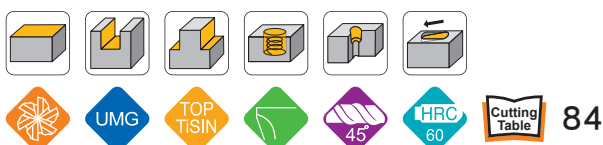


M520 ULTRA CARBIDE END MILLS FOR HIGH HARDNESS- Standard- 6F

Technical drawing of a double-flute drill bit. The drawing shows a side view of the drill bit with dimensions labeled. The diameter is d at the tip and $D(h6)$ at the shank. The length of the cutting edge is $L1$, and the total length is L . The brand 'GEMING' is visible on the shank.

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



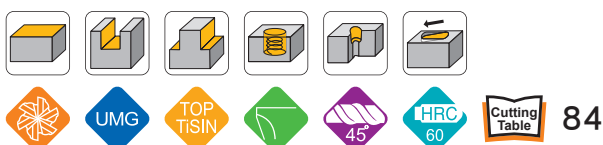
➡ 切削條件表 P.581
Cutting Condition

➡ 技術資料 P.622
Technical Data

M520 ULTRA CARBIDE END MILLS FOR HIGH HARDNESS- Long Flute- 6F

Technical drawing of a double-flute drill bit. The drawing shows a side view of the drill bit with dimensions labeled. The diameter is d at the tip and $D(h6)$ at the shank. The length of the cutting edge is $L1$, and the total length is L . The brand 'EXM HRC' is visible on the shank.

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



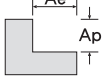
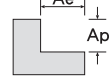
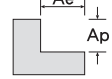
➡ 切削條件表 P.581
Cutting Condition

➡ 技術資料 P.622
Technical Data

Table 84

M520 極細鎢鋼高硬型銑刀-6刃(鍍膜) 切削條件表

SOLID CARBIDE END MILLS- CUTTING CONDITION TABLE

加工材質 Material	碳素鋼 Carbon Steels		合金鋼 Alloy Steels		合金鋼 Alloy Steels		不銹鋼 Stainless Steels	
工件料號 Material Code	S35C,S45C,S50C		SCM,SKT,SKD		SCM,SKT,SKD		SUS304	
硬度 Hardness	HRC<20		HRC20~30		HRC30~45		—	
切削速度 Vc	110m/min		95m/min		75m/min		75m/min	
外徑 Diameter	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)	S (rpm)	F (mm/min)
6mm	5,840	1,060	5,040	900	3,980	710	3,980	540
8mm	4,380	1,050	3,780	840	2,990	690	2,990	530
10mm	3,500	970	3,030	780	2,390	610	2,390	480
12mm	2,920	900	2,520	760	1,990	1,120	1,990	450
16mm	2,190	810	1,890	700	1,490	980	1,490	390
切削量 Cutting Amount (mm)	Ae=0.03D~0.1D		Ae=0.02D~0.1D		Ae=0.02D~0.1D		Ae=0.02D~0.05D	
								

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

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.