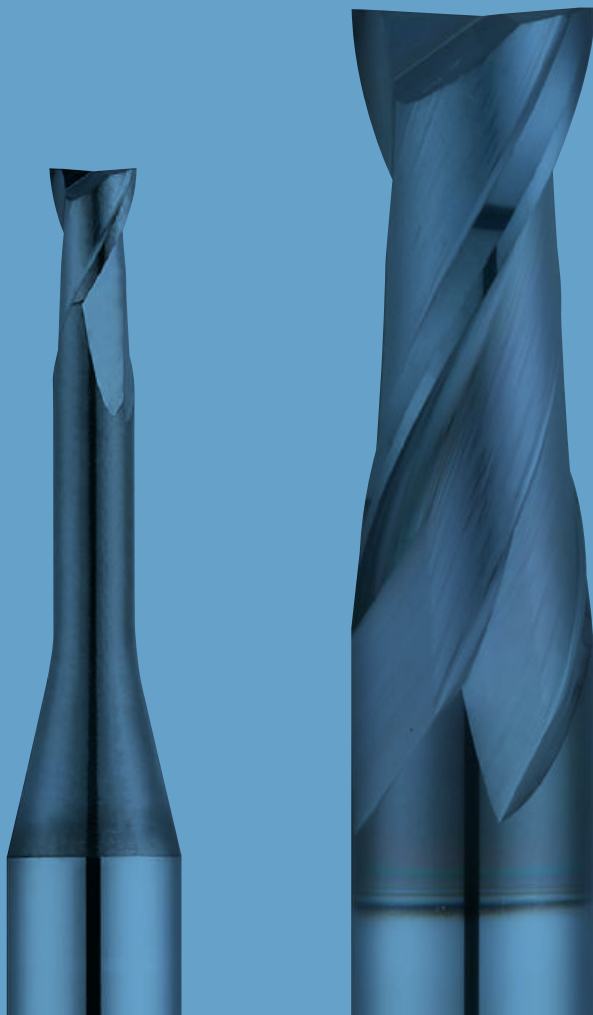


A-PLUS 08



R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

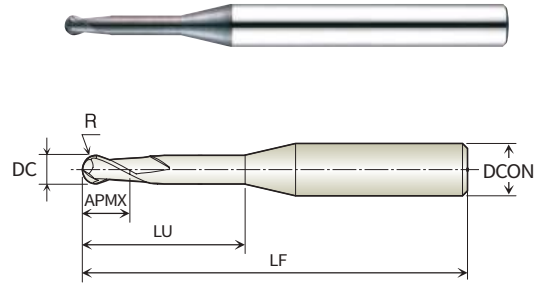
MULTI

Technical data

2KRB

2날 리브 볼 엔드밀 2 Flutes Rib Ball End Mills

DLC

page
No.308

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEPF	반경 RE	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRB-001-003-445	0.1	2	R0.05	0.1	0.3	4	45
2KRB-002-005-445	0.2	2	R0.1	0.2	0.5	4	45
2KRB-002-010-445	0.2	2	R0.1	0.2	1	4	45
2KRB-002-015-445	0.2	2	R0.1	0.2	1.5	4	45
2KRB-002-020-445	0.2	2	R0.1	0.2	2	4	45
2KRB-003-005-445	0.3	2	R0.15	0.3	0.5	4	45
2KRB-003-010-445	0.3	2	R0.15	0.3	1	4	45
2KRB-003-015-445	0.3	2	R0.15	0.3	1.5	4	45
2KRB-003-020-445	0.3	2	R0.15	0.3	2	4	45
2KRB-004-010-445	0.4	2	R0.2	0.4	1	4	45
2KRB-004-020-445	0.4	2	R0.2	0.4	2	4	45
2KRB-004-030-445	0.4	2	R0.2	0.4	3	4	45
2KRB-004-040-445	0.4	2	R0.2	0.4	4	4	45
2KRB-004-050-445	0.4	2	R0.2	0.4	5	4	45
2KRB-005-020-445	0.5	2	R0.25	0.5	2	4	45
2KRB-005-030-445	0.5	2	R0.25	0.5	3	4	45
2KRB-005-040-445	0.5	2	R0.25	0.5	4	4	45
2KRB-005-060-445	0.5	2	R0.25	0.5	6	4	45
2KRB-006-020-445	0.6	2	R0.3	0.6	2	4	45
2KRB-006-040-445	0.6	2	R0.3	0.6	4	4	45
2KRB-006-060-445	0.6	2	R0.3	0.6	6	4	45
2KRB-006-080-445	0.6	2	R0.3	0.6	8	4	45
2KRB-006-100-445	0.6	2	R0.3	0.6	10	4	45
2KRB-008-020-445	0.8	2	R0.4	0.8	2	4	45
2KRB-008-040-445	0.8	2	R0.4	0.8	4	4	45
2KRB-008-060-445	0.8	2	R0.4	0.8	6	4	45

