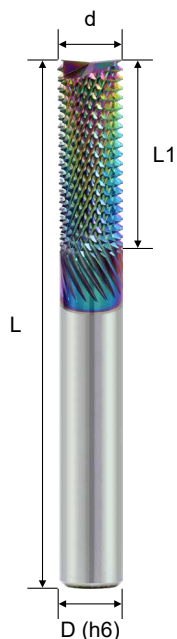


A300 - Square · CFRP Roughing · 7~17F 平銑刀 - CFRP 粗銑用 · 7~17 刃

- For CFRP/Kevlar rough milling.
- Right helix and left helix design.
- NDLC - Nano DLC coating provides exceptional wear resistance and good tool life.
- DIA - Diamond coating provides exceptional wear resistance and good tool life.



ECSSR



Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (Z)
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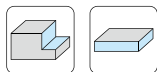
NDLC Nano DLC coating

ECSSR703000L	3	9	60	6	7
ECSSR804000L	4	12	60	6	8
ECSSR106000L	6	18	60	6	11
ECSSR408000L	8	24	60	8	14
ECSSR610000L	10	30	75	10	16
ECSSR712000L	12	36	100	12	17



DIA Diamond Coating

ECSSR703000D	3	9	60	6	7
ECSSR804000D	4	12	60	6	8
ECSSR106000D	6	18	60	6	11
ECSSR408000D	8	24	60	8	14
ECSSR610000D	10	30	75	10	16
ECSSR712000D	12	36	100	12	17



d Tolerance	
d ≤ 6	0 ~ -0.02
6 < d ≤ 12	0 ~ -0.03
d > 12	0 ~ -0.04

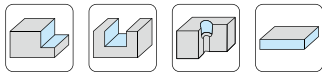
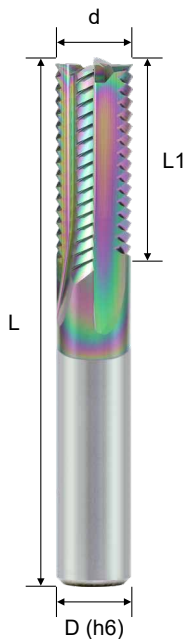
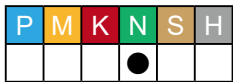
Material	CFRP		GFRP	
	Vc		Vc	
	140 ~ 200 m/min		90 ~ 140 m/min	
Dia. (d)	RPM	fz (mm/tooth)	RPM	fz (mm/tooth)
6	9020	0.020	6100	0.020
8	6760	0.030	4570	0.030
10	5410	0.030	3660	0.030
12	4510	0.035	3050	0.035
		$ap = 2d$ $ae \leq 0.35d$		

A300 - Square · Kevlar · 4F 平銑刀 - 克維拉纖維材料用 · 4 刃

- For Kevlar/CFRP general milling.
- Up & Down chip breaker and center cutting design.
- NDLC - Nano DLC coating provides exceptional wear resistance and good tool life.
- DIA - Diamond coating provides exceptional wear resistance and good tool life.



ECSSK



d Tolerance	
d ≤ 6	0 ~ -0.02
6 < d ≤ 12	0 ~ -0.03
d > 12	0 ~ -0.04

Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (Z)
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NDLC Nano DLC coating

ECSSK404000L	4	12	60	6	4
ECSSK406000L	6	20	60	6	4
ECSSK408000L	8	25	75	8	4
ECSSK410000L	10	30	75	10	4
ECSSK412000L	12	35	100	12	4



DIA Diamond Coating

ECSSK404000D	4	12	60	6	4
ECSSK406000D	6	20	60	6	4
ECSSK408000D	8	25	75	8	4
ECSSK410000D	10	30	75	10	4
ECSSK412000D	12	35	100	12	4

Material	Kevlar / CFRP			
	150 ~ 450 m/min		125 ~ 150 m/min	
Vc				
Dia. (d)	RPM	fz (mm/tooth)	RPM	fr (mm/rev.)
4	23800	0.03	11000	0.05
6	16000	0.05	7400	0.07
8	12000	0.07	5500	0.10
10	9600	0.10	4400	0.15
12	8000	0.12	3700	0.20

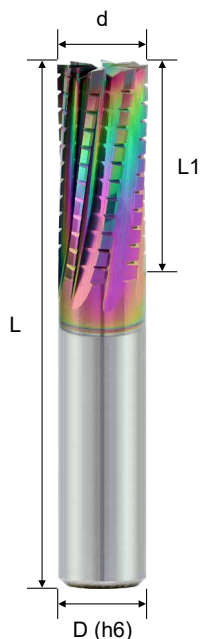
Solid End Milling

A300 - Square · CFRP Finishing · 6F / 8F 平銑刀 - CFRP 精銑用 · 6 刃 / 8 刃

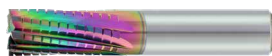
- For CFRP/GFRP multi-purpose finish milling.
- Multi flutes and fine pitch nick geometry design.
- NDLC - Nano DLC coating provides exceptional wear resistance and good tool life.
- DIA - Diamond coating provides exceptional wear resistance and good tool life.



