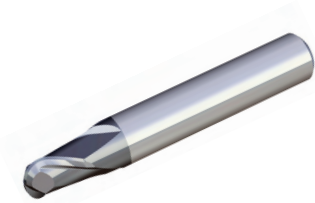
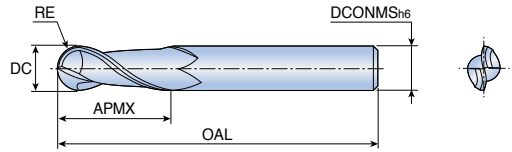


DURACARB SOLUTIONS

SOLID ENDMILL



2날, 솟 볼 엔드밀



RE	DC≤6	±0.005
	DC>6	±0.010

DC	공차
DC≤6	0 - -0.012
DC>6	0 - -0.015

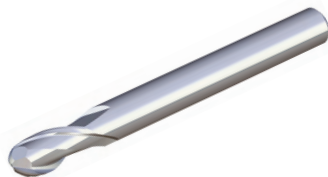
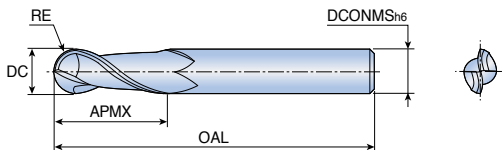
[illegible]

● : 표준 제품

DSBE 2



2날, 미디엄 볼 엔드밀



RE	DC≤6	±0.005
	DC>6	±0.010

DC	공차
DC ≤ 6	0 - -0.012
DC > 6	0 - -0.015

[illegible]

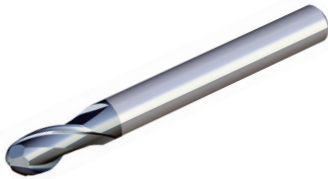
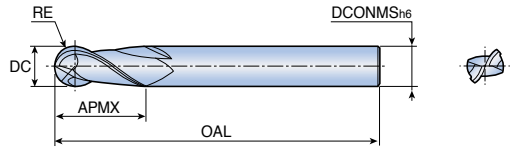
- 웰던 생크의 경우 별도 공급 가능(주문 예: DSBEW 2...)

● : 표준 제품

DSBE 2...T



2날, 미디엄 볼 엔드밀



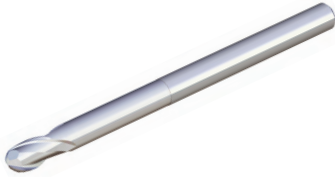
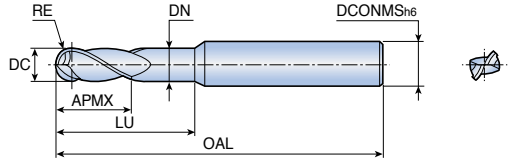
RE	DC ≤ 6	±0.005
	DC > 6	±0.010

DC	공차
DC ≤ 6	0 - -0.012
DC > 6	0 - -0.015

규격	치수 (mm)					재종
	DC	RE	OAL	APMX	DCONMS	DP5015
DSBE 2010T	1.0	0.5	50	1.5	4	●
2010T-6	1.0	0.5	50	1.5	6	●
2012T	1.2	0.6	50	1.8	4	●
2015T	1.5	0.75	50	2.3	4	●
2015T-5X70	1.5	0.75	70	5.0	6	●
2015T-6	1.5	0.75	50	2.3	6	●
2016T	1.6	0.8	50	2.4	4	●
2020T	2.0	1.0	50	3.0	4	●
2020T-6	2.0	1.0	50	3.0	6	●
2020T-7X70	2.0	1.0	70	7.0	6	●
2025T	2.5	1.25	50	3.8	4	●
2025T-6	2.5	1.25	50	3.8	6	●
2030T	3.0	1.5	70	8.0	6	●
2030T-10X70	3.0	1.5	70	10.0	6	●
2035T	3.5	1.75	70	8.0	6	●
2040T	4.0	2.0	70	8.0	6	●
2040T-12X70	4.0	2.0	70	12.0	6	●
2045T	4.5	2.25	80	8.0	6	●
2050T	5.0	2.5	80	12.0	6	●
2050T-15X80	5.0	2.5	80	15.0	6	●
2060T	6.0	3.0	80	12.0	6	●
2060T-15X80	6.0	3.0	80	15.0	6	●
2065T	6.5	3.25	90	12.0	8	●
2070T	7.0	3.5	90	15.0	8	●
2080T	8.0	4.0	90	15.0	8	●
2080T-20X90	8.0	4.0	90	20.0	8	●
2090T	9.0	4.5	100	20.0	10	●
2100T	10.0	5.0	100	20.0	10	●
2100T-25X100	10.0	5.0	100	25.0	10	●
2110T	11.0	5.5	110	25.0	12	●
2120T	12.0	6.0	110	25.0	12	●
2120T-30X100	12.0	6.0	100	30.0	12	●
2140T	14.0	7.0	120	30.0	12	●
2150T	15.0	7.5	125	35.0	16	●
2160T	16.0	8.0	125	35.0	16	●
2180T	18.0	9.0	150	40.0	20	●
2200T	20.0	10.0	150	40.0	20	●

• 웰던 샙크의 경우 별도 공급 가능(주문 예: DSBEW 2...T)

● : 표준 제품



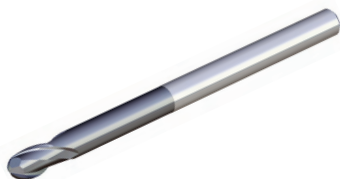
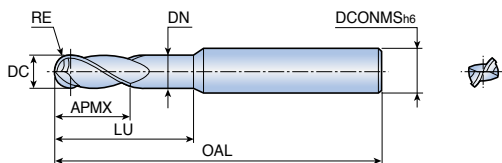
RE	DC≤6	±0.005
	DC>6	±0.010

DC	공차
DC≤6	0 - -0.012
DC>6	0 - -0.015

[illegible]

●: 표준 제품

2
H·A
30°



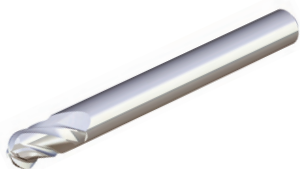
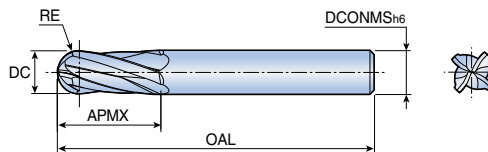
RE	DC≤6	±0.005
	DC>6	±0.010

DC	公差
DC≤6	0 - -0.012
DC>6	0 - -0.015

[illegible]

● : 표준 제품

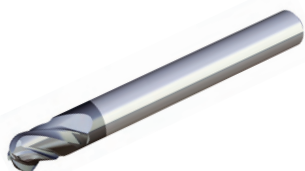
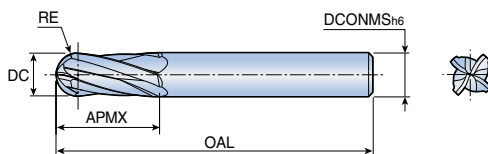
D 엔드밀



RE	DC≤6	±0.005	DC	공차
	DC>6	±0.010	All	0 - -0.020

[illegible]

● : 표준 제품

D 엔드밀


RE	DC≤6	±0.005	DC	공차
	DC>6	±0.010	All	0 - -0.020

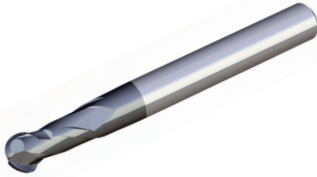
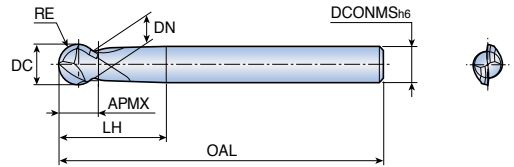
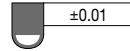
[illegible]

● : 표준 제품

DBES 2...T



2날, 볼(구형) 엔드밀



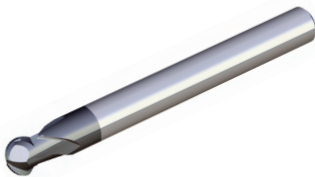
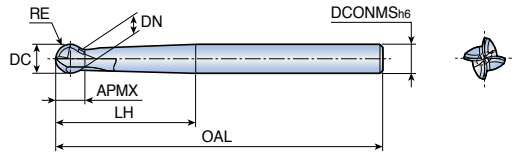
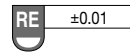
DC	공차
All	0 - -0.030