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEPF	반경 RE	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRB-008-080-445	0.8	2	R0.4	0.8	8	4	45
2KRB-008-100-445	0.8	2	R0.4	0.8	10	4	45
2KRB-010-040-445	1	2	R0.5	1	4	4	45
2KRB-010-060-445	1	2	R0.5	1	6	4	45
2KRB-010-080-445	1	2	R0.5	1	8	4	45
2KRB-010-100-445	1	2	R0.5	1	10	4	45
2KRB-015-060-445	1.5	2	R0.75	1.5	6	4	45
2KRB-015-080-445	1.5	2	R0.75	1.5	8	4	45
2KRB-015-100-445	1.5	2	R0.75	1.5	10	4	45
2KRB-015-120-445	1.5	2	R0.75	1.5	12	4	45
2KRB-015-160-450	1.5	2	R0.75	1.5	16	4	50
2KRB-020-060-445	2	2	R1.0	2	6	4	45
2KRB-020-080-445	2	2	R1.0	2	8	4	45
2KRB-020-100-445	2	2	R1.0	2	10	4	45
2KRB-020-120-445	2	2	R1.0	2	12	4	45
2KRB-020-140-450	2	2	R1.0	2	14	4	50
2KRB-030-120-650	3	2	R1.5	3	12	6	50
2KRB-030-160-660	3	2	R1.5	3	16	6	60
2KRB-030-200-660	3	2	R1.5	3	20	6	60
2KRB-040-120-650	4	2	R2.0	4	12	6	50
2KRB-040-160-660	4	2	R2.0	4	16	6	60
2KRB-040-200-660	4	2	R2.0	4	20	6	60
2KRB-040-250-665	4	2	R2.0	4	25	6	65