ECSSF



Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (Z)
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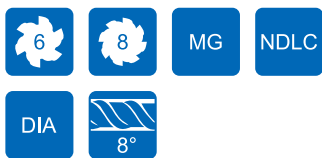
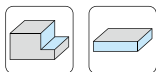
NDLC Nano DLC coating

ECSSF606000L	6	15	60	6	6
ECSSF608000L	8	20	75	8	6
ECSSF810000L	10	25	75	10	8
ECSSF812000L	12	30	100	12	8



DIA Diamond Coating

ECSSF606000D	6	15	60	6	6
ECSSF608000D	8	20	75	8	6
ECSSF810000D	10	25	75	10	8
ECSSF812000D	12	30	100	12	8



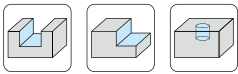
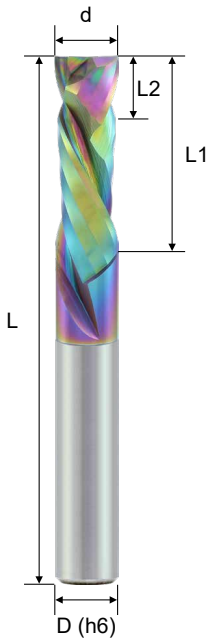
d Tolerance	
d ≤ 6	0 ~ -0.02
6 < d ≤ 12	0 ~ -0.03
d > 12	0 ~ -0.04

Material	CFRP		GFRP	
	Vc		Vc	
	160 ~ 220 m/min		100 ~ 160 m/min	
Dia. (d)	RPM	fz (mm/tooth)	RPM	fz (mm/tooth)
6	10080	0.020	6900	0.020
8	7560	0.030	5170	0.030
10	6050	0.030	4140	0.030
12	5040	0.035	3450	0.035
	ap = 1.5d ae ≤ 0.35d			

- Suitable for CFRP/GFRP.
- Up and down cut design counteracts cutting forces to avoid burrs, tears and delamination.
- NDLC - Nano DLC coating provides exceptional wear resistance and good tool life.
- DIA - Diamond coating provides exceptional wear resistance and good tool life.

ASIA
(Metric)

ECSSD



d Tolerance	
d ≤ 6	0 ~ -0.03
6 < d ≤ 12	0 ~ -0.04
d > 12	0 ~ -0.05

Order No.	Dia. (d)	CL (L1)	Overlap Center (L2)	OAL (L)	Shank (D)	Flutes (Z)
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NDLC Nano DLC coating

Unit : Metric

ECSSD206180L	6	18	6	60	6	2
ECSSD208240L	8	24	8	75	8	2
ECSSD210300L	10	30	10	75	10	2
ECSSD310300L	10	30	10	75	10	3
ECSSD212360L	12	36	12	75	12	2
ECSSD312360L	12	36	12	75	12	3

Unit : Inch

ECS3D20250700L	1/4	3/4	1/4	2 1/2	1/4	2
ECS3D20311000L	5/16	1	5/16	3	5/16	2
ECS3D20371100L	3/8	1 1/8	3/8	3	3/8	2
ECS3D30371100L	3/8	1 1/8	3/8	3	3/8	3
ECS3D20501500L	1/2	1 1/2	1/2	3	1/2	2
ECS3D30501500L	1/2	1 1/2	1/2	3	1/2	3



DIA Diamond Coating

Unit : Metric

ECSSD206180D	6	18	6	60	6	2
ECSSD208240D	8	24	8	75	8	2
ECSSD210300D	10	30	10	75	10	2
ECSSD310300D	10	30	10	75	10	3
ECSSD212360D	12	36	12	75	12	2
ECSSD312360D	12	36	12	75	12	3

Unit : Inch

ECS3D20250700D	1/4	3/4	1/4	2 1/2	1/4	2
ECS3D20311000D	5/16	1	5/16	3	5/16	2
ECS3D20371100D	3/8	1 1/8	3/8	3	3/8	2
ECS3D30371100D	3/8	1 1/8	3/8	3	3/8	3
ECS3D20501500D	1/2	1 1/2	1/2	3	1/2	2
ECS3D30501500D	1/2	1 1/2	1/2	3	1/2	3