K2EAL

ALU-CUT SERIES

Work Materials

P	M	K	N
▢	▢	▢	▣

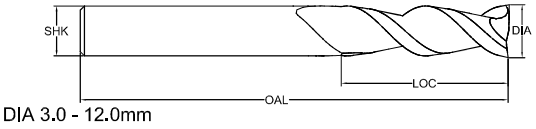
SOLID CARBIDE 2-FLUTE SQUARE END MILL

2刃钨钢平端铣刀

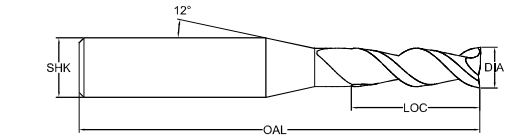
FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Length of Cut (LOC) is 2 X **D**c (Cutter Diameter).

DIA Tolerance	
Dia ≤ 6 mm	h8
Dia > 6 mm	h9
SHK Tolerance	
h6	



DIA 3.0 - 12.0mm



DIA 1.0 - 2.5mm

PRODUCT CODE	DIA	LOC	OAL	SHK
K2EAL 010U	**1.0**	2	45	3
K2EAL 015U	**1.5**	3	45	3
K2EAL 020U	**2.0**	4	45	3
K2EAL 025U	**2.5**	5	45	3
K2EAL 030U	**3.0**	6	50	3
K2EAL 040U	**4.0**	8	50	4
K2EAL 050U	**5.0**	10	55	5
K2EAL 060U	**6.0**	12	55	6
K2EAL 080U	**8.0**	16	70	8
K2EAL 100U	**10.0**	20	75	10
K2EAL 120U	**12.0**	24	80	12

K2ERAL

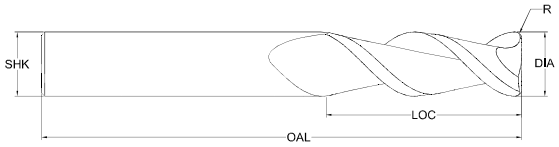
ALU-CUT SERIES

Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 2-FLUTE CORNER RADIUS END MILL

2刃钨钢R-角平端铣刀



FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Length of Cut (LOC) is 3 X **D**c (Cutter Diameter).

DIA Tolerance
h9
SHK Tolerance
h6

PRODUCT CODE	DIA	R	LOC	OAL	SHK
K2ERAL 03 030U	**3.0**	0.3	9	38	3
K2ERAL 05 030U	**3.0**	0.5	9	38	3
K2ERAL 05 040U	**4.0**	0.5	12	50	4
K2ERAL 10 040U	**4.0**	1.0	12	50	4
K2ERAL 05 050U	**5.0**	0.5	15	50	5
K2ERAL 10 050U	**5.0**	1.0	15	50	5
K2ERAL 05 060U	**6.0**	0.5	18	57	6
K2ERAL 10 060U	**6.0**	1.0	18	57	6
K2ERAL 20 060U	**6.0**	2.0	18	57	6
K2ERAL 05 080U	**8.0**	0.5	24	63	8
K2ERAL 10 080U	**8.0**	1.0	24	63	8
K2ERAL 20 080U	**8.0**	2.0	24	63	8
K2ERAL 05 100U	**10.0**	0.5	30	72	10
K2ERAL 10 100U	**10.0**	1.0	30	72	10
K2ERAL 20 100U	**10.0**	2.0	30	72	10
K2ERAL 05 120U	**12.0**	0.5	36	73	12
K2ERAL 10 120U	**12.0**	1.0	36	73	12
K2ERAL 20 120U	**12.0**	2.0	36	73	12
K2ERAL 30 120U	**12.0**	3.0	36	73	12

K3EAL

ALU-CUT SERIES

Work Materials

P	M	K	N
▢	▢	▢	■

SOLID CARBIDE 3-FLUTE SQUARE END MILL

3刃钨钢平端铣刀

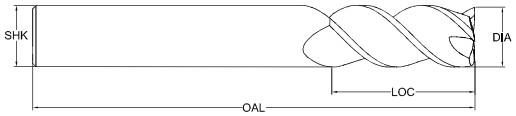
MG | HELIX 45° | GASH LAND

FEATURES:

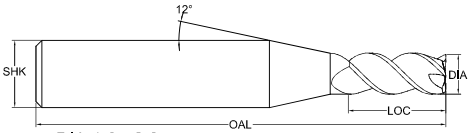
Ideal for high efficiency machining of aluminum & non-ferrous metals.

