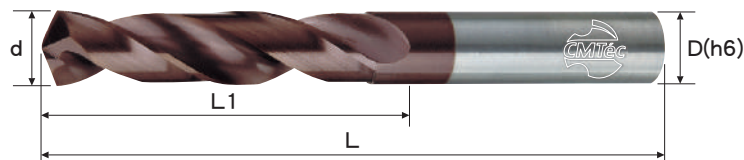


鎢鋼同柄鑽頭- 短刃型- 2刃(3倍長)

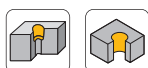
CARBIDE HIGH SPEED DRILLS- Straight Shank- Short Flute- 2F(3×d)

· CDS20000F



規格DIN6539

- ※ 有效加工深度 = 3倍刃徑。
Cutting effective length = 3xd
- ※ 另有118° 泛用型，可供選擇。
Drills, tip angle = 118° is on request.
- ※ 其他刃徑公差規格依需求生產。
Special tolerance(φ) is on request.



刃徑 d	公差 Tolerance
φ	h7



刃徑 d	溝長 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.
3.0	16	46	3.0	2	CDS20300	CDS20300F
3.1	16	49	3.1	2	CDS20310	CDS20310F
3.2	18	49	3.2	2	CDS20320	CDS20320F
3.3	18	49	3.3	2	CDS20330	CDS20330F
3.4	20	52	3.4	2	CDS20340	CDS20340F
3.5	20	52	3.5	2	CDS20350	CDS20350F
3.6	20	52	3.6	2	CDS20360	CDS20360F
3.7	20	52	3.7	2	CDS20370	CDS20370F
3.8	22	55	3.8	2	CDS20380	CDS20380F
3.9	22	55	3.9	2	CDS20390	CDS20390F
4.0	22	55	4.0	2	CDS20400	CDS20400F
4.1	22	55	4.1	2	CDS20410	CDS20410F
4.2	22	55	4.2	2	CDS20420	CDS20420F
4.3	24	58	4.3	2	CDS20430	CDS20430F
4.4	24	58	4.4	2	CDS20440	CDS20440F
4.5	24	58	4.5	2	CDS20450	CDS20450F
4.6	24	58	4.6	2	CDS20460	CDS20460F
4.7	24	58	4.7	2	CDS20470	CDS20470F
4.8	26	62	4.8	2	CDS20480	CDS20480F
4.9	26	62	4.9	2	CDS20490	CDS20490F
5.0	26	62	5.0	2	CDS20500	CDS20500F
5.1	26	62	5.1	2	CDS20510	CDS20510F
5.2	26	62	5.2	2	CDS20520	CDS20520F
5.3	26	62	5.3	2	CDS20530	CDS20530F
5.4	28	66	5.4	2	CDS20540	CDS20540F
5.5	28	66	5.5	2	CDS20550	CDS20550F
5.6	28	66	5.6	2	CDS20560	CDS20560F
5.7	28	66	5.7	2	CDS20570	CDS20570F
5.8	28	66	5.8	2	CDS20580	CDS20580F
5.9	28	66	5.9	2	CDS20590	CDS20590F
6.0	28	66	6.0	2	CDS20600	CDS20600F
6.1	31	70	6.1	2	CDS20610	CDS20610F
6.2	31	70	6.2	2	CDS20620	CDS20620F

→ 切削條件表
Cutting Condition

P.560

→ 技術資料
Technical Data

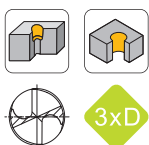
P.630

CARBIDE HIGH SPEED DRILLS- Straight Shank- Short Flute- 2F(3xd)

Technical drawing of a double-flute drill bit. The drawing shows the bit's profile with the following dimensions labeled:

- d : Diameter of the drill bit.
- L_1 : Length of the cutting edge.
- L : Total length of the drill bit.
- $D(h6)$: Diameter of the shank, indicating a tolerance of h6.

- ※ 有效加工深度 = 3倍刃徑。
Cutting effective length = 3xd
- ※ 另有118° 泛用型，可供選擇。
Drills, tip angle = 118° is on request.
- ※ 其他刃徑公差規格依需求生產。
Special tolerance (ϕ) is on request.



刃徑 d	公差 Tolerance
Φ	h7

➡ 切削條件表 P.560
Cutting Condition

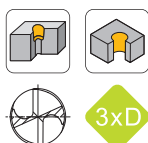
➡ 技術資料 P.630
Technical Data

CARBIDE HIGH SPEED DRILLS- Straight Shank- Short Flute- 2F(3xd)

Technical drawing of a double-flute drill bit. The drawing shows the bit's profile with the following dimensions labeled:

- d : Diameter of the drill bit.
- L_1 : Length of the cutting edge.
- L : Total length of the drill bit.
- $D(h6)$: Diameter of the shank, indicating a tolerance of h6.

- ※ 有效加工深度 = 3倍刃徑。
Cutting effective length = 3xd
- ※ 另有118° 泛用型，可供選擇。
Drills, tip angle = 118° is on request.
- ※ 其他刃徑公差規格依需求生產。
Special tolerance(ϕ) is on request.



刃徑 d	公差 Tolerance
ϕ	h7

➡ 切削條件表 P.560
Cutting Condition

➡ 技術資料 P.630
Technical Data

Table 51

CDS 鎢鋼短刃型同柄鑽頭- 2刃(3倍長)(鍍膜) 切削條件表

SOLID CARBIDE DRILLS- DRILLING CONDITION TABLE

濕式鑽孔 Wet Drilling

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	110m/min		100m/min		60m/min		50m/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)	S (rpm)	F (mm/min)
3mm	11,680	860	10,620	620	6,370	470	5,310	240	12,740	780
5mm	7,000	860	6,370	640	3,820	350	3,190	190	7,640	760
8mm	4,380	820	3,980	600	2,390	320	1,990	180	4,780	740
10mm	3,500	800	3,190	560	1,910	280	1,590	140	3,820	730
12mm	2,920	770	2,650	550	1,590	270	1,330	130	3,190	720
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.									

乾式鑽孔 Dry Drilling

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		100m/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	720	6,900	520	5,310	420	4,250	200	10,620	650
5mm	5,730	720	4,140	530	3,190	320	2,550	160	6,370	630
8mm	3,580	680	2,590	500	1,990	290	1,590	150	3,980	620
10mm	2,870	670	2,070	470	1,590	250	1,270	120	3,190	610
12mm	2,390	640	1,730	460	1,330	240	1,060	110	2,650	600
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 : $S(\text{主軸轉速}) = V_c(\text{切削速度}) \times 1000 / D(\text{外徑}) / \pi (3.14)$ $F(\text{進給速度}) = f(\text{每轉進給量}) \times S(\text{主軸轉速})$

- 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.