

NPN

New Product News



TANGSFEED

TANGENTIAL MILL



High Productivity Shoulder Mill with Tangential Insert



KEY POINT

A higher productivity perpendicular machining solution, TaeguTec's new tangential type TANG-SFEED inserts and cutter line.

The new **TANG-SFEED** line is a double-sided four-corner tangential insert line capable of ramping applications. Furthermore, the insert's high positive helical cutting edge design means high machining performance.

The new line is available in two insert sizes: 09, 14 mm and related cutters. Also included is a general purpose LPKU insert and a high precision LPHU insert.

Not only does the new line offer the advantages of a tangential insert, its new unique geometry enables for better productivity across a diverse range of high feed applications.

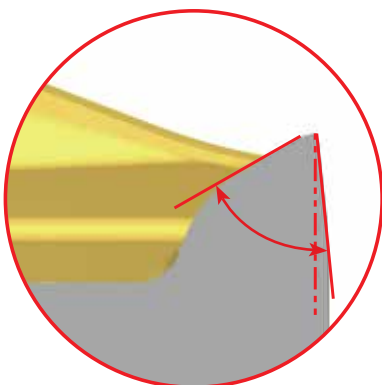
For further technical questions, please contact TaeguTec's product manager.

Features

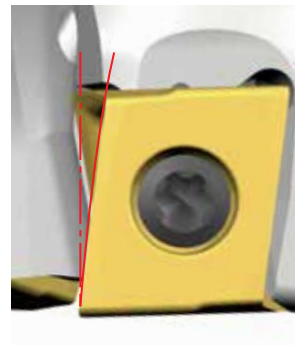
- Capable of helical and straight ramping applications



- Enhanced cutting stability due to the reinforced cutting edge



- Insert's helical cutting edge enables for smooth machining



- Unique tangential insert design
 - Minimizes mismatch during step machining
 - Excellent chip evacuation



- Tangential cutter's larger diameter core offers a higher stiffness cutter compared to the radial type