- Special attention & enhancements made on its flute geometry to ensure smoother chip evacuation that gives exceptional surface finishes.
- High rake angles withlow cutting resistance enable roughing & finishing operations in one single tool.
- Enlarged core diameter improves rigidity, thus minimizing deflection for stable cutting.

DIA Tolerance	
Dia ≤ 6 mm	h8
Dia > 6 mm	h9
SHK Tolerance	
h6	



DIA 3.0 - 20.0mm



DIA 1.0 - 2.0mm

PRODUCT CODE	DIA	LOC	OAL	SHK
K3EAL 010U	**1.0**	3	38	3
K3EAL 020U	**2.0**	6	38	3
K3EAL 030U	**3.0**	8	38	3
K3EAL 040U	**4.0**	11	50	4
K3EAL 050U	**5.0**	13	50	5
K3EAL 060U	**6.0**	15	57	6
K3EAL 080U	**8.0**	19	63	8
K3EAL 100U	**10.0**	23	72	10
K3EAL 120U	**12.0**	26	73	12
K3EAL 160U	**16.0**	30	92	16
K3EAL 200U	**20.0**	38	100	20

K3EALP

ALU-CUT SERIES

Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 3-FLUTE SQUARE END MILL (POLISHED FLUTES)

3刃钨钢平端铣刀（高光）

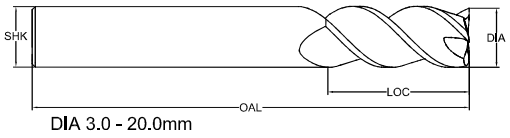
MG | HELIX 45° | GASH LAND

FEATURES:

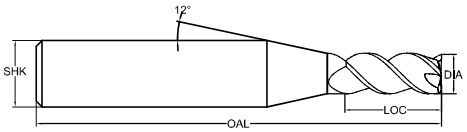
Ideal for high efficiency machining of aluminum & non-ferrous metals.

- Special attention & enhancements made on its flute geometry to ensure smoother chip evacuation that gives exceptional surface finishes.
- High rake angles withlow cutting resistance enable roughing & finishing operations in one single tool.
- Enlarged core diameter improves rigidity, thus minimizing deflection for stable cutting.

DIA Tolerance	
Dia ≤ 6 mm	h8
Dia > 6 mm	h9
SHK Tolerance	
h6	



DIA 3.0 - 20.0mm



DIA 1.0 - 2.0mm

PRODUCT CODE	DIA	LOC	OAL	SHK
K3EALP 010U	**1.0**	3	38	3
K3EALP 020U	**2.0**	6	38	3
K3EALP 030U	**3.0**	8	38	3
K3EALP 040U	**4.0**	11	50	4
K3EALP 050U	**5.0**	13	50	5
K3EALP 060U	**6.0**	15	57	6
K3EALP 080U	**8.0**	19	63	8
K3EALP 100U	**10.0**	23	72	10
K3EALP 120U	**12.0**	26	73	12
K3EALP 160U	**16.0**	30	92	16
K3EALP 200U	**20.0**	38	100	20

K3EALF

ALU-CUT SERIES

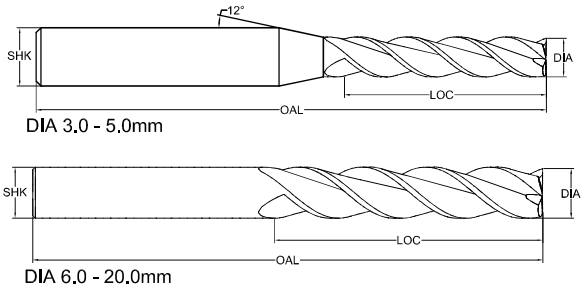
Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 3-FLUTE LONG FLUTE SQUARE END MILL

3刃钨钢长刃平端铣刀

MG | HELIX 40° | GASH LAND



FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Length of Cut (LOC) is 4 X **D**c (Cutter Diameter).

