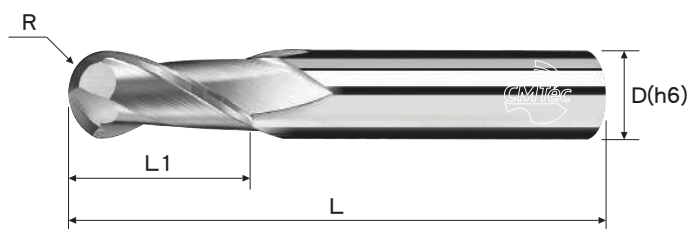


S220 CARBIDE END MILLS FOR COPPER & ALUMINUM- Ball Nose- 2F

▪ **CEBC20000A**



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



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→ 切削條件表 P.545
Cutting Condition

→ 技術資料
Technical Data

Table 21

S220 鎢鋼銅鋁用長刃型銑刀- 2刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

加工材質 Material	鋁合金 Aluminum Alloys				銅合金 Copper Alloys			
切削速度 Vc	150m/min		150m/min		80m/min		80m/min	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
0.5mm	15,920	430	15,920	360	12,740	270	12,740	230
1.0mm	15,920	430	15,920	360	12,740	270	12,740	230
1.5mm	15,920	500	15,920	430	12,740	270	12,740	230
2.0mm	15,920	500	15,920	430	12,740	270	12,740	230
2.5mm	15,920	580	15,920	500	10,190	270	10,190	230
3.0mm	15,920	580	15,920	500	8,490	270	8,490	230
4.0mm	11,940	690	11,940	540	6,370	320	6,370	270
5.0mm	9,550	690	9,550	540	5,100	320	5,100	270
6.0mm	7,960	990	7,960	680	4,250	450	4,250	340
8.0mm	5,970	1,140	5,970	810	3,190	520	3,190	410
10.0mm	4,780	1,340	4,780	990	2,550	610	2,550	500
12.0mm	3,980	1,680	3,980	1,220	2,120	770	2,120	610
切削量 Cutting Amount (mm)	Ap≤1.5D Ae≤0.1D		Ap≤0.5D		Ap≤1.5D Ae≤0.1D		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 22

S220 鎢鋼銅鋁用球刀- 2刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

加工材質 Material	鋁合金 Aluminum Alloys		銅合金 Copper Alloys	
切削速度 Vc	150m/min		80m/min	
半徑 R	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
0.50R	15,920	550	12,740	300
0.75R	15,920	550	12,740	300
1.00R	15,920	550	12,740	300
1.25R	15,920	610	10,190	330
1.50R	15,920	610	8,490	330
2.00R	11,940	760	6,370	410
2.50R	9,550	760	5,100	410
3.00R	7,960	880	4,250	440
4.00R	5,970	1,000	3,190	500
5.00R	4,780	1,180	2,550	580
6.00R	3,980	1,500	2,120	750
切削量 Cutting Amount (mm)	Ap=0.02D Pf=0.05D		Ap=0.02D Pf=0.05D	

※ 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.