

NEW PRODUCT NEWS

The Splitter



Now Available for CHASEMILL &
CHASE2MILL Line, a Brand New Chip
Splitter Insert for Top Productivity with
Reduced Cutting Force



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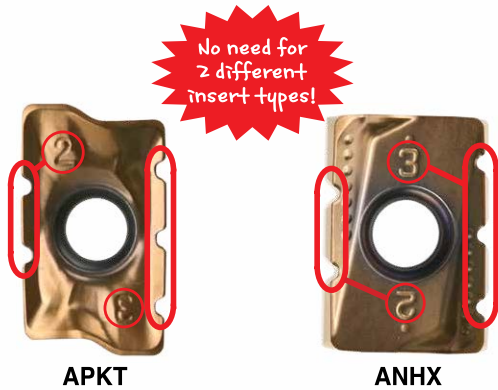
FEATURES

- Chip splitter type insert reduces cutting load for heavy milling applications
- Reduces cutting load – High table feed can be achieved
- Reduces vibration (chatter free) and noise
- Insert's helical cutting edge geometry enables double feed rate
- Improves chip evacuation (Chip split into small pieces)
- Reduces heat generation
- Suitable for long overhang machining (weak machining and fixture applications)
- High depth & width of cut
- Mountable on all standard cutter lines without any modification
- Protects the machine spindle credit to reduced vibration

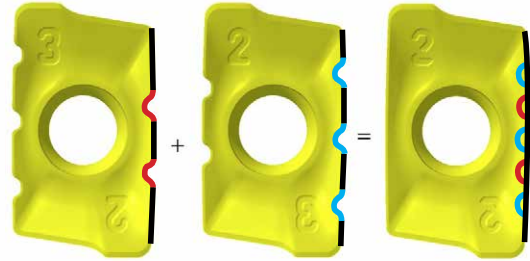
TaeguTec has launched a new line of splitter inserts suitable for top productivity with effective reduced cutting force. With the same high helix cutting edge as the CHASEMILL inserts as well as small chip splitting capabilities, the new line ensures high feed milling and long tool life via minimal noise and vibration stemming from lower cutting forces. For end-users this translates into carrying out the machining process under the condition of smooth and stable operation.

The new insert is mountable to the current CHASEMILL and CHASE2MILL cutters without any modification. It is the ideal insert providing lower cutting force in long overhang situations characterised by vibration, an unstable fixture and low horse-power machining on higher cutting depth and width.

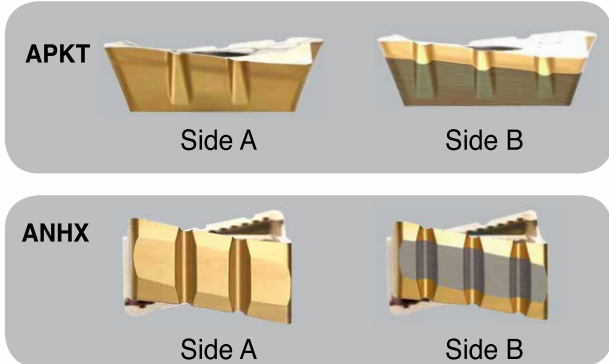
- ① 3 splitting grooves on one cutting edge and 2 splitting grooves on the opposite side



- ② Both cutting edges split chip to small pieces for cutting load reduction and create complete cutting edge when combined.

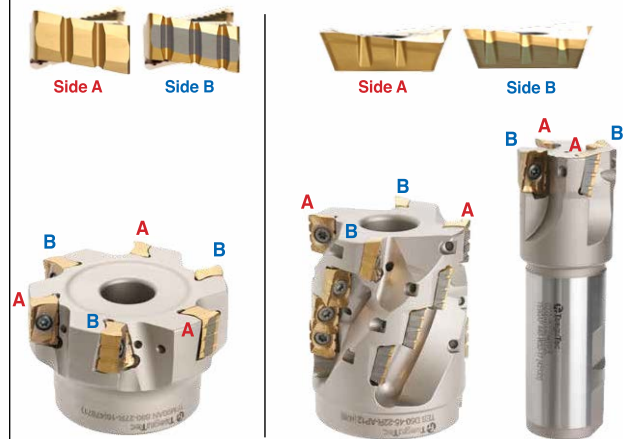


- ③ Full proof configuration-inserts have metal color appearance only on the 3 groove side for simplified mounting