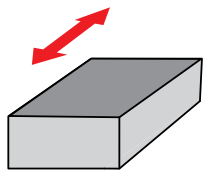


Radial type

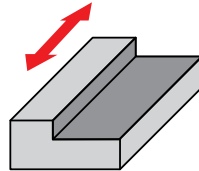


Tangential type

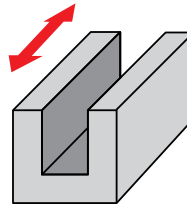
- A wide variety of applications



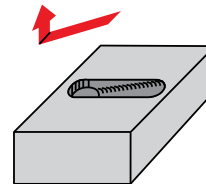
Facing



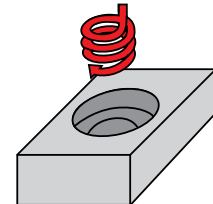
Shouldering



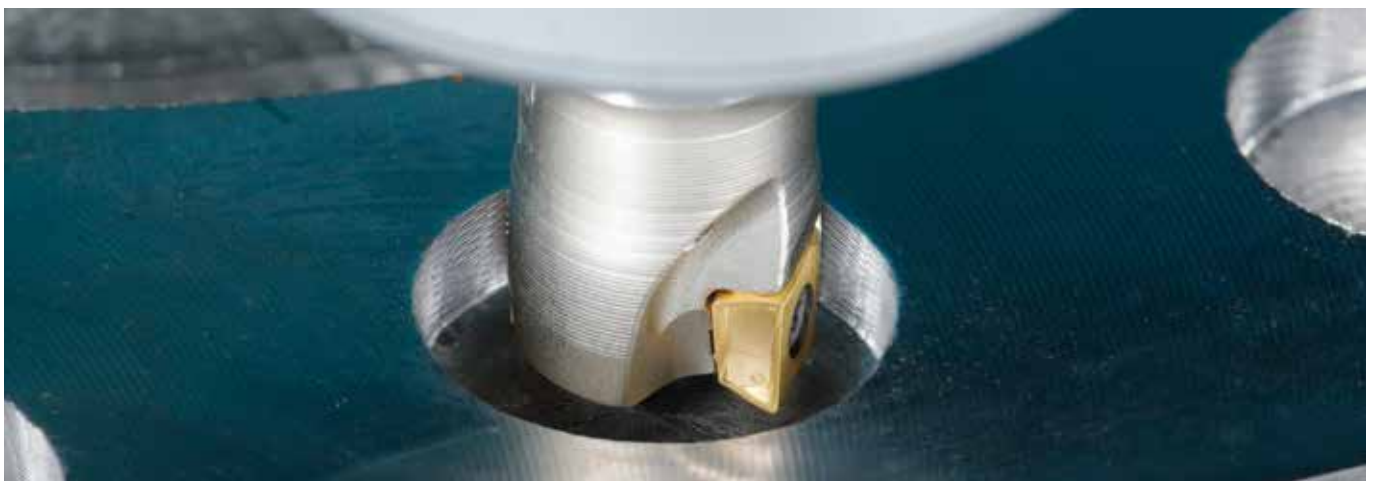
Slotting



Straight ramping



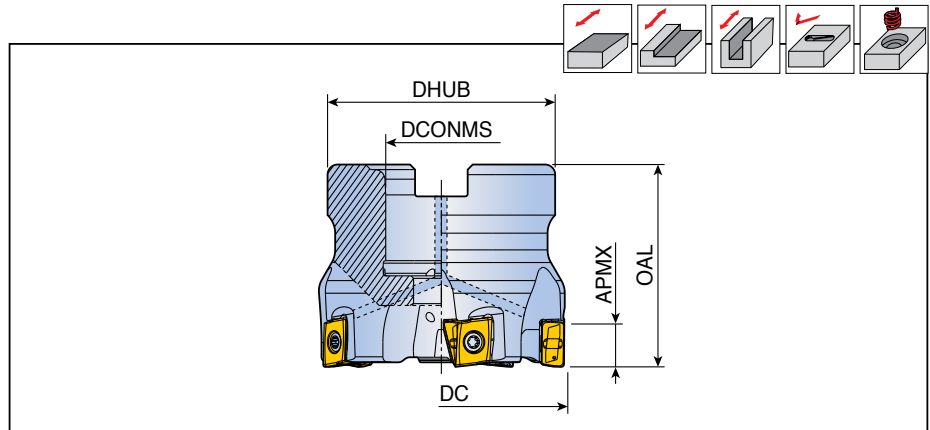
Helical ramping



4T-TF90-09



Face mills



Designation		Dimension (mm)					Coolant	Arbor type	Kg	Mounting bolt	Insert
		DC	DCONMS	DHUB	OAL	APMX					
4T-TF90-640-16R-09	6	40	16	38	40	8.3	●	A	0.3	SH M8x30	LPK(H)U 0904...
550-22R-09	5	50	22	45	40	8.3	●	A	0.4	SH M10x30	
750-22R-09	7	50	22	45	40	8.3	●	A	0.4	SH M10x30	
663-22R-09	6	63	22	47	40	8.3	●	A	0.5	SH M10x30	
1063-22R-09	10	63	22	47	40	8.3	●	A	0.5	SH M10x30	

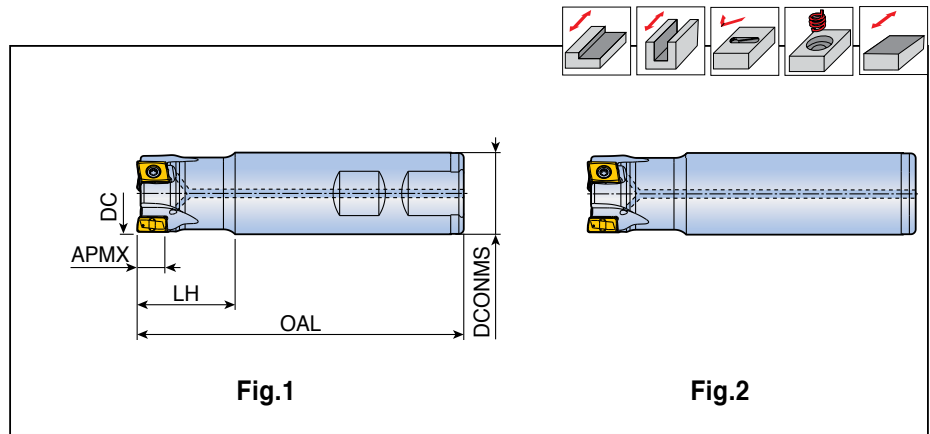
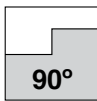
Spare parts

Designation	Screw	Wrench	Wrench handle		
4T-TF90-09	TS 30D082-P	TBLD T08P-W4	THND 4W		

4T-TE90-09



End mills

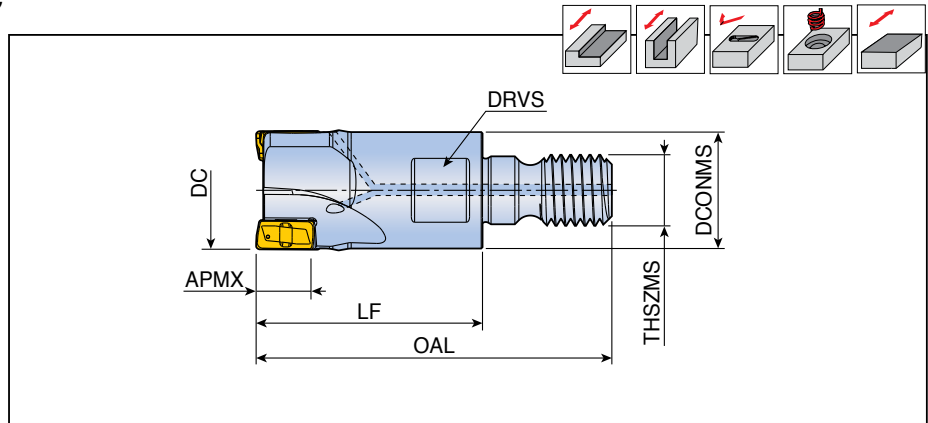
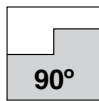


