

# CEXSH強力型鋁用銑刀

## Features:

- 良好的排屑性能，使加工更有效率。

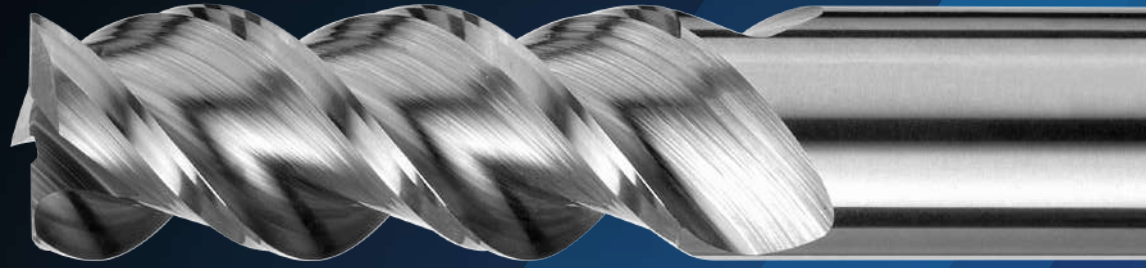
High efficient processing can be achieved by great chip evacuation.

- 高螺旋設計在高速切削下，仍能保持光亮的表面。

High helix angle offers stable and excellent finished surface in high speed.

- 圓弧溝槽設計使排屑性更優異。

Circular flute geometry design is better for chip evacuation and easy of machining.



## 鋁合金乾式加工可行!!!

## Dry Cutting Aluminum!!!

## 切削實例

## CUT EXAMPLES

- $\phi$  16 mm
- 溝銑加工 Slot Milling
- S=5970 rpm
- F=800 mm/min
- $A_p$ =34 mm

- $\phi$  10 mm
- 溝銑加工 Slot Milling
- S=8500 rpm
- F=1000 mm/min
- $A_p$ =25 mm

- $\phi$  4 mm
- 溝銑加工 Slot Milling
- S=10000 rpm
- F=400 mm/min
- $A_p$ =5 mm

- $\phi$  16 mm
- 側銑加工 Side Milling
- S=5970 rpm
- F=2400 mm/min
- $A_p$ =34 mm
- $A_e$ =2.5 mm

- $\phi$  8 mm
- 溝銑加工 Slot Milling
- S=10000 rpm
- F=800 mm/min
- $A_p$ =20 mm

- $\phi$  6 mm
- 溝銑加工 Slot Milling
- S=10000 rpm
- F=600 mm/min
- $A_p$ =10 mm

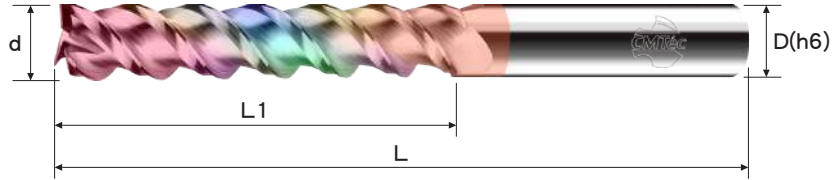
A16061 / 鋁合金乾式切削



# S220 鎢鋼鋁用平銑刀- 強力長刃型- 3刃

MICRO GRAIN CARBIDE END MILLS- Square Type & Long Flute - Power Cutting- Aluminum- 3F

## · CEXHF30000R



刃徑 d	公差 Tolerance
$\phi < 3$	0 ~ -0.03
$3 \leq \phi \leq 10$	-0.01 ~ -0.04
$10 < \phi$	-0.01 ~ -0.05

超精銑 Bright Finishing	—
精銑 Finishing	◎
中銑 Semi Finishing	◎
粗銑 Roughing	◎



刃徑 d	刃長 L1	全長 L	柄徑 D	刃數 F	白刀訂購編號 Uncoated Order No.	鍍膜訂購編號 Coated Order No.
3.0	15	60	4	3	CEXHFM30300	CEXHFM30300R
4.0	20	60	4	3	CEXHFM30400	CEXHFM30400R
3.0	15	60	6	3	CEXHF30300	CEXHF30300R
4.0	20	60	6	3	CEXHF30400	CEXHF30400R
5.0	25	60	6	3	CEXHF30500	CEXHF30500R
6.0	30	75	6	3	CEXHF30600	CEXHF30600R
8.0	45	100	8	3	CEXHF30800	CEXHF30800R
10.0	55	100	10	3	CEXHF31000	CEXHF31000R
12.0	55	100	12	3	CEXHF31200	CEXHF31200R
14.0	75	150	14	3	CEXHF31400	CEXHF31400R
16.0	75	150	16	3	CEXHF31600	CEXHF31600R
18.0	90	150	18	3	CEXHF31800	CEXHF31800R
20.0	90	150	20	3	CEXHF32000	CEXHF32000R


S220 S220 Carbide End Mills S220鎢鋼銑刀系列

Table 72


S220 鎢鋼鋁用強力型銑刀-3刃(白刀) 切削條件表

## SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

## 側銑加工 Side Milling

加工材質 Material	鋁合金 Aluminum Alloys		銅合金 Copper Alloys	
工件料號 Material Code	Al 5052 / 6061 / 7075		C1100	
硬度 Hardness	—		—	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
3mm	18,000	810	7,200	290
4mm	13,500	950	5,400	320
5mm	10,800	990	4,320	340
6mm	9,000	1,080	3,600	360
8mm	7,200	1,170	2,700	410
10mm	5,760	1,260	2,030	430
12mm	4,680	1,350	1,710	460
16mm	3,510	1,350	1,260	460
切削量 Cutting Amount (mm)	Ap=1.5D Ae=0.1D			

## 溝銑加工 Slot Milling

加工材質 Material	鋁合金 Aluminum Alloys		銅合金 Copper Alloys	
工件料號 Material Code	Al 5052 / 6061 / 7075		C1100	
硬度 Hardness	—		—	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
3mm	17,100	590	7,110	270
4mm	13,050	620	5,310	290
5mm	10,350	630	4,230	320
6mm	8,100	720	3,510	330
8mm	7,160	750	2,610	380
10mm	5,670	850	2,070	410
12mm	4,590	900	1,710	440
16mm	3,470	900	1,260	430
切削量 Cutting Amount (mm)	Ap=0.5D			

※ 切削公式 Cutting Formula :  $S$ (主軸轉速) =  $V_c$ (切削速度)  $\times$  1000 /  $D$ (外徑) /  $\pi$  (3.14)       $F$ (進給速度) =  $f_z$ (每刃進給量)  $\times$   $Z$ (刃數)  $\times$   $S$ (主軸轉速)

1. 當加工聲音尖銳時，請調降主軸轉速(S) (10~40%)。When the sound is piercing, please lower the spindle speed(S) (10~40%).
2. 當機台震動太大時，請調降進給速度(F) (10~40%)。When the machine is vibrating, please decrease the feed rate(F) (10~40%).
3. 當主軸負載太大時，請調降進給速度(F) (10~40%)。When the spindle load is high, please decrease the feed rate(F) (10~40%).
4. 以上數據為建議值，適當的條件仍需視機台狀況，夾治具品質，潤滑冷卻系統...等而改變。

These are recommended values which depend on the condition of the machine, fixture, lubricating & cooling systems... etc. They may have to be adapted.