL5D 超精加工鏡面鋁用刀

Ultra finishing aluminum end mills - Long Flutes

MG
Carbide

2
Flutes



* 無橫向加工拉紋



D	H	d	L
3	15	6	60
4	20	6	60
5	25	6	75
6	30	6	75

D	H	d	L
8	40	8	100
10	50	10	100
12	60	12	110



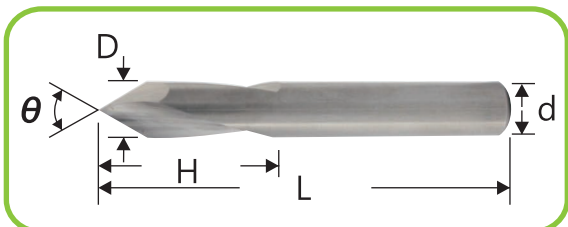
WP 鎢鋼NC定點鑽頭

Micro grain Carbide NC Spotting Drills

MG
Carbide

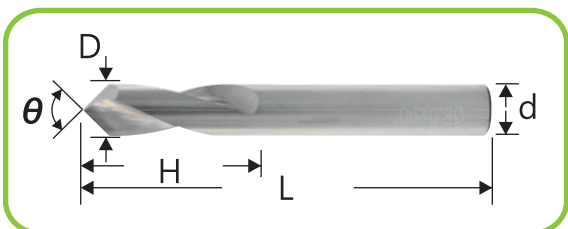
2
Flutes

60°



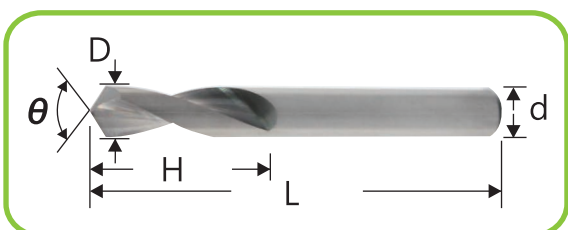
D	H	d	L	θ
3.0	10	3	50	60
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

90°



D	H	d	L	θ
3.0	10	3	50	90
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

120°



D	H	d	L	θ
3.0	10	3	50	120
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

90°



* Long Shank (長柄)

D	H	d	L	θ
3.0	10	3	75	90
4.0	12	4	75	
5.0	15	5	100	
6.0	20	6	100	
8.0	25	8	125	
10.0	25	10	150	
12.0	30	12	150	



WP-A 鍍膜鎢鋼NC定點鑽頭

Micro grain Carbide NC Spotting Drills with coated

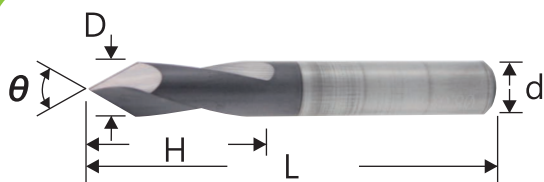
MG
Carbide

2
Flutes

ALTIN
Coated

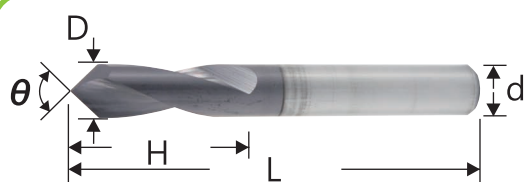
HRC
50°

60°



D	H	d	L	θ
3.0	10	3	50	60
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

90°



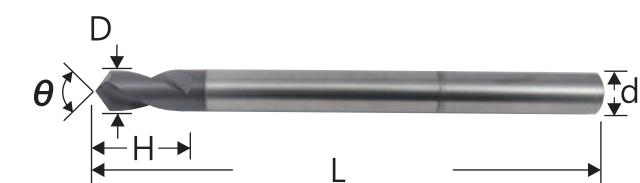
D	H	d	L	θ
3.0	10	3	50	90
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

120°



D	H	d	L	θ
3.0	10	3	50	120
4.0	12	4	50	
5.0	15	5	50	
6.0	20	6	60	
8.0	25	8	60	
10.0	25	10	75	
12.0	30	12	75	

90°



* Long Shank (長柄)

D	H	d	L	θ
3.0	10	3	75	90
4.0	12	4	75	
5.0	15	5	100	
6.0	20	6	100	
8.0	25	8	125	
10.0	25	10	150	
12.0	30	12	150	