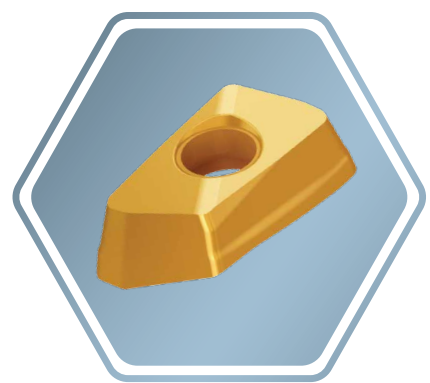


NPN

New Product News



Next Generation Shouldering Insert with V Bottom for Strong Clamping



KEY POINT




TaeguTec's WIN-MILL line has launched the next generation shoulder milling, high productivity AVKT inserts and cutters.

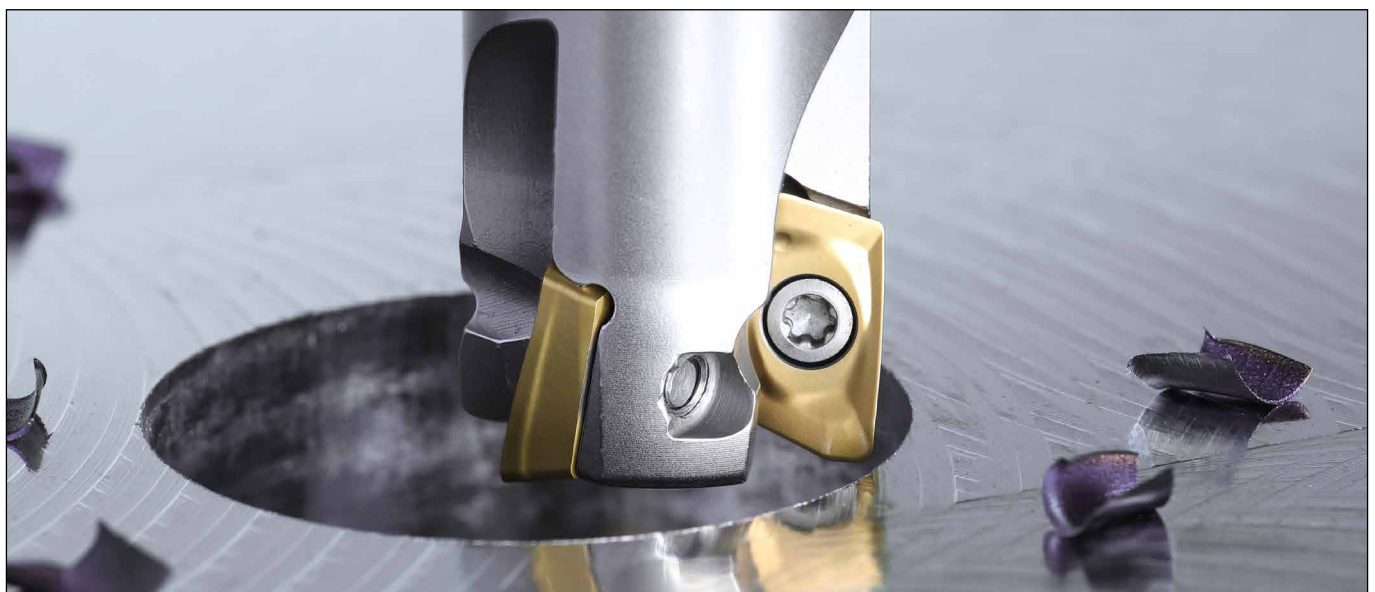
TaeguTec introduces its premium WIN-MILL line, including AVKT inserts with dedicated holders, that maximize productivity in the single-sided, two-corner shoulder milling insert market suitable for various applications.

The new insert includes a V-shape bottom contact for stronger and more stable clamping, providing excellent machining performance even in both ramping and step-down machining. In addition, the new AVKT insert includes a higher ramping angle over similar inserts to provide higher productivity.

For further information, please contact the product manager.