규격	치수 (mm)							재종
	DC	RE	OAL	APMX	LH	DN	DCONMS	
DBES 2030T	3	1.5	80	3.3	28.5	2.52	6	●
2040T	4	2.0	80	4.1	28.5	3.35	6	●
2050T	5	2.5	80	5.4	38.0	4.19	6	●
2060T	6	3.0	100	6.1	28.0	5.03	6	●
2080T	8	4.0	100	8.2	33.0	6.71	8	●
2100T	10	5.0	100	9.7	40.0	8.39	10	●
2120T	12	6.0	110	12.3	49.0	10.06	12	●
2160T	16	8.0	155	15.4	58.0	13.42	16	●

● : 표준 제품

DBES 4...T

4날, 볼(구형) 엔드밀



DC	공차
All	0 - -0.030

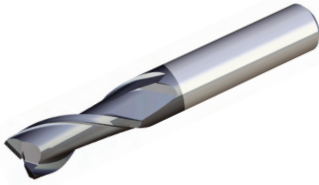
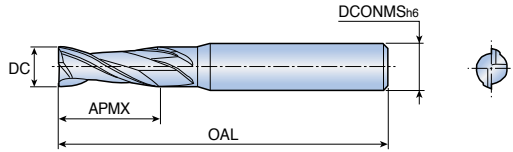
규격	치수 (mm)							재종
	DC	RE	OAL	APMX	LH	DN	DCONMS	
DBES 4030T	3	1.5	80	3.3	28.5	2.52	6	●
4040T	4	2.0	80	4.1	28.5	3.35	6	●
4050T	5	2.5	80	5.4	38.0	4.19	6	●
4060T	6	3.0	100	6.1	28.0	5.03	6	●
4080T	8	4.0	100	8.2	33.0	6.71	8	●
4100T	10	5.0	100	9.7	40.0	8.39	10	●

● : 표준 제품

DTSE 2...M



2날, 미디엄 플랫 엔드밀

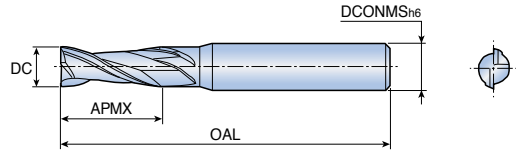


DC	공차
DC ≤ 12	0 - -0.030
DC > 12	0 - -0.035

규격	이송 (mm/tooth)	치수 (mm)				재종		
		DC	OAL	APMX	DCONMS	DP5015	DP5025	DC208
DTSE 2010M-4	0.008-0.030	1.0	40	3	4	●	●	●
2010M	0.008-0.030	1.0	42	3	6	●	●	
2012M	0.008-0.030	1.2	42	3	6	●		
2015M-4	0.008-0.030	1.5	40	4	4	●	●	
2015M	0.008-0.030	1.5	42	4	6	●	●	
2020M-4	0.010-0.030	2.0	40	6	4	●	●	
2020M	0.010-0.030	2.0	42	6	6	●	●	●
2025M-4	0.010-0.030	2.5	40	8	4	●	●	●
2025M	0.010-0.030	2.5	42	8	6	●	●	●
2030M	0.010-0.030	3.0	57	10	6	●	●	
2035M-4	0.010-0.030	3.5	50	12	4	●		
2035M	0.010-0.030	3.5	47	10	6	●	●	●
2040M(12X47)	0.010-0.050	4.0	47	12	6			●
2040M-4	0.010-0.050	4.0	50	12	4	●	●	
2040M	0.010-0.050	4.0	57	12	6	●	●	●
2045M	0.010-0.050	4.5	57	14	6	●	●	●
2050M-5	0.015-0.060	5.0	50	14	5	●	●	●
2050M	0.015-0.060	5.0	57	14	6	●	●	
2055M	0.015-0.060	5.5	57	16	6	●	●	
2060M	0.020-0.060	6.0	57	16	6	●	●	●
2065M-7	0.020-0.060	6.5	60	20	7		●	
2065M	0.020-0.060	6.5	60	20	8	●	●	●
2070M	0.030-0.070	7.0	60	20	8	●	●	●
2075M	0.030-0.070	7.5	63	20	8	●	●	
2080M	0.030-0.100	8.0	63	20	8	●	●	●
2085M	0.030-0.100	8.5	72	22	10	●		
2090M	0.030-0.100	9.0	68	25	10	●	●	
2095M	0.030-0.100	9.5	72	24	10	●	●	
2100M(25X68)	0.030-0.120	10.0	68	25	10	●	●	
2100M	0.030-0.120	10.0	72	22	10	●	●	
2105M	0.030-0.120	10.5	76	26	12	●	●	
2110M	0.030-0.120	11.0	76	30	12	●	●	
2115M	0.030-0.120	11.5	83	30	12	●	●	
2120M(30X76)	0.030-0.120	12.0	76	30	12	●	●	●
2120M	0.030-0.120	12	83	25	12	●	●	●
2130M	0.030-0.132	13	85	35	14	●	●	●
2140M-14	0.030-0.132	14	83	25	14	●	●	

• 웰던 샙크의 경우 별도 공급 가능(주문 예: DTSEW 2...M)

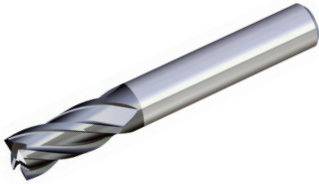
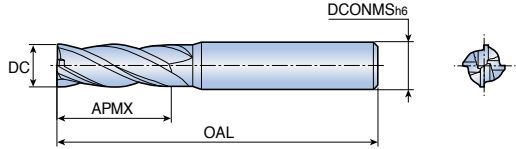
● : 표준 제품

●: 표준 제품

DTSE 4...M



4날, 미디엄 플랫 엔드밀



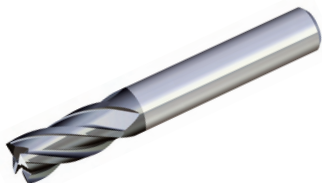
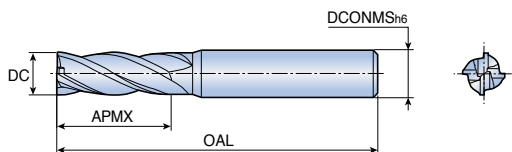
DC	공차
DC ≤ 12	0 - -0.030
DC > 12	0 - -0.035

규격	이송 (mm/tooth)	치수 (mm)				재종		
		DC	OAL	APMX	DCONMS	DP5015	DP5025	DC208
DTSE 4010M	0.005-0.010	1.0	42	2.5	6	●	●	
4015M	0.005-0.012	1.5	42	4	6	●	●	
4020M	0.008-0.017	2.0	42	6	6	●	●	
4025M-4	0.008-0.017	2.5	40	8	4	●	●	●
4025M	0.008-0.017	2.5	42	8	6	●	●	
4030M	0.009-0.020	3.0	57	10	6	●	●	●
4035M-4	0.010-0.028	3.5	50	12	4	●		
4035M	0.010-0.028	3.5	47	10	6	●	●	●
4040M-4	0.010-0.042	4.0	50	12	4	●	●	●
4040M	0.010-0.042	4.0	57	12	6	●	●	●
4045M	0.010-0.042	4.5	57	12	6	●		
4050M	0.020-0.059	5.0	57	14	6	●	●	●
4055M	0.020-0.059	5.5	57	14	6	●	●	
4060M	0.020-0.075	6.0	57	16	6	●	●	●
4065M	0.020-0.075	6.5	60	20	8	●	●	
4070M	0.020-0.075	7.0	60	20	8	●	●	●
4075M	0.020-0.075	7.5	60	20	8	●	●	
4080M	0.030-0.100	8.0	63	20	8	●	●	●
4085M	0.030-0.100	8.5	68	25	10	●	●	
4090M	0.030-0.100	9.0	68	25	10	●	●	
4095M	0.030-0.100	9.5	68	25	10	●	●	
4100M(25X68)	0.030-0.120	10.0	68	25	10	●	●	
4100M	0.030-0.120	10.0	72	22	10	●	●	●
4105M	0.030-0.120	10.5	76	30	12	●	●	
4110M	0.030-0.120	11.0	76	30	12	●	●	
4115M	0.030-0.120	11.5	76	30	12	●	●	
4120M(30X76)	0.030-0.136	12.0	76	30	12	●	●	
4120M	0.030-0.136	12.0	83	25	12	●	●	●
4130M	0.030-0.136	13.0	85	35	14	●	●	
4140M-14	0.030-0.136	14.0	83	25	14	●	●	
4140M	0.030-0.136	14.0	85	35	16		●	
4140M(35X85)	0.030-0.136	14.0	85	35	16	●		●
4150M	0.040-0.140	15.0	92	32	16	●	●	
4160M(40X90)	0.040-0.146	16.0	90	40	16	●	●	
4160M	0.040-0.146	16	92	32	16	●	●	●
4170M(45X110)	0.050-0.146	17	110	45	20	●		
4180M-18	0.050-0.146	18	92	32	18	●	●	