Designation	✱	Dimension (mm)					Coolant	Fig.	Insert
		DC	DCONMS	OAL	LH	APMX			
4T-TE90-220-W20-09	2	20	20	100	30	8.3	●	1	LPK(H)U 0904...
220-20-09-L170	2	20	20	170	30	8.3	●	2	
320-W20-09	3	20	20	100	30	8.3	●	1	
325-W25-09	3	25	25	100	30	8.3	●	1	
325-25-09-L200	3	25	25	200	30	8.3	●	2	
425-W25-09	4	25	25	100	30	8.3	●	1	
425-25-09-L120	4	25	25	120	30	8.3	●	2	
332-W32-09	3	32	32	110	35	8.3	●	1	
332-32-09-L210	3	32	32	210	35	8.3	●	2	
532-W32-09	5	32	32	110	35	8.3	●	1	
532-32-09-L130	5	32	32	130	35	8.3	●	2	
440-W32-09	4	40	32	115	30	8.3	●	1	
440-32-09-L150	4	40	32	150	30	8.3	●	2	
640-W32-09	6	40	32	115	30	8.3	●	1	

4T-TE90-M-09



Modular heads for T-FLEXTEC



Designation	✳	Dimension (mm)							Coolant	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX	DRVS		
4T-TE90-220-M10-09	2	20	18	30	50	M10	8.3	15	●	LPK(H)U 0904...
320-M10-09	3	20	18	30	50	M10	8.3	15	●	
425-M12-09	4	25	21	35	57	M12	8.3	17	●	
532-M16-09	5	32	29	43	68	M16	8.3	25	●	
640-M16-09	6	40	29	43	68	M16	8.3	25	●	

• Matched with T-FLEXTEC holder

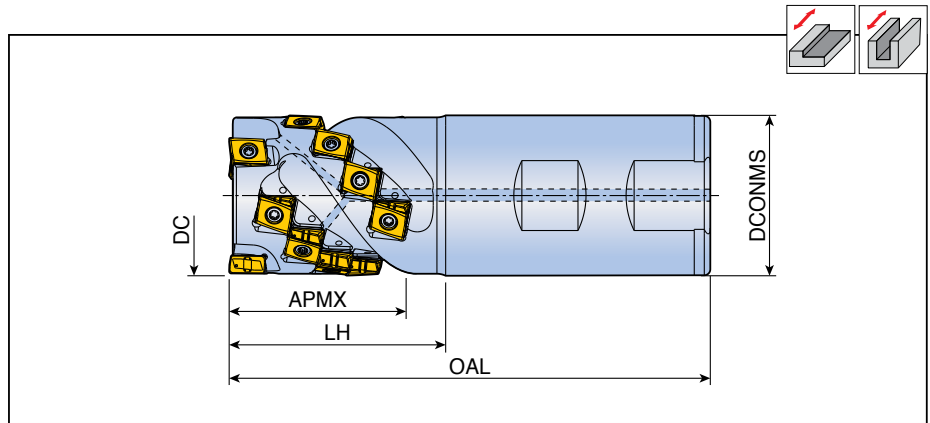
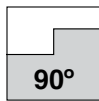
Spare parts

Designation	Screw 	Wrench 	Wrench handle 		
4T-TE90-09	TS 30D082-P	TBLD T08P-W4	THND 4W		

4T-TEF-09



Extended flute cutters



Designation	No. of insert	Dimension (mm)					Coolant	Insert	
		DC	DCONMS	OAL	LH	APMX			
4T-TEF D25-36-W25-09	2	10	25	25	100	43	36	●	LPK(H)U 0904...
D32-36-W32-09	3	15	32	32	105	44	36	●	
D32-43-W32-09	3	18	32	32	115	52	43	●	
D40-43-W40-09	3	18	40	40	125	54	43	●	
D40-51-W40-09	3	21	40	40	135	64	51	●	

