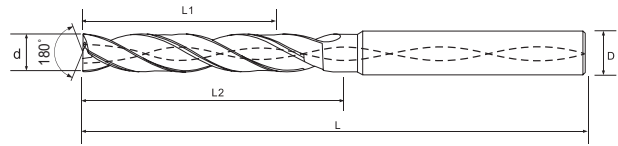


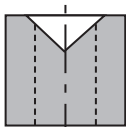
# 5xD Flat Drill with Coolant Hole 5FDC 內冷平頭鑽



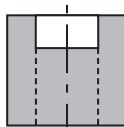
切削條件表 **P182**  
Cutting Condition



MODE 型號		Dimension 規格				
Coating 塗層		Diameter	Effective Drill Depth	Flute Length	Shank Diameter	Full Length
nACRo	ZrN-A	d 刃徑	L1 有效深度	L2 溝長	D 直徑	L 全長
5FDC0302 nACRo	5FDC0302 ZrN-A	3.0	19.5	21.0	6.0	60
5FDC0312 nACRo	5FDC0312 ZrN-A	3.1	20.2	21.7	6.0	60
5FDC0322 nACRo	5FDC0322 ZrN-A	3.2	20.8	22.4	6.0	60
5FDC0332 nACRo	5FDC0332 ZrN-A	3.3	21.5	23.1	6.0	60
5FDC0342 nACRo	5FDC0342 ZrN-A	3.4	22.1	23.8	6.0	60
5FDC0352 nACRo	5FDC0352 ZrN-A	3.5	22.8	24.5	6.0	60
5FDC0362 nACRo	5FDC0362 ZrN-A	3.6	23.4	25.2	6.0	65
5FDC0372 nACRo	5FDC0372 ZrN-A	3.7	24.1	25.9	6.0	65
5FDC0382 nACRo	5FDC0382 ZrN-A	3.8	24.7	26.6	6.0	65
5FDC0392 nACRo	5FDC0392 ZrN-A	3.9	25.4	27.3	6.0	65
5FDC0402 nACRo	5FDC0402 ZrN-A	4.0	26.0	28.0	6.0	65
5FDC0412 nACRo	5FDC0412 ZrN-A	4.1	26.7	28.7	6.0	70
5FDC0422 nACRo	5FDC0422 ZrN-A	4.2	27.3	29.4	6.0	70
5FDC0432 nACRo	5FDC0432 ZrN-A	4.3	28.0	30.1	6.0	70
5FDC0442 nACRo	5FDC0442 ZrN-A	4.4	28.6	30.8	6.0	70
5FDC0452 nACRo	5FDC0452 ZrN-A	4.5	29.3	31.5	6.0	70
5FDC0462 nACRo	5FDC0462 ZrN-A	4.6	29.9	32.2	6.0	70
5FDC0472 nACRo	5FDC0472 ZrN-A	4.7	30.6	32.9	6.0	70
5FDC0482 nACRo	5FDC0482 ZrN-A	4.8	31.2	33.6	6.0	70
5FDC0492 nACRo	5FDC0492 ZrN-A	4.9	31.9	34.3	6.0	70
5FDC0502 nACRo	5FDC0502 ZrN-A	5.0	32.5	35.0	6.0	70
5FDC0512 nACRo	5FDC0512 ZrN-A	5.1	33.2	35.7	6.0	75
5FDC0522 nACRo	5FDC0522 ZrN-A	5.2	33.8	36.4	6.0	75
5FDC0532 nACRo	5FDC0532 ZrN-A	5.3	34.5	37.1	6.0	75



Position Hole 定位孔



Guide Holes 引導孔

**Recommend: Use a position hole or a guide hole in advance.** 建議: 使用定位孔或引導孔

- Position Hole: 1xD to 3xD deep drilled to assure consistent and precise holes with long drill, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
定位孔: 鑽孔1xD和3xD深孔, 以確保長鑽孔的一致和精確孔, 且定位孔應比鑽頭直徑大0.5mm左右。
- Guide Holes: In order to assure precise hole position, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
引導孔: 確保孔位置精度, 且引導孔應比鑽頭直徑大0.1mm左右。

Application 適用材質:

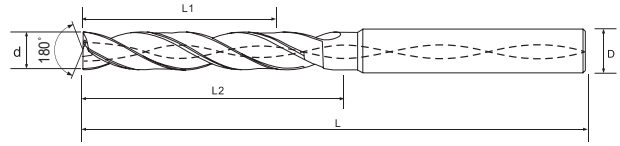
★ Perfect 最推薦    ◎ Excellent 適合    ○ Good 佳

