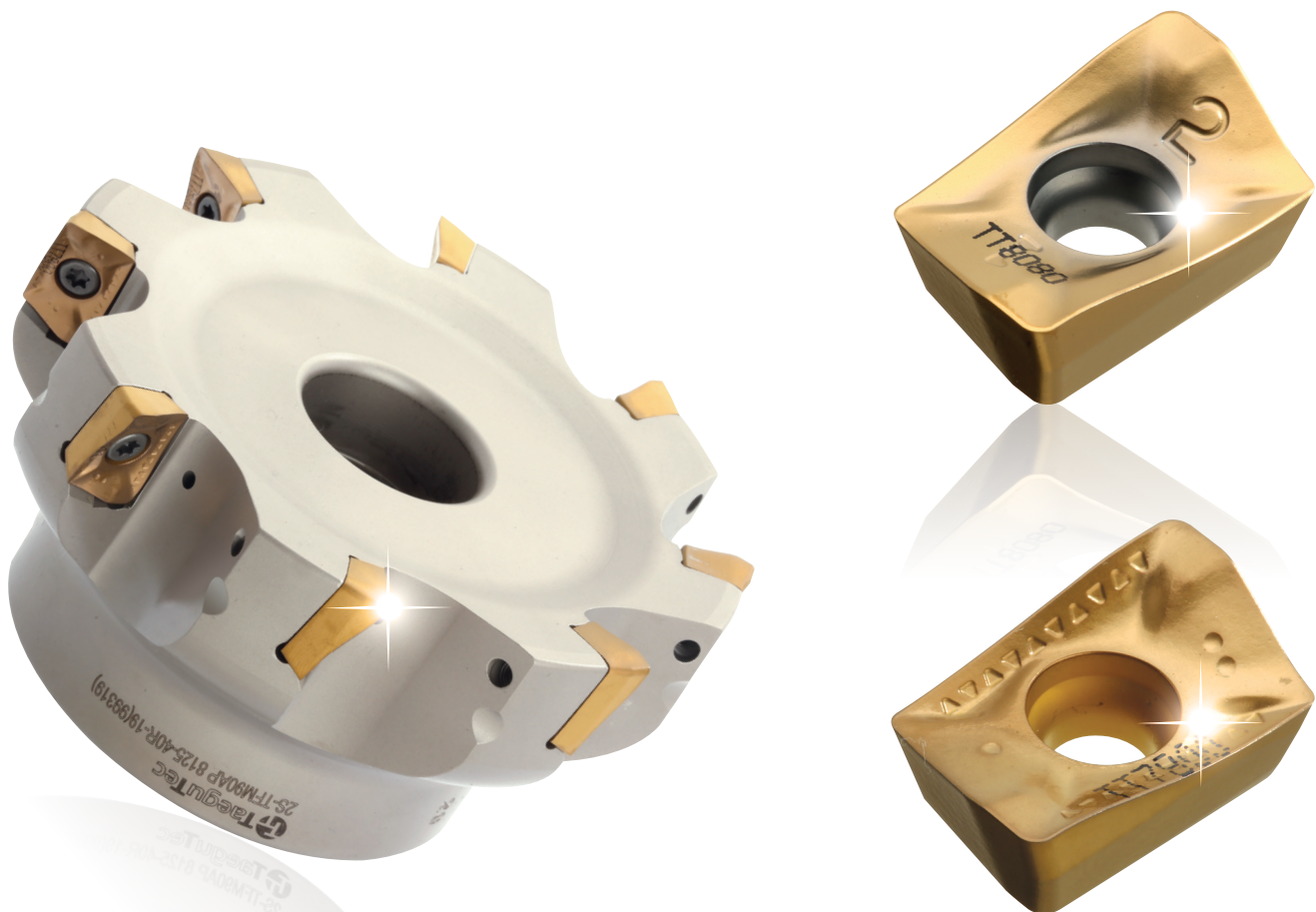


CHASEMILL

APKT 1907 Inserts and Holders Now Available



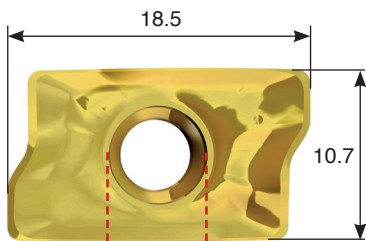
TaeguTec is pleased to introduce a new line of APKT inserts and holders to the popular CHASEMILL line — a family of tools known for stability and high performance.

The newly launched APKT 1907 inserts realize smooth and stable cutting in heavy machining since it is a bigger, thicker insert with a higher helical angle than the current APKT lines making the APKT 1907 line suitable for heavy industry roughing applications such as those found in the power generation and windmill.

