

NEW PRODUCT CHASEMILLPOWER NEWS

expansion

Expanded with New 2PKT 07 Inserts and Cutters



KEY POINT

TaeguTec has expanded the CHASEMILL POWER family of products with new inserts 2PKT 07 and related cutters.

With the popularity of the 2PKT 05 insert line, TaeguTec has expanded the **CHASEMILL POWER** family of products with the introduction of the **2PKT 07** insert and related cutters.

The **2PKT 07** insert is a true 90 degree milling line with 2 cutting edges. Designed with a positive high rake angle, the insert is characterized by a low cutting force during operation. It also has the **CHASEMILL POWER's** unique double dovetail shape insert pocket that relieves the insert screw from the cutting load, thus providing powerful and secure insert clamping. As such, it allows end-users to clamp the **2PKT 07** insert with a bigger size screw relative to similar size conventionally designed inserts which protects against unexpected screw or insert failure during operations. Also, the insert's inclusion of a wide wiper enables excellent surface roughness during machining.

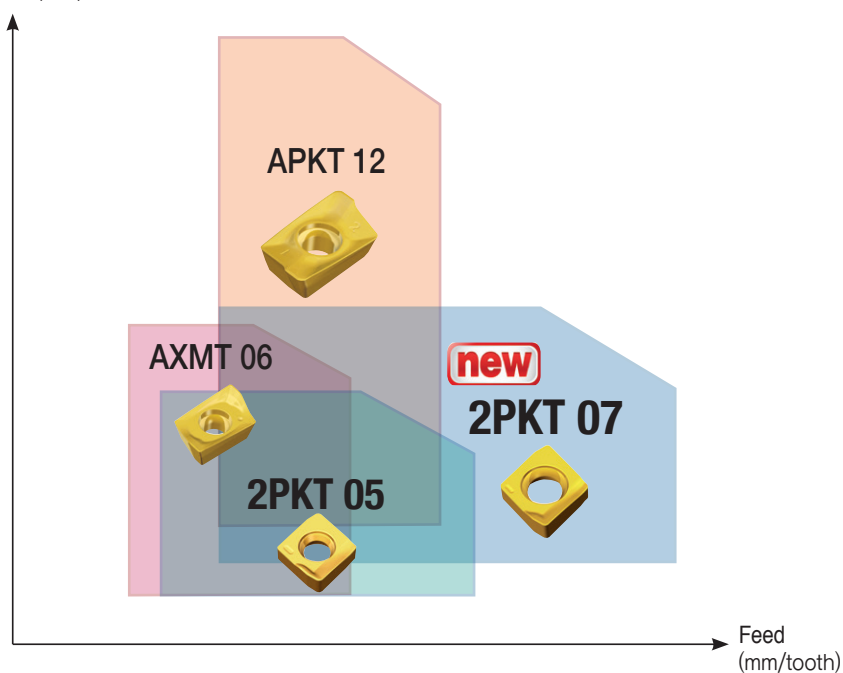
The expansion comes in all cutter types (end mill, modular and face mill); end mills and modular types are available in 16-40 mm diameters while the face mills are available in the 40-80 mm diameter range. All **2PKT 07** cutters include internal coolant channels and are capable of slotting, shouldering, step down, straight ramping and helical ramping.

CHASEMILL POWER Features

- 2 cutting edges and 90° milling
- Positive high rake angle for low cutting resistance machining
- Double dovetail geometries for strong clamping force
- Bigger clamping screw than the competition
- Protects against unexpected screw or insert failure

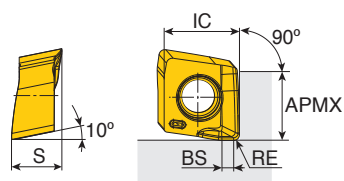
CHASEMILL POWER application range

Depth of cut (mm)

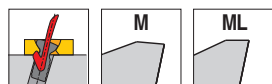


2PKT

Insert



Size	Dimension (mm)				
	IC	S	APMX	BS	RE
05	5.17	3.4	4.7	0.4-0.8	0.4-1.6
07	6.74	4.4	6.0	0.85	0.8



Insert	Designation	Recommended machining conditions		Coated					
		ap (mm)	Feed (mm/tooth)	TT9080	TT8080	TT6080	TT2510	TT7515	
	2PKT 050304R-M	0.5-4.2	0.18-0.06	●	●	●	●	●	
	050308R-M	0.5-4.2	0.18-0.06	●	●	●	●	●	
	050316R-M	0.5-4.2	0.18-0.06	●	●	●	●	●	
	2PKT 050304R-ML	0.5-4.2	0.12-0.02	●	●	●			
	050308R-ML	0.5-4.2	0.18-0.06	●	●	●		●	
	050316R-ML	0.5-4.2	0.18-0.06	●	●	●		●	
	2PKT 070408R-M new	0.6-5.4	0.25-0.07	●	●				