R-PRO	
H-PRO	
A-PRO	
X-PRO	
SUS MILL	
S-PRO	
D-PRO	
A-PLUS	
AL-PRO	
AL MILL	
ABS	
MICRO GRAIN	
MULTI	
Technical data	

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

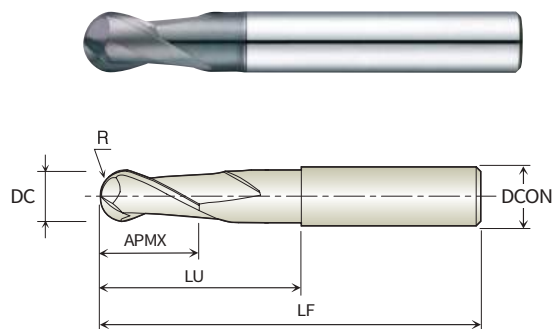
Technical data

2KSB

2날 슷 볼 엔드밀

2 Flutes Short Ball End Mills

DLC

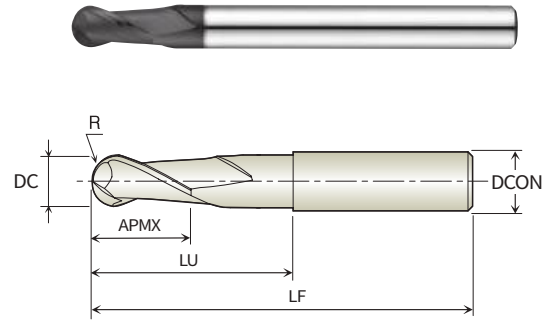
page
No.309

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEFP	반경 RE	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KSB-004-010-650	0.4	2	R0.2	0.4	1	6	50
2KSB-005-015-650	0.5	2	R0.25	0.5	1.5	6	50
2KSB-006-015-650	0.6	2	R0.3	0.6	1.5	6	50
2KSB-008-020-650	0.8	2	R0.4	0.8	2	6	50
2KSB-010-025-650	1	2	R0.5	1	2.5	6	50
2KSB-012-030-650	1.2	2	R0.6	1.2	3	6	50
2KSB-015-040-650	1.5	2	R0.75	1.5	4	6	50
2KSB-020-060-650	2	2	R1.0	2	6	6	50
2KSB-025-060-650	2.5	2	R1.25	2.5	6	6	50
2KSB-030-080-650	3	2	R1.5	3	8	6	50
2KSB-040-100-650	4	2	R2.0	4	10	6	50
2KSB-050-120-650	5	2	R2.5	5	12	6	50
2KSB-060-150-660	6	2	R3.0	7	15	6	60
2KSB-080-200-860	8	2	R4.0	10	20	8	60
2KSB-100-250-A70	10	2	R5.0	12	25	10	70
2KSB-120-300-C80	12	2	R6.0	14	30	12	80

2KLB

2날 롱 볼 엔드밀 2 Flutes Long Ball End Mills



(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEFP	반경 RE	날장 APMX	유효장 LU	샙크경 DCON	전장 LF
2KLB-010-030-650	1	2	R0.5	1.5	3	6	50
2KLB-015-040-650	1.5	2	R0.75	2	4	6	50
2KLB-020-060-660	2	2	R1.0	3	6	6	60
2KLB-030-080-660	3	2	R1.5	4	8	6	60
2KLB-040-100-670	4	2	R2.0	6	10	6	70
2KLB-050-120-680	5	2	R2.5	8	12	6	80
2KLB-060-150-690	6	2	R3.0	9	15	6	90
2KLB-080-200-8A0	8	2	R4.0	12	20	8	100
2KLB-100-250-AA0	10	2	R5.0	15	25	10	100
2KLB-120-300-CB0	12	2	R6.0	18	30	12	110

