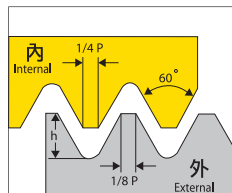


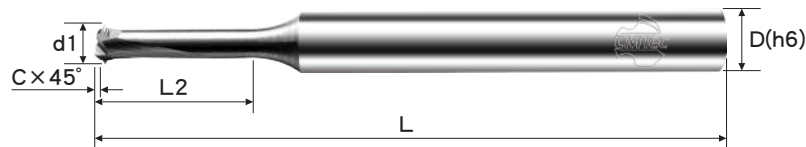
鎢鋼多功能單/雙牙螺旋鑽銑牙刀(鑽孔-螺紋-倒角)- 鋁用- 內螺紋用(ISO規格)

CARBIDE MULTIPURPOSE THREAD MILLS- DRILL-CHAMFER-THREAD
- Helix Flute- For Aluminum- Internal(ISO Metric)

· MSHIA1/2/300000-000

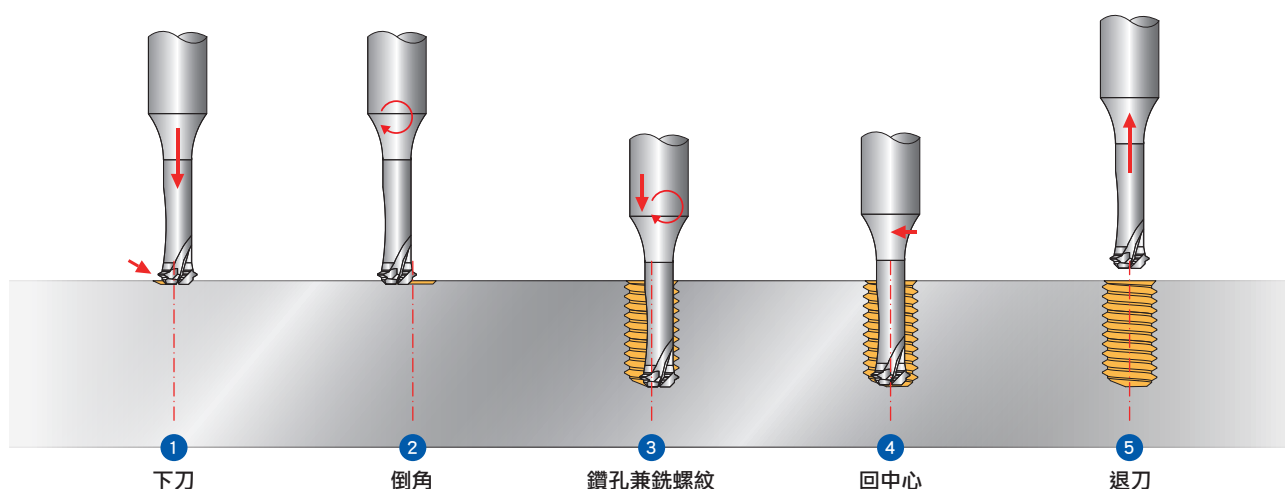


公差 Tolerance class
6g / 6H



切 削 實 例
CUT EXAMPLES

螺紋 Thread	螺距 Pitch	刃徑 d1	有效長 L2	全長 L	柄徑 D	倒角 Chamfer	牙數 Teeth	刃數 Flute	白刀訂購編號 Uncoated Order No.
M0.8	0.20	0.60	2.4	50	4	0.10	1	1	MSHIA100604-020
M0.9	0.225	0.66	2.7	50	4	0.12	1	1	MSHIA100604-022
M1.0	0.25	0.73	3.0	50	4	0.15	1	1	MSHIA100704-025
M1.2	0.25	0.92	3.6	50	4	0.15	1	1	MSHIA100904-025
M1.4	0.30	1.05	4.2	50	4	0.19	1	1	MSHIA101004-030
M1.6	0.35	1.21	4.8	50	4	0.22	1	1	MSHIA101204-035
M2.0	0.40	1.55	6.0	50	4	0.25	1	2	MSHIA201504-040
M2.5	0.45	2.00	7.5	50	4	0.29	1	2	MSHIA202004-045
M3.0	0.50	2.44	9.0	60	6	0.33	1	2	MSHIA202406-050
M4.0	0.70	3.20	12.0	60	6	0.45	1	2	MSHIA203206-070
M5.0	0.80	4.00	15.0	60	6	0.53	1	2	MSHIA204006-080
M6.0	1.00	4.85	18.0	75	6	0.65	2	3	MSHIA304806-100
M8.0	1.25	6.50	24.0	75	8	0.80	2	3	MSHIA306508-125
M10.0	1.50	7.90	30.0	75	8	1.00	2	3	MSHIA307908-150



→ 切削條件表
Cutting Condition P.576

Table 77

鎢鋼多功能單 / 雙牙鑽銑牙刀 切削條件表

SOLID CARBIDE THREAD MILLS- THREADING CONDITION TABLE

材質 Material Group	加工材質 Material		硬度 Hardness	MSHIA		MSHDIA	
				切削速度 Vc (m/min)	每刃進給量 fz (mm)	切削速度 Vc (m/min)	每刃進給量 fz (mm)
P	碳素鋼 Carbon Steels	S35C,S45C,S50C	HRC<20	—	—	65~200	0.008~0.01
	合金鋼 Alloy Steels	SCM,SKT,SKD	HRC20~30	—	—	65~185	0.005~0.008
	合金鋼 Alloy Steels	SCM,SKT,SKD	HRC30~45	—	—	65~160	0.004~0.005
M	不銹鋼 Stainless Steels	SUS304	—	—	—	50~100	0.004~0.008
K	鑄鐵 Cast Iron	FC,FCD	HRC<30	—	—	40~110	0.004~0.008
N	鋁合金 Aluminum Alloys	Al 5052 / 6061 / 7075	—	60~120	0.007~0.08	—	—

※ 刀具「切入進給量」建議採取低於「螺紋切削時進給量」60%。
At tools entry, set the Feed (mm) to 60% lower than the threading Feed.

※ 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 78

CDSF 鎢鋼標準型同柄鑽頭- 2刃(5倍長)(鍍膜) 切削條件表

SOLID CARBIDE DRILLS- DRILLING 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		鑄鐵 Cast Iron	
工件料號 Material Code	S35C,S45C,S50C		SCM,SKT,SKD		SCM,SKT,SKD		SUS304		FC/FCD	
硬度 Hardness	HRC<20		HRC20~30		HRC30~45		—		HRC<30	
切削速度 Vc	90m/min		65m/min		50m/min		40m/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)	S (rpm)	F (mm/min)
3mm	9,550	830	6,900	620	5,310	410	4,250	230	8,490	860
5mm	5,730	620	4,140	460	3,190	320	2,550	170	5,100	840
8mm	3,580	570	2,590	440	1,990	290	1,590	160	3,190	810
10mm	2,870	530	2,070	390	1,590	260	1,270	140	2,550	800
12mm	2,390	470	1,730	350	1,330	230	1,060	140	2,120	800
16mm	1,790	400	1,290	310	1,000	210	800	110	1,590	790
備註 Remarks	※ 未鍍膜鑽頭，請依照上表，減少30%左右轉速和進給量。 Uncoated Drills Reduce 30% RPM & FEED From Coating One.									

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

- 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.