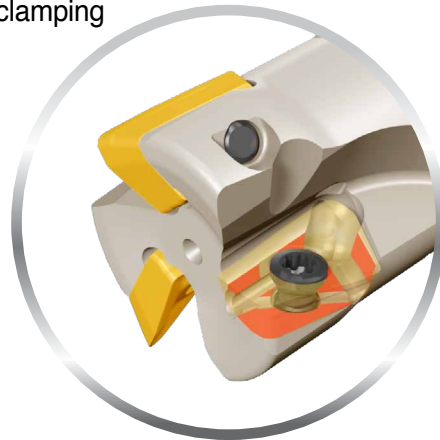
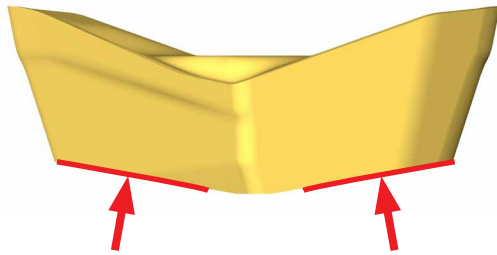
WIN-MILL AVK(C)T Insert

AVKT 10-M/EL	AVCT 10-AL	AVKT 10-HF
 <p>For shouldering</p>	 <p>For shouldering aluminum</p>	 <p>For high feed milling</p>

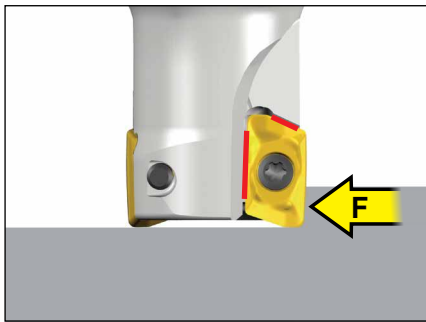


Features

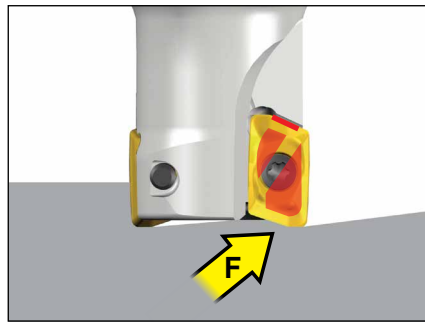
- Insert's V-shape contact face enables strong and stable clamping



- Pocket contact reaction depending on machining application

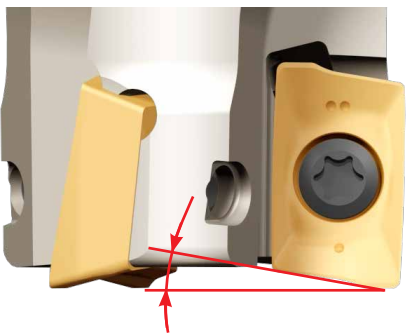


Shouldering

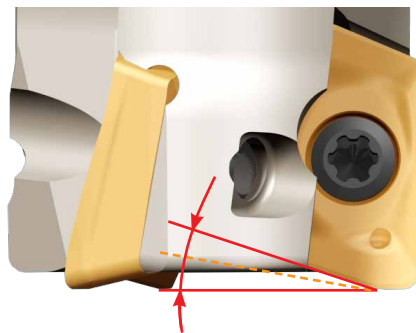


Ramping

- Insert's higher ramping angle for improved productivity



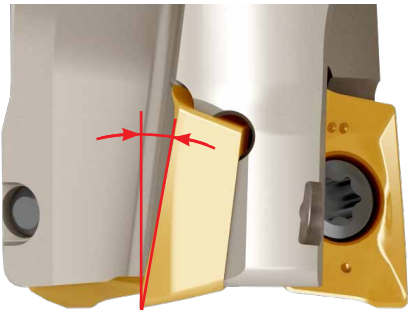
Current APKT type



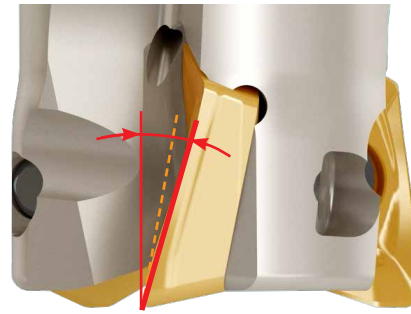
new AVKT

Cutter Dia.	Straight ramp down max. ramping angle			
	Competitor APKT type	new AVKT (R0.8)	Competitor APKT high feed type	new AVKT-HF
Ø16	4.9°	10.9°	3.8°	7.6°
Ø18	4.0°	8.3°	3.4°	5.5°
Ø20	3.4°	6.5°	3.0°	4.2°
Ø25	1.8°	4.3°	2.1°	2.6°
Ø32	2.0°	2.9°	1.6°	1.7°
Ø40	1.5°	2.1°	1.2°	1.2°
Ø50	1.1°	1.6°	0.9°	0.9°
Ø63	0.8°	1.2°	0.5°	0.7°

