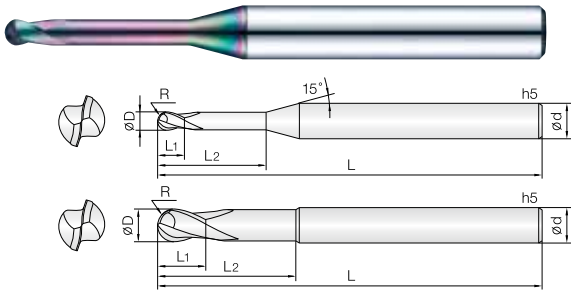


2날 비철 가공용 R-TAC코팅 리브 볼 엔드밀



- 알루미늄 및 알루미늄 합금, 동 및 동합금, 강화플라스틱(CFRP), 유리/탄소섬유 등 비철 비금속 계열의 다양한 피삭재 전용 엔드밀
- 코팅피막에 경도가 높고 마찰계수가 낮은 Tetrabond TAC코팅을 적용하여 내마모성이 우수하며, 피삭재의 표면조도가 월등히 우수합니다.
- 고정밀 공차 적용으로 초정밀가공에 적합합니다.
- 항절력이 높은 미립자 초경합금(0.5µm)을 채택, 엔드밀의 파손을 최소화.
- Endmills for Aluminum, Aluminum alloys, copper, copper alloys, CFRP, glass/carbon fiber, non-ferrous and non-metallic materials
- Tetrabond TAC coating provides excellent work surface finish by high hardness and low friction.
- Minimize fracturing by high TRS fine(0.5µm) WC grade.
- High precise edge tolerance.

2

WC
미립자

RTAC
Coating

R
± 0.005

R
± 0.01

30°
Helix Angle

CUTTING
DATA

0.05 ~ 2.5R 3 ~ 6R 482P

Condition	D Size	D Tolerance	Condition	D Size	D Tolerance
	øD ≠ ød	ø0.1		+0 ~ -0.005mm	øD = ød
	ø0.2 ~ 12	+0 ~ -0.01mm			