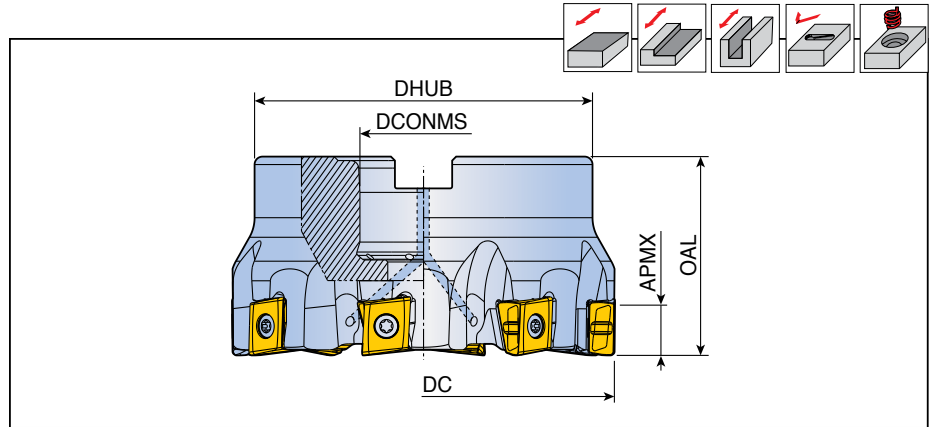
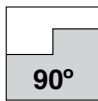
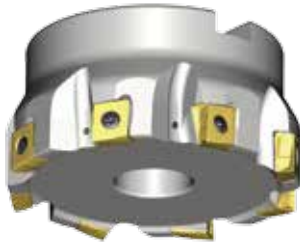
Spare parts

Designation	Screw	Wrench	Wrench handle		
4T-TEF-09	TS 30D082-P	TBLD T08P-W4	THND 4W		

4T-TF90-14



Face mills



Designation		Dimension (mm)					Coolant	Arbor type	Kg	Mounting bolt	Insert
		DC	DCONMS	DHUB	OAL	APMX					
4T-TF90-440-16R-14	4	40	16	38	40	12.5	●	A	0.3	SH M8x30	LPKU 1407...
450-22R-14	4	50	22	45	40	12.5	●	A	0.3	SH M10x30	
650-22R-14	6	50	22	45	40	12.5	●	A	0.3	SH M10x30	
563-22R-14	5	63	22	47	40	12.5	●	A	0.5	SH M10x30	
863-22R-14	8	63	22	47	40	12.5	●	A	0.5	SH M10x30	
780-27R-14	7	80	27	58	50	12.5	●	A	1.0	SH M12x35	
1080-27R-14	10	80	27	58	50	12.5	●	A	1.2	SH M12x35	
8100-32R-14	8	100	32	85	50	12.5	●	A	2.0	SH M16x35	
12100-32R-14	12	100	32	85	50	12.5	●	A	2.1	SH M16x35	
10125-40R-14	10	125	40	85	63	12.5	●	A	3.1	SH M20x40	
14125-40R-14	14	125	40	85	63	12.5	●	A	3.3	SH M20x40	
12160-40R-14	12	160	40	110	63	12.5	x	C	4.1	-	
16160-40R-14	16	160	40	110	63	12.5	x	C	4.3	-	
14200-60R-14	14	200	60	130	63	12.5	x	C	5.7	-	
18200-60R-14	18	200	60	130	63	12.5	x	C	5.8	-	

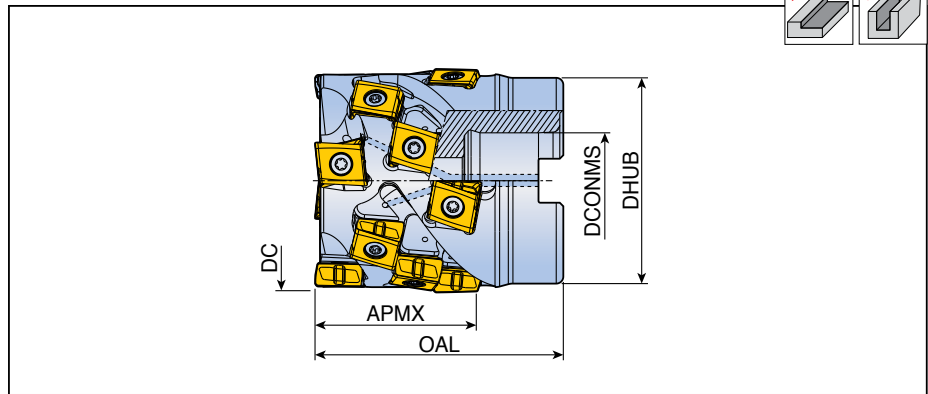
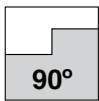
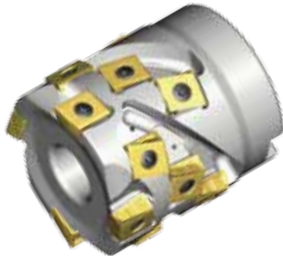
Spare parts

