

# NPN

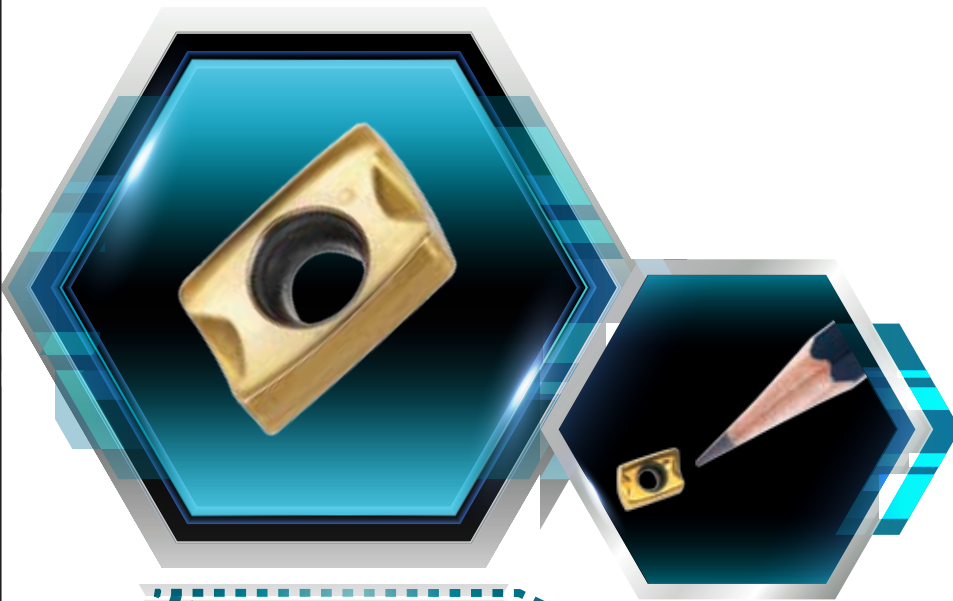
New Product News



## MILLSFEED

HIGH FEED MILL

Mini Sized 90° Shoulder Mill and High Feed Mill with Strong V-Shaped Insert



## KEY POINT

**TaeguTec has released a new line of cutters and inserts for miniature machining in the Ø6-Ø14 mm diameter range — the CVKT 05 line.**

The new **MILL-SPEED** family is ideal for small parts and the miniature industry. It is also designed to replace the machining range of solid carbide end mills from Ø8 (2z). This family of cutters and inserts improves productivity and reduces costs due to the advantages of exchangeable inserts compared to solid carbide end mills.

Designed for various applications, it is equipped with the pressed type CVKT 05 insert for general applications, side ground type CVHT 05-L insert for finishing with low cutting force and the high feed CVKT 05-HF insert for high feed conditions.

For further technical questions, please contact TaeguTec's product manager.



### Features

- Minimum holder diameter Ø6 (1z), Ø8 (2z)
- Finer pitch cutter maximizes productivity compared to the competition

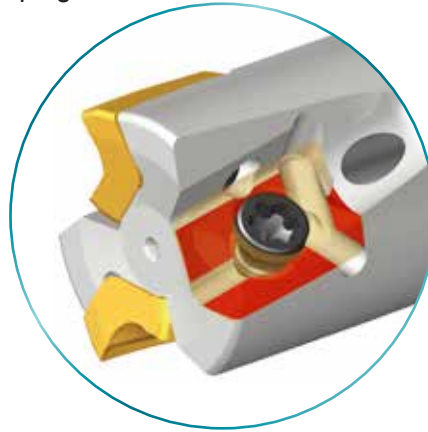
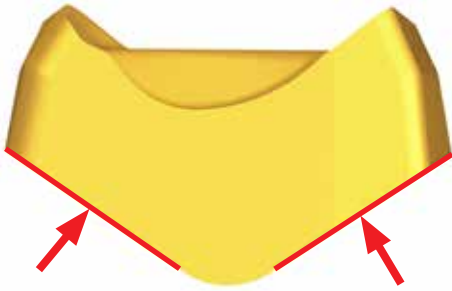


Competitor (Ø10, 2z)

