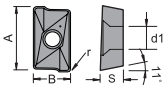
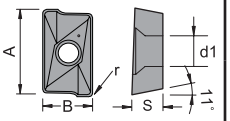
ON TARGET TOOLING LLC

90° APKT Shoulder Milling

- *Innovative strong cutting edge and chip-breaker design.*
- *Excellent chip evacuation.*
- *Large depth of cutting operations.*
- *Lower cutting resistance.*

Specification

	P	Steel	●	●	●	○	○		● 1st choice ○ 2st choice						
	M	Stainless steel	○	○	○	●	●								
	K	Cast iron	●	○	○	○	○								
Inserts	Designation		Grade						Dimensions (mm)						Drawing
			OT42NS	OT62NA	OT62NS	OT82NS	OT82NA		A	B	S	r	d1	t1	
	**APKT 100304PDER-OM**		✓	✓	✓				10.5	6.7	3.5	0.4	2.8	-	
	**APKT 100308PDER-OM**		✓	✓	✓				10.5	6.7	3.5	0.8	2.8	-	
	**APKT 100304PDER-OG**		✓	✓	✓				10.5	6.7	3.5	0.4	2.8	-	
	**APKT 160408PDER-OM**			✓	✓	✓	✓		16.3	9.525	5.25	0.8	4.5	-	
	**APKT 160408PDER-OG**			✓	✓	✓	✓		16.3	9.525	5.25	0.8	4.5	-	

OG: Negative cutting edge protection. General purpose chip breaker for steels and cast iron.

OM: Positive edge with radius, low cutting force and chatter reduction.

Recommended Cutting Conditions

for APKT1003

Working Material	Vc (Speed)		fz (Feed)		ap (Axial DOC)	
	m/min	SFM	FPT mm	FPT in	mm	in
Carbon Steel (HB85-225)	80 ~ 200	260 ~ 660	0.08 ~ 0.20	0.003” ~ 0.008”	~ 7.0	~ .2756”
Stainless 300 Series	50 ~ 110	165 ~ 360	0.05 ~ 0.15	0.002” ~ 0.006”	~ 4.0	~ .1575”
Cast Iron (HB140-220)	80 ~ 180	260 ~ 590	0.08 ~ 0.20	0.003” ~ 0.008”	~ 6.0	~ .2362”

for APKT1604

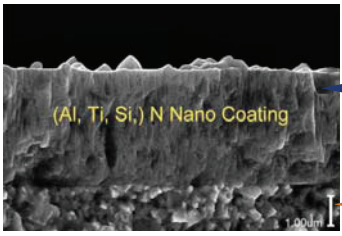
Working Material	Vc (Speed)		fz (Feed)		ap (Axial DOC)	
	m/min	SFM	FPT mm	FPT in	mm	in
Carbon Steel (HB85-225)	80 ~ 200	260 ~ 660	0.12 ~ 0.28	0.005” ~ 0.011”	~ 11.0	~ .4331”
Stainless 300 Series	50 ~ 110	165 ~ 360	0.10 ~ 0.22	0.004” ~ 0.009”	~ 7.0	~ .2576”
Cast Iron (HB140-220)	80 ~ 180	260 ~ 590	0.12 ~ 0.28	0.005” ~ 0.011”	~ 10.0	~ .3937”

Milling Insert Grade

Coated Carbide

"∞" Infinity Nano Coating:

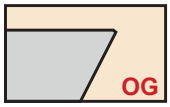
- High adhesion strength to the substrate improves stable cutting performance and acfieves longer tool life.
- Provide excellent heat resistance and oxidation rosistance.
- Maintain highest performance in wet cutting,dry cutting,even harden material.



Smooth surface prevents chip adhesion.
Multi-layered structure prevents crack expansion which causes chipping and fracture.

Newly development substrate with heat resistance and strength

Grade Type	Substrate (HRA)	Coating Type	Thickness	Coolant		Suitable Condition
				Dry	Wet	
OT42NS	92	Al.Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★ ★	●
· High-performance premium grade with a high level of shock and heat resistance. · Specially designed to operates at medium to high cutting speeds and is capable of retaining a secure cutting edge at high metal removal condition. · · First choice for mold steel, hardened steel and high-temperature alloys						
OT62NS	91.8	Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★ ★	●
OT62NA	91.7	Al.Ti.X.N	3~4	★ ★ ★ ★ ★	★ ★ ★ ★	●
· Wide cutting range, both wear resistance and impact resistance are well-balanced at all general machining application. · Priority grade for semi-finishing or medium cutting. · Stainless 400 series machining is recommended.						
OT82NS	90.2	Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★ ★	●
OT82NA	90.3	Al.Ti.X.N	3~4	★ ★ ★ ★ ★	★ ★ ★ ★	●
· Priority grade for roughing purpose, this grade incorporates high temperature strength. · Excellent shock resistance ability, especially during heavy interrupted machining. · Stainless 300 series machining is recommended.						



OG - Negative cutting edge protection. General purpose chip breaker for steels and cast iron.

OM - Positive edge with radius, low cutting force and chatter reduction.