Designation	Screw	Wrench	Wrench handle		
4T-TF90-14	TS 40G110I	TBLD T15-W6	SW6-T		

4T-TES-14



Extended flute cutters



Designation		No. of insert	Dimension (mm)						Coolant	Kg	Mounting bolt	Insert
			DC	DCONMS	DHUB	OAL	APMX					
4T-TES D50-34-22R-14		9	50	22	45	55	34	●	0.5	SH M10x40	LPKU 1407...	
D50-45-22R-14		12	50	22	45	65	45	●	0.6	SH M10x50		
D63-45-27R-14		16	63	27	58	70	45	●	1.1	SH M12x50		
D63-56-27R-14		20	63	27	58	80	56	●	1.3	SH M12x60		
D80-56-32R-14		25	80	32	74	85	56	●	2.3	SH M16x60		
D100-56-40R-14		30	100	40	94	90	56	●	4.1	SH M20x60		

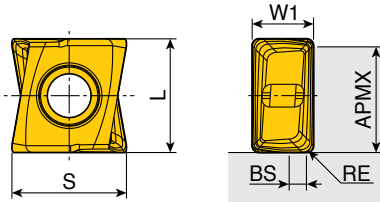
Spare parts

Designation	Screw	Wrench	Wrench handle		
4T-TES-14	TS 40G110I	TBLD T15-W6	SW6-T		

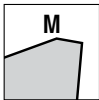
LPK(H)U



Inserts



Size	Dimension (mm)					
	L	W1	S	APMX	BS	RE
09	9	4.5	8.6	8.3	0.6	0.4
14	13.5	6.7	13.5	12.5	0.9	0.8



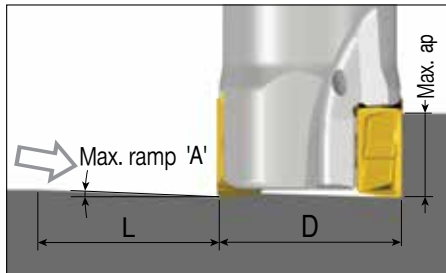
Insert	Designation	Recommended machining conditions		Coated							Uncoated		
		ap (mm)	Feed (mm/tooth)	TT9080	TT9030	TT8080	TT8020	TT8525	TT7080	TT7515	TT6080	K10	
	LPKU 090404 PNR-M	2.5-6.0	0.15-0.06	●		●							
	140708 PNR-M	3.5-10.0	0.20-0.10	●		●	●						
	LPHU 090404 PNR-M	2.5-6.0	0.15-0.06			●					●		

●: Standard items

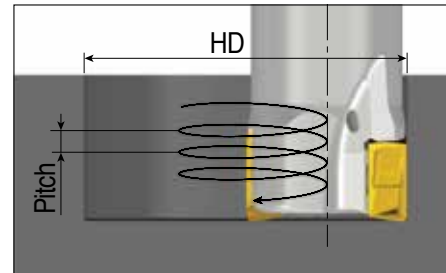
Ramping Data



Straight ramping



Helical ramping



LPK(H)U 09

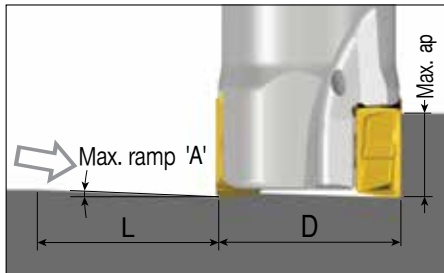
(unit: mm)

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.
Ø20	1.4	8.3	328	33		1.0
					40	1.5
Ø25	1.1	8.3	432	43		1.0
					50	1.5
Ø32	0.8	8.3	594	57		1.1
					64	1.4
Ø40	0.6	8.3	793	73		1.0
					80	1.3
Ø50	0.4	8.3	1057	93		1.0
					100	1.2
Ø63	0.3	8.3	1359	119		1.0
					126	1.2

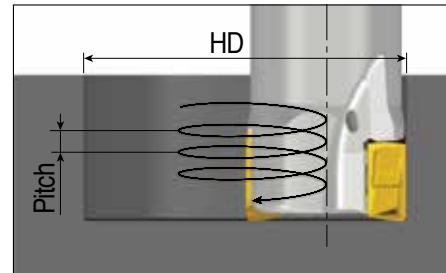
Ramping Data



Straight ramping



Helical ramping



LPKU 14

(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.
Ø40	0.9	12.5	754	69		1.5
					80	2.0
Ø50	0.7	12.5	1023	89		1.5
					100	1.9
Ø63	0.5	12.5	1302	115		1.5
					126	1.9
Ø80	0.4	12.5	1790	149		1.5
					160	1.7
Ø100	0.3	12.5	2387	189		1.4
					200	1.6
Ø125	0.2	12.5	2865	239		1.5
					250	1.7
Ø160	0.2	12.5	3581	309		1.6
					320	1.7
Ø200	0.1	12.5	4775	389		1.5
					400	1.6

KIT COLLECTIONS

These kit products are available in the format listed below.