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

Technical data

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

Technical data

2KRR

2날 리브 코너 래디우스 엔드밀

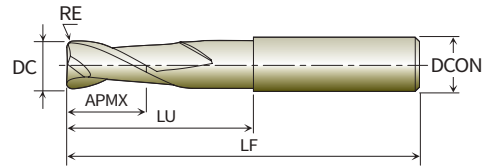
2 Flutes Rib Corner Radius End Mills

DLC



CR

30°

page
No.311

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEPF	반경 RE	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRR-015-R02-040-445	1.5	2	R0.2	2.3	4	4	45
2KRR-020-R03-060-445	2	2	R0.3	3	6	4	45
2KRR-020-R03-100-445	2	2	R0.3	3	10	4	45
2KRR-020-R05-060-445	2	2	R0.5	3	6	4	45
2KRR-020-R05-100-445	2	2	R0.5	3	10	4	45
2KRR-020-R05-140-450	2	2	R0.5	3	14	4	50
2KRR-020-R10-060-445	2	2	R1.0	3	6	4	45
2KRR-020-R10-100-445	2	2	R1.0	3	10	4	45
2KRR-030-R05-100-650	3	2	R0.5	4.5	10	6	50
2KRR-030-R05-120-650	3	2	R0.5	4.5	12	6	50
2KRR-030-R05-160-660	3	2	R0.5	4.5	16	6	60
2KRR-030-R05-200-660	3	2	R0.5	4.5	20	6	60
2KRR-040-R05-120-650	4	2	R0.5	6	12	6	50
2KRR-040-R05-160-660	4	2	R0.5	6	16	6	60
2KRR-040-R05-200-660	4	2	R0.5	6	20	6	60
2KRR-060-R05-180-660	6	2	R0.5	9	18	6	60
2KRR-060-R10-180-660	6	2	R1.0	9	18	6	60
2KRR-060-R15-180-660	6	2	R1.5	9	18	6	60
2KRR-080-R05-240-865	8	2	R0.5	12	24	8	65
2KRR-080-R10-240-865	8	2	R1.0	12	24	8	65
2KRR-080-R15-240-865	8	2	R1.5	12	24	8	65
2KRR-100-R05-300-A70	10	2	R0.5	15	30	10	70
2KRR-100-R10-300-A70	10	2	R1.0	15	30	10	70
2KRR-100-R15-300-A70	10	2	R1.5	15	30	10	70
2KRR-120-R05-300-C80	12	2	R0.5	18	30	12	80
2KRR-120-R10-300-C80	12	2	R1.0	18	30	12	80

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEFP	반경 RE	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRR-120-R15-300-C80	12	2	R1.5	18	30	12	80

R-PRO	
H-PRO	
A-PRO	
X-PRO	
SUS MILL	
S-PRO	
D-PRO	
A-PLUS	
AL-PRO	
AL MILL	
ABS	
MICRO GRAIN	
MULTI	
Technical data	

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

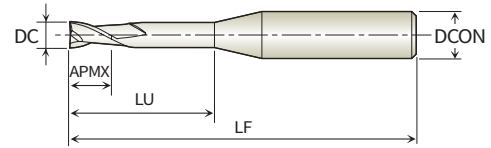
MULTI

Technical data

2KRE

2날 리브 플랫 엔드밀 2 Flutes Rib Flat End Mills

DLC

page
No.312

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZFP	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRE-001-003-445	0.1	2	0.15	0.3	4	45
2KRE-001-005-445	0.1	2	0.15	0.5	4	45
2KRE-002-005-445	0.2	2	0.3	0.5	4	45
2KRE-002-010-445	0.2	2	0.3	1	4	45
2KRE-002-015-445	0.2	2	0.3	1.5	4	45
2KRE-002-020-445	0.2	2	0.3	2	4	45
2KRE-003-005-445	0.3	2	0.45	0.5	4	45
2KRE-003-010-445	0.3	2	0.45	1	4	45
2KRE-003-015-445	0.3	2	0.45	1.5	4	45
2KRE-003-020-445	0.3	2	0.45	2	4	45
2KRE-004-010-445	0.4	2	0.6	1	4	45
2KRE-004-020-445	0.4	2	0.6	2	4	45
2KRE-004-030-445	0.4	2	0.6	3	4	45
2KRE-004-040-445	0.4	2	0.6	4	4	45
2KRE-004-050-445	0.4	2	0.6	5	4	45
2KRE-005-020-445	0.5	2	0.7	2	4	45
2KRE-005-040-445	0.5	2	0.7	4	4	45
2KRE-005-060-445	0.5	2	0.7	6	4	45
2KRE-006-020-445	0.6	2	0.9	2	4	45
2KRE-006-040-445	0.6	2	0.9	4	4	45
2KRE-006-060-445	0.6	2	0.9	6	4	45
2KRE-008-020-445	0.8	2	1.2	2	4	45
2KRE-008-040-445	0.8	2	1.2	4	4	45
2KRE-008-060-445	0.8	2	1.2	6	4	45
2KRE-008-080-445	0.8	2	1.2	8	4	45
2KRE-010-040-445	1	2	1.5	4	4	45