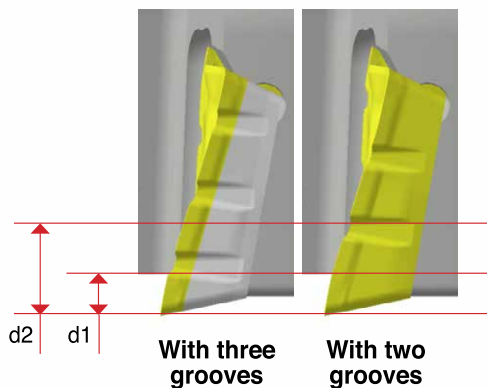
Notice: When insert mounting, ensure they are mounted in a staggered formation i.e. 1st tooth-2 groove side; 2nd tooth-3 groove side and repeat action for the remaining teeth

- ④ For optimum machining efficiency, use even numbered flute type cutters

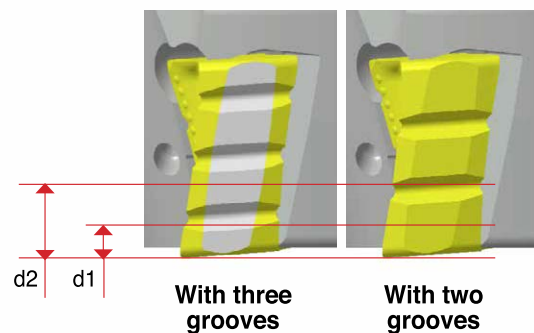


Also applicable to odd numbered flute type cutters

- ⑤ The splitter inserts effective in axial depth of cuts $\geq d1$



Depth of Cut	APKT 17	APKT 12
d1	3mm	2.4mm
d2	6.5mm	5.2mm



Depth of Cut	ANHX 16
d1	2.5mm
d2	6mm

Inserts

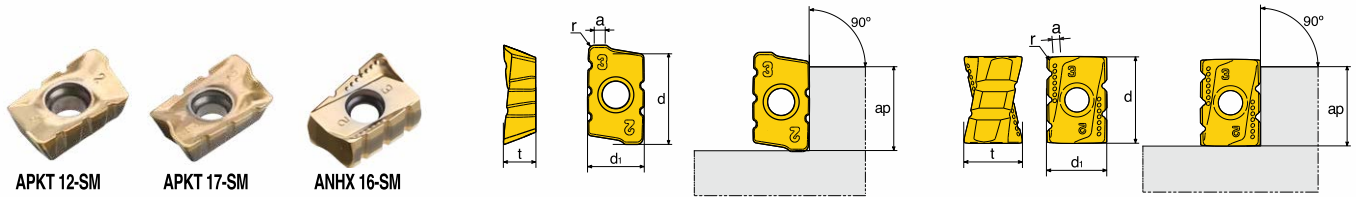


Fig.1

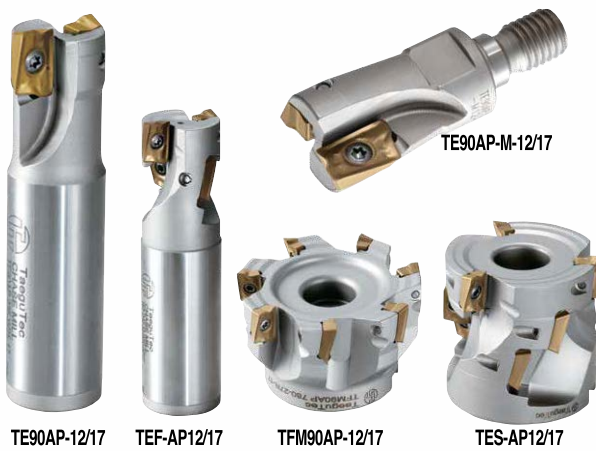
Fig.2

Designation	Dimension (mm)							Grade			
	d	d1	t	a	r	ap	Fig.	TT6080	TT7800	TT8080	TT9080
APKT 1204 PER-SM	12.9	8.3	4.76	1.6	0.8	12.5	1	•	•	•	•
APKT 1705 PER-SM	17	10.7	5.56	2.26	0.8	16.1	1	•	•	•	•
ANHX 160708R-SM	16	11	10.6	1.4	0.8	15	2	•	•	•	•

