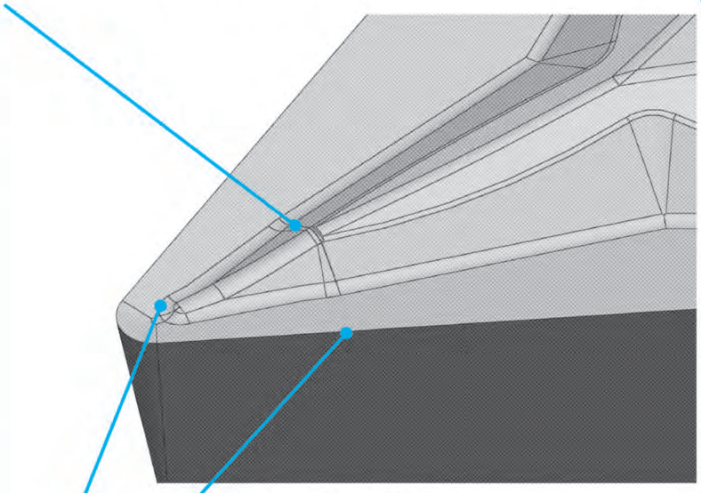
YL브레이커 터닝용 만능 브레이커

터닝 팁의 에이스 스트라이커!!

특 성

도트 거리의 최적화에 의해
고절입 시의 절삭저항을 억제

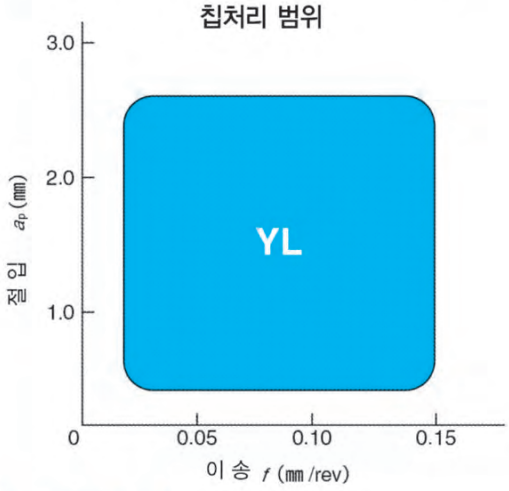


샤프엣지 & 고경사 상면각.
발군의 절삭성, 고품질의 가공면을 실현!

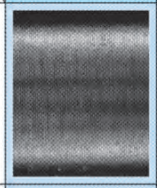
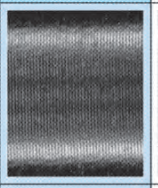
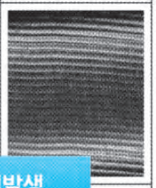
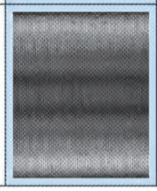
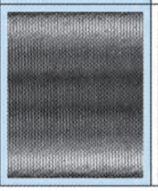
ST4/QM3를
새롭게 라인업

코너 선단부근까지 돌출된 도트 형상.
저절입(a_p=0.3mm)부터 칩처리가 가능.

칩처리 범위



내떨림 성능

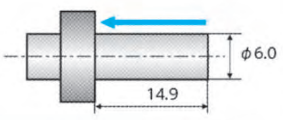
	이 송 f (mm/rev)			
	YL 브레이커		타사3차원 몰드브레이커품	
절입 a_p (mm)	0.03	0.05	0.03	0.05
3				
2				

떨림발생

【절삭조건】 피삭재: SUS304 ϕ16
V_c =80m/min f =0.05 mm/rev a_p =2,3 mm WET

표준재고품

피 삭 재	: SUS304L
절삭속도 (m/min)	: 50
이 송 (mm/rev)	: 0.03
절 입 (mm)	: 1.5
절 삭 유	: WET

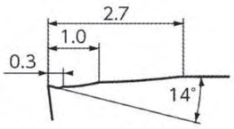
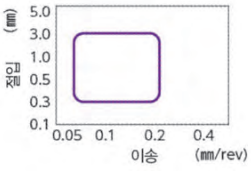
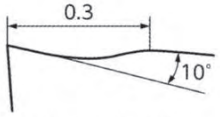
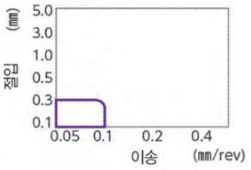
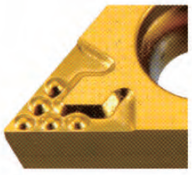
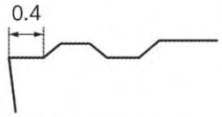
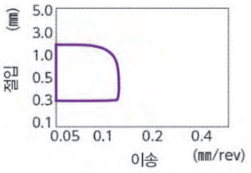
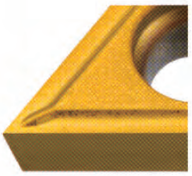
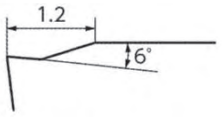
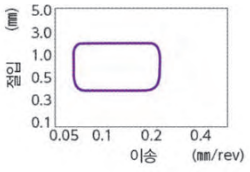
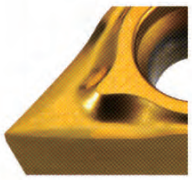
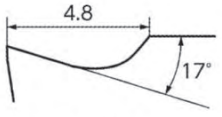
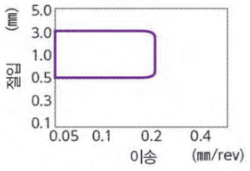


YL브레이커	3,000개/코너
종래품(PVD 코팅초경)	2,000개/코너

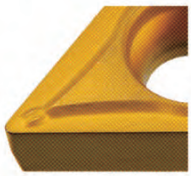
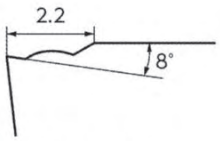
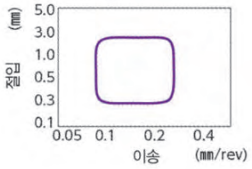
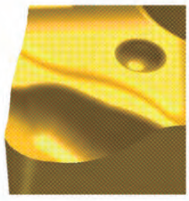
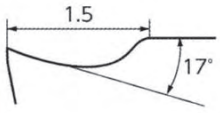
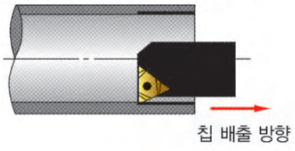
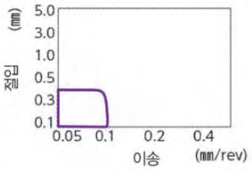
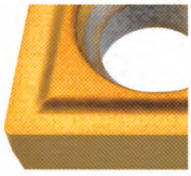
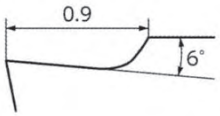
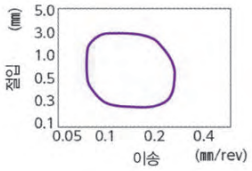
NTK YL 브레이커는 칩처리가 양호.
종래품과 비교하여 대폭적인 수명개선이 가능하였다.
또한, 치수보정이 필요없어 안정된 가공을 실현하였다.

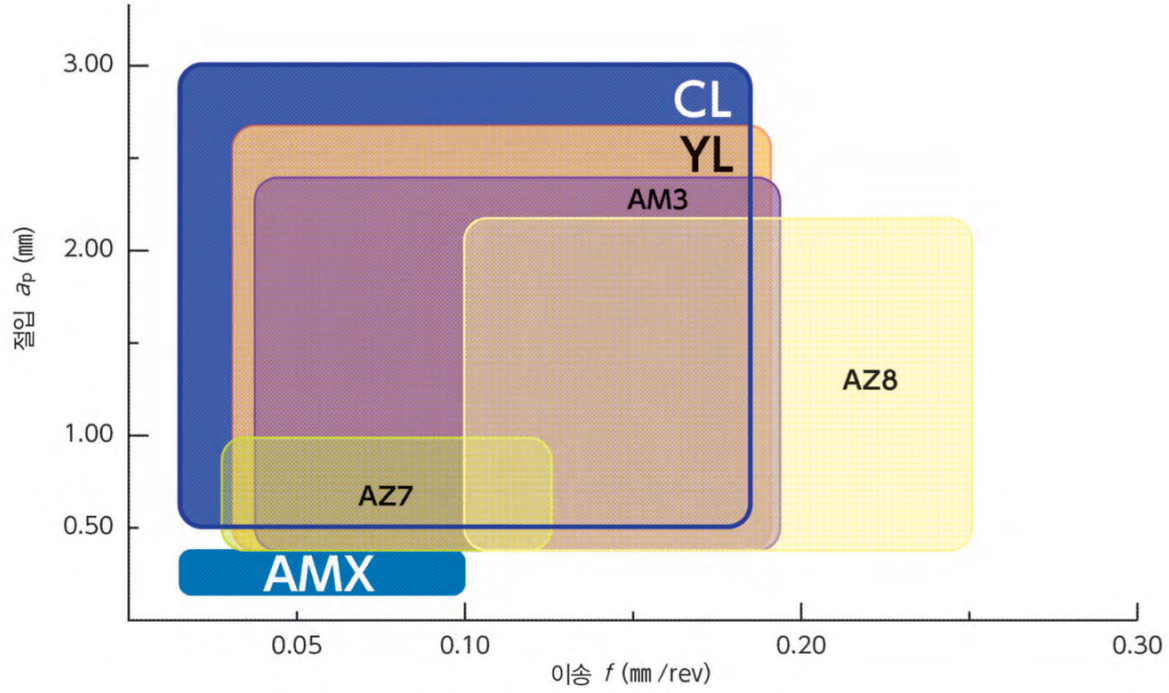
팁 호칭 • 브레이커

포지팁 3차원 몰드 브레이커

명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
YL		 ※DCGT11T302MYL타입	●절삭성과 강도를 양립하여 폭넓은 가공영역을 커버 ●발군의 칩처리성	
AMX		 ※DCGT11T302MAMX타입	●극소 절입 영역에 있어서 뛰어난 칩처리 성능	
AZ7		 ※DCGT11T302MFN타입 (FN이 붙지 않는 품번은 FN이 붙은 품번과 비교하여 인선높이가 0.2mm 높게 되어 있습니다.)	●저이송, 저절입에서 우수한 칩처리 성능	
AM3		 ※DCGT11T302타입	●절삭성, 칩처리를 양립한 만능브레이커	
CL		 ※DCGT11T302M타입	●더블포지 저저항 형상으로 절삭성 양호 ●광범위한 칩처리성	