• 웰던 샙크의 경우 별도 공급 가능(주문 예: DTSEW 4...M)

●: 표준 제품

D 엔드밀

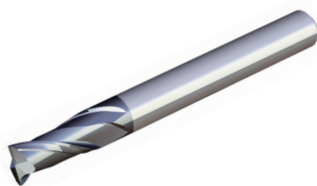
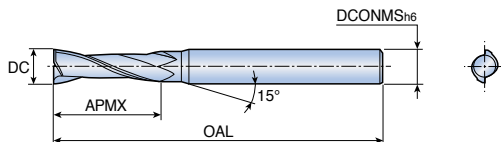
DC	공차
$DC \leq 12$	0 - -0.030
$DC > 12$	0 - -0.035

[illegible]

● : 표준 제품

D 엔드밀

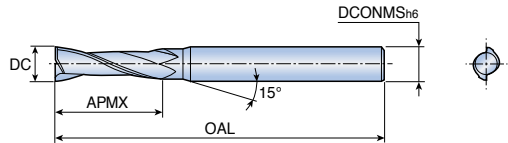
2
H·A
30°



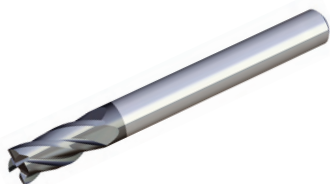
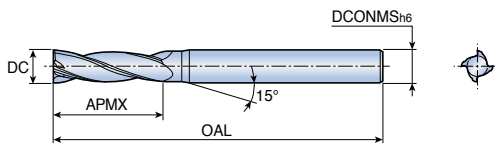
DC	공차
$DC \leq 12$	0 - -0.030
$DC > 12$	0 - -0.035

[illegible]

● : 표준 제품

[illegible]

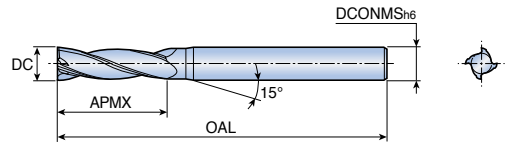
D 엔드밀

DC	공차
$DC \leq 12$	0 - -0.030
$DC > 12$	0 - -0.035

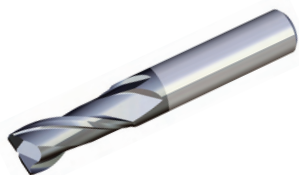
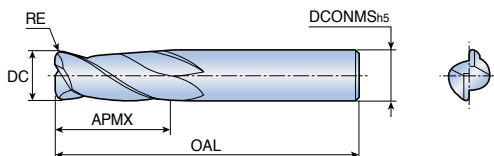
[illegible]

● : 표준 제품

[illegible]

Member WAC Group
Duracarb

2
H·A
30°



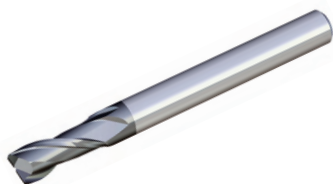
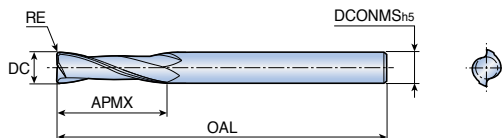
RE	±0.02	DC	공차
		DC ≤ 12	0 - -0.030
		DC > 12	0 - -0.035

[illegible]

● : 표준 제품

D 엔드밀

2
H•A
30°

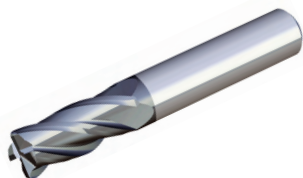
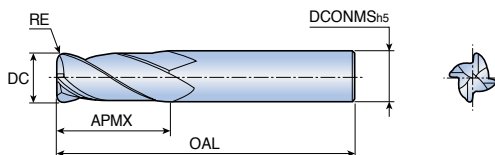


RE	± 0.02
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DC	공차
$DC \leq 12$	0 - -0.030
$DC > 12$	0 - -0.035

[illegible]

●: 표준 제품

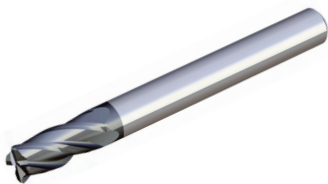
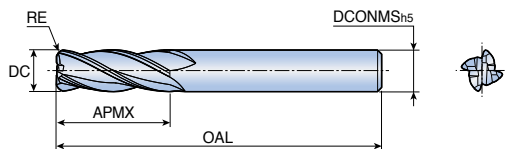
D 엔드밀


RE	±0.02	DC	공차
		DC ≤ 12	0 - -0.030
		DC > 12	0 - -0.035

[illegible]

● : 표준 제품

D 엔드밀

RE	± 0.02
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DC	공차
$DC \leq 12$	0 - -0.030
$DC > 12$	0 - -0.035

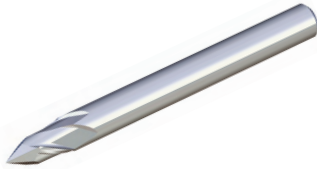
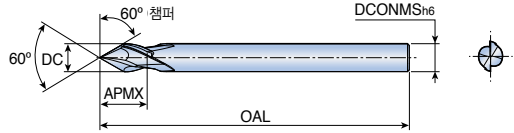
[illegible]

●: 표준 제품

DCEM 2...-C60



2날, 60° 챔퍼



- 다기능 엔드밀
 - 챔퍼 보링, 챔퍼링, 측면 밀링

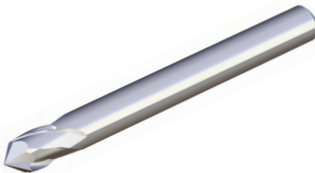
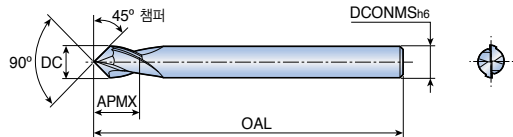
DC	공차
All	-0.01 - -0.05

규격	이송 (mm/tooth)	치수 (mm)				재종	
		DC	OAL	APMX	DCONMS	DC208	
DCEM 2040-C60	0.02-0.04	4	70	7.5	6	●	
2060-C60	0.02-0.04	6	80	11.2	6	●	
2080-C60	0.03-0.06	8	90	14.9	8	●	
2100-C60	0.03-0.08	10	100	18.7	10	●	
2120-C60	0.04-0.09	12	110	22.4	12	●	
2160-C60	0.05-0.10	16	125	29.9	16	●	
2200-C60	0.05-0.10	20	150	37.3	20	●	

● : 표준 제품

DCEM 2

2날, 45° 챔퍼



- 다기능 엔드밀
 - 챔퍼 보링, 챔퍼링, 측면 밀링, *센터링, V-홈 밀링

DC	공차
All	-0.01 - -0.05

규격	이송 (mm/tooth)	치수 (mm)				재종	
		DC	OAL	APMX	DCONMS	DC208	DP5025
DCEM 2040	0.02-0.05	4	70	6	6	●	●
2060	0.02-0.05	6	80	9	6	●	●
2080	0.03-0.07	8	90	12	8	●	●
2100	0.03-0.10	10	100	15	10	●	●
2120	0.04-0.10	12	110	18	12	●	●
2160	0.05-0.10	16	125	24	16	●	●
2200	0.05-0.10	20	150	30	20	●	●

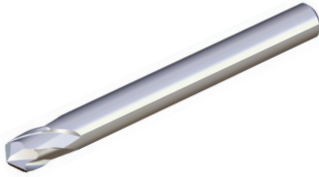
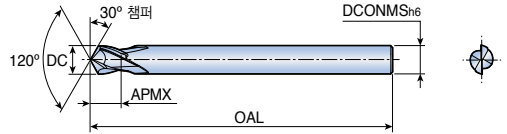
- *45° 센터링 가공은 주철과 비철금속 피삭재만 적용 가능

● : 표준 제품

DCEM 2...-C120



2날, 30° 챔퍼



- 다기능 엔드밀
- 챔퍼 보링, 챔퍼링, 측면 밀링, 센터링, V-홈 밀링, 드릴링

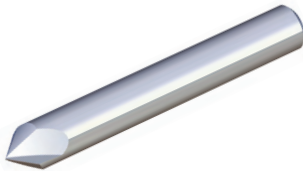
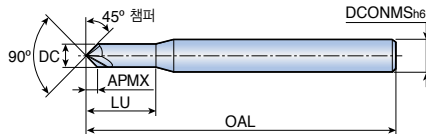
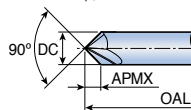
DC	공차
All	-0.01 - -0.05