Coating 塗層	Carbon steel, Alloy steel 炭素鋼, 合金鋼	Pre-hardened steel 預硬鋼	High-hardened 高硬度鋼					Stainless steel 不鏽鋼	Cast iron 鑄鐵	Copper alloy 銅合金, 銅	Aluminum alloy 鋁合金	Titanium alloy 鈦合金	Nickel/Inconel alloy 鎳基合金
		~45HRC	~50HRC	~55HRC	~60HRC	~65HRC							
nACRo	◎	○						○	○				
ZrN-A	○							◎	○	○	○	○	

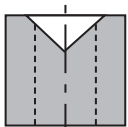
## 5xD Flat Drill with Coolant Hole 5FDC 內冷平頭鑽



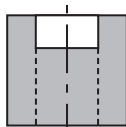
切削條件表  
**P182**  
Cutting Condition



MODE 型號		Dimension 規格				
Coating 塗層		Diameter	Effective Drill Depth	Flute Length	Shank Diameter	Full Length
nACRo	ZrN-A	d 刃徑	L1 有效深度	L2 溝長	D 直徑	L 全長
5FDC0542 nACRo	5FDC0542 ZrN-A	5.4	35.1	37.8	6.0	75
5FDC0552 nACRo	5FDC0552 ZrN-A	5.5	35.8	38.5	6.0	75
5FDC0562 nACRo	5FDC0562 ZrN-A	5.6	36.4	39.2	6.0	75
5FDC0572 nACRo	5FDC0572 ZrN-A	5.7	37.1	39.9	6.0	75
5FDC0582 nACRo	5FDC0582 ZrN-A	5.8	37.7	40.6	6.0	75
5FDC0592 nACRo	5FDC0592 ZrN-A	5.9	38.4	41.3	6.0	75
5FDC0602 nACRo	5FDC0602 ZrN-A	6.0	39.0	42.0	6.0	75
5FDC0612 nACRo	5FDC0612 ZrN-A	6.1	39.7	42.7	8.0	85
5FDC0622 nACRo	5FDC0622 ZrN-A	6.2	40.3	43.4	8.0	85
5FDC0632 nACRo	5FDC0632 ZrN-A	6.3	41.0	44.1	8.0	85
5FDC0642 nACRo	5FDC0642 ZrN-A	6.4	41.6	44.8	8.0	85
5FDC0652 nACRo	5FDC0652 ZrN-A	6.5	42.3	45.5	8.0	85
5FDC0662 nACRo	5FDC0662 ZrN-A	6.6	42.9	46.2	8.0	90
5FDC0672 nACRo	5FDC0672 ZrN-A	6.7	43.6	46.9	8.0	90
5FDC0682 nACRo	5FDC0682 ZrN-A	6.8	44.2	47.6	8.0	90
5FDC0692 nACRo	5FDC0692 ZrN-A	6.9	44.9	48.3	8.0	90
5FDC0702 nACRo	5FDC0702 ZrN-A	7.0	45.5	49.0	8.0	90
5FDC0712 nACRo	5FDC0712 ZrN-A	7.1	46.2	49.7	8	95
5FDC0722 nACRo	5FDC0722 ZrN-A	7.2	46.8	50.4	8	95
5FDC0732 nACRo	5FDC0732 ZrN-A	7.3	47.5	51.1	8	95
5FDC0742 nACRo	5FDC0742 ZrN-A	7.4	48.1	51.8	8	95
5FDC0752 nACRo	5FDC0752 ZrN-A	7.5	48.8	52.5	8	95
5FDC0762 nACRo	5FDC0762 ZrN-A	7.6	49.4	53.2	8	95
5FDC0772 nACRo	5FDC0772 ZrN-A	7.7	50.1	53.9	8	95



Position Hole 定位孔



Guide Holes 引導孔

**Recommend: Use a position hole or a guide hole in advance.** 建議: 使用定位孔或引導孔

- Position Hole: 1xD to 3xD deep drilled to assure consistent and precise holes with long drill, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
定位孔: 鑽孔1xD和3xD深孔, 以確保長鑽孔的一致和精確孔, 且定位孔應比鑽頭直徑大0.5mm左右。
- Guide Holes: In order to assure precise hole position, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
引導孔: 確保孔位置精度, 且引導孔應比鑽頭直徑大0.1mm左右。

Application 適用材質:

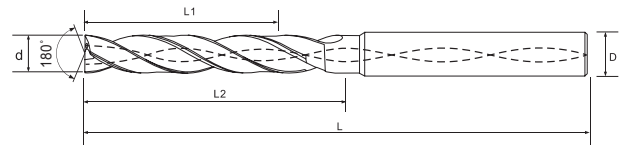
★ Perfect 最推薦    ◎ Excellent 適合    ○ Good 佳