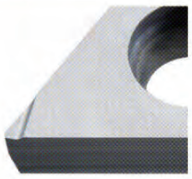
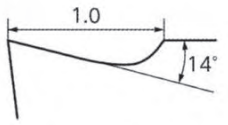
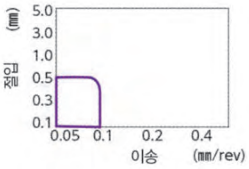
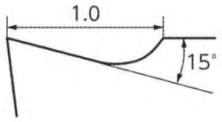
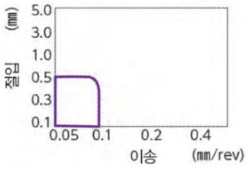
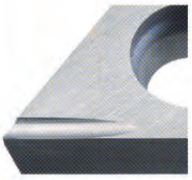
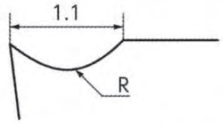
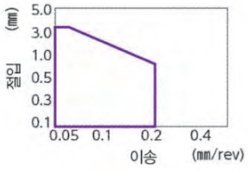
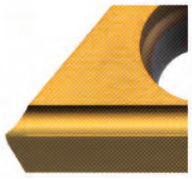
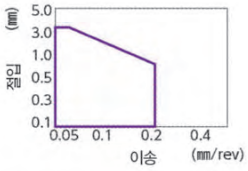
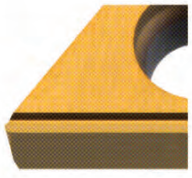
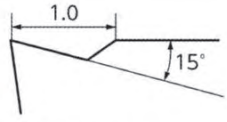
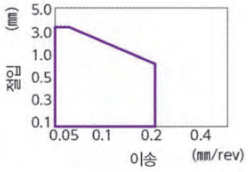
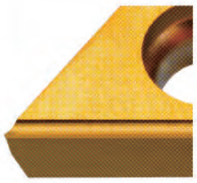
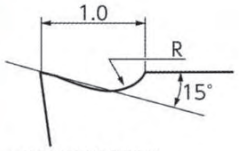
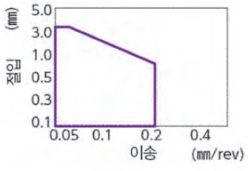
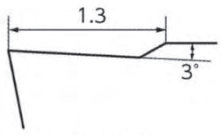
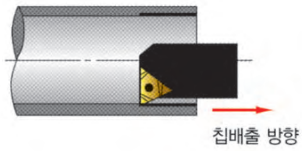
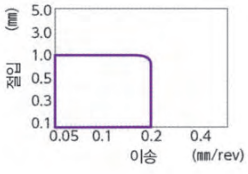
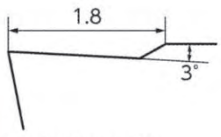
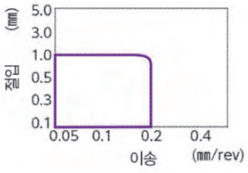
■ 포지팁 3차원 몰드 브레이커

명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
AZ8		 ※DCMT11T302타입	●CVD코팅이면서 뛰어난 절삭성을 갖는 범용성이 높은 브레이커	
FG		 ※TPGH110304타입	●내경 가공용 브레이커 ●저절입 영역에서 칩을 앞쪽으로 배출시킴 ●고경사로 절삭성 양호 	
AM5		 ※CPGH060202FN타입	●내경 가공용 브레이커 ●절삭성과 칩처리를 양립	

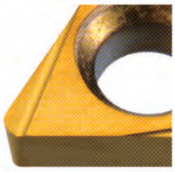
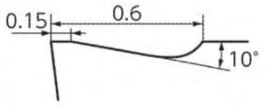
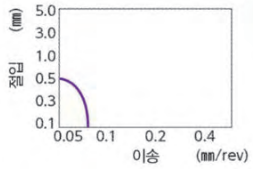
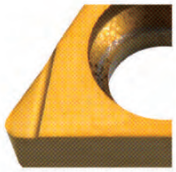
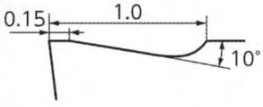
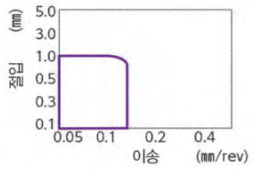
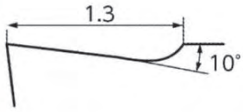
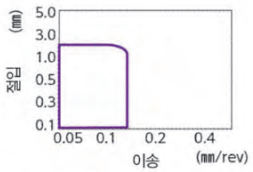
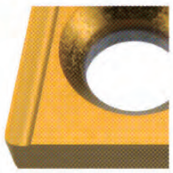
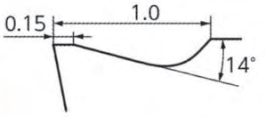
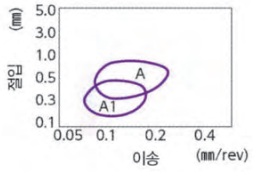
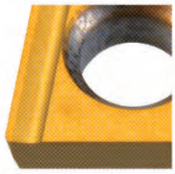
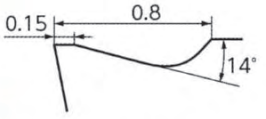
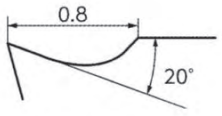
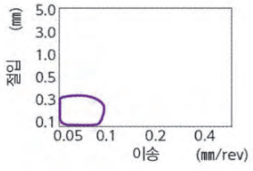


팁 호칭 • 브레이커

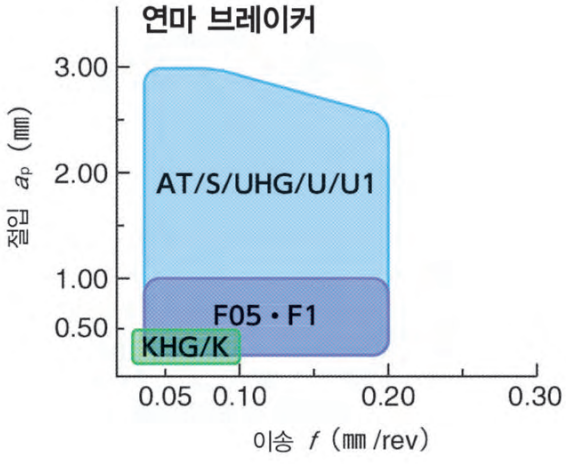
포지팁 연마 브레이커

명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
KHG		 ※DCET11T302타입	●사상영역에서 칩의 흐름을 제어 ●고정도로 연마된 코너R로 초정밀가공에 최적 ●인선 코너R 치수공차±0.01	
K		 ※TPGH090202FL타입	●사상가공에서 칩을 컨트롤 ●고경사로 절삭성 양호	
UHG		 ※DCET11T3008R타입	●절삭성이 뛰어나고 광범위한 칩처리 성능을 가짐 ●인선 코너 R치수 공차±0.01	
U • U1		 ※DCGT11T302M타입	●고경사로 절삭성이 좋고 피삭재의 가공경화 방지에도 효과적	
S		 ※DCGT11T302타입	●저이송 영역의 표준 브레이커로 절삭성과 칩배출을 양립	
AT		 ※DCGT11T302타입	●내용착성과 치수안정성에 뛰어난 브레이커 ●소경워크, 저탄소강 등의 가공에 최적	
F05		 ※TPGH060102F타입	●칩을 앞쪽으로 배출하는 내경가공 전용 브레이커 ●특히 막힌 홀 가공에 있어서 뛰어난 성능을 발휘 	
F1		 ※TPGH110302F타입		