- Higher insert rake angle over conventional inserts enable soft cutting

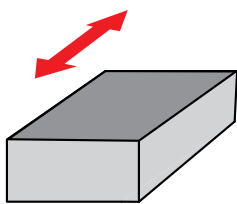


Current APKT type

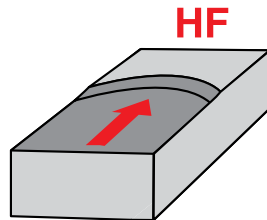


new AVKT

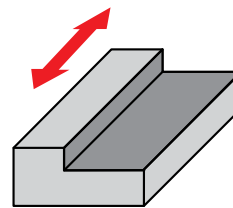
- Applicable to the same applications as the current APKT type inserts



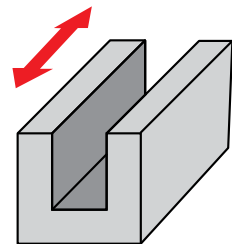
Facing



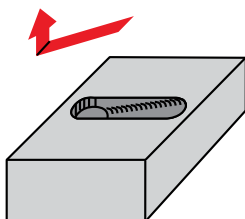
High feed milling



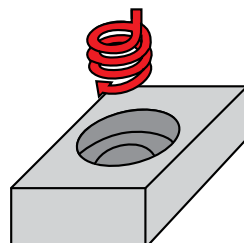
Shouldering



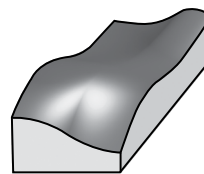
Slotting



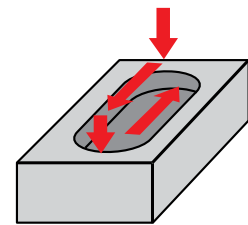
Straight ramping



Helical ramping



Profiling

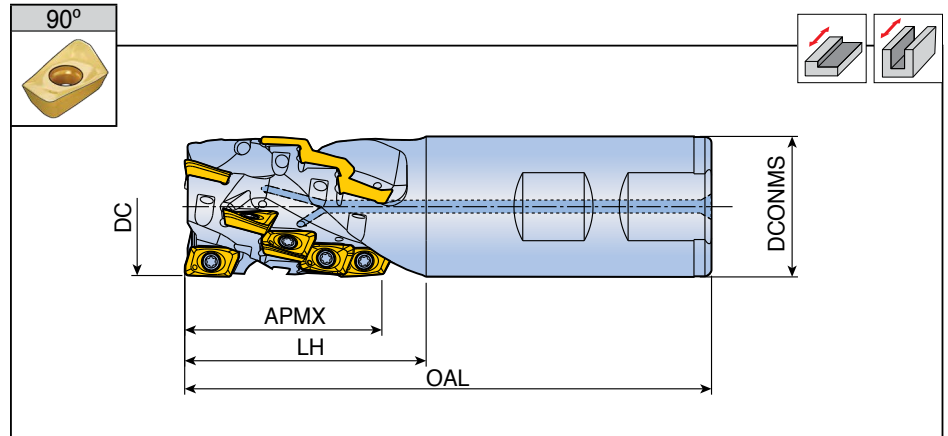
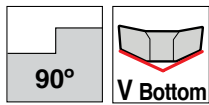