규격	이송 (mm/tooth)	치수 (mm)				재종
		DC	OAL	APMX	DCONMS	DC208
DCEM 2040-C120	0.02-0.05	4	70	5.2	6	●
2060-C120	0.02-0.05	6	80	7.7	6	●
2080-C120	0.03-0.07	8	90	10.3	8	●
2100-C120	0.03-0.10	10	100	12.9	10	●
2120-C120	0.04-0.10	12	110	15.5	12	●
2160-C120	0.05-0.10	16	125	20.6	16	●
2200-C120	0.05-0.10	20	150	25.8	20	●

● : 표준 제품

DECEM 2

2날, 45° 챔퍼 - 경제형



- 다기능 엔드밀
- 챔퍼 보링, 챔퍼링, 센터링, V-홈 밀링

DC	공차
All	0 - -0.030

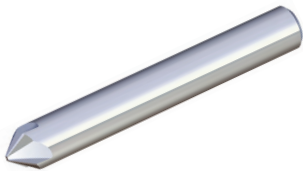
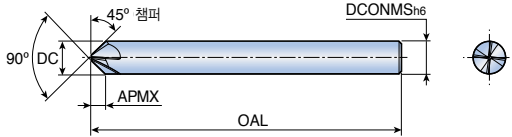
규격	이송 (mm/tooth)	치수 (mm)						재종
		DC	OAL	APMX	LU	DCONMS	타입	DC208
DECEM 2020	0.01-0.03	2	57	1.0	6	6	A	●
2030	0.01-0.04	3	57	1.5	9	6	A	●
2040	0.02-0.05	4	57	2.0	12	6	A	●
2060	0.02-0.05	6	57	2.9	-	6	B	●
2080	0.03-0.07	8	63	3.8	-	8	B	●
2100	0.03-0.10	10	72	4.9	-	10	B	●
2120	0.04-0.10	12	83	5.9	-	12	B	●
2160	0.05-0.10	16	92	7.9	-	16	B	●

● : 표준 제품

DECEM 4



4날, 45° 챔퍼 - 경제형



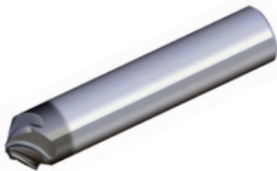
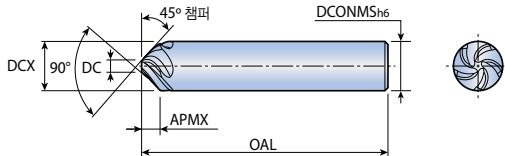
• 챔퍼링

DC	공차
All	0 - -0.030

규격	이송 (mm/tooth)	치수 (mm)				재종	
		DC	OAL	APMX	DCONMS	DC208	DP5025
DECEM 4060	0.02-0.04	6	57	2.5	6	●	●
4080	0.02-0.05	8	63	3.4	8	●	●
4100	0.03-0.08	10	72	4.4	10	●	●
4120	0.03-0.08	12	83	5.1	12	●	●

DHCEM 5

5날, 45° 챔퍼 - 경제형

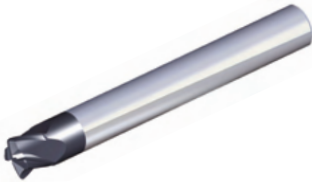
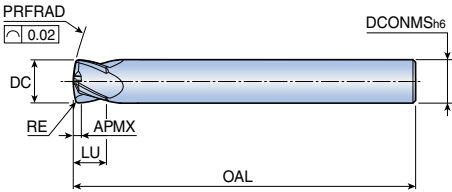


DC	공차
All	±0.1

규격	이송 (mm/tooth)	치수 (mm)					재종
		DCX	DC	OAL	APMX	DCONMS	DP5025
DHCEM 5080	0.02-0.06	8	2	63	3.0	8	●
5100	0.03-0.07	10	2.5	72	3.8	10	●
5120	0.03-0.08	12	3	83	4.5	12	●
5160	0.04-0.10	16	4	92	6.0	16	●

● : 표준 제품

4, 6날, Lens 형상의 프로파일 가공용 엔드밀

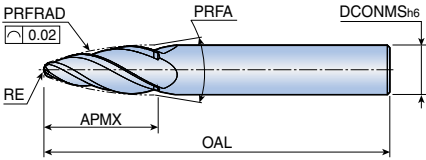


규격	이송 (mm/tooth)	치수 (mm)								재종	
		DC	NOF	PRFRAD	RE	APMX	LU	DCONMS	OAL	DP5015	
DSCSL 4080R015X05	0.02-0.08	8	4	15	0.75	1.1	5.0	8	63	●	
6100R020X07	0.03-0.09	10	6	20	1.0	1.4	7.0	10	72	●	
6120R025X09	0.03-0.10	12	6	25	1.0	1.5	9.0	12	83	●	

● PRFRAD: 프로파일 반경 ● : 표준 제품

DSCSO

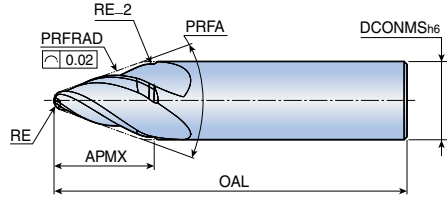
4날, Oval 형상의 프로파일 가공용 엔드밀



규격	이송 (mm/tooth)	치수 (mm)							재종	
		PRFRAD	RE	APMX	PRFA	DCONMS	OAL	DP5015		
DSCSO 4080R090X24	0.02-0.08	90	1.0	24.8	14.9	8	63	●		
4100R085X26	0.03-0.09	85	2.0	26.6	15.5	10	72	●		
4120R080X27	0.03-0.10	80	2.0	27.1	18.4	12	83	●		

● PRFRAD: 프로파일 반경 ● : 표준 제품

4날, Oval 형상의 프로파일 가공용 테이퍼 엔드밀



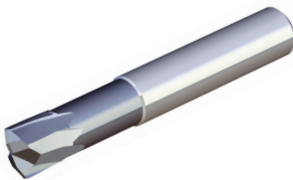
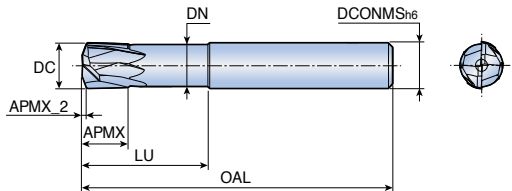
규격	이송 (mm/tooth)	치수 (mm)							재종
		PRFRAD	RE	RE_2	APMX	PRFA	DCONMS	OAL	
DSCST 4080R250A40X10	0.02-0.08	250	1.0	4.0	10	40	8	63	●
4100R250A40X11	0.03-0.09	250	2.0	5.0	11	40	10	63	●
4120R250A40X12	0.03-0.10	250	3.0	6.0	12	40	12	63	●
									●

● PRFRAD: 프로파일 반경

● : 표준 제품

DHFM 2

2날, 고이송 플랫 엔드밀



DC	공차
All	0 - -0.030

규격	이송 (mm/tooth)	치수 (mm)							재종
		DC	OAL	APMX	APMX_2*	LU	DN	DCONMS	
DHFM 2040	0.2-0.4	4	47	4	0.3	10	3.9	6	●
2060	0.3-0.6	6	52	6	0.5	16	5.5	6	●
2080	0.4-0.7	8	60	8	0.75	22	7.3	8	●
2100	0.5-0.9	10	68	10	1.0	28	9.2	10	●
2120	0.5-1.0	12	76	12	1.1	33	11.0	12	●

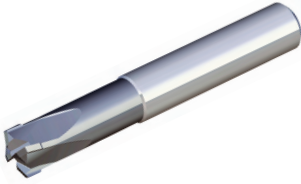
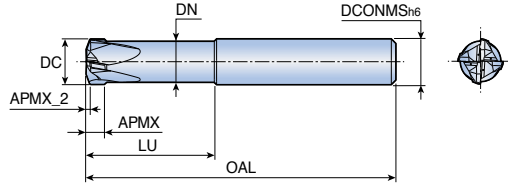
● *고이송 가공시의 최대 절입 깊이

● : 표준 제품

DHFM 4



4날, 고이송 플랫 엔드밀



• 고이송 가공용 (H.F.M)