Cat. No.	Designation	Bill of materials	Qty.
6334795	KISFT-4T-TE90-425-W25-09	4T-TE90-425-W25-09	1
		LPKU 090404 PNR-M TT9080	8
6334796	KISFT-4T-TE90-532-W32-09	4T-TE90-532-W32-09	1
		LPKU 090404 PNR-M TT9080	10
6334797	KISFT-4T-TF90-640-16R-09	4T-TF90-640-16R-09	1
		LPKU 090404 PNR-M TT9080	12
6334798	KISFT-4T-TF90-750-22R-09	4T-TF90-750-22R-09	1
		LPKU 090404 PNR-M TT9080	14



Cat. No.	Designation	Bill of materials	Qty.
6337860	KISFS-4T-TE90-425-W25-09	4T-TE90-425-W25-09	1
		LPKU 090404 PNR-M TT9080	50
6337861	KISFS-4T-TE90-532-W32-09	4T-TE90-532-W32-09	1
		LPKU 090404 PNR-M TT9080	50
6337862	KISFS-4T-TF90-640-16R-09	4T-TF90-640-16R-09	1
		LPKU 090404 PNR-M TT9080	50
6337863	KISFS-4T-TF90-750-22R-09	4T-TF90-750-22R-09	1
		LPKU 090404 PNR-M TT9080	50



Cat. No.	Designation	Bill of materials	Qty.
6338433	KISFF-A-LPKU 09-M TT9080	LPKU 090404 PNR-M TT9080	100
6338434	KISFF-B-LPKU 09-M TT9080		300

NPN

New Product News



TANGSFEED

TANGENTIAL MILL

Now Available in Ultra Small
05 Size Inserts and End Mills



KEY POINT

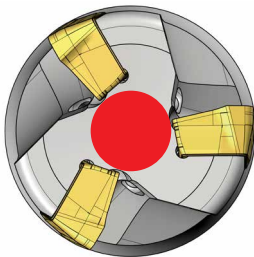
TaeguTec has expanded the TANG-SFEED line with new LPKU 05, LPHU 05 inserts and end mills.

TaeguTec has introduced a small 05 size insert to the Ø10 (2 teeth) end mill TANG-SFEED product line currently available in 09 and 14 sizes.

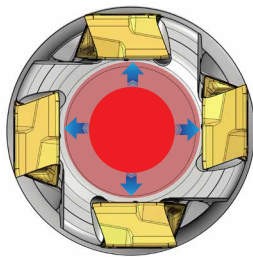
Along with the smaller size end mills, two new inserts have been added; a LPKU 05 utility type and a LPHU 05 precision type. Both inserts along with the end mills, modular head type are available in a 10 to 32 mm diameter range and extended flute end mills in a 16 to 25 mm diameter range.

TANG-SFEED product features

- Strong tangential type 4-corner insert
- Exact 90 degree shouldering
- Optimized geometry for smooth machining and improved stability
- Capable of straight and helical ramping machining
- Tangential cutter's larger diameter core offers a higher stiffness compared to the radial type cutter



Radial type



Tangential type (TANG-SFEED)

- Wide product line-up compared to competitors

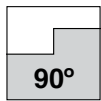
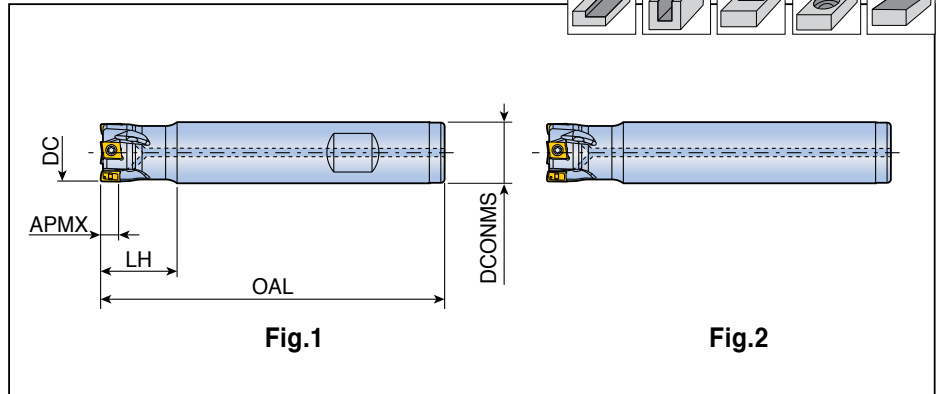
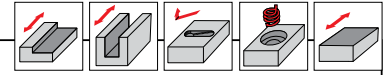
TANG-SFEED cutters lineup by diameters