PRODUCT CODE	DIA	LOC	OAL	SHK
K3EALF 030U	**3.0**	12	50	6
K3EALF 040U	**4.0**	16	55	6
K3EALF 050U	**5.0**	20	60	6
K3EALF 060U	**6.0**	24	65	6
K3EALF 080U	**8.0**	32	90	8
K3EALF 100U	**10.0**	40	100	10
K3EALF 120U	**12.0**	48	110	12
K3EALF 160U	**16.0**	64	160	16
K3EALF 200U	**20.0**	80	200	20

LOC = 4 x Dc

DIA Tolerance

+ 0 / - 0.020 mm

SHK Tolerance

h6

K3EAXLF

ALU-CUT SERIES

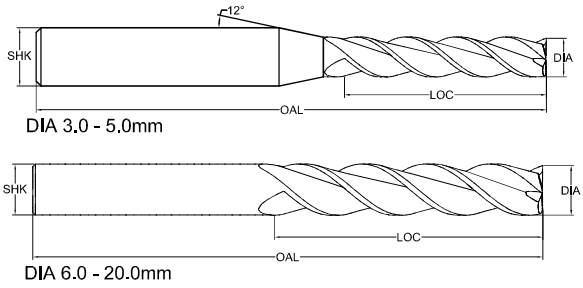
Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 3-FLUTE EXTRA LONG FLUTE SQUARE END MILL

3刃钨钢特长刃平端铣刀

MG | HELIX 40° | GASH LAND



FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Length of Cut (LOC) is 5 X **D**c (Cutter Diameter).

LOC = 5 x Dc

DIA Tolerance

+ 0.000 / - 0.020 mm

SHK Tolerance

h6

PRODUCT CODE	DIA	LOC	OAL	SHK
K3EAXLF 030U	**3.0**	15	55	6
K3EAXLF 040U	**4.0**	20	60	6
K3EAXLF 050U	**5.0**	25	65	6
K3EAXLF 060U	**6.0**	30	75	6
K3EAXLF 080U	**8.0**	40	90	8
K3EAXLF 100U	**10.0**	50	100	10
K3EAXLF 120U	**12.0**	60	110	12
K3EAXLF 160U	**16.0**	80	160	16
K3EAXLF 200U	**20.0**	100	200	20

K2BALN

ALU-CUT SERIES

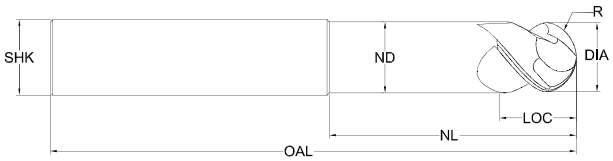
Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 2-FLUTE NECK RELIEF BALLNOSE END MILL

2刃钨钢深沟圆头铣刀

MG | HELIX 50° | U



FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Ideal for 3D contour machining and profiling applications.