포지팁 연마 브레이커

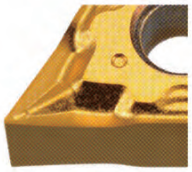
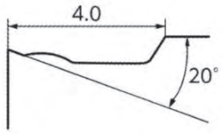
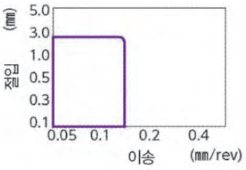
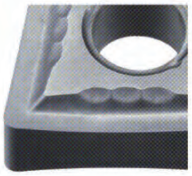
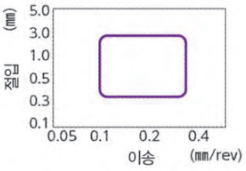
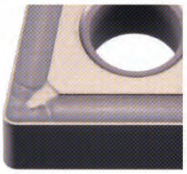
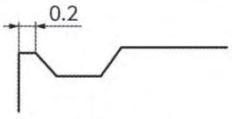
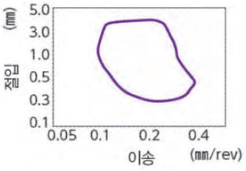
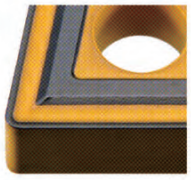
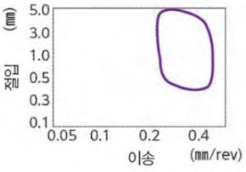
명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
B1		 ※TCGH060102FV타입	●내경가공에 있어서 뛰어난 절삭성과 인선강도에 의해 안정된 가공을 실현	
B2		 ※TPGH090202FV타입		
B3		 ※TPGH090202F타입		
A		 ※CPGH080202타입	●인선강도, 칩 배출을 양립 ●범용 브레이커	
A1		 ※CPGH040102타입		
A2		 ※ERGHT30102F타입	●저절입, 저이송 조건에서 칩을 컨트롤 ●큰 경사각에 의해 절삭성도 양호	

포지팁

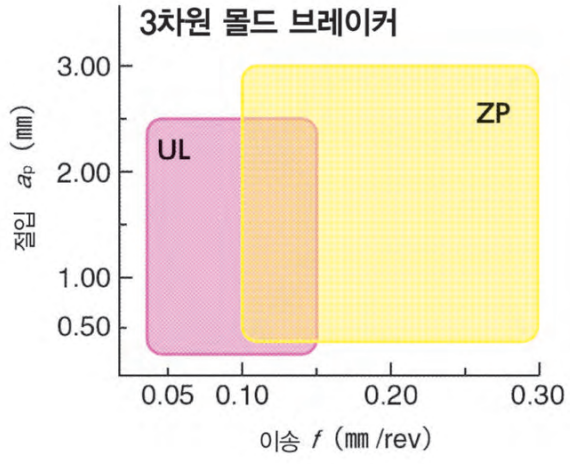


팁 호칭 • 브레이커

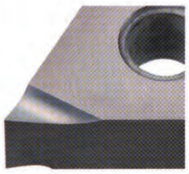
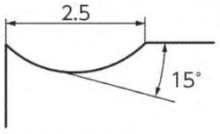
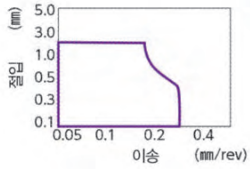
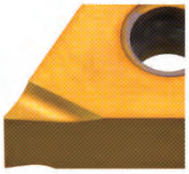
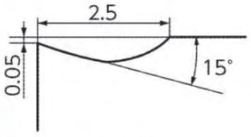
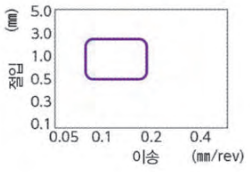
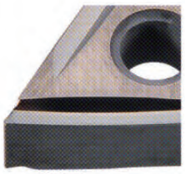
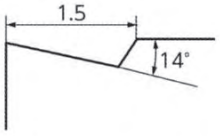
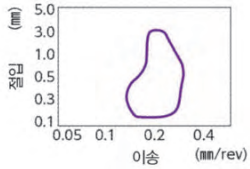
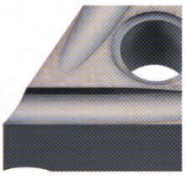
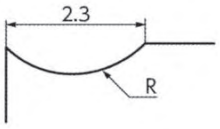
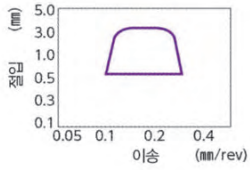
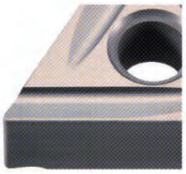
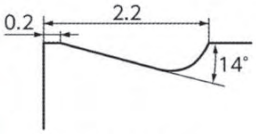
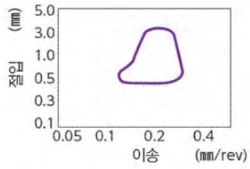
네거팁 3차원 몰드 브레이커

명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
UL		 ※TNGG160401MFN타입	●포지팁에 필적하는 절삭성 ●광범위한 칩 처리 성능	
ZP		 ※CNMG120408타입	●더블포지의 경사와 인선부 샤프엣지의 조합으로 절삭성 양호 ●고절입에서도 저저항으로 가공 가능	
Z5		 ※CNMG120408ENB타입	●랜드 형성, 강도 향상 ●강단속 가공용	
G		 ※CNMG120408타입	●인선강도가 높아 안정성에 뛰어난 황삭가공용 브레이커	

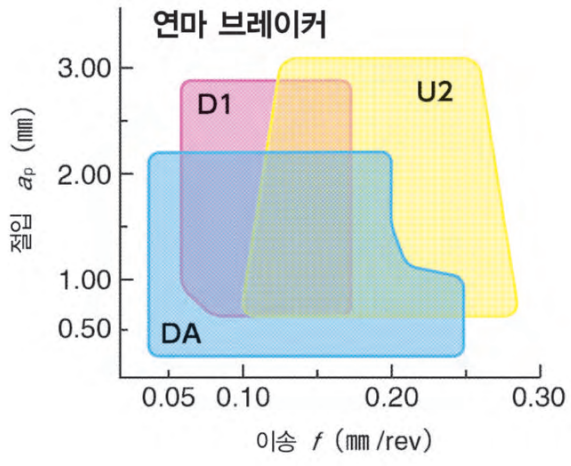
네거팁



■ 네거팁 연마브레이커

명칭	브레이커 형상 • 단면		특성 • 용도	칩 처리 범위
DA		 ※TNGG160401F타입	●절삭성이 우수하고 칩 배출을 컨트롤하는 사상용 브레이커	
D1		 ※TNEG160402F타입		
N1		 ※TNGG160402T타입	●브레이커 형상의 상승각이 크고, 더블포지 형상 ●칩 처리 양호	
U2		 ※TNGG160402F타입	●고경사로 절삭성이 좋고 피삭재의 가공경화나 burr억제에 효과적임	
C		 ※TNGG160402F타입	●인선강도와 칩배출을 양립시킨 범용 브레이커	

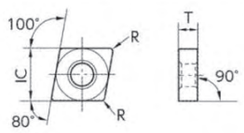
■ 네거팁



초경합금

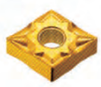
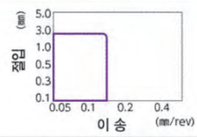
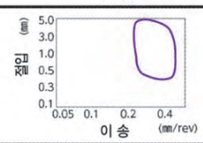
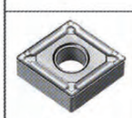
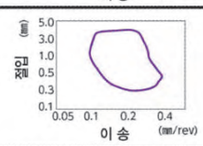
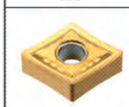
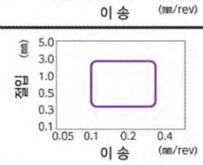
〈80° 마름모형 네거티브〉

품 번	내접원(IC)	두께(T)
CN_1204	12.7	4.76



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스 텐 리 스 강	●	●	●	●	●	●	●		●	●
주 철	●	●	●	●	●	●	●			●
비 철 금 속		●		●	●			●		
내 열 합 금	●		●		●	●	●			●
고 경 도 재	●		●			●	●			

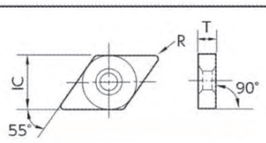
● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1	적합홀더 참조 페이지	브레이커적용범위
 UL	CNGG120404FNUL	CNGG431FNUL	0.4			●		●		●				F11 F13 G42 K36	
	120408FNUL	432FNUL	0.8			●		●		●					
G	CNMG120408G	CNMG432-G	0.8								●				
	120412G	433-G	1.2								●				
	120416G	434-G	1.6								●				
 Z5	CNMG120408TNBZ5	432-TNB-Z5	0.8			●				●					
 ZP	CNGG120404FNZP	CNGG431-FN--ZP	0.4		●	●				●					
	120408FNZP	432-FN--ZP	0.8		●	●				●					

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

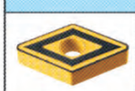
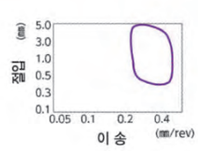
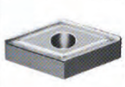
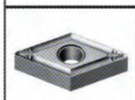
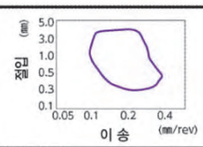
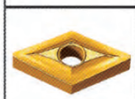
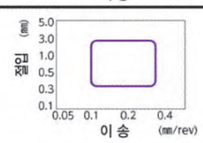
〈55° 마름모형 네거티브〉

품 번	내접원(IC)	두께(T)
DN_1504	12.7	4.76



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스 텐 리 스 강	●	●	●	●	●	●	●		●	●
주 철	●	●	●	●	●	●	●	●		●
비 철 금 속		●		●	●			●		
내 열 합 금	●		●		●	●	●			●
고 경 도 재	●		●			●	●			