FEATURES

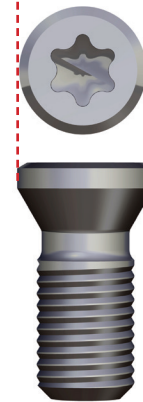
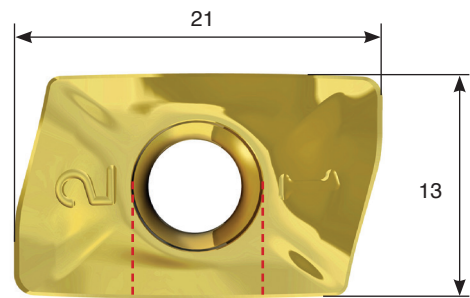
- **Higher helical angle of the APKT 19 insert line → Smooth machining with excellent performance**
- **Thicker and bigger insert → Strong and stable machining with higher productivity**
- **Appropriate for roughing machining in heavy industries such as power generation and windmill**

APKT 1705



M4

APKT 1907 **new**



M5

Availability

In stock

Price

Available in the GAL system

Sincerely,
TaeguTec

Park Hong-sik

Rotating & Non-Rotating Product Manager

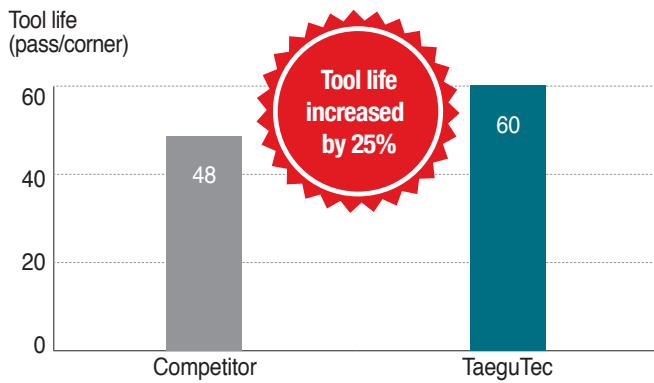
Sincerely,
TaeguTec

Lee Jae-wook

Milling Product Manager

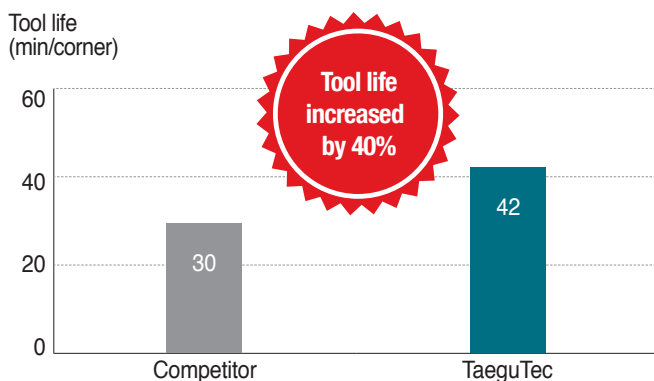
Case study 1

		Competitor	TaeguTec
Workpiece material		Cast iron	
Cutter		D125mm face mill	2S-TFM90AP 8125-40R-19
Insert		APKT type 18mm	APKT 190712R-M TT9080
Cutting speed	V (m/min)	250	250
	N (rpm)	635	635
Feed rate	Fz (mm/tooth)	0.25	0.25
	F (mm/min)	1270	1270
Width of cut	ae (mm)	85	85
Depth of cut	ap (mm)	7	7
Coolant		Air	Air
Tool life (pass/corner)		48	60



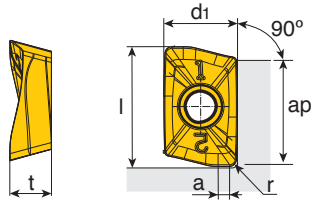
Case study 2

		Competitor	TaeguTec
Workpiece material		Alloy steel	
Cutter		D200mm face mill	2S-TFM90AP 12200-60R-19
Insert		APKT type 18mm	APKT 190712R-MR TT7800
Cutting speed	V (m/min)	200	200
	N (rpm)	318	318
Feed rate	Fz (mm/tooth)	0.23	0.23
	F (mm/min)	878	878
Width of cut	ae (mm)	130	130
Depth of cut	ap (mm)	9	9
Coolant		Air	Air
Tool life (min/corner)		30	42