PRODUCT CODE	DIA	R	ND	LOC	NL	OAL	SHK
K2BALN25 060U	**6.0**	3.0	5.4	5.5	25	57	6
K2BALN30 080U	**8.0**	4.0	7.2	7	30	63	8
K2BALN35 100U	**10.0**	5.0	9	8.5	35	72	10
K2BALN40 120U	**12.0**	6.0	11	10.5	40	73	12
K2BALN50 160U	**16.0**	8.0	14.5	14	50	92	16
K2BALN55 200U	**20.0**	10.0	18	17	55	100	20

DIA Tolerance	
Dia ≤ 6 mm	h8
Dia > 6 mm	h9
Radius Tolerance	
+ 0 / - 0.020 mm	
SHK Tolerance	
h6	

K3EROAL

ALU-CUT SERIES

Work Materials

P	M	K	N
▢	▢	▢	▣

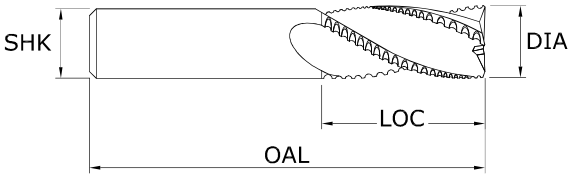
SOLID CARBIDE 3-FLUTE ROUGHING END MILL

3刃钨钢粗皮铣刀

FEATURES:

- Ideal for rapid stock removal of Aluminum & Aluminum Alloys.
- Exceptional chip breaker design prevent chips packing in flutes, thus improves in chip flow.
- Less horsepower is required and heavy roughing applications.

DIA Tolerance
+ 0.000 / - 0.050 mm
SHK Tolerance
h6



PRODUCT CODE	DIA	LOC	OAL	SHK
K3EROAL 060U	6.0	20	63	6
K3EROAL 080U	8.0	20	63	8
K3EROAL 100U	10.0	25	70	10
K3EROAL 120U	12.0	25	73	12
K3EROAL 140U	14.0	30	83	14
K3EROAL 160U	16.0	30	83	16
K3EROAL 180U	18.0	35	100	18
K3EROAL 200U	20.0	38	100	20
K3EROAL 250U	25.0	50	100	25

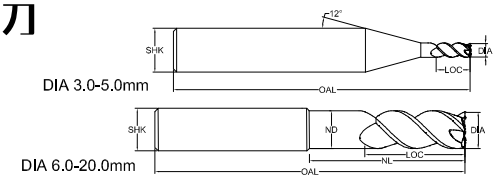
K3EALN / K3EARLN

Work Materials

P	M	K	N
▢	▢	▢	▣

SOLID CARBIDE 3-FLUTE LONG NECK RELIEF SQUARE / CORNER RADIUS END MILL

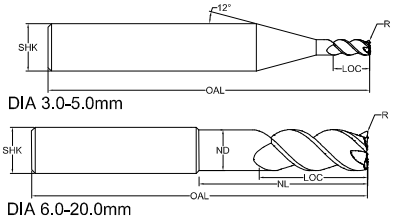
3刃钨钢长颈深沟平端铣刀/R-角平端铣刀



FEATURES:

- Suitable for high speed machining in aluminum and other non-ferrous materials, excellent surface finishes, superior chip removal.
- Neck relief design allows extended reach of cutting areas with cutting stability.

PRODUCT	DIA	R	ND	LOC	NL	OAL	SHK
Square End Mill							
K3EALN 09 030U	**3.0**	-	2.8	4.5	9	50	6
K3EALN 12 040U	**4.0**	-	3.7	6	12	50	6
K3EALN 15 050U	**5.0**	-	4.6	7.5	15	50	6
K3EALN 18 060U	**6.0**	-	5.5	9	18	57	6
K3EALN 24 080U	**8.0**	-	7.3	12	24	70	8
K3EALN 30 100U	**10.0**	-	9.2	15	30	80	10
K3EALN 36 120U	**12.0**	-	11	18	36	90	12
K3EALN 48 160U	**16.0**	-	14.5	24	48	110	16
K3EALN 60 200U	**20.0**	-	18.2	30	60	125	20