• Coolant through type

CHASEMILL Tool Program

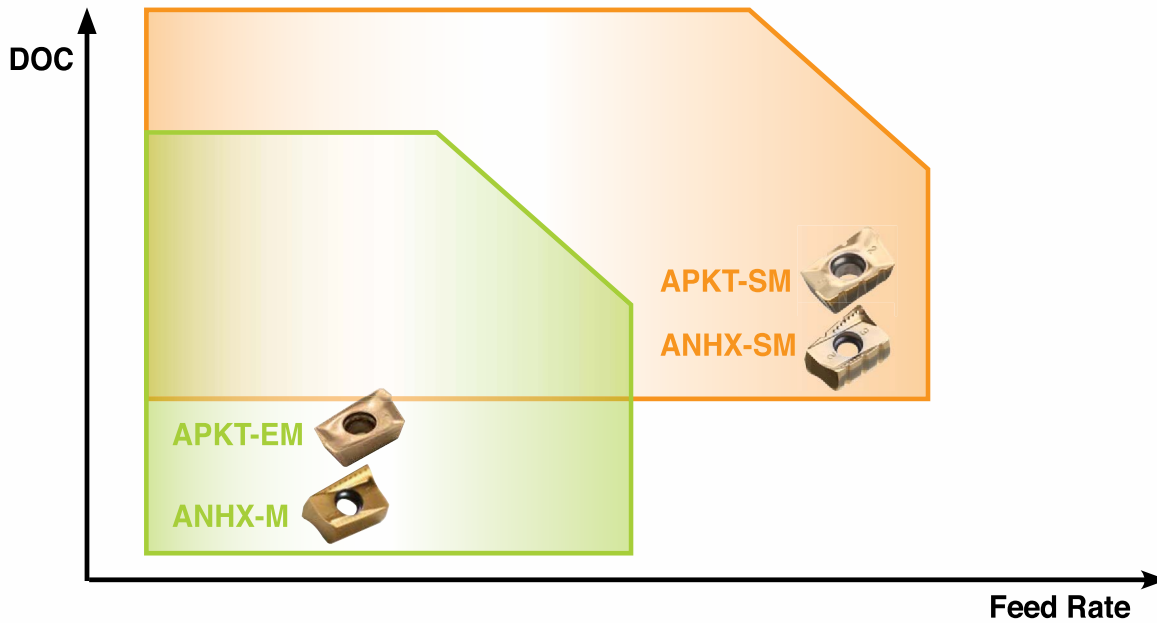
CHASE2MILL Tool Program



To cover all relevant diameters for both the CHASEMILL and CHASE2MILL line, TaeguTec is adding even number cutters to the line as standard items

- TFM90AP 663-22R-12
- TFM90AP 450-22R-17-B
- TFM90AP 680-27R-17
- TFM90AP 8125-40R-17
- TFM90AN 680-27R-16

Application guide in general use



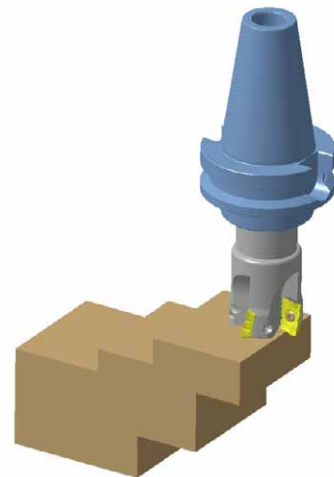
Splitter insert suitable for all 90° milling operations where improved productivity is required.