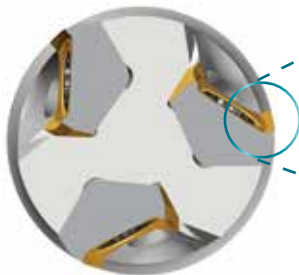


TaeguTec (Ø10, 3z)

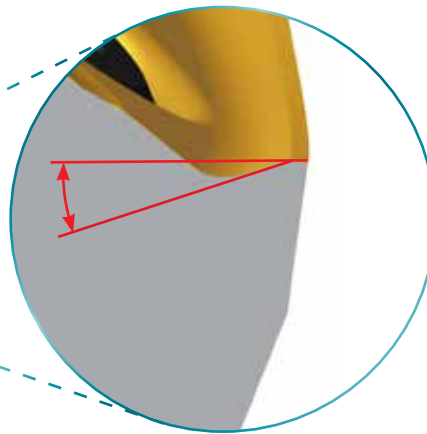
- Unique V shape insert bottom design
  - Increased insert rigidity
  - Improved self-positioning for strong insert clamping



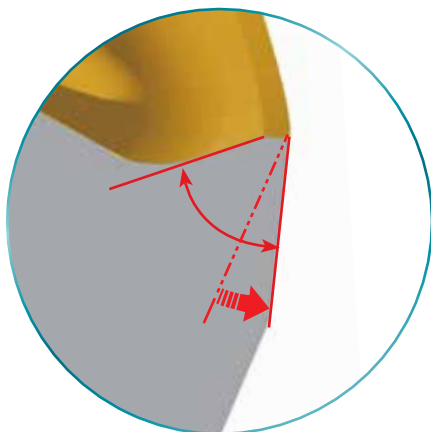
- High-rake angle design reduces cutting loads, which results in excellent chip evacuation



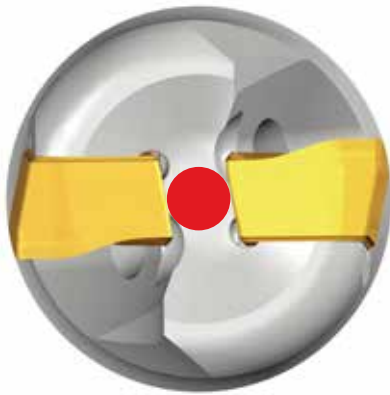
Section view



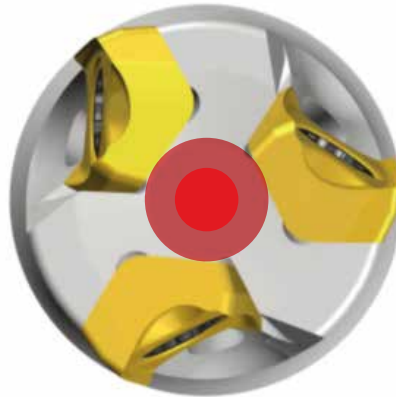
- Enhanced cutting edges design improves tool life and productivity



- Higher-stiffness core diameter over the competitor's APKT type cutter

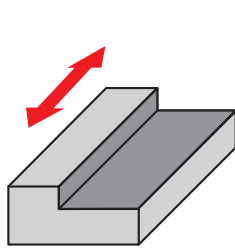


Competitor (Ø10, 2z)

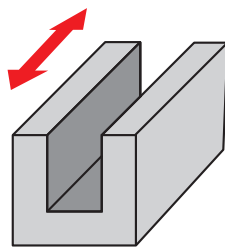


TaeguTec (Ø10, 3z)

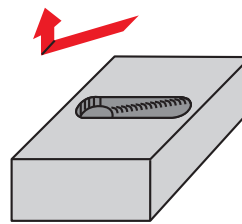
- Increased productivity due to high ramping angle
- Covers a wide variety of applications