DC	공차
All	0 - -0.030

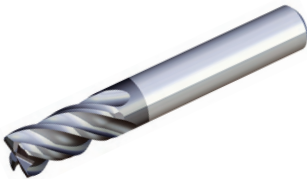
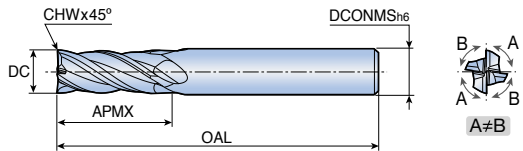
규격	이송 (mm/tooth)	치수 (mm)							재종
		DC	OAL	APMX	APMX 2*	LU	DN	DCONMS	
DHFM 4060	0.3-0.5	6	52	2.5	0.5	16	5.4	6	●
4080	0.3-0.6	8	60	3.5	0.7	24	7.2	8	●
4100	0.4-0.8	10	68	4.0	0.75	28	9.2	10	●
4120	0.4-1.0	12	76	5.0	1.05	33	11.0	12	●

• *고이송 가공시의 최대 절입 깊이

● : 표준 제품

DCFM 4...M

4날, 45° 챔퍼 (부등분할)



• 부등 분할 (진동 감소)

DC	공차	DC	공차
3 < DC ≤ 6	-0.020 - -0.038	10 < DC ≤ 18	-0.032 - -0.059
6 < DC ≤ 10	-0.025 - -0.047	18 < DC ≤ 30	-0.040 - -0.073

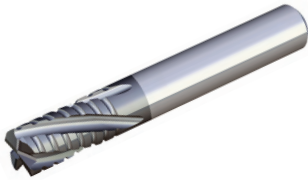
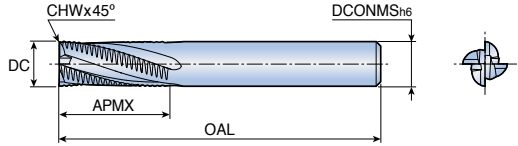
규격	이송 (mm/tooth)	치수 (mm)					재종
		DC	CHW	OAL	APMX	DCONMS	
DCFM 4040M	0.02-0.05	4	0.15	57	10	6	●
4060M	0.03-0.07	6	0.25	57	14	6	●
4080M	0.03-0.08	8	0.3	63	18	8	●
4100M	0.03-0.10	10	0.4	72	22	10	●
4120M	0.04-0.11	12	0.5	83	26	12	●
4160M	0.05-0.13	16	0.6	100	34	16	●
4200M	0.05-0.17	20	0.6	110	42	20	●
4250M	0.06-0.20	25	0.6	121	52	25	●

● : 표준 제품

DREL ...L



3-4날, 롱 코너 챔퍼 황삭 엔드밀



DC	공차	DC	공차
DC ≤ 3	0 - -0.040	10 < DC ≤ 18	0 - -0.070
3 < DC ≤ 6	0 - -0.048	18 < DC ≤ 30	0 - -0.084
6 < DC ≤ 10	0 - -0.058		

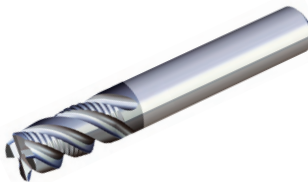
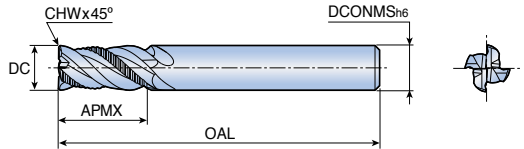
규격	이송 (mm/tooth)	치수 (mm)						재종 DP5015
		DC	NOF	CHW	OAL	APMX	DCONMS	
DREL 3060L	0.03-0.06	6	3	0.38	57	16	6	●
3080L	0.03-0.08	8	3	0.38	63	16	8	●
4100L	0.03-0.09	10	4	0.61	72	22	10	●
4120L	0.04-0.10	12	4	0.61	83	26	12	●
4140L-14	0.05-0.11	14	4	0.61	83	26	14	●
4160L	0.05-0.11	16	4	0.61	92	32	16	●
4200L	0.05-0.11	20	4	0.61	104	38	20	●

- 웰던 생크의 경우 별도 공급 가능(주문 예: DRELW ...L)
- NOF: 날수

● : 표준 제품

DFSM 4...M

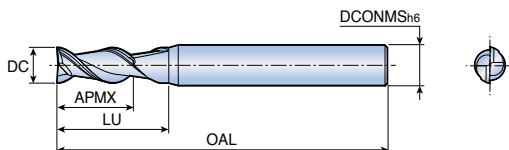
4날, 45° 챔퍼 (황삭+정삭 콤비네이션)



DC	공차	DC	공차
3 < DC ≤ 6	-0.020 - -0.038	10 < DC ≤ 18	-0.032 - -0.059
6 < DC ≤ 10	-0.025 - -0.047	18 < DC ≤ 30	-0.040 - -0.073

규격	이송 (mm/tooth)	치수 (mm)					재종 DP5025
		DC	CHW	OAL	APMX	DCONMS	
DFSM 4060M	0.03-0.06	6	0.25	57	14	6	●
4080M	0.03-0.08	8	0.3	63	18	8	●
4100M	0.03-0.09	10	0.3	72	22	10	●
4120M	0.04-0.11	12	0.4	83	26	12	●
4140M	0.04-0.11	14	0.4	83	30	14	●
4160M	0.05-0.11	16	0.6	92	34	16	●
4200M	0.05-0.11	20	0.6	104	42	20	●
4250M	0.06-0.11	25	0.6	121	52	25	●

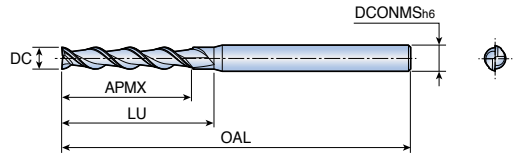
● : 표준 제품



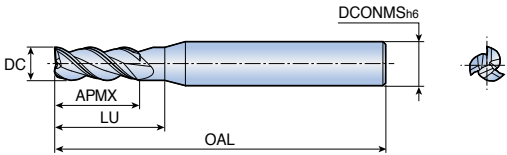
DC	공차
All	0 - -0.012

[illegible]

● : 표준 제품

[illegible]

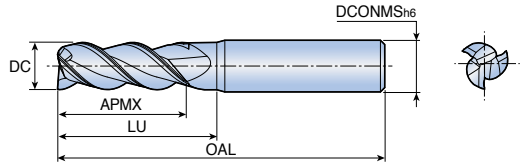
196



DC	공차
All	0 - -0.012

규격	이송 (mm/tooth)	치수 (mm)					재종
		DC	OAL	APMX	LU	DCONMS	DC208
DAES 3010(4X50)-4	0.01-0.015	1	50	4	5	4	●
3015(6X50)-6	0.01-0.02	1.5	50	6	7	6	●
3020(7X50)-6	0.02-0.04	2	50	7	9	6	●
3020-6	0.02-0.04	2	47	6	8	6	●
3030	0.02-0.05	3	47	10	13	6	●
3030(12X57)	0.02-0.05	3	57	12	14.5	6	●
3040	0.02-0.05	4	47	12	15	6	●
3040(14X57)	0.02-0.05	4	57	14	17	6	●
3050	0.02-0.06	5	52	15	20	6	●
3050(18X57)	0.02-0.06	5	57	18	22	6	●
3060	0.03-0.07	6	52	15	-	6	●
3060(18X60)	0.03-0.07	6	60	18	-	6	●
3070	0.03-0.09	7	60	20	26	8	●
3080	0.03-0.09	8	60	20	-	8	●
3080(23X70)	0.03-0.09	8	70	23	-	8	●
3090	0.03-0.10	9	68	25	31	10	●
3100	0.03-0.10	10	68	25	-	10	●
3100(28X75)	0.03-0.10	10	75	28	-	10	●
3110	0.03-0.12	11	76	30	37	12	●
3120	0.03-0.12	12	76	30	-	12	●
3120(33X80)	0.03-0.12	12	80	33	-	12	●
3130	0.03-0.12	13	85	35	40	14	●
3140	0.05-0.14	14	85	35	40	14	●
3150	0.05-0.14	15	90	40	50	16	●
3160	0.05-0.14	16	90	40	-	16	●
3160(43X100)	0.05-0.14	16	100	43	-	16	●
3180	0.05-0.15	18	110	45	55	18	●
3200	0.05-0.15	20	110	45	-	20	●
3200(49X100)	0.05-0.15	20	100	49	-	20	●
3250	0.05-0.15	25	140	65	-	25	●

● : 표준 제품



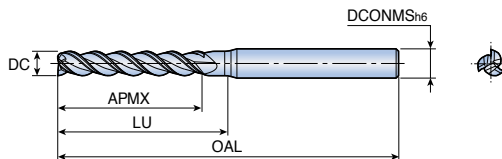
DC	공차
All	0 - -0.012

[illegible]