Deep and wide engagement



Long overhang machining



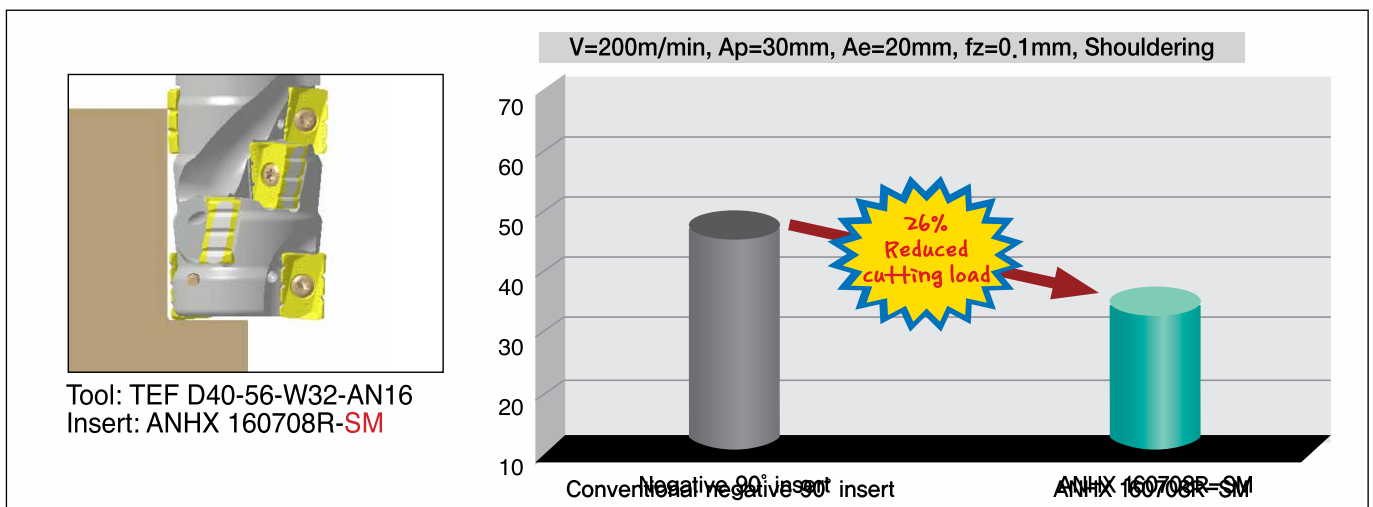
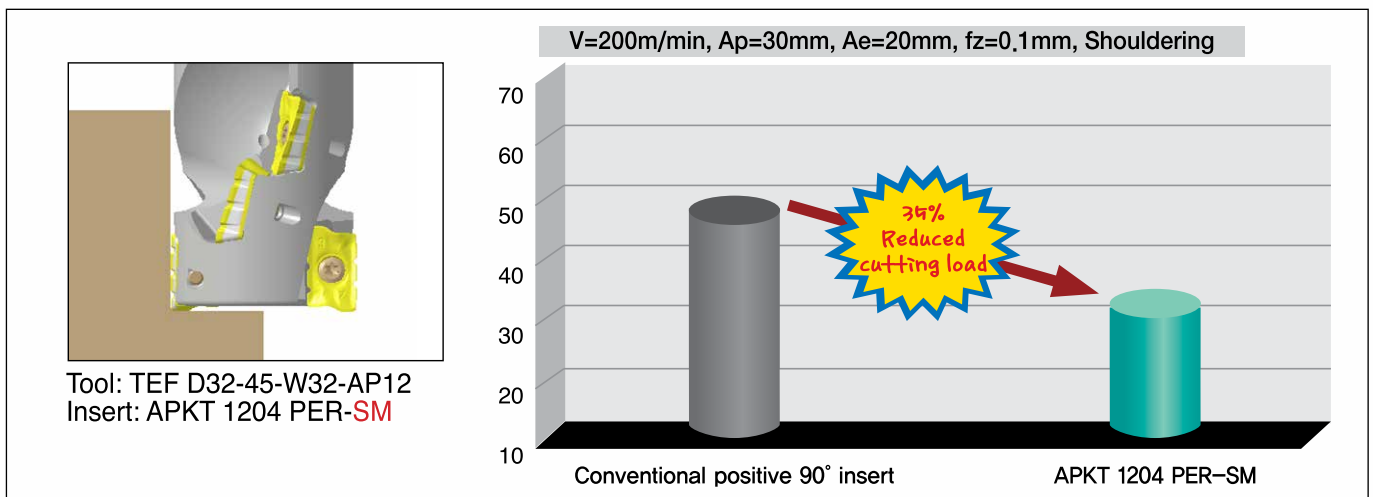
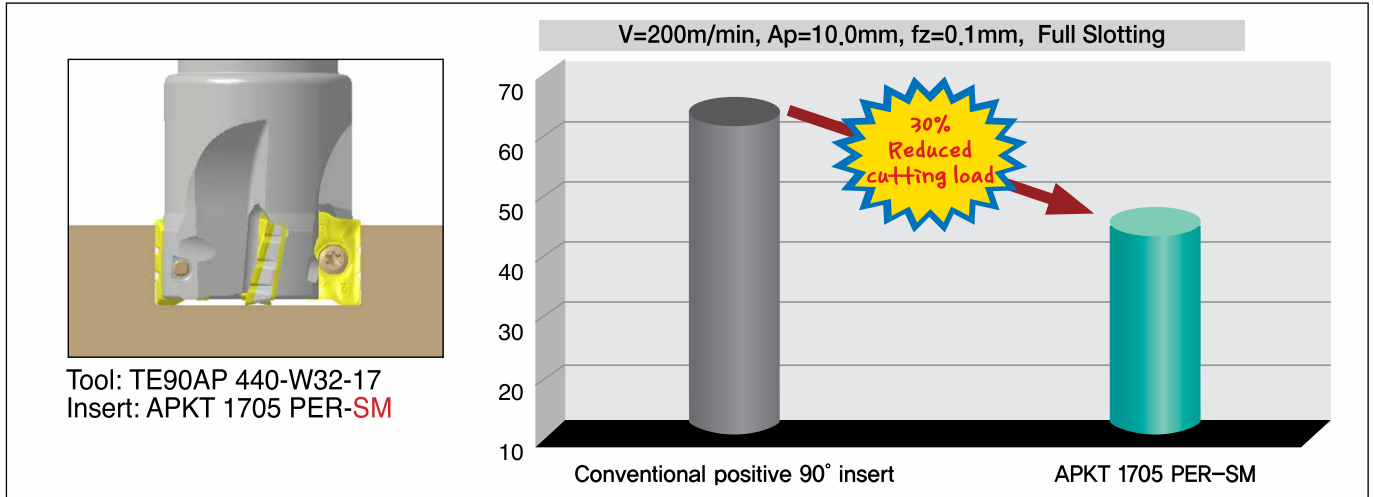
Unstable fixture