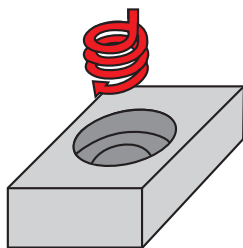
Shouldering



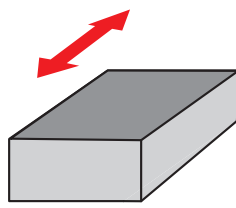
Slotting



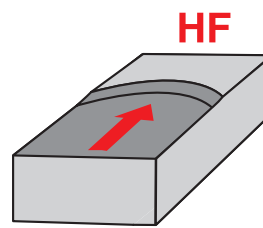
Straight ramping



Helical ramping



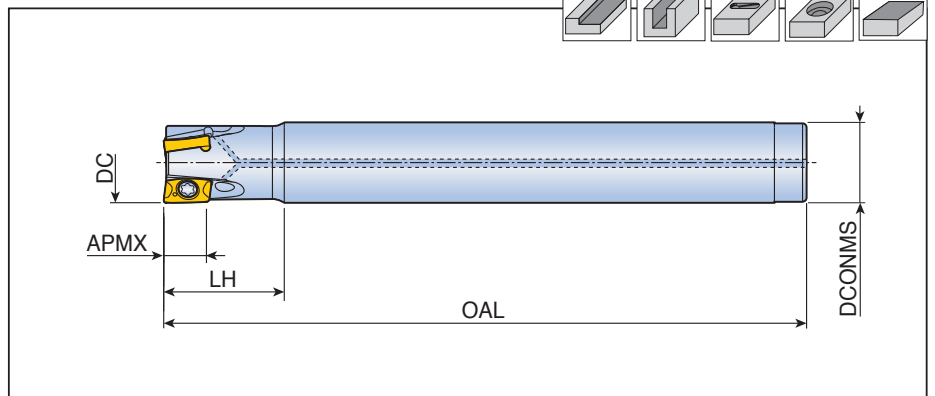
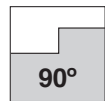
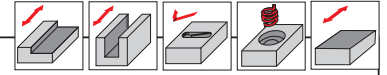
Facing



High feed milling

## 2S-TE90CV-05

End mills



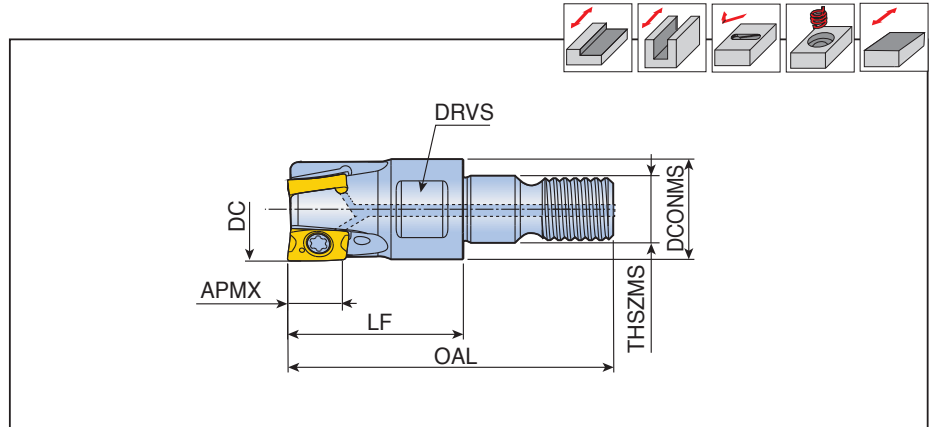
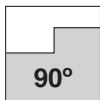
Designation	C	Dimension (mm)					Coolant	Insert
		DC	DCONMS	OAL	LH	APMX		
<b>2S-TE90CV-106-06-05</b>	1	6	6	60	12	5.0	●	CVK(H)T 0502...
<b>208-08-05</b>	2	8	8	80	12	5.0	●	
<b>209-08-05</b>	2	9	8	80	12	5.0	●	
<b>310-10-05</b>	3	10	10	80	15	5.0	●	
<b>311-10-05</b>	3	11	10	80	12	5.0	●	
<b>412-12-05</b>	4	12	12	80	15	5.0	●	
<b>413-12-05</b>	4	13	12	80	12	5.0	●	
<b>414-12-05</b>	4	14	12	80	10	5.0	●	

• Cutter body for 'HF' insert should be modified with body corner radius 1.8 mm

## 2S-TE90CV-M-05



Modular heads for T-FLEXTEC



Designation	✱	Dimension (mm)							Coolant	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX	DRVS		
<b>2S-TE90CV-310-M06-05</b>	3	10	9.7	17	31.5	M06	5.0	8	●	CVK(H)T 0502...
<b>412-M06-05</b>	4	12	9.7	17	31.5	M06	5.0	8	●	