●: 표준 제품

DAES 3...XL

3날, 긴날 플랫 엔드밀

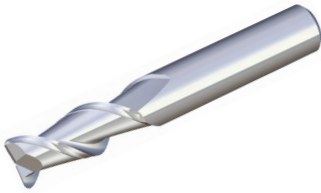
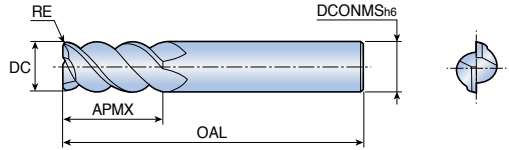


DC	공차
All	0 - -0.012

[illegible]

●: 표준 제품

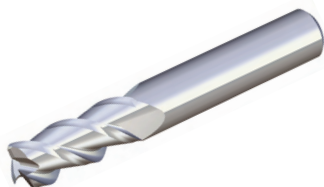
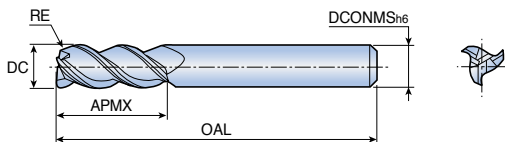
2날, 미디엄 코너 라디우스 엔드밀



RE	±0.02	DC	공차
		All	0 - -0.012

[illegible]

●: 표준 제품



RE	±0.02	DC	공차
		All	0 - -0.012

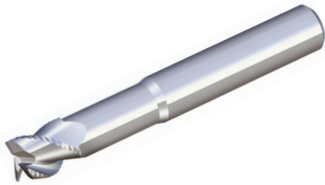
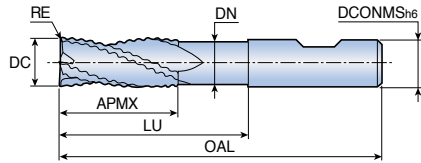
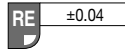
[illegible]

●: 표준 제품

DREMA 3/ 3...C



3날, 코너 라디우스 황삭 엔드밀



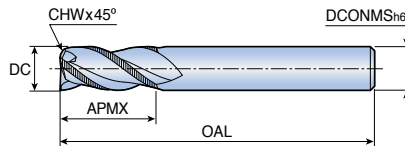
DC	공차	DC	공차
DC ≤ 6	0 - -0.008	10 < DC ≤ 16	0 - -0.011
6 < DC ≤ 10	0 - -0.009	16 < DC	0 - -0.013

규격		이송 (mm/tooth)	치수 (mm)							재종 DC208
원통형 생크	월던 생크		DC	RE	OAL	APMX	LU	DN	DCONMS	
DREMA 3060C	DREMA 3060	0.03-0.07	6	0.2	57	9	21	5.5	6	●
3080C	3080	0.03-0.11	8	0.2	63	12	27	7.2	8	●
3100C	3100	0.05-0.14	10	0.2	72	12	31	9.0	10	●
3120C	3120	0.07-0.16	12	0.2	83	12	37	11.0	12	●
3160C	3160	0.07-0.18	16	0.2	92	14	43	15.0	16	●
3200C	3200	0.07-0.20	20	0.2	104	17	53	18.8	20	●

● : 표준 제품

DREA 3...L

3날, 코너 챔퍼 황삭 엔드밀



DC	공차	DC	공차
3 < DC ≤ 6	0 - -0.040	10 < DC ≤ 18	0 - -0.058
6 < DC ≤ 10	0 - -0.048	18 < DC ≤ 30	0 - -0.084

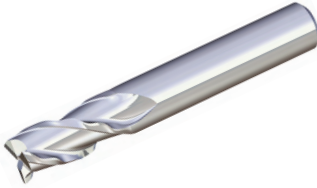
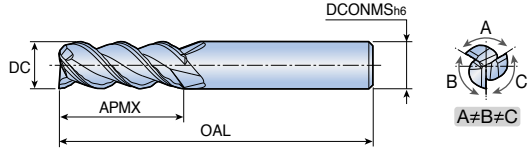
규격	이송 (mm/tooth)	치수 (mm)					재종 DC208
		DC	CHW	OAL	APMX	DCONMS	
DREA 3060L	0.03-0.07	6	0.61	57	16	6	●
3080L	0.03-0.15	8	0.61	63	16	8	●
3100L	0.05-0.20	10	0.61	72	22	10	●
3120L	0.07-0.22	12	0.66	83	26	12	●
3160L	0.07-0.25	16	0.99	92	32	16	●
3200L	0.07-0.25	20	0.99	104	38	20	●

● : 표준 제품

DAWE 3



3날, 웨이브 플랫 엔드밀



• 웨이브 절삭 인선

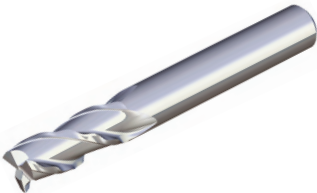
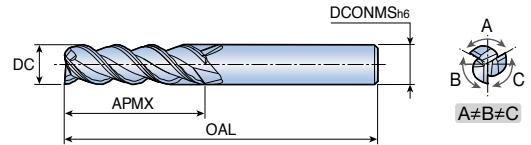
DC	공차
All	0 - -0.012

규격	이송 (mm/tooth)	치수 (mm)				재종 DC208
		DC	OAL	APMX	DCONMS	
DAWE 3060	0.03-0.07	6	52	14	6	●
3080	0.03-0.09	8	60	14	8	●
3100	0.03-0.10	10	68	19	10	●
3120	0.03-0.12	12	76	22	12	●
3140	0.05-0.14	14	85	24	14	●
3160	0.05-0.14	16	90	30	16	●
3180	0.05-0.15	18	110	34	18	●
3200	0.05-0.15	20	110	38	20	●

● : 표준 제품

DAWE 3...ML

3날, 롱 웨이브 플랫 엔드밀

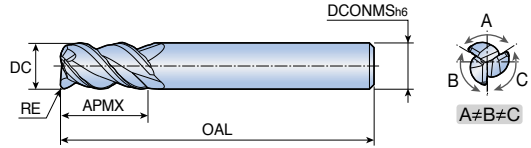


• 웨이브 절삭 인선

DC	공차
All	0 - -0.012

규격	이송 (mm/tooth)	치수 (mm)				재종 DC208
		DC	OAL	APMX	DCONMS	
DAWE 3060ML	0.03-0.07	6	65	20	6	●
3080ML	0.03-0.09	8	75	20	8	●
3100ML	0.03-0.10	10	80	25	10	●
3120ML	0.03-0.12	12	95	30	12	●
3140ML	0.03-0.12	14	110	35	14	●
3160ML	0.05-0.14	16	110	40	16	●
3180ML	0.05-0.15	18	125	45	18	●
3200ML	0.05-0.15	20	125	45	20	●

● : 표준 제품



- 

DC

공차

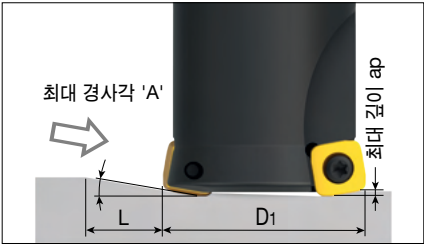
0 - -0.012

[illegible]