Step down

TEF-AV10



Extended flute cutters

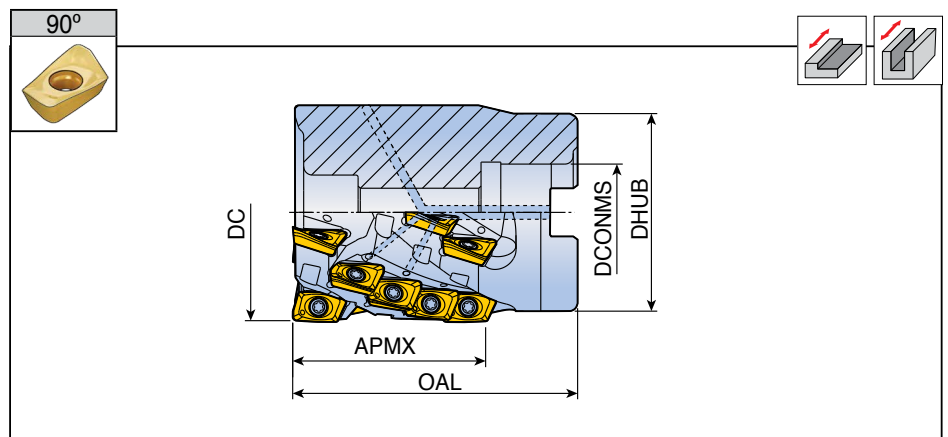
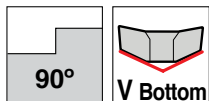


Designation	No. of inserts	Dimension (mm)					Coolant hole	Kg	Insert	
		DC	DCONMS	OAL	LH	APMX				
TEF D25-27-W25-AV10-2F	2	6	25	25	95	35	27	●	0.3	AVKT 10-M/EL AVCT 10-AL
D32-44-W32-AV10-3F	3	15	32	32	120	55	44	●	0.6	

TES-AV10



Extended flute cutters

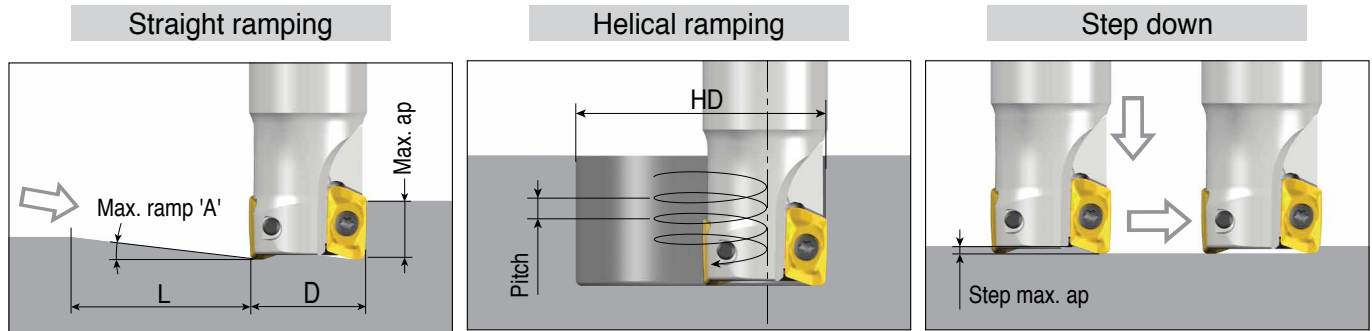


Designation	No. of insert	Dimension (mm)					Coolant hole	Kg	Mounting bolt	Insert	
		DC	DCONMS	OAL	DHUB	APMX					
TES D40-35-16R-AV10-4F	4	16	40	16	55	38	35	●	0.3	SH M8x40	AVKT 10-M/EL AVCT 10-AL
D50-44-22R-AV10-5F	5	25	50	22	65	45	44	●	0.6	SH M10x50	

Spare parts

Designation	Screw	Wrench			
	TEF/TES-AV10	TS 30B062/HG-P	TD 8P		

Ramping Data



AVKT 10-R0.8

(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	10.9	10	52	20		2.4	1.7
					32	9.7	
Ø18	8.3	10	69	24		2.7	2.0
					36	8.2	
Ø20	6.5	10	88	28		2.9	2.0
					40	7.2	
Ø25	4.3	10	133	38		3.1	2.0
					50	5.9	
Ø32	2.9	10	198	52		3.2	2.0
					64	5.1	
Ø40	2.1	10	267	68		3.3	2.0
					80	4.7	
Ø50	1.6	10	347	88		3.4	2.0
					100	4.5	
Ø63	1.2	10	459	114		3.5	2.0
					126	4.3	

AVKT 10-R1.6

(unit: mm)