● : 제1추천
● : 제2추천

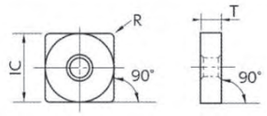
형 상	품 번	인치계	코너R	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1	적합홀더 참조 페이지	브레이커적용범위
 G	DNMG150404G	DNMG431-G	0.4								●			F15 F17 G43 K37	
	150408G	432-G	0.8								●				
	150412G	433-G	1.2								●				
 G	DNMG150404TNG	DNMG431-TN--G	0.4			●									
 Z5	DNMG150408TNBZ5	DNMG432-TNB-Z5	0.8			●				●					
 ZP	DNGG150404FNZP	DNGG431-FN--ZP	0.4		●	●				●					
	150408FNZP	432-FN--ZP	0.8		●	●				●					

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

NTK

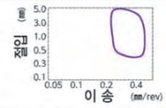
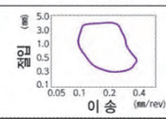
〈90° 정사각형 네거티브〉

품 번	내접원(IC)	두께(T)
SN_1204	12.7	4.76



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스 텐 리 스 강	●	●	●	●	●	●	●			●
주 철	●	●	●	●	●	●	●			
비 철 금 속								●		
내 열 합 금		●		●	●					●
고 경 도 재	●		●		●	●	●			

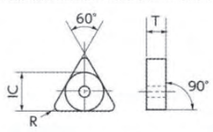
● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너 R	PVD코팅 미립자초경	코팅초경	CVD	초경	적합홀더 참조 페이지	브레이커적용범위
				ST4 ZM3 QM3 VM1 TM4 DT4 DM4	CP1	CP7	KM1		
G	SNMG120408G	SNMG432-G	0.8		●			F21 F23 K38	
	SNMG120412G	SNMG433-G	1.2		●				
	SNMG120416G	SNMG434-G	1.6		●				
Z5	SNMG120408TNBZ5	SNMG432-TNB-Z5	0.8	● ●					

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

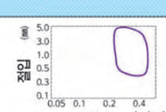
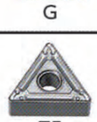
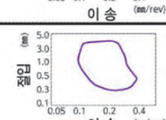
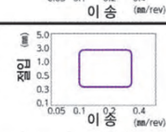
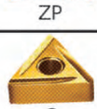
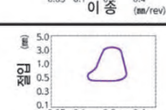
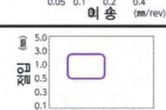
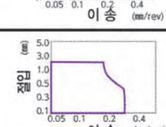
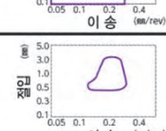
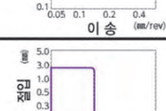
〈60° 정삼각형 네거티브〉

품 번	내접원(IC)	두께(T)
TN_1604	9.525	4.76



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스 텐 리 스 강	●	●	●	●	●	●	●			●
주 철	●	●	●	●	●	●	●			
비 철 금 속								●		
내 열 합 금		●		●	●					●
고 경 도 재	●		●		●	●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너 R	PVD코팅 미립자초경	코팅초경	CVD	초경	적합홀더 참조 페이지	브레이커적용범위
				ST4 ZM3 QM3 VM1 TM4 DT4 DM4	CP1	CP7	KM1		
G	TNMG160408G	TNMG332-G	0.8		●			F27 G41	
	160412G	333-G	1.2		●				
 Z5	TNMG160404TNBZ5	331-TNB-Z5	0.4	● ●					
	160408TNBZ5	332-TNB-Z5	0.8	● ●					
ZP	TNGG160402FNZP	TNGG33Y-FN--ZP	0.2	● ● ● ● ●					
	160404FNZP	331-FN--ZP	0.4	● ● ● ● ●					
	160408FNZP	332-FN--ZP	0.8	● ● ● ● ●					
 C 우승수	TNGG160402FR/LC	TNGG33Y-FR/L--C	0.2	R					
D1 우승수	TNEG160402FR/LD1		0.2	●					
	160404FR/LD1		0.4	●					
	160408FR/LD1		0.8	●					
DA 우승수	TNGG160401FR/LDA	TNGG331CFR/L--DA	0.1	R R					
U2 우승수	TNGG160401FR/LU2	TNGG331CFR/L--U2	0.1	R R					
	160402FR/LU2	33Y-FR/L--U2	0.2	● ●					
	160404FR/LU2	331-FR/L--U2	0.4	● ●					
	160408FR/LU2	332-FR/L--U2	0.8	●					
UL	TNGG160401MFNUL	TNGG3304MFNUL	*0.08	● ● ● ●					
	160402MFNUL	3308MFNUL	*0.18	● ● ● ●					
	160404MFNUL	331MFNUL	*0.38	● ● ● ●					
	160408MFNUL	332MFNUL	*0.78	● ● ● ●					

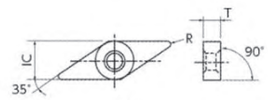
※R기호(01M, 02M, 04M, 08M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4, R0.8이하의 가공에 사용할 수 있습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

초경합금

〈35° 마름모형 네거티브〉

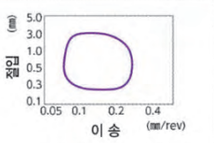
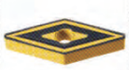
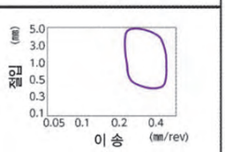
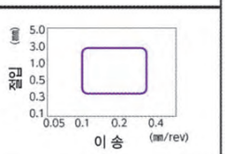
품 번	내접원(IC)	두께(T)
VN_1604	9.525	4.76



VN__

강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●			●
비철금속	●		●		●			●		
내열합금		●	●	●	●	●	●			●
고경도재	●		●			●	●			

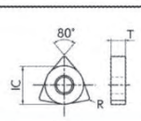
● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
AM1	VNMG160404TNBAM1	331-TNB-AM1	0.4			●				●				F31	
	160408TNBAM1	332-TNB-AM1	0.8			●				●					
 G	VNMG160404G	VNMG331-G	0.4								●				
	160408G	332-G	0.8								●				
	160412G	333-G	1.2								●				
ZP	VNGG160402FNZP	VNGG33Y-FN--ZP	0.2			●				●					
	160404FNZP	331-FN--ZP	0.4			●				●					
	160408FNZP	332-FN--ZP	0.8			●				●					

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

〈80° 육각형 네거티브〉

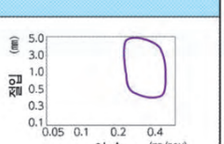
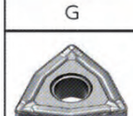
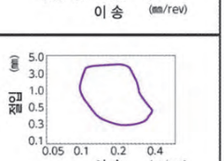
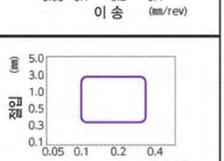
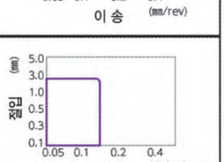
품 번	내접원(IC)	두께(T)
WN_0804	12.7	4.76



WN__

강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●			●
비철금속	●		●		●			●		
내열합금		●	●	●	●	●	●			●
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

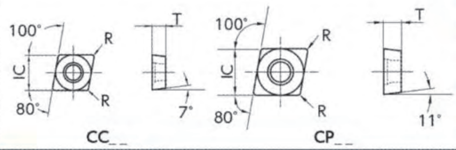
형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
G	WNMG080408G	WNMG432-G	0.8								●				
	080412G	433-G	1.2								●				
 Z5	WNMG080408TNBZ5	WNMG432-TNB-Z5	0.8			●				●				F32 K39	
	080412TNBZ5	433-TNB-Z5	1.2			●				●					
ZP	WNGG080404FNZP	WNGG431-FN--ZP	0.4		●	●				●					
	080408FNZP	432-FN--ZP	0.8		●	●				●					
UL	WNGG080404FNUL	WNGG431FNUL	0.4			●		●		●					
	080408FNUL	432FNUL	0.8			●		●		●					

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

E1-50 1904.12.27 1:25 AM 페이지37 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

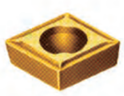
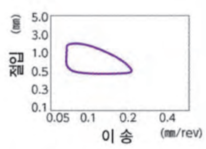
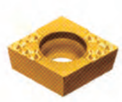
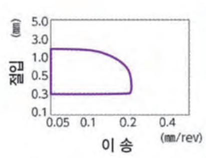
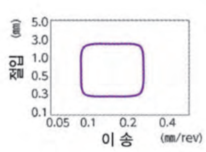
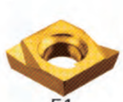
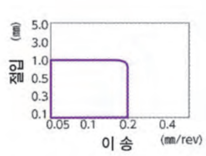
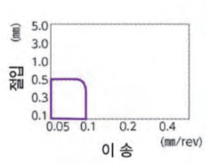
〈80° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
CC_0602	6.35	2.38	7°
CC_09T3	9.525	3.97	7°



피삭재	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	•
스텐리스강	●	●	●	●	●	●	●			•
주철								●		
비철금속		•		•	•					●
내열합금	•		●		•	●	●			
고경도재	•		●			•	●			

