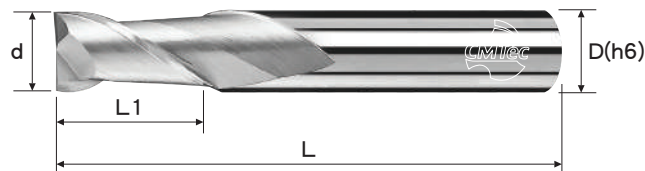


S220 鎢鋼銅鋁用平銑刀- 小柄/標準型- 2刃

S220 CARBIDE END MILLS FOR COPPER & ALUMINUM- Square Type- 2F

· CESC20000-00A

· CESC20000-00A



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.
0.5	1	50	4	2	CESCM20050-25	CESCM20050-25A
1.0	2	50	4	2	CESCM20100-25	CESCM20100-25A
1.5	3	50	4	2	CESCM20150-25	CESCM20150-25A
2.0	4	50	4	2	CESCM20200-25	CESCM20200-25A
2.5	5	50	4	2	CESCM20250-25	CESCM20250-25A
3.0	6	50	6	2	CESC20300-25	CESC20300-25A
4.0	8	50	6	2	CESC20400-25	CESC20400-25A
5.0	10	60	6	2	CESC20500-25	CESC20500-25A
6.0	12	60	6	2	CESC20600-25	CESC20600-25A
8.0	16	60	8	2	CESC20800-25	CESC20800-25A
10.0	20	75	10	2	CESC21000-25	CESC21000-25A
12.0	24	75	12	2	CESC21200-25	CESC21200-25A

· CESC20000-00A

· CESC20000-00A

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

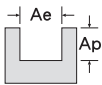
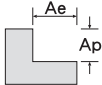
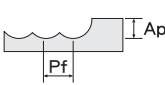


刃徑 d	刃長 L1	全長 L	柄徑 D	刃數 F	白刀訂購編號 Uncoated Order No.	鍍膜訂購編號 Coated Order No.
0.5	1	50	4	2	CESCM20050-45	CESCM20050-45A
1.0	2	50	4	2	CESCM20100-45	CESCM20100-45A
1.5	3	50	4	2	CESCM20150-45	CESCM20150-45A
2.0	4	50	4	2	CESCM20200-45	CESCM20200-45A
2.5	5	50	4	2	CESCM20250-45	CESCM20250-45A
3.0	6	50	6	2	CESC20300-45	CESC20300-45A
4.0	8	50	6	2	CESC20400-45	CESC20400-45A
5.0	10	60	6	2	CESC20500-45	CESC20500-45A
6.0	12	60	6	2	CESC20600-45	CESC20600-45A
8.0	16	60	8	2	CESC20800-45	CESC20800-45A
10.0	20	75	10	2	CESC21000-45	CESC21000-45A
12.0	24	75	12	2	CESC21200-45	CESC21200-45A

Table 19

S220 鎢鋼石墨用銑刀- 2 / 4刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

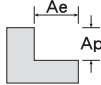
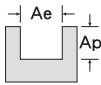
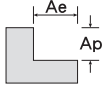
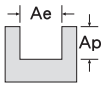
刀具 END MILLS	CESG2-A		CESG4-A		CEBG2-A	
切削速度 Vc	225m/min		250m/min		250m/min	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
3mm	23,000	800	25,000	960	25,000	1,000
4mm	17,000	700	19,000	820	19,000	850
5mm	14,000	650	15,500	750	15,500	800
6mm	11,500	600	12,600	700	12,600	750
8mm	8,500	400	9,300	600	9,300	640
10mm	6,900	450	7,600	550	7,600	600
12mm	5,700	400	6,300	340	6,300	580
切削量 Cutting Amount (mm)						

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

Table 20

S220 鎢鋼銅鋁用銑刀- 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	480	15,920	400	12,740	300	12,740	250
1.0mm	15,920	480	15,920	400	12,740	300	12,740	250
1.5mm	15,920	560	15,920	480	12,740	300	12,740	250
2.0mm	15,920	560	15,920	480	12,740	300	12,740	250
2.5mm	15,920	640	15,920	560	10,190	300	10,190	250
3.0mm	15,920	640	15,920	560	8,490	300	8,490	250
4.0mm	11,940	770	11,940	600	6,370	350	6,370	300
5.0mm	9,550	770	9,550	600	5,100	350	5,100	300
6.0mm	7,960	1,100	7,960	750	4,250	500	4,250	380
8.0mm	5,970	1,270	5,970	900	3,190	580	3,190	450
10.0mm	4,780	1,490	4,780	1,100	2,550	680	2,550	550
12.0mm	3,980	1,870	3,980	1,350	2,120	850	2,120	680
切削量 Cutting Amount (mm)	$Ap \leq 1D$ $Ae \leq 0.25D$ 		$Ap \leq 0.5D$ 		$Ap \leq 1D$ $Ae \leq 0.25D$ 		$Ap \leq 0.5D$ 	

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

- 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%).
- 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%).
- 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%).
- 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.