

S220 鎢鋼平銑刀- 強力高導小柄/標準型- 2刃

S220 MICRO GRAIN CARBIDE END MILLS- Square Type- Power Cutting & High Helix- 2F

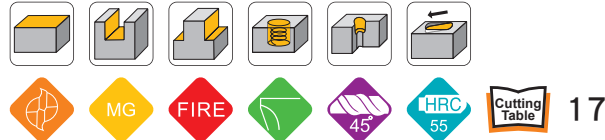
· CEHSM20000F

· CEHS20000F



刃徑 d	公差 Tolerance
$\phi < 3$	0 ~ -0.02
$3 \leq \phi \leq 10$	-0.01 ~ -0.03
$10 < \phi$	-0.01 ~ -0.04

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



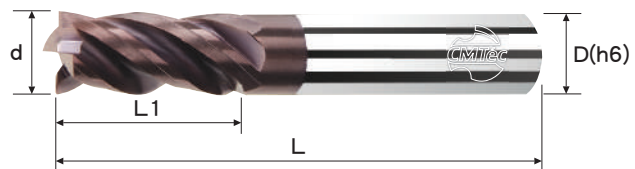
刃徑 d	刃長 L1	全長 L	柄徑 D	刃數 F	白刀訂購編號 Uncoated Order No.	鍍膜訂購編號 Coated Order No.
2.0	5	50	4	2	CEHSM20200	CEHSM20200F
3.0	8	50	4	2	CEHSM20300	CEHSM20300F
4.0	10	50	4	2	CEHSM20400	CEHSM20400F
3.0	8	50	6	2	CEHS20300	CEHS20300F
4.0	10	50	6	2	CEHS20400	CEHS20400F
5.0	13	50	6	2	CEHS20500	CEHS20500F
6.0	15	50	6	2	CEHS20600	CEHS20600F
8.0	20	60	8	2	CEHS20800	CEHS20800F
10.0	25	75	10	2	CEHS21000	CEHS21000F
12.0	30	75	12	2	CEHS21200	CEHS21200F
16.0	35	100	16	2	CEHS21600	CEHS21600F

S220 鎢鋼平銑刀- 強力高導小柄/標準型- 4刃

S220 MICRO GRAIN CARBIDE END MILLS- Square Type- Power Cutting & High Helix- 4F

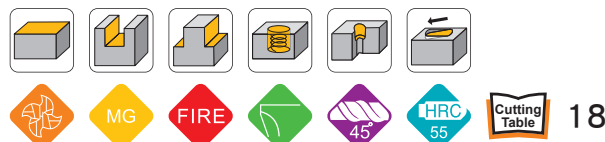
· CEHSM40000F

· CEHS40000F



刃徑 d	公差 Tolerance
$\phi < 3$	0 ~ -0.02
$3 \leq \phi \leq 10$	-0.01 ~ -0.03
$10 < \phi$	-0.01 ~ -0.04

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.
2.0	5	50	4	4	CEHSM40200	CEHSM40200F
3.0	8	50	4	4	CEHSM40300	CEHSM40300F
4.0	10	50	4	4	CEHSM40400	CEHSM40400F
3.0	8	50	6	4	CEHS40300	CEHS40300F
4.0	10	50	6	4	CEHS40400	CEHS40400F
5.0	13	50	6	4	CEHS40500	CEHS40500F
6.0	15	50	6	4	CEHS40600	CEHS40600F
8.0	20	60	8	4	CEHS40800	CEHS40800F
10.0	25	75	10	4	CEHS41000	CEHS41000F
12.0	30	75	12	4	CEHS41200	CEHS41200F
16.0	35	100	16	4	CEHS41600	CEHS41600F

Table 17

S220 鎢鋼高導強力型銑刀-2刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

加工材質 Material	不銹鋼 Stainless Steels		鈦合金 Titanium Alloys		鈦合金 Titanium Alloys		鋁合金 Aluminum Alloys	
工件料號 Material Code	SUS304		Ti5Al2Sn		Ti-6Al-4V		Al 5052 / 6061 / 7075	
硬度 Hardness	—		HRC≒30		HRC>30		—	
切削速度 Vc	54m/min		60m/min		40m/min		120m/min	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
2mm	10,320	620	11,460	450	7,640	290	22,930	180
3mm	6,910	410	7,640	300	5,100	190	15,290	230
4mm	5,180	410	5,740	230	3,820	140	11,460	170
5mm	4,100	410	4,580	180	3,060	110	9,170	230
6mm	3,460	410	3,820	150	2,540	100	7,640	190
8mm	2,590	410	2,870	170	1,910	110	5,740	200
10mm	2,050	430	2,290	190	1,520	130	4,580	230
12mm	1,730	430	1,910	220	1,270	140	3,820	190
16mm	1,440	500	1,430	190	950	130	2,870	230
切削量 Cutting Amount (mm)	Ap=0.5D (D≦3, Ap≦0.25D)		Ap=1D		Ap=0.5D		Ap=1D (D≦3, Ap≦0.5D)	

※ 切削公式 Cutting Formula : S(主軸轉速) = Vc(切削速度) × 1000 / D(外徑) / π (3.14) F(進給速度) = fz(每刃進給量) × Z(刃數) × S(主軸轉速)

Table 18

S220 鎢鋼高導強力型銑刀-4刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

加工材質 Material	不銹鋼 Stainless Steels		鈦合金 Titanium Alloys		鈦合金 Titanium Alloys		鋁合金 Aluminum Alloys	
工件料號 Material Code	SUS304		Ti5Al2Sn		Ti-6Al-4V		Al 5052 / 6061 / 7075	
硬度 Hardness	—		HRC≒30		HRC>30		—	
切削速度 Vc	54 m/min		60m/min		40m/min		120m/min	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F(mm/min)	S (rpm)	F (mm/min)
2mm	10,320	620	11,460	540	7,640	360	22,930	220
3mm	6,910	410	7,640	360	5,100	240	15,290	280
4mm	5,180	410	5,740	270	3,820	180	11,460	200
5mm	4,100	410	4,580	220	3,060	140	9,170	280
6mm	3,460	410	3,820	180	2,540	120	7,640	230
8mm	2,590	410	2,870	220	1,910	150	5,740	240
10mm	2,050	430	2,290	250	1,520	170	4,580	280
12mm	1,730	430	1,910	280	1,270	190	3,820	230
16mm	1,440	500	1,430	250	950	170	2,870	280
切削量 Cutting Amount (mm)	Ap=0.6D Ae≦0.1D		Ap=0.6D Ae≦0.1D		Ap=0.6D Ae≦0.1D		Ap=0.6D Ae≦0.1D	

※ 切削公式 Cutting Formula : S(主軸轉速) = Vc(切削速度) × 1000 / D(外徑) / π (3.14) F(進給速度) = fz(每刃進給量) × Z(刃數) × 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.