● : 제1추천
• : 제2추천

형 상	품 번	인치계	코너R	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1	적합홀더 참조 페이지	브레이커적용범위
				PVD코팅 미립자초경							CVD 코팅초경		초경		
 AM3	CCGT060200FNAM3		0.03				●	◉	●					G25, K30	
	060202FNAM3		0.2		●		●								
	060204FNAM3		0.4		●										
	060201MFNAM3		*0.08	◉		●		◉	◉						
	060202MFNAM3		*0.18	◉		●		◉	●						
	060204MFNAM3		*0.38	◉		◉		◉	●						
	CCGT09T300FNAM3		0.03				●	●	●						
	09T302FNAM3		0.2			●	●								
	09T304FNAM3		0.4			●	●								
	09T301MFNAM3		*0.08	◉	●	●	●	●	●						
	09T302MFNAM3		*0.18	◉	●	●	●	●	●						
	09T304MFNAM3		*0.38	◉	●	●	●	●	●						
	CCMT060202FNAM3		0.2							●					
	060204FNAM3		0.4							●					
	CCMT09T302FNAM3		0.2							●					
	09T304FNAM3		0.4							●					
	09T308FNAM3		0.8							●					
 AZ7	CCGT060200AZ7		0.03			●									
	060201MAZ7		*0.08			●									
	060202MAZ7		*0.18			●									
	CCGT09T300AZ7		0.03		●	●		●	●						
	09T301MAZ7		*0.08		●	●		●	●						
	09T302MAZ7		*0.18		●	●		●	●						
	09T304MAZ7		*0.38		●	●		●	●						
AZ8	CCMT060202ENAAZ8		0.2									●			
	060204ENBAZ8		0.4									●			
	060208ENBAZ8		0.8									●			
	CCMT09T302ENAAZ8		0.2									●			
	09T304ENBAZ8		0.4									●			
	09T308ENBAZ8		0.8									●			
 F1 우승수	CCGT060201FR/LF1		0.1	R		R		R							
	060202FR/LF1		0.2	R		R		R							
	060204FR/LF1		0.4	R		R		R							
	CCGT09T302FR/LF1		0.2	R		R		R							
	09T304FR/LF1		0.4	R		R		R							
KHG	CCET0602005R/LKHG		0.05				●								
	0602008R/LKHG		0.08				●								
	0602018R/LKHG		0.18				●								
	060202R/LKHG		0.2				●								
	CCET09T3005R/LKHG		0.05				●	R							
	09T3008R/LKHG		0.08				●	R							
	09T3018R/LKHG		0.18				●	R							
	09T302R/LKHG		0.2				●	R							

Breaker application range charts (브레이커적용범위): 절입 (mm) 5.0 / 3.0 / 1.0 / 0.5 / 0.3 / 0.1; 이 송 0.05 / 0.1 / 0.2 / 0.4 (mm/rev)

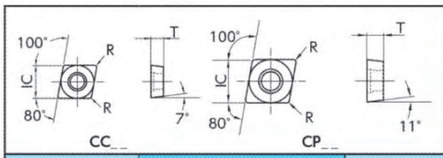
※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.

● : 표준재고 ◉ : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

초경합금

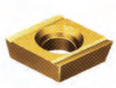
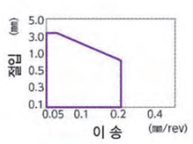
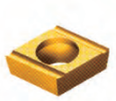
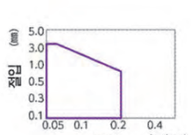
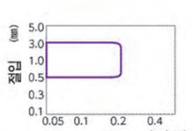
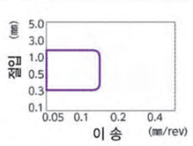
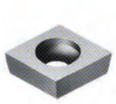
〈80° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
CC_0602	6.35	2.38	7°
CC_09T3	9.525	3.97	7°



강										
스 텐 리 스 강	●	●	●	●	●	●	●		●	●
주 철	●	●	●	●	●	●	●			●
비 철 금 속		●		●	●			●		●
내 열 합 금	●		●		●	●	●			
고 경 도 재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CVD CP1	CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
 S 좌승수	CCGT060200R/LS		0.03		●		●		R						
	060201R/LS		0.1		●		●								
	060202R/LS		0.2		●		●								
	060201MR/LS		*0.08			R			R						
	060202MR/LS		*0.18			R			R						
	CCGT09T300R/LS		0.03		R		●	R	R						
	09T301R/LS		0.1		●	R	●								
	09T302R/LS		0.2		R	R	●								
	09T304R/LS		0.4			R									
	09T301MR/LS		*0.08			R		R	R						
	09T302MR/LS		*0.18			R		R	R						
	09T304MR/LS		*0.38			R		R	R						
 U·U1 우승수	CCGT060200R/LU		0.03		R				R						
	060201R/LU		0.1		●				R						
	060202R/LU		0.2		●				R						
	CCGT09T300R/LU1		0.03		●			R	R						
	09T301R/LU1		0.1		●			R	R						
	09T302R/LU1		0.2		●			R	R						
	09T304R/LU1		0.4		●			R	R						
CL ※2	CCGT060201MCL		*0.08	●		●		●	●	●				G25 K30	
	060202MCL		*0.18	●		●		●	●	●					
	09T300CL		0.03					●	●						
	09T301MCL		*0.08	●		●		●	●	●					
	09T302MCL		*0.18	●		●		●	●	●					
	09T304MCL		*0.38	●		●		●	●	●					
YL	CCGT09T300YL		0.03					●	●						
	09T301MYL		0.08	●		●		●	●	●					
	09T302MYL		0.18	●		●		●	●	●					
	09T304MYL		0.38	●		●		●	●	●					
	09T308MYL		0.78	●		●		●	●	●					
 브레이커 無	CCGW060200FN		0.03		●										—
	060201FN		0.1		●										
	060200H		0.03										●		
	060201H		0.1										●		
	060202H		0.2										●		
	CCGW09T300FN		0.03		●										
	09T301FN		0.1		●										
	09T300H		0.03										●		
	09T301H		0.1										●		
	09T302H		0.2										●		
	09T302MP		*0.18						●						
	09T30V		0.0				●								
	09T301P		0.1				●								
	09T302P		0.2				●								

※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.
※2 CL브레이커는 제품사양상 상기치수와 약간 다릅니다만 가공에는 문제 없습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

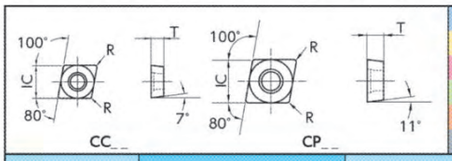
E1-50 1904.12.27 1:25 AM 페이지39 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

NTK

〈80° 마름모형 포지티브〉

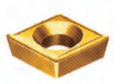
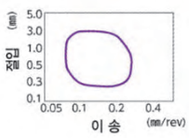
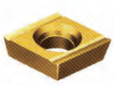
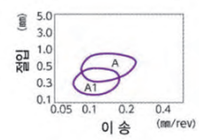
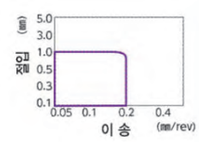
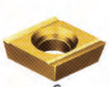
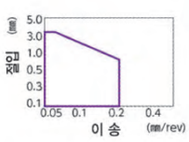
품 번	내접원(IC)	두께(T)	여유각
CP_0401	4.76	1.59	11°
CP_0602	6.35	2.38	11°

품 번	내접원(IC)	두께(T)	여유각
CP_0802	7.94	2.38	11°
CP_0903	9.525	3.18	11°



	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스텐리스강	●	●	●	●	●	●	●			●
주철								●		
비철금속		●		●	●					●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1	적합홀더 참조 페이지	브레이커적용범위
 AM5	CPGH060202FNAM5	CPGP83Y-FN--AM5	0.2		●			●							
	CPGH080202FNAM5	CPGP03Y-FN--AM5	0.2		●			●							
	CPGH090302FNAM5	CPGM32Y-FN--AM5	0.2		●			●							
	090304FNAM5	321-FN--AM5	0.4		●			●							
	090308FNAM5	322-FN--AM5	0.8		●			●							
 A・A1 좌승수	CPGH040102F R/L A1	CPGP62Y-F R/L--A1	0.2		L			L							
	040104F R/L A1	621-F R/L--A1	0.4		L			L							
	CPGH060202F R/L A	CPGP83Y-F R/L--A	0.2		L			L							
	060204F R/L A	831-F R/L--A	0.4		L			L							
	CPGH080202F R/L A	CPGP03Y-F R/L--A	0.2		L			L							
	080204F R/L A	031-F R/L--A	0.4		L			L						K30 K31	
F1 우승수	CPGH040101F R/L F1		0.1	R		R		R							
	040102F R/L F1		0.2	R		R		R							
	040104F R/L F1		0.4	R		R		R							
	CPGH060202F R/L F1		0.2	R		R		R							
	060204F R/L F1		0.4	R		R		R							
 S 좌승수	CPGH040101 R/L S		0.1			L		L							
	040102 R/L S		0.2			L		L							
	040104 R/L S		0.4			L		L							
	CPGH060202 R/L S		0.2			L		L							
	060204 R/L S		0.4			L		L							

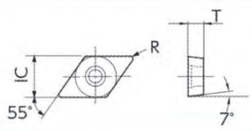
※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정) ★신표준재고품(특정)