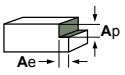
PRODUCT CODE	DIA	R	ND	LOC	NL	OAL	SHK
Corner Radius End Mill							
K3ERALN 05 030U	**3.0**	0.5	2.8	4.5	9	50	6
K3ERALN 05 040U	**4.0**	0.5	3.7	6	12	50	6
K3ERALN 05 050U	**5.0**	0.5	4.6	7.5	15	50	6
K3ERALN 05 060U	**6.0**	0.5	5.5	9	18	57	6
K3ERALN 10 060U	**6.0**	1.0	5.5	9	18	57	6
K3ERALN 05 080U	**8.0**	0.5	7.3	12	24	70	8
K3ERALN 10 080U	**8.0**	1.0	7.3	12	24	70	8
K3ERALN 20 080U	**8.0**	2.0	7.3	12	24	70	10
K3ERALN 05 100U	**10.0**	0.5	9.2	15	30	80	10
K3ERALN 10 100U	**10.0**	1.0	9.2	15	30	80	10
K3ERALN 20 100U	**10.0**	2.0	9.2	15	30	80	10
K3ERALN 05 120U	**12.0**	0.5	11	18	36	90	12
K3ERALN 10 120U	**12.0**	1.0	11	18	36	90	12
K3ERALN 20 120U	**12.0**	2.0	11	18	36	90	12
K3ERALN 05 160U	**16.0**	0.5	14.5	24	48	110	16
K3ERALN 10 160U	**16.0**	1.0	14.5	24	48	110	16
K3ERALN 20 160U	**16.0**	2.0	14.5	24	48	110	16
K3ERALN 30 160U	**16.0**	3.0	14.5	24	48	110	16
K3ERALN 05 200U	**20.0**	0.5	18.2	30	60	125	20
K3ERALN 10 200U	**20.0**	1.0	18.2	30	60	125	20
K3ERALN 20 200U	**20.0**	2.0	18.2	30	60	125	20
K3ERALN 30 200U	**20.0**	3.0	18.2	30	60	125	20

DIA Tolerance
+0/-0.020 mm
SHK Tolerance
h6

Operating Parameters For ALU-CUT Series

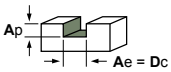
K2EAL

SIDE MILLING 侧面切削



ISO WORK MATERIAL CODE	N	Aluminium Alloy		N	High-Silicon Aluminium	
Dc (mm)		n (min^{-1})	Vf (mm/min)		n (min^{-1})	Vf (mm/min)
6.0		33000	5370		10600	1430
8.0		24900	5150		8000	1390
10.0		19700	5080		6400	1360
12.0		16500	4980		5300	1320
16.0		12400	4890		4000	1300
20.0		10000	4840		3200	1290
25.0		8000	4780		2500	1280
Depth of Cut (DOC)			**A**p (mm) = 1.0 x **D**c		**A**e (mm) = 0.5 x **D**c	

SLOT MILLING 槽切削



6.0	19800	3230	6400	860
8.0	14700	3090	4800	830
10.0	11500	3050	3800	810
12.0	10000	2990	3200	790
16.0	7500	2930	2400	780
20.0	6000	2900	1900	770
25.0	4800	2870	1500	770
Depth of Cut (DOC)		**A**p (mm) = 1.0 x **D**c	**A**e (mm) = 1.0 x **D**c	

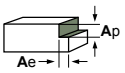
Dc = Cutter Diameter (mm) 切削直径
Ap = Depth of cut (mm) 切削深度

n = Spindle Speed (mm^{-1}) 转速

Vf = Feed Rate (mm/min) 进给速
Ae = Width of Cut (mm) 切削宽度

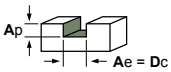
K2ERAL

SIDE MILLING 侧面切削



ISO WORK MATERIAL CODE	N	Aluminium & Aluminium Alloy	
Dc (mm)		n (min^{-1})	Vf (mm/min)
3.0		10500	900
4.0		10500	1100
5.0		10500	1300
6.0		10500	1500
8.0		8200	1800
10.0		8200	2100
12.0		8200	2600
Depth of Cut (DOC)		**A**p (mm) = 1.0 x **D**c	**A**e (mm) = 0.25 x **D**c