Coating 塗層	Carbon steel, Alloy steel 碳素鋼, 合金鋼	Pre-hardened steel 預硬鋼	High-hardened 高硬度鋼					Stainless steel 不鏽鋼	Cast iron 鑄鐵	Copper alloy 銅合金, 銅	Aluminum alloy 鋁合金	Titanium alloy 鈦合金	Nickel/Inconel alloy 鎳基合金
		~45HRC	~50HRC	~55HRC	~60HRC	~65HRC							
nACRo	◎	○					○	○					
ZrN-A	○						◎	○	○	○	○		

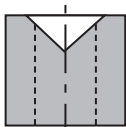
# 5xD Flat Drill with Coolant Hole 5FDC 內冷平頭鑽



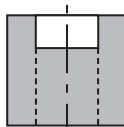
切削條件表 **P182**  
Cutting Condition



MODE 型號		Dimension 規格				
Coating 塗層		Diameter	Effective Drill Depth	Flute Length	Shank Diameter	Full Length
nACRo	ZrN-A	d 刃徑	L1 有效深度	L2 溝長	D 直徑	L 全長
5FDC0782 nACRo	5FDC0782 ZrN-A	7.8	50.7	54.6	8	95
5FDC0792 nACRo	5FDC0792 ZrN-A	7.9	51.4	55.3	8	95
5FDC0802 nACRo	5FDC0802 ZrN-A	8.0	52.0	56.0	8	95
5FDC0812 nACRo	5FDC0812 ZrN-A	8.1	52.7	56.7	10	100
5FDC0822 nACRo	5FDC0822 ZrN-A	8.2	53.3	57.4	10	100
5FDC0832 nACRo	5FDC0832 ZrN-A	8.3	54.0	58.1	10	100
5FDC0842 nACRo	5FDC0842 ZrN-A	8.4	54.6	58.8	10	100
5FDC0852 nACRo	5FDC0852 ZrN-A	8.5	55.3	59.5	10	100
5FDC0862 nACRo	5FDC0862 ZrN-A	8.6	55.9	60.2	10	105
5FDC0872 nACRo	5FDC0872 ZrN-A	8.7	56.6	60.9	10	105
5FDC0882 nACRo	5FDC0882 ZrN-A	8.8	57.2	61.6	10	105
5FDC0892 nACRo	5FDC0892 ZrN-A	8.9	57.9	62.3	10	105
5FDC0902 nACRo	5FDC0902 ZrN-A	9.0	58.5	63.0	10	105
5FDC0912 nACRo	5FDC0912 ZrN-A	9.1	59.2	63.7	10	110
5FDC0922 nACRo	5FDC0922 ZrN-A	9.2	59.8	64.4	10	110
5FDC0932 nACRo	5FDC0932 ZrN-A	9.3	60.5	65.1	10	110
5FDC0942 nACRo	5FDC0942 ZrN-A	9.4	61.1	65.8	10	110
5FDC0952 nACRo	5FDC0952 ZrN-A	9.5	61.8	66.5	10	110
5FDC0962 nACRo	5FDC0962 ZrN-A	9.6	62.4	67.2	10	110
5FDC0972 nACRo	5FDC0972 ZrN-A	9.7	63.1	67.9	10	110
5FDC0982 nACRo	5FDC0982 ZrN-A	9.8	63.7	68.6	10	110
5FDC0992 nACRo	5FDC0992 ZrN-A	9.9	64.4	69.3	10	110
5FDC1002 nACRo	5FDC1002 ZrN-A	10.0	65.0	70.0	10	110
5FDC1012 nACRo	5FDC1012 ZrN-A	10.1	65.7	70.7	12	120



Position Hole 定位孔



Guide Holes 引導孔

**Recommend: Use a position hole or a guide hole in advance.** 建議: 使用定位孔或引導孔

- Position Hole: 1xD to 3xD deep drilled to assure consistent and precise holes with long drill, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
定位孔: 鑽孔1xD和3xD深孔, 以確保長鑽孔的一致和精確孔, 且定位孔應比鑽頭直徑大0.5mm左右。
- Guide Holes: In order to assure precise hole position, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
引導孔: 確保孔位置精度, 且引導孔應比鑽頭直徑大0.1mm左右。

Application 適用材質:

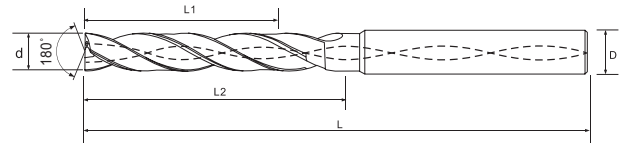
★ Perfect 最推薦    ◎ Excellent 適合    ○ Good 佳