초경합금

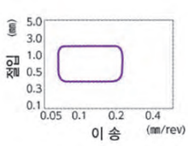
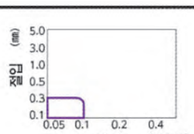
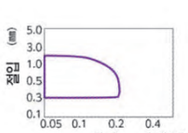
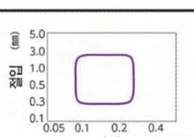
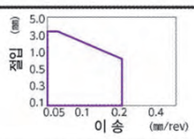
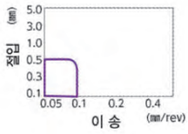
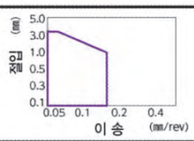
〈55° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
DC_0702	6.35	2.38	7°
DC_11T3	9.525	3.97	7°



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●			●
비철금속		●		●	●			●		
내열합금	●		●		●	●	●			●
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경							코팅초경 CVD		초경	적합홀더 참조 페이지	브레이커적용범위
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1		
AM3	DCGT070200FNAM3		0.03		●		●	●	●					G27 G29	
	070201FNAM3		0.1		●		●								
	070202FNAM3		0.2		●		●								
	070204FNAM3		0.4		●		●								
	070201MFNAM3		*0.08	●		●		●	●						
	070202MFNAM3		*0.18	●		●		●	●						
	070204MFNAM3		*0.38	●		●		●	●						
	DCGT11T300FNAM3		0.03		●		●	●	●						
	11T302FNAM3		0.2		●	●	●								
	11T304FNAM3		0.4		●	●	●								
	11T301MFNAM3		*0.08	●	●	●	●	●	●						
	11T302MFNAM3		*0.18	●	●	●	●	●	●						
	11T304MFNAM3		*0.38	●	●	●	●	●	●						
	DCMT070202FNAM3		0.2							●					
	070204FNAM3		0.4							●					
	DCMT11T302FNAM3		0.2							●					
	11T304FNAM3		0.4							●					
	11T308FNAM3		0.8							●					
AMX	DCGT070201MAMX		*0.08					●	●	●					
	070202MAMX		*0.18					●	●	●					
	070204MAMX		*0.38					●	●	●					
	DCGT11T301MAMX		*0.08					●	●	●					
	11T302MAMX		*0.18					●	●	●					
	11T304MAMX		*0.38					●	●	●					
AZ7	DCGT070200AZ7		0.03			●								G27 G29	
	070201MAZ7		*0.08			●									
	070202MAZ7		*0.18			●									
	DCGT11T300AZ7		0.03		●	●		●	●						
	11T301MAZ7		*0.08		●	●		●	●						
	11T302MAZ7		*0.18		●	●		●	●						
	11T304MAZ7		*0.38		●	●		●	●						
	11T308AZ7		0.8		●	●			●						
AZ8	DCMT070202ENAAZ8		0.2									●			
	070204ENBAZ8		0.4									●			
	070208ENBAZ8		0.8									●			
	DCMT11T302ENAAZ8		0.2									●			
	11T304ENBAZ8		0.4									●			
	11T308ENBAZ8		0.8									●			
AT	DCET11T301M$^{R}_{L}$AT		*0.08					R						G27 G29	
	11T302M$^{R}_{L}$AT		*0.18					R							
KHG	DCET0702005$^{R}_{L}$KHG		0.05				●								
	0702008$^{R}_{L}$KHG		0.08				●								
	0702018$^{R}_{L}$KHG		0.18				●								
	070202$^{R}_{L}$KHG		0.2				●								
	DCET11T3005$^{R}_{L}$KHG		0.05				●	R							
	11T3008$^{R}_{L}$KHG		0.08				●	R							
	11T3018$^{R}_{L}$KHG		0.18				●	R							
	11T302$^{R}_{L}$KHG		0.2				●	R							
UHG 우승수	DCET0702008$^{R}_{L}$UHG		0.08				R								
	DCET11T3008$^{R}_{L}$UHG		0.08				R								

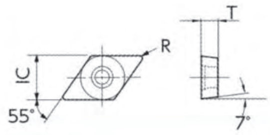
※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

E1-50 1904.12.27 1:25 AM 페이지41 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

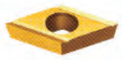
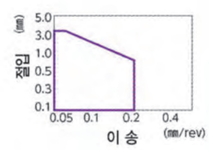
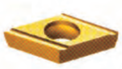
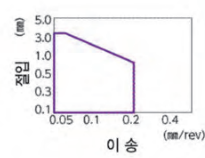
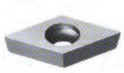
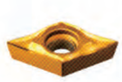
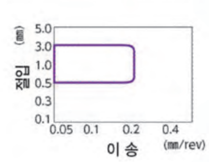
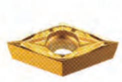
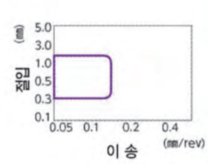
〈55° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
DC_0702	6.35	2.38	7°
DC_11T3	9.525	3.97	7°



피삭재	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	🔴	🔴	🔴	🔴	🔴	🔴	🔴		🔴	🔵
스텐리스강	🔴	🔴	🔴	🔴	🔴	🔴	🔴			🔵
주철								🔴		
비철금속		🔵		🔵	🔵					🔴
내열합금	🔵		🔴		🔵	🔴	🔴			
고경도재	🔵		🔴			🔵	🔴			

🔴 : 제1추천
🔵 : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경							CVD 코팅초경		초경	적합홀더 참조 페이지	브레이커적용범위
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1		
 S 우승수	DCGT070200R/LS		0.03		●		●		R						
	070201R/LS		0.1		●		●								
	070202R/LS		0.2		●		●								
	070204R/LS		0.4-				R								
	070201MR/LS		*0.08			R			R						
	070202MR/LS		*0.18			R			R						
	DCGT11T300R/LS		0.03		R		●	R	R						
	11T301R/LS		0.1		R	R	●								
	11T302R/LS		0.2		R	R	●								
	11T304R/LS		0.4			R									
	11T301MR/LS		*0.08			R		R	R						
	11T302MR/LS		*0.18			R		R	R						
	11T304MR/LS		*0.38			R		R	R						
 U・U1 우승수	DCGT070200R/LU		0.03		R		R								
	070201R/LU		0.1		R		R								
	070202R/LU		0.2		●		R							G27	
	DCGT11T300R/LU1		0.03		●		R	R	R					G29	
	11T301R/LU1		0.1		●		R	R	R						
	11T302R/LU1		0.2		●		R	R	R						
	11T304R/LU1		0.4		●		R	R	R						
 브레이커 無	DCGW070200FN		0.03		●										—
	070201FN		0.1		●										
	070200H		0.03										●		
	070201H		0.1										●		
	070202H		0.2										●		
	07020V		0.0				●								
	DCGW11T300FN		0.03		●										
	11T301FN		0.1		●										
	11T300H		0.03										●		
	11T301H		0.1										●		
	11T302H		0.2										●		
	11T30V		0.0				●								
 CL ※2	DCGT070201MCL		*0.08	🔴		🔴		●	●	●					
	070202MCL		*0.18	🔴		🔴		●	●	●					
	070204MCL		*0.38	🔴		●		●	●	●					
	DCGT11T301MCL		*0.08	🔴		🔴		●	●	●					
	11T302MCL		*0.18	🔴		●		●	●	●					
	11T304MCL		*0.38	🔴		●		●	●	●					
 YL	DCGT070201MYL		0.08			🔴				●				G27	
	070202MYL		0.18			🔴				●				G29	
	070204MYL		0.38			🔴				🔴					
	DCGT11T300YL		0.03					●	●						
	11T301MYL		0.08	🔴		🔴		●	🔴	●					
	11T302MYL		0.18	🔴		🔴		●	🔴	●					
	11T304MYL		0.38	🔴		●		●	🔴	●					
	11T308MYL		0.78	🔴		🔴		●	🔴	●					

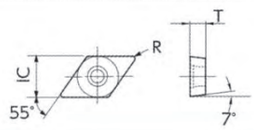
● : 표준재고 🔴 : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

※R기호(01M, 02M, 04M, 08M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4, R0.8이하의 가공에 사용할 수 있습니다.
※2 CL브레이커는 제품사양상 상기치수와 약간 다릅니다만 가공에는 문제 없습니다.

초경합금

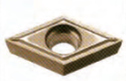
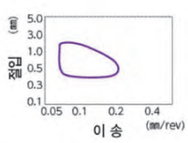
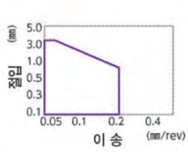
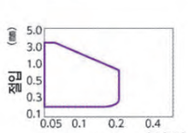
〈TFD형 와이퍼有〉

품 번	내접원(IC)	두께(T)	여유각
TFD_07	6.35	2.38	7°
TFD_11	9.525	3.97	7°



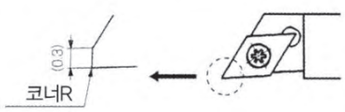
강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●	●		
비철금속		●		●	●					●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CVD CP1	CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
 AM3	TFD11FR05AM3	DCGT32.502AM3-WP	0.05			R			R	R				G27 G29	
	11FR15AM3	32.506AM3-WP	0.15			R			R	R					
S※ 우승수	TFD07FR/L05	DCGT21.502R/LS-WP	0.05		●	R	R								
	07FR/L15	21.506R/LS-WP	0.15		●	R									
	TFD11FR05	DCGT32.502RS-WP	0.05		R	R	R								
	11FR15	32.506RS-WP	0.15		R	R									
U・U1※ 우승수	TFD07FR05U	DCGT21.502RU-WP	0.05		R	R	R								
	07FR15U	21.506RU-WP	0.15		R	R									
	TFD11FR05U1	DCGT32.502RU1-WP	0.05		R	R	R								
	11FR15U1	32.506RU1-WP	0.15		R	R									
브레이커 無	TFD07FR05H 경면	DCGW21.502RH-WP	0.05										R		—
	TFD11FR05H 경면	DCGW32.502RH-WP	0.05										R		

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

◆TFD형의 특성

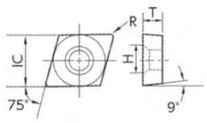


※TFD형의 팁 형상은 DCGT형과 같습니다.
※TFD형은 홀더에 세팅한 상태에서 0.3mm의 스트레이트(와이퍼)가 되도록 설계되어 있어 워크의 면조도의 향상 및 고이송이 가능한 타입입니다.
※TFD형은 날각이 93°인 홀더(SDJC-N, SDJC-N-F, SDJC, CH-SDUC, Y-SDJC, Y-SDJC-OH)에 장착가능합니다.