SLOT MILLING 槽切削

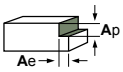


3.0		10000	700
4.0		10000	900
5.0		10000	1000
6.0		10000	1200
8.0		8000	1400
10.0		8000	1700
12.0		8000	2100
Depth of Cut (DOC)		**A**p (mm) = 0.5 x **D**c	**A**e (mm) = 1.0 x **D**c

Dc = Cutter Diameter (mm) 切削直径
Ap = Depth of cut (mm) 切削深度
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ae = Width of Cut (mm) 切削宽度

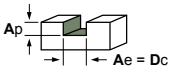
K3EAL
K3EALP

SIDE MILLING 侧面切削



ISO WORK MATERIAL CODE	N Aluminium		N Aluminium Alloy		N Cast Aluminium	
Dc (mm)	n (min^{-1})	n (min^{-1})	n (min^{-1})	n (min^{-1})	n (min^{-1})	n (min^{-1})
1.0	20000	1100	20000	1100	20000	1100
2.0	20000	1500	20000	1500	20000	1500
3.0	20000	2000	20000	2200	20000	2200
4.0	20000	2200	20000	2500	18300	2300
5.0	19700	2500	20000	3100	14600	2100
6.0	16500	2500	18600	3500	12200	2100
8.0	12300	2500	13900	3500	9200	2200
10.0	9900	2500	11100	3800	7300	2200
12.0	8200	2700	9300	4100	6100	2200
16.0	7500	1800	8400	2600	5600	1500
20.0	6000	1500	6700	2000	4500	1300
Depth of Cut (DOC)			**A**p (mm) = 1.0 x **D**c		**A**e (mm) = 0.25 x **D**c	

SLOT MILLING 槽切削

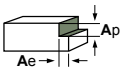


1.0	20000	600	20000	600	20000	600
2.0	20000	900	20000	900	20000	900
3.0	20000	1200	20000	1400	20000	1200
4.0	20000	1400	20000	1800	18300	1400
5.0	19700	1500	20000	2200	14600	1400
6.0	16500	1600	18600	2500	12200	1400
8.0	12300	1700	13900	2600	9200	1400
10.0	9900	1700	11100	2600	7300	1400
12.0	8200	1900	9300	2600	6100	1500
16.0	7500	1500	8400	1700	5600	1200
20.0	6000	1300	6700	1500	4500	900
Depth of Cut (DOC)			**A**p (mm) = 1.0 x **D**c		**A**e (mm) = 0.75 x **D**c	

Dc = Cutter Diameter (mm) 切削直径
Ap = Depth of cut (mm) 切削深度
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ae = Width of Cut (mm) 切削宽度

K3EALF
K3EAXLF

SIDE MILLING 侧面切削



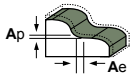
ISO WORK MATERIAL CODE	N	Aluminium & Aluminium Alloy	
Dc (mm)		**n** (min^{-1})	**V**f (mm/min)
3.0		42000	1000
4.0		31000	1400
5.0		25000	1800
6.0		21000	2000
8.0		16000	2200
10.0		12700	2400
12.0		10600	2200
16.0		8000	2000
20.0		6300	1800
Depth of Cut (DOC)		**A**p (mm) = 2.5 x **D**c	**A**e (mm) = 0.1 x **D**c

Note:
- The cutting data is reference value only. Please adjust accordingly to your real working conditions.
- If RPM is lower than reference value, please reduce feedrate by the same proportion.
- Reduce cutting parameter should vibration occurs during machining.