	(mm)							
	Ø10	Ø16	Ø20	Ø32	Ø40	Ø63	Ø100	Ø200
new LPK(H)U 05	2z	4z	5z	8z				
LPK(H)U 09			2z	5z	6z	10z		
LPK(H)U 14					4z	8z	12z	18z



4T-TE90-05

End mills

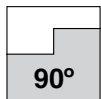
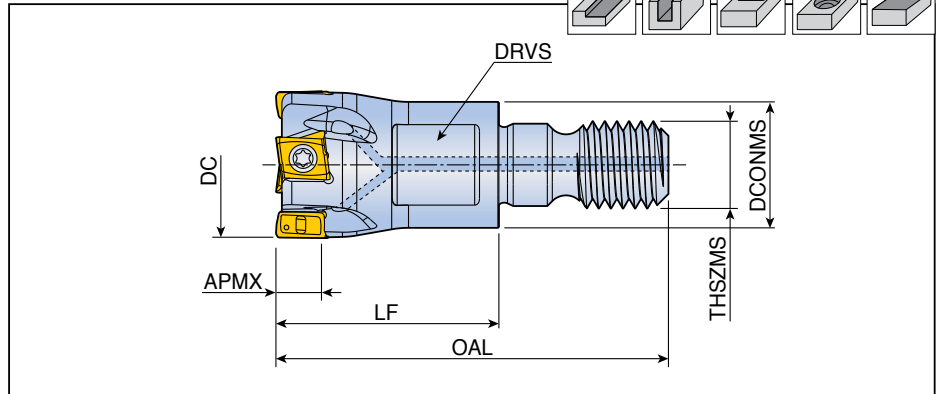
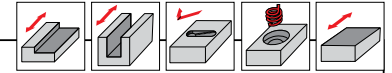
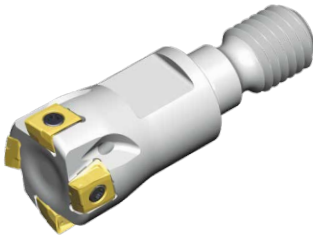


Designation		Dimension (mm)					Coolant hole	Fig.	Insert
		DC	DCONMS	OAL	LH	APMX			
4T-TE90-210-10-05	2	10	10	80	15	4.6	•	2	LPK(H)U 0502...
211-10-05	2	11	10	80	15	4.6	•	2	
212-12-05	2	12	12	80	15	4.6	•	2	
312-12-05	3	12	12	80	15	4.6	•	2	
313-12-05	3	13	12	80	15	4.6	•	2	
316-W16-05	3	16	16	90	20	4.6	•	1	
416-W16-05	4	16	16	90	20	4.6	•	1	
420-W20-05	4	20	20	100	25	4.6	•	1	
520-W20-05	5	20	20	100	25	4.6	•	1	
625-W25-05	6	25	25	110	30	4.6	•	1	
832-W25-05	8	32	25	110	20	4.6	•	1	

4T-TE90-M-05



Modular heads for T-FLEXTEC



Designation		Dimension (mm)							Coolant hole	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX	DRVS		
4T-TE90-210-M06-05	2	10	9.7	17	31.5	M06	4.6	8	●	LPK(H)U 0502...
312-M06-05	3	12	11	17	31.5	M06	4.6	8	●	
416-M08-05	4	16	13	23	40.5	M08	4.6	10	●	
520-M10-05	5	20	18	23	43	M10	4.6	15	●	
625-M12-05	6	25	21	27	49	M12	4.6	17	●	
832-M16-05	8	32	29	27	52	M16	4.6	25	●	

• Matched with T-FLEXTEC holder

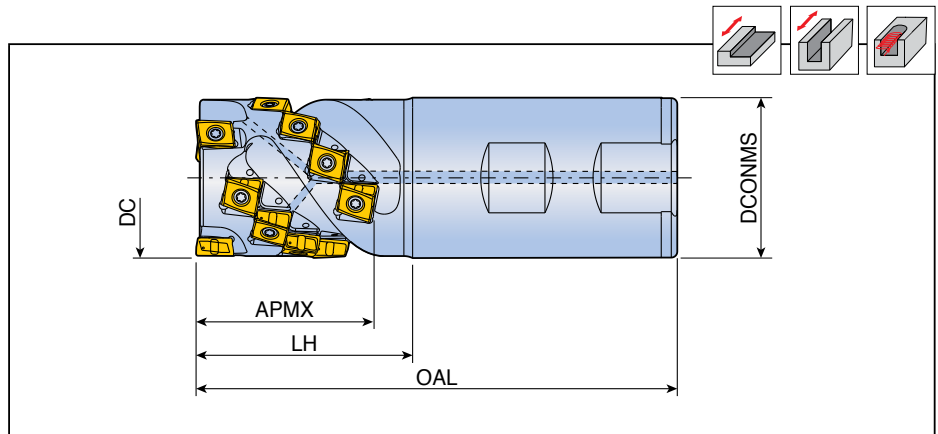
Spare parts

Designation	Screw	Wrench			
4T-TE90-05	TS 18041/SG-P	TD 6P			



4T-TEF-05

Extended flute cutters



Designation	No. of insert	Dimension (mm)					Coolant hole	Insert	
		DC	DCONMS	OAL	LH	APMX			
4T-TEF D16-15-W16-05	2	8	16	16	80	28	15	●	LPK(H)U 0502...
D20-23-W20-05	3	18	20	20	85	33	23	●	
D25-27-W25-05	4	28	25	25	95	35	27	●	