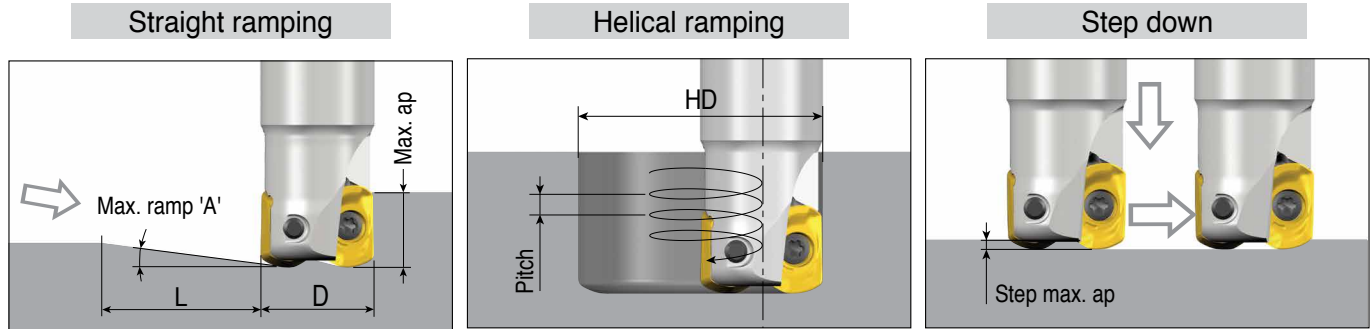
Cutter dia. (D)	Straight ramp down			Helical ramp down			Step down
	Max. ramp (A°)	Max. ap	Min. length (L)	Min. dia. (HD)	Max. dia. (HD)	Max. pitch/rev.	Max. ap
Ø16	10.4	10	55	20		2.3	1.5
					32	9.2	
Ø18	7.8	10	73	24		2.6	1.7
					36	7.7	
Ø20	6.1	10	94	28		2.7	1.7
					40	6.7	
Ø25	3.9	10	147	38		2.8	1.7
					50	5.3	
Ø32	2.6	10	216	52		2.9	1.7
					64	4.6	
Ø40	2.0	10	287	68		3.1	1.7
					80	4.4	
Ø50	1.5	10	382	88		3.1	1.7
					100	4.1	
Ø63	1.1	10	498	114		3.2	1.7
					126	4.0	

AVKT 10-R3.2

(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	10	66	20		1.9	1.1
					32	7.6	
Ø18	6.2	10	92	24		2.0	1.4
					36	6.1	
Ø20	4.6	10	124	28		2.0	1.4
					40	5.1	
Ø25	2.9	10	198	38		2.1	1.4
					50	4.0	
Ø32	1.9	10	302	52		2.1	1.4
					64	3.3	
Ø40	1.4	10	395	68		2.2	1.4
					80	3.2	
Ø50	1.0	10	546	88		2.2	1.4
					100	2.9	
Ø63	0.8	10	717	114		2.2	1.4
					126	2.8	

Ramping Data

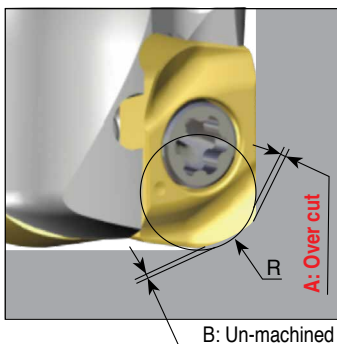


AVKT 1004R-HF

(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	7.6	10	75	20.5		1.9	0.8
					32	6.7	
Ø18	5.5	10	104	24.5		2.0	1.0
					36	5.4	
Ø20	4.2	10	136	28.5		2.0	1.2
					40	4.6	
Ø25	2.6	10	220	38.5		1.9	1.3
					50	3.6	
Ø32	1.7	10	337	52.5		1.9	1.4
					64	3.0	
Ø40	1.2	10	478	68.5		1.9	1.4
					80	2.6	
Ø50	0.9	10	637	88.5		1.9	1.4
					100	2.5	
Ø63	0.7	10	819	114.5		2.0	1.4
					126	2.4	

Programming technical data



	R Program	A Over cut	B Un machined
AVKT 1004R-HF	1.7	0	0.49
	1.9	0	0.43
	2.0	0.01	0.40
	2.5	0.13	0.24
	3.0	0.30	0.11

Yellow background: Recommended program 'R'