●: Standard items

2P-TE90-07

End mill

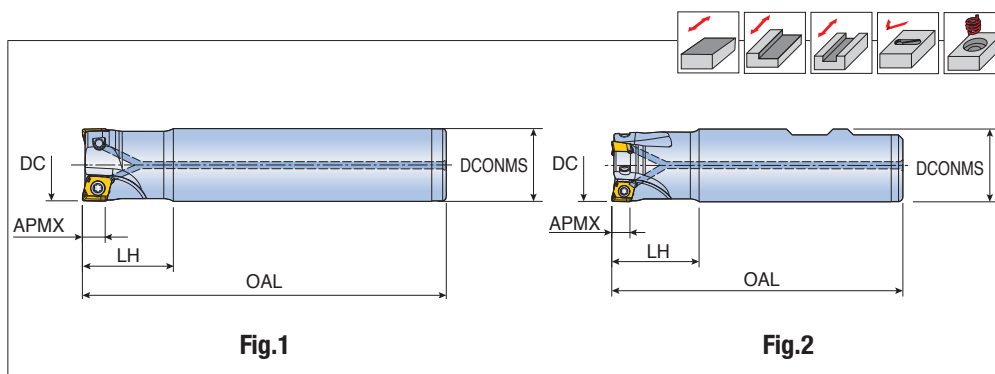
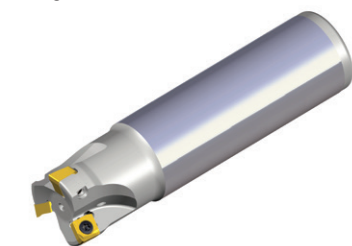


Fig.1

Fig.2

Designation		Dimension (mm)					Coolant	Fig.	Insert
		DC	DCONMS	OAL	LH	APMX			
2P-TE90-216-W16-07	2	16	16	90	25	6.0	●	2	2PKT 0704...
216-16-07-L	2	16	16	145	25	6.0	●	1	
220-20-07-L	2	20	20	170	40	6.0	●	1	
320-W20-07	3	20	20	90	25	6.0	●	2	
325-W20-07	3	25	20	100	25	6.0	●	2	
325-W25-07	3	25	25	100	30	6.0	●	2	
332-W32-07	3	32	32	110	40	6.0	●	2	
425-W25-07	4	25	25	100	30	6.0	●	2	
432-W25-07	4	32	25	110	30	6.0	●	2	
540-W32-07	5	40	32	110	30	6.0	●	2	

• APMX and OAL in the table are the values when using the 08R insert

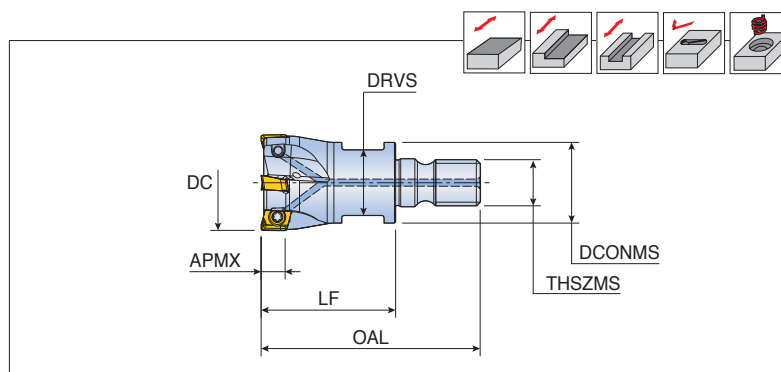
Spare parts

Designation	Screw	Wrench	Wrench handle		
					
2P-TE90-07	TS 30B068I/HG	TBLD T08-W4	THND 4W		

Modular



90°

[illegible]

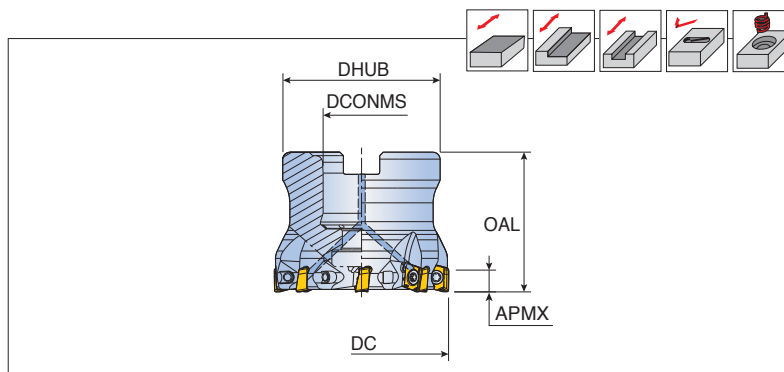
- APMX and OAL in the table are the values when using the 08R insert