APKT 19

Insert



Size	Dimension (mm)					
	l	d1	t	ap	a	r
19	21	13	7.35	17.9	2	1.2



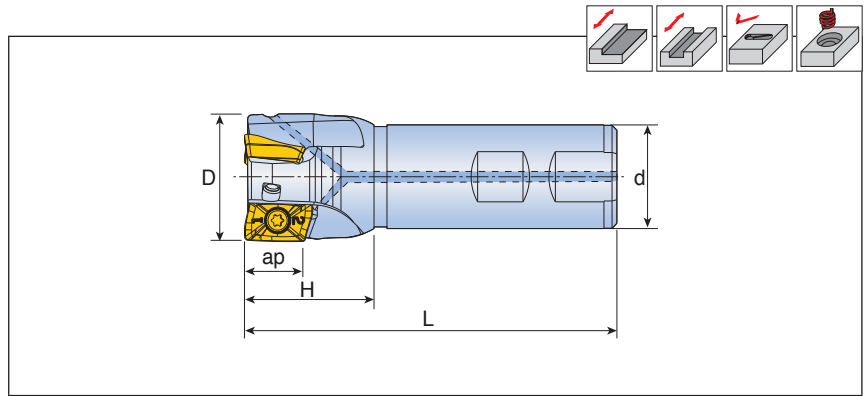
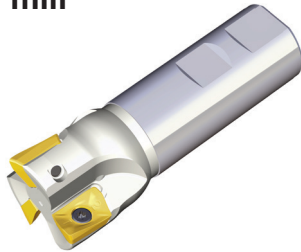
Insert	Designation	Recommended Machining Conditions		Coated					
		Feed (mm/tooth)	ap (mm)	TT9080	TT8080	TT7800	TT7080	TT6080	TT2510
	APKT 190712R-MR	0.10-0.30	5.0-15.0	●	●			●	●
	190712R-M	0.10-0.25	5.0-15.0	●	●	●	●	●	●
	190712R-ML	0.08-0.20	5.0-15.0	●	●			●	

● ML will be launched by the end of May 2015

● : Standard items

2S-TE90AP-19

End mill



Designation		Dimension (mm)					Insert
		D	d	L	H	ap	
2S-TE90AP 340-W32-19	3	40	32	115	40	17.9	APKT 1907...

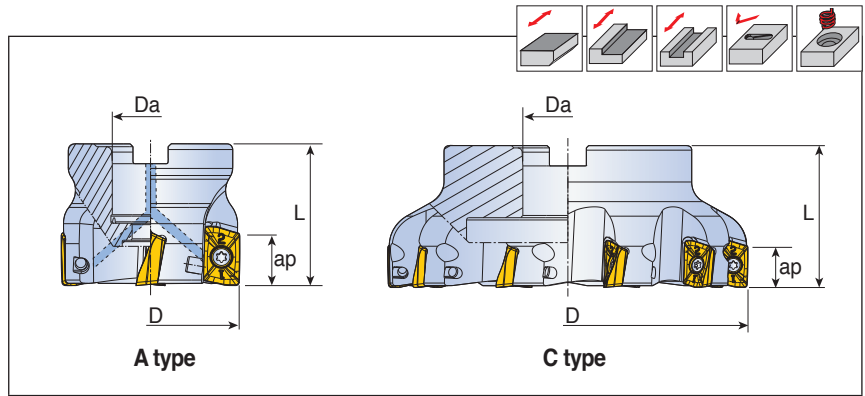
- Coolant through hole

Spare parts

Designation	Screw	Wrench			
2S-TE90AP-19	TS 50115I	TD20			

2S-TFM90AP-19

Face mill



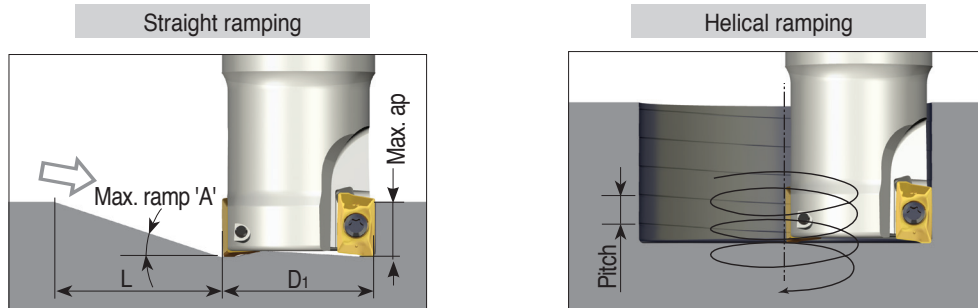
Designation		Dimension (mm)				Coolant	Arbor style		Mounting bolt	Insert
		D	Da	L	ap					
2S-TFM90AP 350-22R-19	3	50	22	45	17.9	●	A	0.3	LH M10x1.5x35	APKT 1907...
463-22R-19	4	63	22	50	17.9	●	A	0.7	SH M10x1.5x35	
463-27R-19	4	63	27	50	17.9	●	A	0.7	SH M12x1.75x35	
680-27R-19	6	80	27	50	17.9	●	A	1.1	SH M12x1.75x35	
7100-32R-19	7	100	32	50	17.9	●	A	1.9	SH M16x2x35	
6125-40R-19	6	125	40	63	17.9	●	A	3.0	SH M20x2.5x40	
8125-40R-19	8	125	40	63	17.9	●	A	3.0	SH M20x2.5x40	
10160-40R-19	10	160	40	63	17.9	X	C	4.2	-	
12200-60R-19	12	200	60	63	17.9	X	C	6.0	-	