***Product line is particularly effective on hard-to-cut operations characterised by high cutting load or vibration**

Cutting Performance Test

Machine Used: HSK A 100 (25Kw)

Workpiece: SAE4140



Reduced noise level and smoother cutting in all 3 tests

Recommended cutting conditions

Operating Guidelines for CHASEMILL - APKT 1204 PER-SM Insert

Workpiece	Hardness(HB)	D.O.C	Speed(m/min)	Best Grades	Feed(mm/tooth)
Low Carbon Steel	85~175	10.0	180~300	TT7800, TT9080	0.12-0.25
High Carbon Steel	175~225	10.0	130~280	TT7800, TT9080	0.12-0.25
Alloy Steel	275~325	10.0	120~250	TT9080, TT8080, TT7800	0.1-0.2
Tool Steel	-	10.0	80~200	TT9080, TT8080	0.1-0.2
Stainless 300 Series	-	7.0	80~170	TT8080, TT9080	0.1-0.18
Stainless 400 Series	-	7.0	100~210	TT9080, TT8080	0.1-0.2
High Temp. Super Alloy	-	7.0	30~100	TT8080, TT9080	0.08-0.15
Titanium Alloy	-	7.0	30~80	TT8080, TT9080	0.08-0.15
Gray Cast Iron	190~220	11.0	150~400	TT6080	0.15-0.3
Nodular Cast Iron	140~200	11.0	100~250	TT6080	0.15-0.3

Operating Guidelines for CHASEMILL - APKT 1705 PER-SM Insert

Workpiece	Hardness(HB)	D.O.C	Speed(m/min)	Best Grades	Feed(mm/tooth)
Low Carbon Steel	85~175	15.0	180~300	TT7800, TT9080	0.15-0.3
High Carbon Steel	175~225	15.0	130~280	TT7800, TT9080	0.15-0.3
Alloy Steel	275~325	15.0	120~250	TT9080, TT8080, TT7800	0.12-0.25
Tool Steel	-	15.0	80~200	TT9080, TT8080	0.12-0.25
Stainless 300 Series	-	10.0	80~170	TT8080, TT9080	0.1-0.2
Stainless 400 Series	-	10.0	100~210	TT9080, TT8080	0.1-0.25
High Temp. Super Alloy	-	10.0	30~100	TT8080, TT9080	0.08-0.18
Titanium Alloy	-	10.0	30~80	TT8080, TT9080	0.08-0.18
Gray Cast Iron	190~220	16.0	150~400	TT6080	0.15-0.3
Nodular Cast Iron	140~200	16.0	100~250	TT6080	0.15-0.3

Operating Guidelines for CHASE2MILL - ANHX 160708R-SM Insert

Workpiece	Hardness(HB)	D.O.C	Speed(m/min)	Best Grades	Feed(mm/tooth)
Low Carbon Steel	85~175	14.0	180~300	TT7800, TT9080	0.12-0.27
High Carbon Steel	175~225	14.0	130~280	TT7800, TT9080	0.12-0.27
Alloy Steel	275~325	14.0	120~250	TT9080, TT8080, TT7800	0.12-0.25
Tool Steel	-	14.0	80~200	TT9080, TT8080	0.12-0.25
Stainless 300 Series	-	10.0	80~170	TT8080, TT9080	0.1-0.2
Stainless 400 Series	-	10.0	100~210	TT9080, TT8080	0.1-0.25
High Temp. Super Alloy	-	10.0	30~100	TT8080, TT9080	0.08-0.20
Titanium Alloy	-	10.0	30~80	TT8080, TT9080	0.08-0.20
Gray Cast Iron	190~220	15.0	150~400	TT6080	0.15-0.3
Nodular Cast Iron	140~200	15.0	100~250	TT6080	0.15-0.3