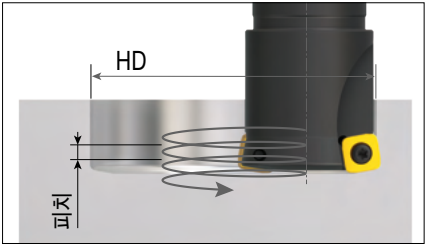
204

ISO	피삭재	조건	인장강도 Rm (N/mm ²)	경도 (HB)	소재 그룹	비코팅	코팅					
							DC210	DP5320	DP9320	DP8330	DC9235	DP7320
P	탄소강 패삭강 주강	<0.25%C	풀림	420	125	1		220-370	250-410	170-250	150-210	
		>=0.25%C	풀림	650	190	2		180-310	200-380	130-220	120-200	
		<0.55%C	담금질 및 뜨임	850	250	3		115-195	140-230	90-170	70-140	
		>=0.55%C	풀림	750	220	4		130-210	160-250	100-190	90-150	
			담금질 및 뜨임	1000	300	5		115-175	135-195	70-160	60-130	
	연강 및 주강 (5% 이하 합금 원소 함유)		풀림	600	200	6		175-265	190-290	150-220	130-170	
			담금질 및 뜨임	930	275	7		130-215	150-240	110-190	70-150	
				1000	300	8		105-185	135-225	80-160	60-110	
				1200	350	9		95-160	120-190	70-120	50-100	
	고합금강, 주강 및 공구강		풀림	680	200	10		85-155	100-150	70-110	50-80	
담금질 및 뜨임			1100	325	11		75-135	90-140	60-100	40-80		
M	스테인리스강 및 주강	페라이트계/마르텐사이트계	680	200	12		115-270		90-200	75-170		
		마르텐사이트계	820	240	13		100-230		70-160	60-130		
		오스테나이트계	600	180	14		120-275		100-210	80-180		
K	회주철 (GG)	페라이트		160	15	70-130					200-390	
		펄라이트		250	16	50-110					160-300	
	구상흑연주철 (GGG)	페라이트		180	17	45-90					130-250	
		펄라이트		260	18	40-85					110-210	
	가단주철	페라이트		130	19	70-140					210-330	
		펄라이트		230	20	55-115					130-280	
N	알루미늄-단조합금	시효경화처리 안됨		60	21	550-700						
		시효경화처리		100	22	600-750						
	알루미늄- 주조합금	<=12% Si	시효경화처리 안됨	75	23	800-900						
			시효경화처리	90	24	650-800						
		>12% Si	고온 열처리	130	25	250-320						
		>1% Pb	패삭합금	110	26	300-400						
	구리합금	황동		90	27	300-400						
		전해구리		100	28	210-280						
	비철금속	듀로플라스틱, 탄소강화섬유			29							
		경화고무			30							
S	내열합금강	Fe 함유	풀림		200	31	50-70	40-80		30-65		
			시효경화처리		280	32	40-50	30-60		20-45		
		Ni or Co 함유	풀림		250	33	50-70	35-70		25-50		
			시효경화처리		350	34	35-40	30-60		20-40		
			주조		320	35	45-50	35-65		20-45		
	티타늄 및 티타늄 합금강		Rm 400		36	120-145	90-130		60-100			
		Alpha+beta 시효경화처리	Rm 1050		37	35-45	35-70		25-55			
H	고경도강	열경화처리		55HRC	38		40-75					
		열경화처리		60HRC	39		30-55					
	칠드주철	주조		400	40							
	고경도 구상흑연주철	열경화처리		55HRC	41							

직선 램핑 가공



헬리컬 램핑 가공



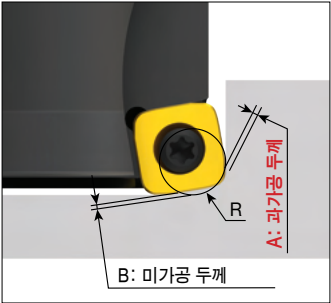
SDMT 06

커터 직경 (D)	직선 램핑 가공			헬리컬 램핑 가공		
	최대 경사각 (A°)	최대 절삭깊이 (mm)	최소 길이 (L)	최소 직경	최대 직경	최대 피치/회전
16	2.1	0.8	21.83	23.1		0.80
					32	0.80
17	2.1	0.8	21.83	25.1		0.80
					34	0.80
20	2.1	0.8	21.83	31.0		0.80
					40	0.80
21	2.05	0.8	22.36	33.0		0.80
					42	0.80
25	2	0.8	22.92	41.0		0.80
					50	0.80
26	1.9	0.8	24.13	43.0		0.80
					52	0.80
32	1.9	0.8	24.13	55.0		0.80
					64	0.80
33	1.8	0.8	25.47	57.0		0.80
					66	0.80

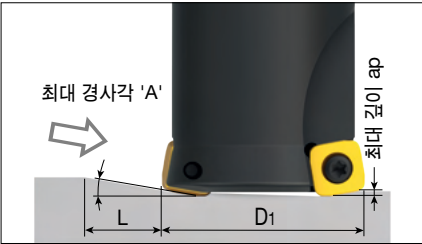
프로그램 시 요령

CNC 프로그램 작성시 각각의 인서트에 맞는 코너 'R'값을 사용하면 코너 가공부위에 대략 'B'mm만큼의 미가공 두께가 생깁니다. 코너 'R'인 CNC 프로그램을 사용할 경우에는 'A'mm의 과가공이 생깁니다.
과가공 부분을 방지하기 위해서는 황삭 가공시 가공량을 'A'만큼 감안하여 설정하여 주십시오. 기타 프로그램 'R'값 데이터는 아래표를 참조하여 주시기 바랍니다.

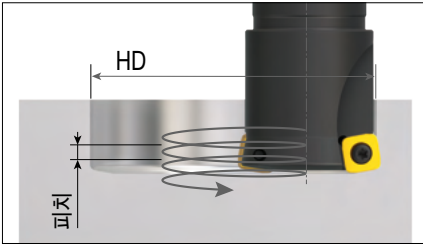
	R 프로그램값	A과가공 두께	B미가공 두께
SDMT 06	2	0.00	0.62
	2.5	0.10	0.53
	3.0	0.27	0.44



직선 램핑 가공



헬리컬 램핑 가공



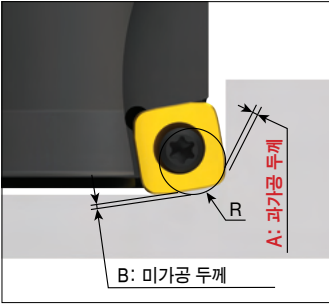
SDMT 10

커터 직경 (D)	직선 램핑 가공			헬리컬 램핑 가공		
	최대 경사각 (A°)	최대 절삭깊이 (mm)	최소 길이 (L)	최소 직경	최대 직경	최대 피치/회전
25	0.3	1.1	210	34.2		0.1
					50	0.3
32	1.2	1.1	53	48.2		0.9
					64	1.1
40	4.1	1.1	16	64.2		1.1
					80	1.1
50	3.1	1.1	21	84.2		1.1
					100	1.1
52	3	1.1	21	88.2		1.1
					104	1.1
63	2.2	1.1	29	110.2		1.1
					126	1.1

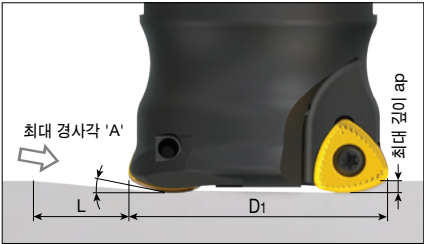
프로그램 시 요령

CNC 프로그램 작성시 각각의 인서트에 맞는 코너 'R'값을 사용하면 코너 가공부위에 대략 'B'mm만큼의 미가공 두께가 생깁니다. 코너 'R'인 CNC 프로그램을 사용할 경우에는 'A'mm의 과가공이 생깁니다. 과가공 부분을 방지하기 위해서는 황삭 가공시 가공량을 'A'만큼 감안하여 설정하여 주십시오. 기타 프로그램 'R'값 데이터는 아래표를 참조하여 주시기 바랍니다.

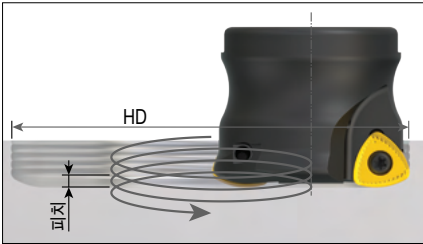
	R 프로그램값	A과가공 두께	B미가공 두께
SDMT 10	2.5	0	0.74
	3	0.05	0.66
	3.5	0.2	0.58
	4	0.38	0.5
	4.5	0.57	0.43



직선 램핑 가공



헬리컬 램핑 가공



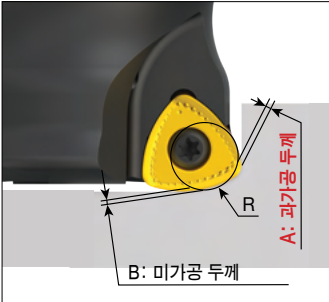
WLMT 12

커터 직경 (D)	직선 램핑 가공			헬리컬 램핑 가공		
	최대 경사각 (A°)	최대 절삭깊이 (mm)	최소 길이 (L)	최소 직경	최대 직경	최대 피치/회전
50	1.1	2	104.21	84.2		2.00
					100	2.00
63	0.8	2	143.30	110.2		2.00
					126	2.00
80	0.7	2	163.78	144.1		2.00
					160	2.00
100	0.5	2	229.29	184.1		2.00
					200	2.00

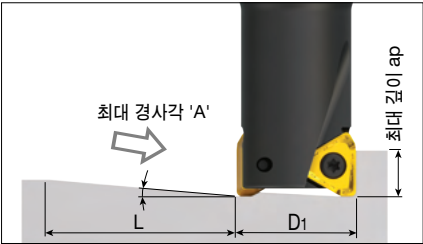
프로그램 시 요령

CNC 프로그램 작성시 각각의 인서트에 맞는 코너 'R'값을 사용하면 코너 가공부위에 대략 'B'mm만큼의 미가공 두께가 생깁니다. 코너 'R'인 CNC 프로그램을 사용할 경우에는 'A'mm의 과가공이 생깁니다.
과가공 부분을 방지하기 위해서는 황삭 가공시 가공량을 'A'만큼 감안하여 설정하여 주십시오. 기타 프로그램 'R'값 데이터는 아래표를 참조하여 주시기 바랍니다.