- Cutter body for '-HF' insert should be modified with body corner radius 1.8 mm
- Matched with T-FLEXTEC holder

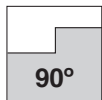
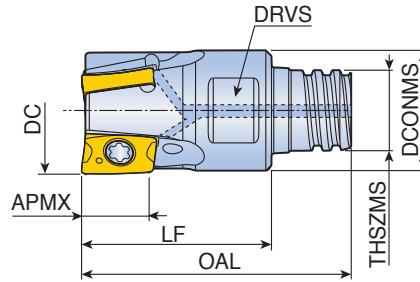
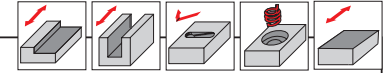
### Spare parts

Designation	Screw	Wrench			
	<b>2S-TE90CV-05</b>	TS 18033/HG-P	TD 6P		

## 2S-TE90CV-S-05



Modular heads for MAXI-RUSH



Designation		Dimension (mm)							Coolant	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX	DRVS		
<b>2S-TE90CV-310-S06-05</b>	3	10	9.6	15	21.3	S06	5.0	8	●	CVK(H)T 0502...
<b>412-S08-05</b>	4	12	11.5	16	23.5	S08	5.0	10	●	

- Cutter body for '-HF' insert should be modified with body corner radius 1.8 mm
- Matched with MAXI-RUSH holder

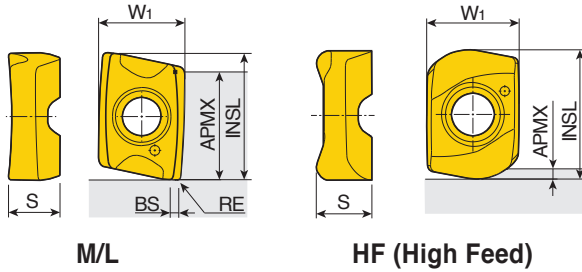
### Spare parts

Designation	Screw	Wrench			
<b>2S-TE90CV-05</b>	TS 18033/HG-P	TD 6P			

## CVK(H)T



### Inserts



Size	Dimension (mm)					
	INSL	W <sub>1</sub>	S	APMX	BS	RE
<b>05-M/L</b>	6.3	4.2	2.6	5.0	0.35	0.2
<b>05-HF</b>	5.5	4.2	2.5	0.5	-	-

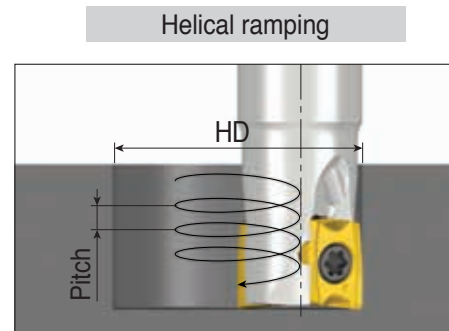
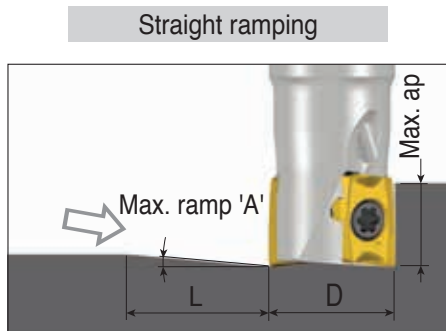


Insert	Designation	Recommended machining conditions		Coated							Uncoated				
		ap (mm)	Feed (mm/tooth)	TT9080	TT9030	TT8080	TT8020	TT8525	TT7080	TT7515	TT6080	TT5525	TT2510	K10	
	<b>CVKT 0502PNR-M</b>	0.5-4.0	0.08-0.04	●		●									
	<b>CVHT 0502PNR-L</b>	0.5-4.0	0.07-0.03	●		●					●				
	<b>CVKT 0502R-HF</b>	0.2-0.4	0.70-0.30	●		●						●			