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEPF	날장 APMX	유효장 LU	생크경 DCON	전장 LF
2KRE-010-060-445	1	2	1.5	6	4	45
2KRE-010-080-445	1	2	1.5	8	4	45
2KRE-010-100-445	1	2	1.5	10	4	45
2KRE-015-060-445	1.5	2	2.3	6	4	45
2KRE-015-080-445	1.5	2	2.3	8	4	45
2KRE-015-100-445	1.5	2	2.3	10	4	45
2KRE-015-120-445	1.5	2	2.3	12	4	45
2KRE-015-160-450	1.5	2	2.3	16	4	50
2KRE-020-060-445	2	2	3	6	4	45
2KRE-020-080-445	2	2	3	8	4	45
2KRE-020-100-445	2	2	3	10	4	45
2KRE-020-120-445	2	2	3	12	4	45
2KRE-020-140-450	2	2	3	14	4	50
2KRE-030-120-650	3	2	4.5	12	6	50
2KRE-030-160-660	3	2	4.5	16	6	60
2KRE-030-200-660	3	2	4.5	20	6	60
2KRE-040-120-650	4	2	6	12	6	50
2KRE-040-160-660	4	2	6	16	6	60
2KRE-040-200-660	4	2	6	20	6	60
2KRE-040-250-665	4	2	6	25	6	65

R-PRO	
H-PRO	
A-PRO	
X-PRO	
SUS MILL	
S-PRO	
D-PRO	
A-PLUS	
AL-PRO	
AL MILL	
ABS	
MICRO GRAIN	
MULTI	
Technical data	

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

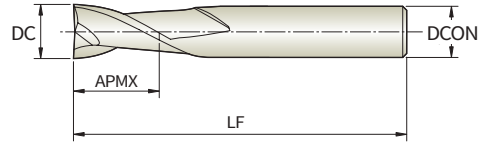
MULTI

Technical data

2KPE

2날 플랫 엔드밀 2 Flutes Flat End Mills

DLC

page
No.313

(Unit: mm)

제품코드 Product Code	직경 DC	날수 ZEFP	날장 APMX	생크경 DCON	전장 LF
2KPE-004-008-445	0.4	2	0.8	4	45
2KPE-005-010-445	0.5	2	1	4	45
2KPE-006-012-445	0.6	2	1.2	4	45
2KPE-007-014-445	0.7	2	1.4	4	45
2KPE-008-016-445	0.8	2	1.6	4	45
2KPE-010-025-645	1	2	2.5	6	45
2KPE-010-040-645	1	2	4	6	45
2KPE-012-040-645	1.2	2	4	6	45
2KPE-015-040-645	1.5	2	4	6	45
2KPE-020-060-645	2	2	6	6	45
2KPE-020-080-645	2	2	8	6	45
2KPE-025-080-650	2.5	2	8	6	50
2KPE-030-100-650	3	2	10	6	50
2KPE-030-120-650	3	2	12	6	50
2KPE-035-100-650	3.5	2	10	6	50
2KPE-040-120-650	4	2	12	6	50
2KPE-040-160-660	4	2	16	6	60
2KPE-050-150-650	5	2	15	6	50
2KPE-060-150-660	6	2	15	6	60
2KPE-060-240-660	6	2	24	6	60
2KPE-080-200-865	8	2	20	8	65
2KPE-100-250-A70	10	2	25	10	70
2KPE-120-300-C80	12	2	30	12	80