Coating 塗層	Carbon steel, Alloy steel 炭素鋼, 合金鋼	Pre-hardened steel 預硬鋼	High-hardened 高硬度鋼					Stainless steel 不鏽鋼	Cast iron 鑄鐵	Copper alloy 銅合金, 銅	Aluminum alloy 鋁合金	Titanium alloy 鈦合金	Nickel/Inconel alloy 鎳基合金
		~45HRC	~50HRC	~55HRC	~60HRC	~65HRC							
nACRo	◎	○					○	○					
ZrN-A	○						◎	○	○	○	○		

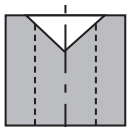
## 5xD Flat Drill with Coolant Hole 5FDC 內冷平頭鑽



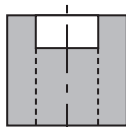
切削條件表 **P182**  
Cutting Condition



MODE 型號		Dimension 規格				
Coating 塗層		Diameter	Effective Drill Depth	Flute Length	Shank Diameter	Full Length
nACRo	ZrN-A	d 刃徑	L1 有效深度	L2 溝長	D 直徑	L 全長
5FDC1022 nACRo	5FDC1022 ZrN-A	10.2	66.3	71.4	12	120
5FDC1032 nACRo	5FDC1032 ZrN-A	10.3	67.0	72.1	12	120
5FDC1042 nACRo	5FDC1042 ZrN-A	10.4	67.6	72.8	12	120
5FDC1052 nACRo	5FDC1052 ZrN-A	10.5	68.3	73.5	12	120
5FDC1062 nACRo	5FDC1062 ZrN-A	10.6	68.9	74.2	12	125
5FDC1072 nACRo	5FDC1072 ZrN-A	10.7	69.6	74.9	12	125
5FDC1082 nACRo	5FDC1082 ZrN-A	10.8	70.2	75.6	12	125
5FDC1092 nACRo	5FDC1092 ZrN-A	10.9	70.9	76.3	12	125
5FDC1102 nACRo	5FDC1102 ZrN-A	11.0	71.5	77.0	12	125
5FDC1112 nACRo	5FDC1112 ZrN-A	11.1	72.2	77.7	12	125
5FDC1122 nACRo	5FDC1122 ZrN-A	11.2	72.8	78.4	12	125
5FDC1132 nACRo	5FDC1132 ZrN-A	11.3	73.5	79.1	12	125
5FDC1142 nACRo	5FDC1142 ZrN-A	11.4	74.1	79.8	12	125
5FDC1152 nACRo	5FDC1152 ZrN-A	11.5	74.8	80.5	12	125
5FDC1162 nACRo	5FDC1162 ZrN-A	11.6	75.4	81.2	12	130
5FDC1172 nACRo	5FDC1172 ZrN-A	11.7	76.1	81.9	12	130
5FDC1182 nACRo	5FDC1182 ZrN-A	11.8	76.7	82.6	12	130
5FDC1192 nACRo	5FDC1192 ZrN-A	11.9	77.4	83.3	12	130
5FDC1202 nACRo	5FDC1202 ZrN-A	12.0	78.0	84.0	12	130
5FDC1252 nACRo	5FDC1252 ZrN-A	12.5	81.3	87.5	14	145
5FDC1302 nACRo	5FDC1302 ZrN-A	13.0	84.5	91.0	14	145
5FDC1352 nACRo	5FDC1352 ZrN-A	13.5	87.8	94.5	14	150
5FDC1402 nACRo	5FDC1402 ZrN-A	14.0	91.0	98.0	14	150



Position Hole 定位孔



Guide Holes 引導孔

**Recommend: Use a position hole or a guide hole in advance.** 建議: 使用定位孔或引導孔

- Position Hole: 1xD to 3xD deep drilled to assure consistent and precise holes with long drill, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
定位孔: 鑽孔1xD和3xD深孔, 以確保長鑽孔的一致和精確孔, 且定位孔應比鑽頭直徑大0.5mm左右。
- Guide Holes: In order to assure precise hole position, and the guide hole should be bigger around 0.1mm than the diameter of drill.  
引導孔: 確保孔位置精度, 且引導孔應比鑽頭直徑大0.1mm左右。

Application 適用材質:

★ Perfect 最推薦    ◎ Excellent 適合    ○ Good 佳

Coating 塗層	Carbon steel, Alloy steel 炭素鋼, 合金鋼	Pre-harden steel 預硬鋼	High-hardened 高硬度鋼					Stainless steel 不鏽鋼	Cast iron 鑄鐵	Copper alloy 銅合金, 銅	Aluminum alloy 鋁合金	Titanium alloy 鈦合金	Nickel/Inconel alloy 鎳基合金
		~45HRC	~50HRC	~55HRC	~60HRC	~65HRC							
nACRo	◎	○						○	○				
ZrN-A	○							◎	○	○	○	○	