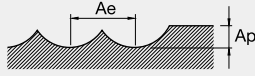
단위 : mm

Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter R × D	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
2DRB 001 003 S04	0.05R X 0.1	0.3	-	45	4		2DRB 030 120 S06	1.5R X 3	4	12	50	6	
2DRB 002 005 S04	0.1R X 0.2	0.5	-	45	4		2DRB 030 160 S06	1.5R X 3	4	16	60	6	
2DRB 002 010 S04	0.1R X 0.2	0.2	1	45	4		2DRB 030 200 S06	1.5R X 3	4	20	60	6	
2DRB 002 015 S04	0.1R X 0.2	0.2	1.5	45	4		2DRB 030 250 S06	1.5R X 3	4	25	65	6	
2DRB 002 020 S04	0.1R X 0.2	0.2	2	45	4		2DRB 030 300 S06	1.5R X 3	4	30	70	6	
2DRB 003 010 S04	0.15R X 0.3	0.3	1	45	4		2DRB 030 400 S06	1.5R X 3	4	40	80	6	
2DRB 003 015 S04	0.15R X 0.3	0.3	1.5	45	4		2DRB 040 120 S06	2R X 4	5	12	50	6	
2DRB 003 020 S04	0.15R X 0.3	0.3	2	45	4		2DRB 040 160 S06	2R X 4	5	16	60	6	
2DRB 004 010 S04	0.2R X 0.4	0.4	1	45	4		2DRB 040 200 S06	2R X 4	5	20	60	6	
2DRB 004 020 S04	0.2R X 0.4	0.4	2	45	4		2DRB 040 250 S06	2R X 4	5	25	65	6	
2DRB 004 030 S04	0.2R X 0.4	0.4	3	45	4		2DRB 040 300 S06	2R X 4	5	30	70	6	
2DRB 004 040 S04	0.2R X 0.4	0.4	4	45	4		2DRB 050 200 S06	2.5R X 5	6	20	60	6	
2DRB 004 050 S04	0.2R X 0.4	0.4	5	45	4		2DRB 050 400 S06	2.5R X 5	6	40	80	6	
2DRB 005 020 S04	0.25R X 0.5	0.5	2	45	4		2DRB 060 200 S06	3R X 6	8	20	60	6	
2DRB 005 040 S04	0.25R X 0.5	0.5	4	45	4		2DRB 060 300 S06	3R X 6	8	30	90	6	
2DRB 005 060 S04	0.25R X 0.5	0.5	6	45	4		2DRB 080 200 S08	4R X 8	10	20	70	8	
2DRB 005 080 S04	0.25R X 0.5	0.5	8	45	4		2DRB 100 250 S10	5R X 10	12	25	80	10	
2DRB 005 100 S04	0.25R X 0.5	0.5	10	45	4		2DRB 120 250 S12	6R X 12	14	25	80	12	
2DRB 006 020 S04	0.3R X 0.6	0.6	2	45	4								
New 2DRB 006 030 S04	0.3R X 0.6	0.6	3	45	4								
2DRB 006 040 S04	0.3R X 0.6	0.6	4	45	4								
2DRB 006 060 S04	0.3R X 0.6	0.6	6	45	4								
2DRB 006 080 S04	0.3R X 0.6	0.6	8	45	4								
2DRB 006 100 S04	0.3R X 0.6	0.6	10	45	4								
2DRB 008 020 S04	0.4R X 0.8	0.8	2	45	4								
2DRB 008 040 S04	0.4R X 0.8	0.8	4	45	4								
2DRB 008 060 S04	0.4R X 0.8	0.8	6	45	4								
2DRB 008 080 S04	0.4R X 0.8	0.8	8	45	4								
2DRB 008 100 S04	0.4R X 0.8	0.8	10	45	4								
2DRB 008 120 S04	0.4R X 0.8	0.8	12	45	4								
2DRB 010 040 S04	0.5R X 1	1	4	45	4								
2DRB 010 060 S04	0.5R X 1	1	6	45	4								
2DRB 010 080 S04	0.5R X 1	1	8	45	4								
2DRB 010 100 S04	0.5R X 1	1	10	45	4								
2DRB 010 120 S04	0.5R X 1	1	12	45	4								
2DRB 010 160 S04	0.5R X 1	1	16	50	4								
2DRB 015 060 S04	0.75R X 1.5	1.5	6	45	4								
2DRB 015 080 S04	0.75R X 1.5	1.5	8	45	4								
2DRB 015 100 S04	0.75R X 1.5	1.5	10	45	4								
2DRB 015 120 S04	0.75R X 1.5	1.5	12	45	4								
2DRB 015 160 S04	0.75R X 1.5	1.5	16	50	4								
2DRB 015 200 S04	0.75R X 1.5	1.5	20	50	4								
2DRB 020 060 S04	1R X 2	3	6	45	4								
2DRB 020 080 S04	1R X 2	3	8	45	4								
2DRB 020 100 S04	1R X 2	3	10	45	4								
2DRB 020 120 S04	1R X 2	3	12	45	4								
2DRB 020 160 S04	1R X 2	3	16	50	4								
2DRB 020 200 S04	1R X 2	3	20	50	4								
2DRB 020 250 S04	1R X 2	3	25	60	4								
2DRB 020 300 S04	1R X 2	3	30	70	4								