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

Technical data

A-PLUS

2KRB

High Speed Milling Condition

피삭재	동합금		
Workpiece	Copper Alloys		
Radius of Ball Nose	Depth of Cut Ad(mm)	RPM	Feed (mm/min)
R0.05	0.003~0.010	38,000~50,000	50~100
R0.1	0.010~0.020	38,000~50,000	200~500
R0.15	0.010~0.025	38,000~50,000	300~800
R0.2	0.010~0.030	30,000~42,000	300~1,000
R0.25	0.010~0.030	30,000~42,000	500~1,400
R0.3	0.010~0.100	24,000~40,000	350~1,600
R0.4	0.030~0.100	20,000~40,000	450~2,000
R0.5	0.050~0.200	20,000~40,000	800~3,000
R0.75	0.100~0.300	18,000~30,000	1,200~3,000
R1.0	0.100~0.400	12,000~20,000	1,200~3,000
R1.5	0.200~0.500	16,000~20,000	1,800~4,000
R2.0	0.300~0.500	16,000~20,000	2,100~4,000
Depth of Cut			

⚠ 경고 WARNING

1. 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
2. 절삭유 사용을 추천합니다.

1. Use a rigid precise machine and holder.
2. Recommend water soluble fluids.

A-PLUS 2KSB

High Speed Milling Condition

피삭재	동합금		
Workpiece	Copper Alloys		
"Radius of Ball Nose"	"Depth of Cut ap(mm)"	RPM	"Feed (mm/min)"
R0.2	0.010~0.030	30,000~42,000	300~1,000
R0.25	0.010~0.030	30,000~42,000	500~1,400
R0.3	0.010~0.100	24,000~40,000	350~1,600
R0.4	0.030~0.100	20,000~40,000	450~2,000
R0.5	0.050~0.200	20,000~40,000	800~3,000
R0.75	0.100~0.300	18,000~30,000	1,200~3,000
R1.0	0.100~0.400	12,000~20,000	1,200~3,000
R1.5	0.200~0.500	16,000~20,000	1,800~4,000
R2.0	0.300~0.500	16,000~20,000	2,100~4,000
R3.0	0.300~0.600	13,300~20,000	1,600~4,000
R4.0	0.300~0.800	10,000~16,000	1,400~3,200
R5.0	0.300~1.000	8,000~12,800	1,280~3,000
R6.0	0.300~1.200	6,600~10,000	1,190~2,660
Depth of Cut			

- △ 경고 WARNING**
- 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
 - 절삭유 사용을 추천합니다.

- Use a rigid precise machine and holder.
- Recommend water soluble fluids.

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

Technical data

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

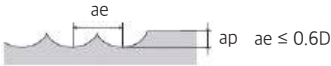
MULTI

Technical data

A-PLUS

2KLB

High Speed Milling Condition

피삭재	동합금		
Workpiece	Copper Alloys		
Radius of Ball Nose	Depth of Cut a_p (mm)	RPM	Feed (mm/min)
R0.5	0.050~0.200	20,000~40,000	800~3,000
R0.75	0.100~0.300	18,000~30,000	1,200~3,000
R1.0	0.100~0.400	12,000~20,000	1,200~3,000
R1.5	0.200~0.500	16,000~20,000	1,800~4,000
R2.0	0.300~0.500	16,000~20,000	2,100~4,000
R3.0	0.300~0.600	13,300~20,000	1,600~4,000
R4.0	0.300~0.800	10,000~16,000	1,400~3,200
R5.0	0.300~1.000	8,000~12,800	1,280~3,000
R6.0	0.300~1.200	6,600~10,000	1,190~2,660
Depth of Cut			

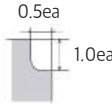
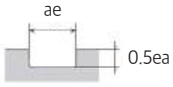
⚠ 경고 WARNING

1. 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
2. 절삭유 사용을 추천합니다.