●: Standard items



## Ramping Data

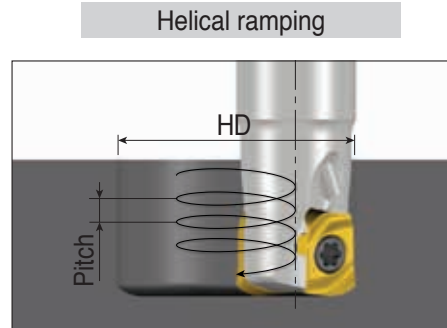
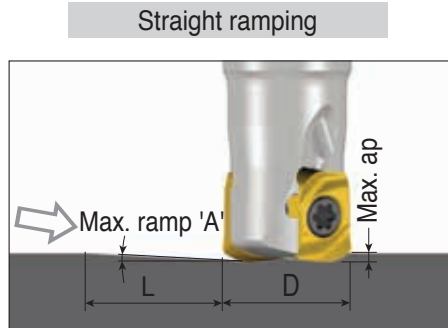


CVK(H)T 05: R0.2

(unit: mm)

Cutter dia.(D)	Straight ramp down			Helical ramp down			
	Max. ramp (A°)	Max. ap	Min. length (L)	Min. dia.(HD)	Max. dia.(HD)	Max. pitch/rev.	
Ø6	2.5	5.0	112	6.5	12	0.1	
Ø8	2.1		136	10.5	16	0.2	
Ø9	1.7		164	12.5	18	0.3	
Ø10	1.7		169	14.5	20	0.4	
Ø11	1.3		212	16.5	22	0.3	
Ø12	1.3		220	18.5	24	0.4	
Ø13	1.1		249	20.5	26	0.7	
Ø14	1.0		273	22.5	28	0.4	
						28	0.7

## Ramping Data

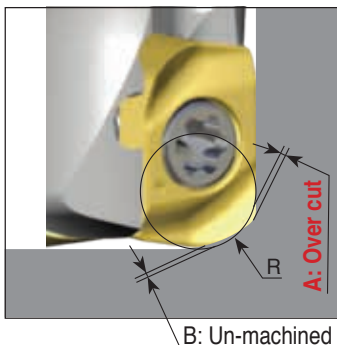


### CVKT 05-HF

(unit: mm)

Cutter dia.(D)	Straight ramp down			Helical ramp down		
	Max. ramp ( $A^\circ$ )	Max. ap	Min. length (L)	Min. dia.(HD)	Max. dia.(HD)	Max. pitch/rev.
Ø6	0.20	0.5	143	6.5	12	0.0
Ø8	0.45		64	10.5	16	0.1
Ø9	0.55		52	12.5	18	0.1
Ø10	0.30		96	14.5	20	0.1
Ø11	0.35		82	16.5	22	0.1
Ø12	0.70		41	18.5	24	0.2
Ø13	0.75		38	20.5	26	0.3
Ø14	0.85		34	22.5	28	0.5

### Programming technical data



	R Program	A Over cut	B Un-machined
CVKT 05-HF	0.8	0	0.21
	0.9	0	0.18
	1.0	0.02	0.14

**0.8**: Recommended program 'R'

## KIT COLLECTIONS

These kit products are available in the format listed below.



Cat. No.	Designation	Bill of materials	Qty.
6334769	<b>KISFT-2S-TE90CV-208-05</b>	2S-TE90CV-208-08-05	1
		CVKT 0502PNR-M TT9080	4
6334770	<b>KISFT-2S-TE90CV-310-05</b>	2S-TE90CV-310-10-05	1
		CVKT 0502PNR-M TT9080	6
6334771	<b>KISFT-2S-TE90CV-412-05</b>	2S-TE90CV-412-12-05	1
		CVKT 0502PNR-M TT9080	8



Cat. No.	Designation	Bill of materials	Qty.
6337835	<b>KISFS-2S-TE90CV-208-05</b>	2S-TE90CV-208-08-05	1
		CVKT 0502PNR-M TT9080	50
6337836	<b>KISFS-2S-TE90CV-310-05</b>	2S-TE90CV-310-10-05	1
		CVKT 0502PNR-M TT9080	50
6337837	<b>KISFS-2S-TE90CV-412-05</b>	2S-TE90CV-412-12-05	1
		CVKT 0502PNR-M TT9080	50



Cat. No.	Designation	Bill of materials	Qty.
6338415	<b>KISFF-A-CVKT 05-M TT9080</b>	CVKT 0502PNR-M TT9080	100
6338416	<b>KISFF-B-CVKT 05-M TT9080</b>		300
6338417	<b>KISFF-C-CVKT 05-M TT9080</b>		500