ZDRB Cutting Condition

• RPM : rev./min • Feed : mm/min

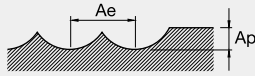
피삭재 Material	알루미늄 합금 Aluminum Alloy Expanding Material AL7075				알루미늄 합금 주물 / 다이캐스팅 Aluminum Alloys Casting / Die Casting AC4B / Si13%				탄소섬유 / 동합금 Magnesium Alloy / Copper Alloy / CFRP AZ91 / AZ80A / C1100		동합금 Copper Alloy C1100	
	일반가공 Regular Milling		고속가공 High Speed Milling		일반가공 Regular Milling		고속가공 High Speed Milling		일반가공 Regular Milling		고속가공 High Speed Milling	
반경 Radius	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
R0.1	32,000	220	45,000	290	32,000	220	45,000	290	32,000	220	45,000	290
R0.3	32,000	480	45,000	660	32,000	480	45,000	660	32,000	480	45,000	660
R0.5	28,800	760	45,000	1,100	28,800	760	45,000	1,100	28,800	760	45,000	1,100
R0.8	28,800	850	45,000	1,400	28,800	850	45,000	1,400	25,200	850	35,900	1,300
R1	28,600	1,400	45,000	2,000	28,600	1,400	43,000	1,900	21,500	1,000	35,900	1,600
R1.5	19,100	1,400	45,000	3,000	19,100	1,400	28,600	1,900	14,300	1,000	23,900	1,600
R2	14,300	1,400	35,900	3,200	14,300	1,400	21,400	1,900	10,700	1,000	17,900	1,600
R3	9,500	1,400	23,900	3,200	9,500	1,400	14,300	1,900	7,200	1,000	12,000	1,600
R4	7,200	1,800	17,600	4,100	7,200	1,800	10,700	2,400	5,400	1,300	8,900	2,000
R5	5,700	1,600	14,000	3,600	5,700	1,600	8,600	2,200	4,300	1,200	7,200	1,800
R6	4,800	1,500	11,700	3,400	4,800	1,500	7,200	2,000	3,600	1,100	5,900	1,700
절입량 Depth of Cut	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae
	0.1D	0.2D	0.05D	0.1D	0.1D	0.2D	0.05D	0.1D	0.1D	0.2D	0.02D	0.05D



ZDLB Cutting Condition

• RPM : rev./min • Feed : mm/min

피삭재 Material	알루미늄 합금 Aluminum Alloy Expanding Material AL7075				알루미늄 합금 주물 / 다이캐스팅 Aluminum Alloys Casting / Die Casting AC4B / Si13%				탄소섬유 / 동합금 Magnesium Alloy / Copper Alloy / CFRP AZ91 / AZ80A / C1100		동합금 Copper Alloy C1100	
	일반가공 Regular Milling		고속가공 High Speed Milling		일반가공 Regular Milling		고속가공 High Speed Milling		일반가공 Regular Milling		고속가공 High Speed Milling	
반경 Radius	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
R0.3	28,800	350	40,000	490	28,800	350	36,100	480	28,800	350	31,600	420
R0.5	23,400	720	31,500	950	23,400	720	25,200	900	23,400	720	20,700	800
R0.8	23,400	760	35,900	1,120	23,400	760	25,200	1,000	22,500	720	20,700	800
R1	22,500	950	31,500	1,260	22,500	950	25,200	1,100	17,100	720	20,700	800
R1.5	15,300	950	20,700	1,260	15,300	950	16,700	1,100	11,300	720	13,500	800
R2	11,300	950	15,800	1,260	11,300	950	12,600	1,100	8,600	720	10,400	800
R3	9,000	950	13,200	1,260	9,000	950	12,600	1,100	5,900	720	8,900	800
R4	6,400	1,150	11,600	1,260	6,400	1,150	9,800	1,000	4,800	880	6,400	950
R5	5,200	1,050	9,400	1,120	5,200	1,050	7,800	860	3,900	760	5,300	880
R6	4,100	1,000	6,700	950	4,100	1,000	5,400	520	3,000	740	4,600	840
절입량 Depth of Cut	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae	Ap	Ae
	0.1D	0.2D	0.05D	0.1D	0.1D	0.2D	0.05D	0.1D	0.1D	0.2D	0.02D	0.05D



- 상기 절삭조건은 참고 수치이므로 실가공시 가공형상, 가공목적, 적용기계에 따라 조건 변경 요망합니다.
- 조건표가 기계의 최대 스피드속도를 초과하거나 버 및 적열 현상이 발생할 때 스피드속도와 이송속도를 비례하여 조정하십시오.
- 에어브로 혹은 미스트 콜러트를 추천합니다.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine, or found red heat on the material, adjust RPM and feed in the same proportion.
- Air blow or mist coolant is recommended.