1. Use a rigid precise machine and holder.
2. Recommend water soluble fluids.

A-PLUS 2KRR

High Speed Milling Condition

피삭재	H ₁₀			
Workpiece	Copper			
Outside Diameter	RPM	Feed (mm/min)	RPM	Feed (mm/min)
2.0	15,000~25,000	3,000	15,000~25,000	1,500
3.0	15,000~25,000	3,200	15,000~25,000	1,600
4.0	15,000~25,000	3,500	15,000~25,000	1,800
6.0	10,000~20,000	4,000	10,000~20,000	2,000
8.0	7,000~15,000	4,000	7,000~15,000	2,000
10.0	5,000~13,000	4,500	5,000~13,000	2,200
12.0	3,000~9,000	4,500	3,000~9,000	2,200
Depth of Cut				

- △ 경고 WARNING**
- 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
 - 절삭유 사용을 추천합니다.
1. Use a rigid precise machine and holder.
2. Recommend water soluble fluids.

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

MULTI

Technical data

R-PRO

H-PRO

A-PRO

X-PRO

SUS MILL

S-PRO

D-PRO

A-PLUS

AL-PRO

AL MILL

ABS

MICRO
GRAIN

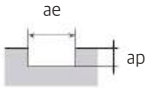
MULTI

Technical data

A-PLUS

2KRE

High Speed Milling Condition

피삭재	동		
Workpiece	Copper		
Outside Diameter	Depth of Cut ap(mm)	RPM	Feed (mm/min)
0.1	0.001~0.005	39,000~50,000	50~100
0.2	0.002~0.006	39,000~50,000	300~450
0.3	0.003~0.008	39,000~50,000	350~550
0.4	0.004~0.010	39,000~50,000	390~620
0.5	0.005~0.020	34,000~50,000	430~800
0.6	0.005~0.030	34,000~50,000	400~980
0.8	0.007~0.040	21,000~42,000	420~1,170
1.0	0.009~0.060	17,000~34,000	430~1,200
1.5	0.025~0.070	15,000~22,000	500~1,100
2.0	0.025~0.070	10,000~17,000	500~1,100
3.0	0.050~0.110	7,000~11,000	600~1,150
4.0	0.060~0.150	5,000~8,500	630~1,200
Depth of Cut			

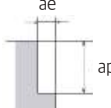
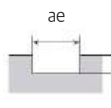
⚠ 경고 WARNING

1. 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
2. 절삭유 사용을 추천합니다.

1. Use a rigid precise machine and holder.
2. Recommend water soluble fluids.

A-PLUS 2KPE

High Speed Milling Condition

피삭재	HSP			
Workpiece	Copper			
Outside Diameter	RPM	Feed (mm/min)	RPM	Feed (mm/min)
0.4	30,000~40,000	100	30,000~40,000	80
0.5	28,000~35,000	120	28,000~35,000	100
0.6	27,000~33,000	150	23,000~28,000	120
0.8	20,000~25,000	180	18,000~24,000	150
1	15,000~20,000	180	14,000~20,000	150
1.2	14,000~20,000	200	10,000~15,000	150
1.5	14,000~20,000	250	10,000~15,000	150
2	13,000~18,000	320	5,000~10,000	150
2.5	13,000~18,000	420	5,000~10,000	150
3.0	12,000~17,000	600	4,000~8,000	170
4.0	10,000~15,000	650	4,000~8,000	200
5.0	8,000~12,000	700	4,000~8,000	250
6.0	5,000~10,000	750	3,500~7,000	250
8.0	4,000~9,000	650	3,000~6,000	250
10.0	4,000~8,000	600	3,000~6,000	350
12.0	3,000~6,000	500	3,000~6,000	450
Depth of Cut	 $ap=1.5D, ae=0.02D (D \leq \varnothing 1)$ $ap=1.5D, ae=0.10D (D > \varnothing 1)$		 $ap=0.05D (D \leq \varnothing 1)$ $ap=0.10D (D > \varnothing 1)$	

⚠ 경고 WARNING

1. 강성을 지닌 정밀한 장비와 홀더를 사용하십시오.
2. 절삭유 사용을 추천합니다.

1. Use a rigid precise machine and holder.
2. Recommend water soluble fluids.