Dc = Cutter Diameter (mm) 切削直径
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ap = Depth of cut (mm) 切削深度
Ae = Width of Cut (mm) 切削宽度

K2BALN

CONTOUR MILLING 等高切削

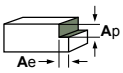


ISO WORK MATERIAL CODE	N	Aluminium Alloy		N	Copper Alloy	
Dc (mm)		n (min^{-1})	Vf (mm/min)		n (min^{-1})	Vf (mm/min)
Roughing						
6.0		14400	1450		4400	350
8.0		13600	1620		3700	400
10.0		12200	1900		3580	490
12.0		11500	2460		3400	650
16.0		9000	2150		2620	520
20.0		5800	1780		1700	450
Depth of Cut (DOC)			**A**p (mm) = 0.2 x **D**c		**A**e (mm) = 0.5 x **D**c	
Finishing						
6.0		18720	1880		5720	450
8.0		17680	2100		4810	520
10.0		15860	2470		4650	630
12.0		14950	3190		4420	840
16.0		11700	2790		3400	670
20.0		7540	2310		2210	580
Depth of Cut (DOC)			**A**p (mm) = 0.05 x **D**c		**A**e (mm) = 0.05 x **D**c	

Dc = Cutter Diameter (mm) 切削直径
Ap = Depth of cut (mm) 切削深度
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ae = Width of Cut (mm) 切削宽度

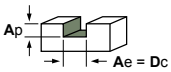
K3EROAL

SIDE MILLING 侧面切削



ISO WORK MATERIAL CODE	N	Aluminium Alloy		N	High-Silicon Aluminium	
Dc (mm)		n (min^{-1})	Vf (mm/min)		n (min^{-1})	Vf (mm/min)
6.0		33200	5370		10600	1430
8.0		24900	5150		8000	1390
10.0		19900	5080		6400	1360
12.0		16600	4980		5300	1320
16.0		12400	4890		4000	1300
20.0		10000	4840		3200	1290
25.0		8000	4780		2500	1280
Depth of Cut (DOC)			**A**p (mm) = 1.5 x **D**c		**A**e (mm) = 0.5 x **D**c	

SLOT MILLING 槽切削

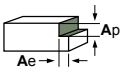


6.0	19900	3230	6400	860
8.0	14900	3090	4800	830
10.0	11900	3050	3800	810
12.0	10000	2990	3200	790
16.0	7500	2930	2400	780
20.0	6000	2900	1900	770
25.0	4800	2870	1500	770
Depth of Cut (DOC)		**A**p (mm) = 1.0 x **D**c	**A**e (mm) = 1.0 x **D**c	

Dc = Cutter Diameter (mm) 切削直径
Ap = Depth of cut (mm) 切削深度
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ae = Width of Cut (mm) 切削宽度

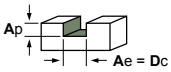
K3EALN
K3EARLN

SIDE MILLING 侧面切削



ISO WORK MATERIAL CODE	N	Aluminium & Aluminium Alloy	
Dc (mm)		n (min^{-1})	Vf (mm/min)
3.0		42000	1900
4.0		31000	2200
5.0		25000	2200
6.0		21000	2400
8.0		16000	2600
10.0		12700	3000
12.0		10600	3200
16.0		8000	3200
20.0		6300	3100
Depth of Cut (DOC)		Ap (mm) = 0.75 x Dc	Ae (mm) = 0.3 x Dc

SLOT MILLING 槽切削



3.0		42000	1340
4.0		31000	1400
5.0		25000	1480
6.0		21000	1640
8.0		16000	1720
10.0		12700	1940
12.0		10600	2100
16.0		7900	2100
20.0		6300	2100
Depth of Cut (DOC)		Ap (mm) = 0.75 x Dc	Ae (mm) = 1.0 x Dc

Note:
- The cutting data is reference value only. Please adjust accordingly to your real working conditions.
- If RPM is lower than reference value, please reduce feedrate by the same proportion.
- Reduce cutting parameter should vibration occurs during machining.

Dc = Cutter Diameter (mm) 切削直径
n = Spindle Speed (mm^{-1}) 转速
Vf = Feed Rate (mm/min) 进给速
Ap = Depth of cut (mm) 切削深度
Ae = Width of Cut (mm) 切削宽度