E1-50 1904.12.27 1:26 AM 페이지43 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

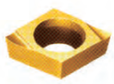
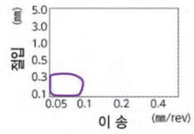
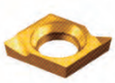
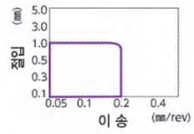
〈75° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
ER_T301	3.97	1.59	9°



	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스 텐 리 스 강	●	●	●	●	●	●	●			●
주 철								●		
비 철 금 속		●		●	●					●
내 열 합 금	●		●		●	●	●			
고 경 도 재	●		●			●	●			

● : 제1추천
● : 제2추천

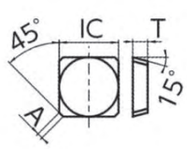
형 상	품 번	인치계	코너 R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
 A2 우승수	ERGHT30102F R/L A2	ERGP52Y-F R/L--A2	0.2		●		■	●						K29	
	30104F R/L A2	521-F R/L--A2	0.4		L			●							
 F1 ※ 우승수	ERGHT30101F R/L F1	—	0.1	R		R		R							
	30102F R/L F1	—	0.2	R		R		R							
	30104F R/L F1	—	0.4	R		R		R							

※F1, F05, FG브레이커는 칩을 앞쪽으로 배출하는 타입이므로 우승수의 보링바에 우승수 팁을 사용해 주세요.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

〈90° 사각형 포지티브〉

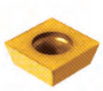
품 번	내접원(IC)	두께(T)	여유각
SD_0602	6.35	2.38	15°



SD_ _

	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스 텐 리 스 강	●	●	●	●	●	●	●			●
주 철								●		
비 철 금 속		●		●	●					●
내 열 합 금	●		●		●	●	●			
고 경 도 재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너 R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
 브레이커 無	SDEW060202FN		0.2		●									—	—

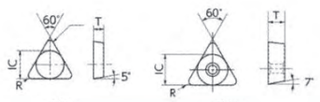
● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

초경합금

〈60° 정삼각형 포지티브〉

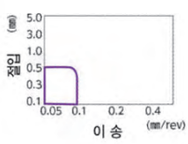
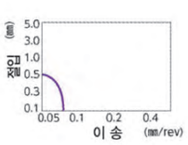
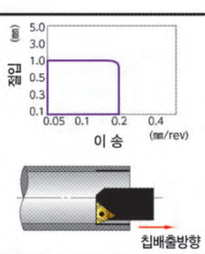
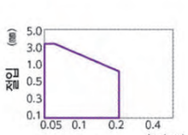
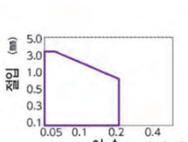
품 번	내접원(IC)	두께(T)	여유각
TC_0601	3.97	1.59	7°
TC_06T1	3.97	1.98	7°

품 번	내접원(IC)	두께(T)	여유각
TC_0902	5.56	2.38	7°
TC_1102	6.35	2.38	7°



	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스테인리스강	●	●	●	●	●	●	●			●
주철								●		
비철금속		●		●						●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조페이지	브레이커적용범위
K 좌승수	TCGH060102FR/LK		0.2					L						K32 K33 K34	
	060104FR/LK		0.4					L							
B1 좌승수	TCGH060102FR/LB1	TCGP52Y-FR/L--B1	0.2		L			L							
	060104FR/LB1	521-FR/L--B1	0.4		L			L							
F05 ※ 우승수	TCGH060101FR/LF05	TCGP521CFR/L--F05	0.1	R		R		R							 칩배출방향
	060102FR/LF05	52Y-FR/L--F05	0.2	R	●	R	■	●							
	060104FR/LF05	521-FR/L--F05	0.4	R	R	R	■	R							
S 우승수	TCGT090201R/LS		0.1		R		●							G38	
	090202R/LS		0.2		R										
	TCGT110201R/LS		0.1		R		●								
U 우승수	TCGT090201R/LU		0.1		R										
	090202R/LU		0.2		R										
브레이커 無	TCGW06T108FN		0.8		●									G38	—
	TCGW090200FN		0.03		●										
	090201FN		0.1		●										
	TCGW110200FN		0.03		●										
	110201FN		0.1		●										

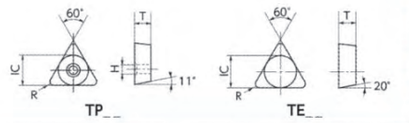
※F05브레이커는 칩을 앞쪽으로 배출하는 타입이므로 우승수의 보링바에 우승수 팁을 사용해 주세요.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

NTK

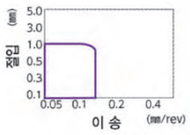
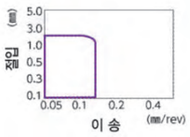
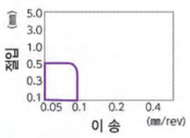
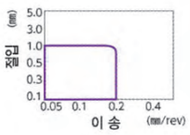
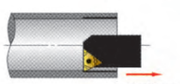
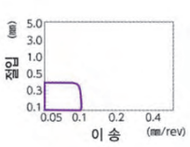
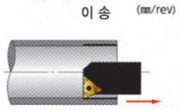
품 번	내접원(IC)	두께(T)	여유각
TP_0802	4.76	2.38	11°
TP_0902	5.56	2.38	11°
TP_1103	6.35	3.18	11°

〈60° 정삼각형 포지티브〉



강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●			●
비철금속		●		●	●			●		●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CVD CP1	CP7	초경 KM1	적합홀더 참조페이지	브레이커적용범위
B2・B3 좌승수	TPGH090202F$^{R}_{L}$B2	TPGP73Y-F$^{R}_{L}$--B2	0.2		L			L						K32 K33 K34	
	090204F$^{R}_{L}$B2	731-F$^{R}_{L}$--B2	0.4		L			L							
	090208F$^{R}_{L}$B2	732-F$^{R}_{L}$--B2	0.8		L			L							
	TPGH080202F$^{R}_{L}$B3	TPGP63Y-F$^{R}_{L}$--B3	0.2		L			L							
	080204F$^{R}_{L}$B3	631-F$^{R}_{L}$--B3	0.4		L			L							
K 좌승수	TPGH090202F$^{R}_{L}$K		0.2					L							
	090204F$^{R}_{L}$K		0.4					L							
	090208F$^{R}_{L}$K		0.8					L							
F1 ※ 우승수	TPGH080202F$^{R}_{L}$F1	TPGP63Y-F$^{R}_{L}$--F1	0.2		R		R	R							  칩배출방향
	080204F$^{R}_{L}$F1	631-F$^{R}_{L}$--F1	0.4		R		R	R							
	TPGH090201F$^{R}_{L}$F1	TPGP731CF$^{R}_{L}$--F1	0.1	R		R		R							
	090202F$^{R}_{L}$F1	73Y-F$^{R}_{L}$--F1	0.2	R	R	R	R	R							
	090204F$^{R}_{L}$F1	731-F$^{R}_{L}$--F1	0.4	R	R	R	R	R							
	090208F$^{R}_{L}$F1	732-F$^{R}_{L}$--F1	0.8	R	R	R		R							
	TPGH110302F$^{R}_{L}$F1	TPGH22Y-F$^{R}_{L}$--F1	0.2	R	R	R	R	R							
	110304F$^{R}_{L}$F1	221-F$^{R}_{L}$--F1	0.4	R	R	R	R	R							
	110308F$^{R}_{L}$F1	222-F$^{R}_{L}$--F1	0.8	R	R	R		R							
FG ※ 우승수	TPGH090202$^{R}_{L}$FG		0.2	R		R		R							  칩배출방향
	090204$^{R}_{L}$FG		0.4	R		R		R							
	TPGH110302$^{R}_{L}$FG		0.2	R		R		R							
	110304$^{R}_{L}$FG		0.4	R		R		R							

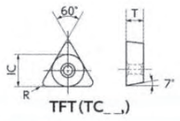
※F1, FG브레이커는 칩을 앞쪽으로 배출하는 타입이므로 우승수의 보링바에 우승수 팁을 사용해 주세요.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

초경합금

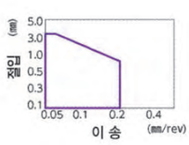
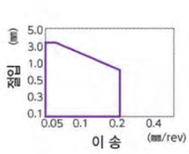
〈TFT형 와이퍼有〉