Designation	Screw	Wrench	Wrench handle		
2P-TE90-M-07	TS 30B068I/HG	TBLD T08-W4	THND 4W		

Face mill



90°

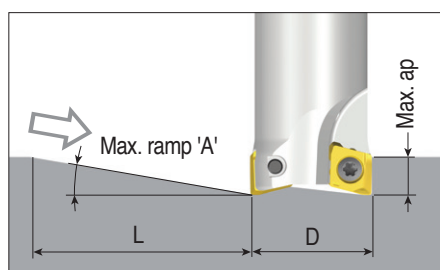


- APMX and OAL in the table are the values when using the 08R insert
- Mounting bolt with coolant through hole is available on request (ordering example: SH M10x1.5x30-C)

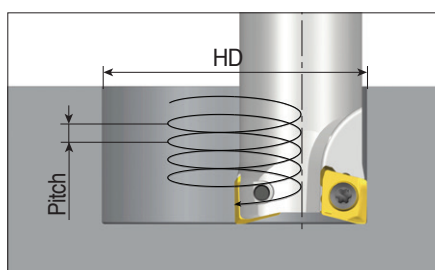
Designation	Screw	Wrench	Wrench handle		
2P-TF90-07	TS 30B068I/HG	TBLD T08-W4	THND 4W		

Ramping Data

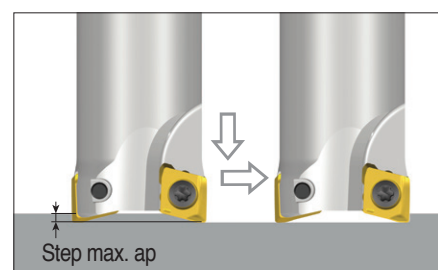
Straight ramping



Helical ramping



Step down



2PKT 07 : 0.8R

(unit: mm)

Cutter dia. (D)	Straight ramp down			Helical ramp down			Step down
	Max. ramp (A°)	Max. ap	Min. length (L)	Min. dia. (HD)	Max. dia. (HD)	Max. pitch/rev.	Max. ap
Ø16	8.6	6	40	21.5	32	2.2	1.3
Ø20	6.2		55	29.5	40	2.8	
Ø25	4.3		80	39.5	50	2.9	
Ø32	2.9		119	53.5	64	2.9	
Ø40	2.2		156	69.5	80	3.0	
Ø50	1.6		208	89.5	100	3.8	
Ø63	1.2		275	115.5	126	3.7	
Ø80	0.9		362	149.5	160	3.5	

Recommended Cutting Conditions

Cutting speed Vc(m/min)

ISO	Material		Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Coated				
							TT9080	TT8080	TT7515	TT6080	TT2510
P	Non-alloy steel, cast steel, free cutting steel	< 0.25%C	Annealed	420	125	1	220-370	170-250			
		>= 0.25%C	Annealed	650	190	2	180-310	130-220			
		< 0.55%C	Quenched and tempered	850	250	3	115-195	90-170			
		>= 0.55%C	Annealed	750	220	4	130-210	100-190			
			Quenched and tempered	1000	300	5	115-175	70-160			
	Low alloy steel and cast steel (less than 5% of alloying elements)		Annealed	600	200	6	175-265	150-220			
			Quenched and tempered	930	275	7	130-215	110-190			
				1000	300	8	105-185	80-160			
				1200	350	9	95-160	70-120			
	High alloy steel, cast steel and tool steel		Annealed	680	200	10	85-155	70-110			
			Quenched and tempered	1100	325	11	75-135	60-100			
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			180-350	200-390	
			Pearlitic		250	16			140-280	160-300	
	Cast iron nodular (GGG)		Ferritic		180	17			115-230	130-250	
			Pearlitic		260	18			100-200	110-210	
	Malleable cast iron		Ferritic		130	19			190-310	210-330	
			Pearlitic		230	20			120-260	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					
		>12% Si	High temp.		130	25					
	Copper alloys	>1% Pb	Free cutting		110	26					
			Brass		90	27					
			Electrolitic copper		100	28					
	Non-metallic		Duroplastics, fiber plastics			29					
			Hard rubber			30					
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			
			Cast		320	35	35-65	20-45			
	Titanium, Ti alloys			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
			Hardened		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