- Trochoidal machining capable

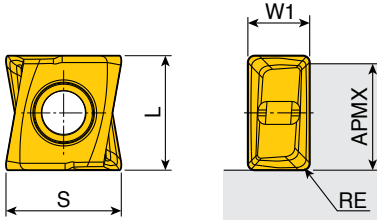
Spare parts

Designation	Screw	Wrench			
	4T-TEF-05	 TS 18041I/SG-P	 TD 6P		

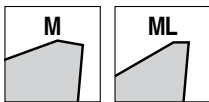




LPK(H)U

Inserts



Size	Dimension (mm)				
	L	W1	S	APMX	RE
05	5	2.7	5.0	4.6	0.4



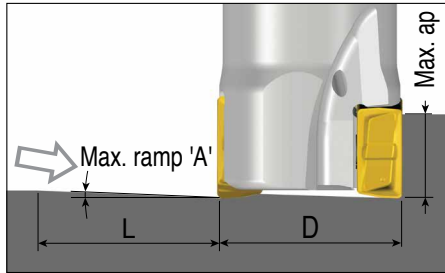
Insert	Designation	Recommended machining conditions		Coated								Uncoated		
		ap (mm)	Feed (mm/tooth)	TT9080	TT9030	TT8080	TT8020	TT8525B	TT7080	TT7515	TT6080	K10		
	LPKU 050204 PNR-M	1.0-3.5	0.08-0.04	●		●								
	LPHU 050204 PNR-ML	1.0-3.5	0.08-0.04			●					●			

●: Standard items

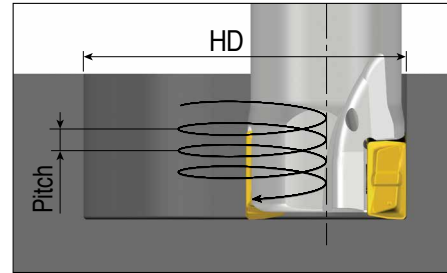
Ramping Data



Straight ramping



Helical ramping



LPK(H)U 05

(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.
Ø10	1.8	4.6	142	16.8		0.6
					20	0.9
Ø11	1.6	4.6	160	18.8		0.6
					22	0.8
Ø12	1.5	4.6	176	20.8		0.6
					24	0.8
Ø13	1.3	4.6	195	22.8		0.6
					26	0.8
Ø16	1.0	4.6	251	28.8		0.6
					32	0.8
Ø20	0.8	4.6	330	36.8		0.6
					40	0.7
Ø25	0.6	4.6	439	46.8		0.6
					50	0.7
Ø32	0.4	4.6	586	60.8		0.6
					64	0.7

KIT COLLECTIONS

These kit products are available in the format listed below.



Cat. No.	Designation	Bill of materials	Qty.
6334791	KISFT-4T-TE90-210-10-05	4T-TE90-210-10-05	1
		LPKU 050204 PNR-M TT9080	4
6334792	KISFT-4T-TE90-312-12-05	4T-TE90-312-12-05	1
		LPKU 050204 PNR-M TT9080	6
6334793	KISFT-4T-TE90-416-W16-05	4T-TE90-416-W16-05	1
		LPKU 050204 PNR-M TT9080	8
6334794	KISFT-4T-TE90-520-W20-05	4T-TE90-520-W20-05	1
		LPKU 050204 PNR-M TT9080	10



Cat. No.	Designation	Bill of materials	Qty.
6337856	KISFS-4T-TE90-210-10-05	4T-TE90-210-10-05	1
		LPKU 050204 PNR-M TT9080	50
6337857	KISFS-4T-TE90-312-12-05	4T-TE90-312-12-05	1
		LPKU 050204 PNR-M TT9080	50
6337858	KISFS-4T-TE90-416-W16-05	4T-TE90-416-W16-05	1
		LPKU 050204 PNR-M TT9080	50
6337859	KISFS-4T-TE90-520-W20-05	4T-TE90-520-W20-05	1
		LPKU 050204 PNR-M TT9080	50



Cat. No.	Designation	Bill of materials	Qty.
6338431	KISFF-A-LPKU 05-M TT9080	LPKU 050204 PNR-M TT9080	100
6338432	KISFF-B-LPKU 05-M TT9080		300