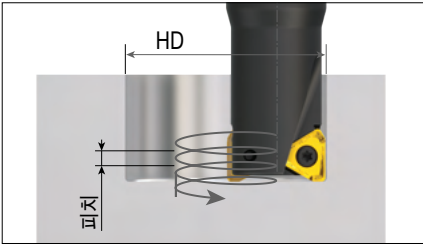
	R 프로그램값	A과가공 두께	B미가공 두께
WLMT 12	3.5	0.00	1.01
	3.6	0.00	0.98
	4.0	0.03	0.86
	4.5	0.13	0.71



직선 램핑 가공



헬리컬 램핑 가공



TOMX 10

커터 직경 (D)	직선 램핑 가공			헬리컬 램핑 가공		
	최대 경사각 (A°)	최대 절삭깊이 (mm)	최소 길이 (L)	최소 직경	최대 직경	최대 피치/회전
20	4.4	7.5	98	32		2.5
					40	4.1
25	4.5	7.5	96	41		3.4
					50	5.2
32	3.2	7.5	135	55		3.4
					64	4.8

ISO	피삭재	경도 (HB)	절삭 길이 (mm)	D20			D25			D32			D40			D50		
				V	*RPM	**Feed	V	*RPM	**Feed	V	*RPM	**Feed	V	*RPM	**Feed	V	*RPM	**Feed
P	저탄소강	85 - 175	0.4	714	11,374	15,924	797	10,159	18,285	900	8,958	18,633	1,005	8,002	12,803	1,122	7,149	11,438
			0.8	510	8,124	11,374	568	7,238	13,028	641	6,376	13,262	714	5,687	9,099	797	5,075	8,120
			1.5	380	6,043	8,460	421	5,366	9,659	473	4,708	9,792	526	4,190	6,705	586	3,734	5,974
			3.2	273	4,345	6,083	299	3,814	6,865	333	3,317	6,900	369	2,935	4,696	408	2,602	4,163
			4.8	234	3,729	5,221	254	3,235	5,823	280	2,787	5,798	308	2,450	3,920	339	2,162	3,459
			6.4	214	3,413	4,779	229	2,919	5,254	250	2,488	5,175	273	2,172	3,475	299	1,906	3,050
			7.9	205	3,258	4,561	215	2,740	4,931	232	2,308	4,800	251	2,000	3,200	274	1,746	2,794
			10	200	3,185	4,459	204	2,601	4,681	216	2,147	4,467	231	1,839	2,942	250	1,592	2,548
	고탄소강	175 - 225	0.4	643	10,237	11,260	718	9,143	10,971	810	8,063	10,481	905	7,202	11,163	1,010	6,434	9,651
			0.8	459	7,312	8,043	511	6,514	7,817	577	5,738	7,460	643	5,118	7,933	717	4,568	6,852
			1.5	342	5,439	5,983	379	4,829	5,795	426	4,237	5,508	474	3,771	5,846	528	3,360	5,040
			3.2	246	3,910	4,301	269	3,433	4,119	300	2,986	3,881	332	2,642	4,095	368	2,342	3,513
			4.8	211	3,356	3,692	229	2,911	3,494	252	2,509	3,261	277	2,205	3,417	305	1,946	2,919
			6.4	193	3,072	3,379	206	2,627	3,153	225	2,239	2,911	245	1,954	3,029	269	1,716	2,574
			7.9	184	2,932	3,225	194	2,466	2,959	209	2,077	2,700	226	1,800	2,790	247	1,572	2,358
			10	180	2,866	3,153	184	2,341	2,809	194	1,933	2,513	208	1,655	2,565	225	1,433	2,150
	합금강	275 - 325	0.4	571	9,099	9,099	638	8,127	8,940	720	7,167	8,600	804	6,401	8,962	898	5,719	8,006
			0.8	408	6,499	6,499	455	5,790	6,369	513	5,101	6,121	571	4,550	6,369	637	4,060	5,684
			1.5	304	4,834	4,834	337	4,293	4,722	378	3,766	4,519	421	3,352	4,693	469	2,987	4,182
			3.2	218	3,476	3,476	240	3,051	3,356	267	2,654	3,185	295	2,348	3,287	327	2,082	2,914
			4.8	187	2,983	2,983	203	2,588	2,847	224	2,230	2,676	246	1,960	2,744	272	1,730	2,422
			6.4	171	2,731	2,731	183	2,335	2,569	200	1,990	2,389	218	1,737	2,432	239	1,525	2,135
			7.9	164	2,606	2,606	172	2,192	2,411	186	1,846	2,215	201	1,600	2,240	219	1,397	1,956
			10	160	2,548	2,548	163	2,081	2,289	173	1,718	2,062	185	1,471	2,059	200	1,274	1,783
	공구강	200 - 250	0.4	536	8,530	6,824	598	7,619	6,857	675	6,719	6,719	754	6,001	7,202	842	5,361	6,434
			0.8	383	6,093	4,875	426	5,428	4,886	480	4,782	4,782	536	4,265	5,118	598	3,806	4,568
			1.5	285	4,532	3,626	316	4,024	3,622	355	3,531	3,531	395	3,143	3,771	440	2,800	3,360
			3.2	205	3,259	2,607	225	2,861	2,574	250	2,488	2,488	276	2,201	2,642	306	1,951	2,342
			4.8	176	2,797	2,238	190	2,426	2,184	210	2,091	2,091	231	1,837	2,205	255	1,622	1,946
			6.4	161	2,560	2,048	172	2,189	1,970	188	1,866	1,866	205	1,629	1,954	224	1,430	1,716
			7.9	153	2,444	1,955	161	2,055	1,849	174	1,731	1,731	188	1,500	1,800	206	1,310	1,572
			10	150	2,389	1,911	153	1,951	1,756	162	1,611	1,611	173	1,379	1,655	188	1,194	1,433
M	스테인리스 300 시리즈	135 - 185	0.4	464	7,393	5,175	518	6,603	5,282	585	5,823	5,241	603	4,801	5,761	673	4,289	5,147
			0.8	332	5,281	3,697	369	4,705	3,764	416	4,144	3,730	429	3,412	4,095	478	3,045	3,654
			1.5	247	3,928	2,750	274	3,488	2,790	307	3,060	2,754	316	2,514	3,017	352	2,240	2,688
			3.2	177	2,824	1,977	195	2,479	1,983	217	2,156	1,941	221	1,761	2,113	245	1,561	1,873
			4.8	152	2,424	1,697	165	2,103	1,682	182	1,812	1,631	185	1,470	1,764	204	1,297	1,557
			6.4	139	2,219	1,553	149	1,897	1,518	163	1,617	1,456	164	1,303	1,564	180	1,144	1,373
			7.9	133	2,118	1,482	140	1,781	1,425	151	1,500	1,350	151	1,200	1,440	165	1,048	1,257
			10	130	2,070	1,449	133	1,691	1,352	140	1,396	1,256	139	1,103	1,324	150	955	1,146
	스테인리스 400 시리즈	135 - 185	0.4	357	5,687	3,412	399	5,079	3,556	450	4,479	3,583	503	4,001	4,201	561	3,574	3,753
			0.8	255	4,062	2,437	284	3,619	2,533	320	3,188	2,550	357	2,843	2,986	398	2,538	2,665
			1.5	190	3,022	1,813	211	2,683	1,878	237	2,354	1,883	263	2,095	2,200	293	1,867	1,960
			3.2	136	2,172	1,303	150	1,907	1,335	167	1,659	1,327	184	1,468	1,541	204	1,301	1,366
			4.8	117	1,865	1,119	127	1,617	1,132	140	1,394	1,115	154	1,225	1,286	170	1,081	1,135
			6.4	107	1,707	1,024	115	1,460	1,022	125	1,244	995	136	1,086	1,140	150	953	1,001
			7.9	102	1,629	977	108	1,370	959	116	1,154	923	126	1,000	1,050	137	873	917
			10	100	1,592	955	102	1,300	910	108	1,074	859	115	919	965	125	796	836

*계산된 RPM은 실제 유효 직경을 고려함

**계산된 피드 F는 실제 칩 두께를 고려함