- Mounting bolt with coolant through hole is available on request (ordering example: SH M10x1.5x30-C)
- 2S-TFM90AP 463-22R-19 will be launched by the end of May 2015

Spare parts

Designation					
2S-TFM90AP-19	TS 50115I	T-T20			

Ramping data



APKT 19

Cutter dia.(D1)	Straight ramp down			Helical ramp down		
	Max. ramp (A°)	Max. ap (mm)	Min. length (L)	Min. dia.	Max. dia.	Max. pitch/rev.
Ø40	6.0	17.5	167	56	80	4.5 11.2
Ø50	4.0	17.5	250	76	100	4.9 9.3
Ø63	2.9	17.5	346	102	126	5.3 8.5
Ø80	2.1	17.5	477	136	160	5.5 7.8
Ø100	1.6	17.5	627	176	200	5.7 7.5
Ø125	1.2	17.5	736	226	250	5.6 7.0
Ø160	0.9	17.5	1115	296	320	5.7 6.7
Ø200	0.7	17.5	1433	376	400	5.7 6.5

Recommended cutting conditions

Cutting speed : Vc(m/min)

ISO	Material	Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Coated						
						TT9080	TT8080	TT7080	TT7800	TT6080	TT2510	
P	Non-alloy steel, cast steel, free cutting steel	< 0.25%C	Annealed	420	125	1	220-370	170-250	250-410	160-270		
		>= 0.25%C	Annealed	650	190	2	180-310	130-220	200-380	140-210		
		< 0.55%C	Quenched and tempered	850	250	3	115-195	90-170	140-230	90-160		
		>= 0.55%C	Annealed	750	220	4	130-210	100-190	160-250	100-170		
			Quenched and tempered	1000	300	5	115-175	70-160	135-195	80-140		
	Low alloy steel and cast steel (less than 5% of alloying elements)	Annealed		600	200	6	175-265	150-220	190-290	140-200		
				930	275	7	130-215	110-190	150-240	90-160		
		Quenched and tempered		1000	300	8	105-185	80-160	135-225	70-150		
				1200	350	9	95-160	70-120	120-190	60-110		
	High alloy steel, cast steel and tool steel	Annealed		680	200	10	85-155	70-110	100-150	60-90		
Quenched and tempered			1100	325	11	75-135	60-100	90-140	50-90			
M	Stainless steel and cast steel	Ferritic / martensitic		680	200	12	115-270	90-200				
		Martensitic		820	240	13	100-230	70-160				
		Austenitic		600	180	14	120-275	100-210				
K	Gray cast iron (GG)	Ferritic			160	15					200-390	
		Pearlitic			250	16					160-300	
	Cast iron nodular (GGG)	Ferritic			180	17					130-250	
		Pearlitic			260	18					110-210	
	Malleable cast iron	Ferritic			130	19					210-330	
		Pearlitic			230	20					130-280	
N	Aluminum - wrought alloy	Not cureable			60	21						
		Cured			100	22						
	Aluminum-cast, alloyed	<=12% Si	Not cureable			75	23					
			Cured			90	24					
	Copper alloys	>12% Si	High temp.			130	25					
		>1% Pb	Free cutting			110	26					
	Non-metallic		Brass			90	27					
			Electrolytic copper			100	28					
Duroplastics, fiber plastics						29						
S	High temp. alloys	Fe based	Annealed			200	31	40-80	30-65			
			Cured			280	32	30-60	20-45			
		Ni or Co based	Annealed			250	33	35-70	25-50			
			Cured			350	34	30-60	20-40			
	Titanium, Ti alloys		Cast			320	35	35-65	20-45			
				Rm 400		36	90-130	60-100				
			Alpha+beta alloys cured	Rm 1050		37	35-70	25-55				
H	Hardened steel	Hardened			55HRC	38	40-75				70-180	
					60HRC	39	30-55				50-130	
	Chilled cast iron	Cast			400	40						
	Cast iron nodular	Hardened			55HRC	41						

■ Steel
 ■ Stainless steel
 ■ Cast iron
 ■ Nonferrous
 ■ High temp. alloys
 ■ Hardened steel