품 번	내접원(IC)	두께(T)	여유각
TFT_09	5.56	2.38	7°
TFT_11	6.35	2.38	7°



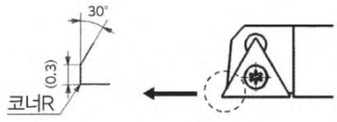
강	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
스테인리스강	●	●	●	●	●	●	●		●	●
주철	●	●	●	●	●	●	●			●
비철금속	●	●		●	●			●		
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CVD CP1	CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
S ※ 우승수	TFT09FR05	TCGT7302RS-WP	0.05		●									G38	
	09FR15	7306RS-WP	0.15		●										
	TFT11FR05	TCGT21.502RS-WP	0.05		●										
	11FR15	21.506RS-WP	0.15		●										
	TFT09FL05	TCGT7302LS-WP	0.05		●										
	09FL15	7306LS-WP	0.15		●										
U · U1 ※ 우승수	TFT09FR05U	TCGT7302RU-WP	0.05		●										
	09FR15U	7306RU-WP	0.15		●										
	TFT11FR05U1	TCGT21.502RU1-WP	0.05		●										
	11FR15U1	21.506RU1-WP	0.15		●										

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

◆TFT형의 특성



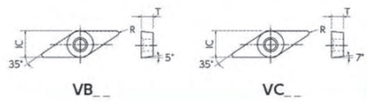
※TFD형의 팁 형상은 TCGT형과 같습니다.
※TFT형은 절인각 91°의 홀더(STAC-N)에 장착가능합니다.
※TFT형은 홀더에 세팅한 상태에서 0.3mm의 스트레이트(와이퍼)가 되도록 설계되어 있어 워크의 면조도의 향상 및 고이송이 가능한 타입입니다.

E1-50 1904.12.27 1:26 AM 페이지47 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

〈35° 마름모형 포지티브〉

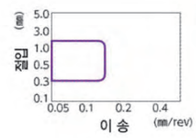
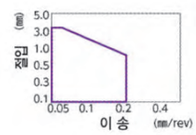
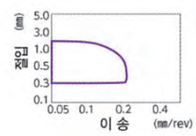
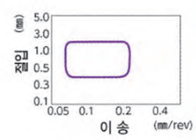
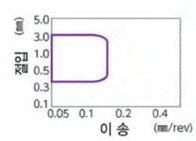
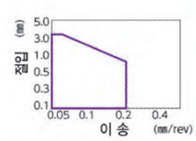
품 번	내접원(IC)	두께(T)	여유각
VB_1604	9.525	4.76	5°

품 번	내접원(IC)	두께(T)	여유각
VC_1103	6.35	3.18	7°
VC_1303	7.94	3.18	7°



	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스텐리스강	●	●	●	●	●	●	●			●
주철								●		
비철금속		●		●	●					●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너 R	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1	적합홀더 참조 페이지	브레이커적용범위
YL	VBGT160402FNYL		0.2	●				●		●				—	
	160404FNYL		0.4	●				●		●					
	160408FNYL		0.8	●				●		●					
UHG 우승수	VCET1103008R/L UHG		0.08				R							G31 G33	
AZ7	VCGT110300AZ7		0.03		●	●								G31 G33	
	110301MAZ7		*0.08		●	●									
	110302MAZ7		*0.18		●	●									
	110304MAZ7		*0.38		●	●									
AM3	VCGT110300FNAM3		0.03				●	●	●						
	110301FNAM3		0.1		●		●								
	110302FNAM3		0.2		●		●								
	110301MFNAM3		*0.08	●		●	●	●	●						
	110302MFNAM3		*0.18	●		●	●	●	●						
	110304MFNAM3		*0.38	●		●	●	●	●						
	VCMT110302FNAM3		0.2							●					
	110304FNAM3		0.4							●					
2M 우승수	VCGT130300FR/L 2M		0.03							●				G31 G64	
	130301FR/L 2M		0.1							●					
U 우승수	VCGT110300R/L U		0.03		R		R							G31 G33	
	110301R/L U		0.1		R		R								
	110302R/L U		0.2		R		R								
	110301MR/L U		*0.08						R						
	110302MR/L U		*0.18						R						
브레이커 無	VCGW110300H		0.03										●		—
	110301H		0.1										●		
	110302H		0.2										●		

※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

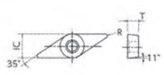
초경합금

〈35° 마름모형 포지티브〉

품 번	내접원(IC)	두께(T)	여유각
VC_1102	6.35	2.38	7°
VC_1103	6.35	3.18	7°

품 번	내접원(IC)	두께(T)	여유각
VP_0802	4.76	2.38	11°
VP_1103	6.35	3.18	11°

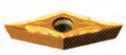
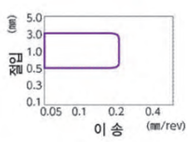
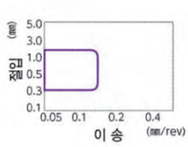
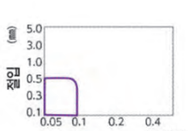
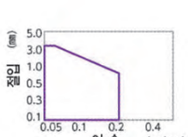
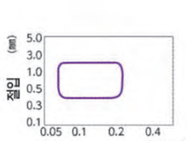
VC__



VP__

	강	스테인리스강	주철	비철금속	내열합금	고경도재
ST4	●	●			●	●
ZM3	●	●		●		●
QM3	●	●			●	●
VM1	●	●		●		●
TM4	●	●		●	●	●
DT4	●	●			●	●
DM4	●	●			●	●
CP1			●			
CP7	●					
KM1	●	●		●		

● : 제1추천
● : 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CVD CP1	CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
 CL ※2	VCGT110202MCL		*0.18			●		●	●	●				G31	
	VCGT110301MCL		*0.08	●		●		●	●	●					
	110302MCL		*0.18	●		●		●	●	●					
YL	VCGT110301MYL		0.08	●		●		●	●	●				G33	
	110302MYL		0.18	●		●		●	●	●					
	110304MYL		0.38	●		●		●	●	●					
KHG 우승수	VPET0802005$^{R}_{L}$KHG		0.05				●	R						G35	
	0802008$^{R}_{L}$KHG		0.08				●	R	R						
	0802018$^{R}_{L}$KHG		0.18				●	R							
	080202$^{R}_{L}$KHG		0.2				●	R							
	VPET1103005$^{R}_{L}$KHG		0.05				●	R							
	1103008$^{R}_{L}$KHG		0.08				●	R							
	1103018$^{R}_{L}$KHG		0.18				●	R							
	110302$^{R}_{L}$KHG		0.2				●	R							
UHG 우승수	VPET0802008$^{R}_{L}$UHG		0.08						●						
AM3	VPGT110300FNAM3		0.03					●	●						
	110301MFNAM3		*0.08	●		●		●	●						
	110302MFNAM3		*0.18	●		●		●	●						

※R기호(01M, 02M, 04M)에 대해 피삭부품의 R지시가 R0.1, R0.2, R0.4이하의 가공에 사용할 수 있습니다.
※2 CL브레이커는 제품사양상 상기치수와 약간 다릅니다만 가공에는 문제 없습니다.

● : 표준재고 ● : 신표준재고 ■ : 표준재고폐지예정품 ★표준재고품(특정)

E1-50 1904.12.27 1:26 AM 페이지49 광진그래픽 CTP_1500_CMYK-POSI 2400DPI 175LPI T

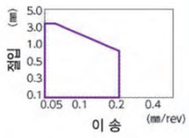
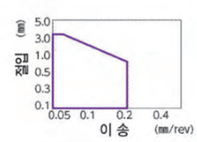
〈TFV형 와이퍼有〉

품 번	내접원(IC)	두께(T)	여유각
TFV_11	6.35	3.18	7°

TFV(VC_ _)

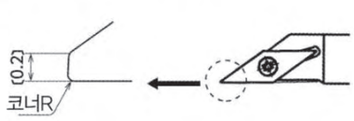
	ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1
강	●	●	●	●	●	●	●		●	●
스텐리스강	●	●	●	●	●	●	●			●
주철								●		
비철금속		●		●	●					●
내열합금	●		●		●	●	●			
고경도재	●		●			●	●			

●: 제1추천
●: 제2추천

형 상	품 번	인치계	코너R	PVD코팅 미립자초경 ST4	ZM3	QM3	VM1	TM4	DT4	DM4	코팅초경 CP1	CVD CP7	초경 KM1	적합홀더 참조 페이지	브레이커적용범위
U	TFV11FR05U	VCGT2202RU-WP	0.05		●		●							G31 G33	
	11FR10U	2204RU-WP	0.10		●		●								
랜드有	TFV11FR05SX	VCGT2202RSX-WP	0.05		●		●								
	11FR10SX	2204RSX-WP	0.10		●		●								

●: 표준재고 ●: 신표준재고 ■: 표준재고폐지예정품 ★표준재고품(특정)

◆TFV형의 특성



※TFV형의 팁형상은 VCGT형과 같습니다.
※TFV형은 절인각이 93° 인 홀더(SVJC-N형)에 장착가능합니다.
※TFT형은 홀더에 세팅한 상태에서 0.2mm의 스트레이트(와이퍼)가 되도록 설계되어 있어, 워크의 면조도의 향상 및 고이송이 가능한 타입입니다.