

NEW PRODUCT NEWS

CHASEFEED



High Feed & High Positive SBMT 13 Inserts



CHASEFEED

High feed & high positive SBMT 13 inserts

FEATURES

- Single sided, four corner high positive insert for high feed cutting conditions.
- Lower cutting force than double sided inserts.
- High helix geometry for smooth cutting.
- Increased insert thickness for better endurance under high feed conditions.

For efficient machining in high feed conditions, TaeguTec has launched a new milling program – CHASEFEED with SBMT 13 insert type.

The SBMT 13 insert with a high positive helix cutting edge for smooth machining is perfectly suited for high feed machining applications. As it is a single sided, 4 cutting edges insert, the SBMT 13 is designed to achieve better cutting force over other double sided inserts.

The new CHASEFEED line includes cylindrical shank end mills in diameters 32, 33, 35, 40 and 42mm; modular end mill type in diameters 32, 33, 40 and 42mm; and also in face mill type from diameter 50 to 125mm.

The new CHASEFEED line is designed for high feed machining up to feed rates of 2.0mm/tooth at maximum depths of cut of 2mm.

The strong and positive single sided insert SBMT 1306 with 6.35mm thickness provides the necessary durability for smooth low power machining in high feed milling of various kinds of workpiece materials.

Moreover the inserts are available in two kinds of geometries, 'M' for optimum machining in stable setups as well as 'ML' which is suited for low power machining in unstable setups and long overhangs.

SBMT 13

Insert

M

ML

Size	Dimension (mm)			
	d	t	ap	r
13	13.05	6.65	2	2.5

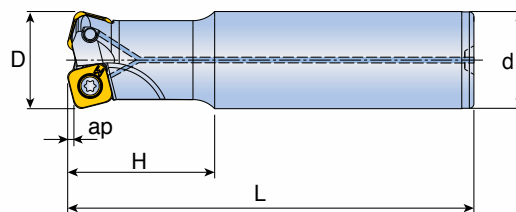
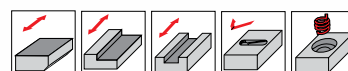
Insert	Designation	Recommended machining conditions		CVD coated			PVD coated					
		Fz (mm/tooth)	ap (mm)	TT6800	TT7800	TT9540	TT2510	TT3540	TT6080	TT8020	TT8080	TT9080
	SBMT 130625R-M	0.40-2.00	0.5-2.0	●	●	○	●	○	●	●	●	●
	130625R-ML	0.40-2.00	0.5-2.0			○		○			●	●

• ML will be launched by early October 2014

●: Standard item ○: Semi standard item

TESB...-13-L

End mill



Designation		Dimension (mm)					Insert
		D	d	L	H	ap	
TESB 232-32-13-L150	2	32	32	150	50	2	SBMT 130625R-M/ML
232-32-13-L200	2	32	32	200	80	2	
233-32-13-L200	2	33	32	200	30	2	
233-32-13-L250	2	33	32	250	50	2	
235-32-13-L200	2	35	32	200	30	2	
340-32-13-L150	3	40	32	150	30	2	
340-32-13-L200	3	40	32	200	30	2	
342-32-13-L200	3	42	32	200	30	2	

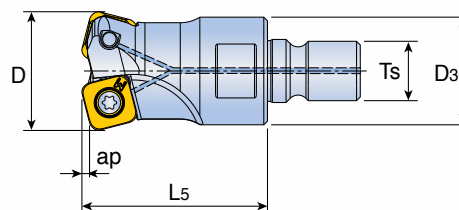
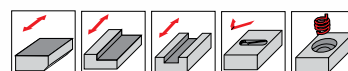
• Coolant through type

Spare parts

Designation	Screw	Wrench			
TESB...-13-L	TS 501151	T-T20			

TESB...-M-13

Modular



Designation		Dimension (mm)					Insert
		D	D ₃	L ₅	T _s	a _p	
TESB 232-M16-13	2	32	29	50	16	2	SBMT 130625R-M/ML
233-M16-13	2	33	29	50	16	2	
340-M16-13	3	40	29	50	16	2	
342-M16-13	3	42	29	50	16	2	

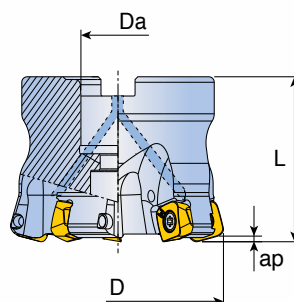
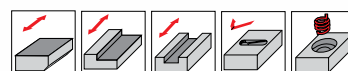
• Coolant through type

Spare parts

Designation	Screw	Wrench			
TESB...-M-13	TS 501151	T-T20			

TFMSB...-R-13

Face mill



Designation		Dimension (mm)				Insert
		D	Da	L	ap	
TFMSB 350-22R-13	3	50	22	40	2	SBMT 130625R-M/ML
450-22R-13	4	50	22	40	2	
452-22R-13	4	52	22	40	2	
463-22R-13	4	63	22	50	2	
563-22R-13	5	63	22	50	2	
580-27R-13	5	80	27	60	2	
580-32R-13	5	80	32	60	2	
6100-32R-13	6	100	32	60	2	
7125-40R-13	7	125	40	60	2	

• ~D125: Coolant through type

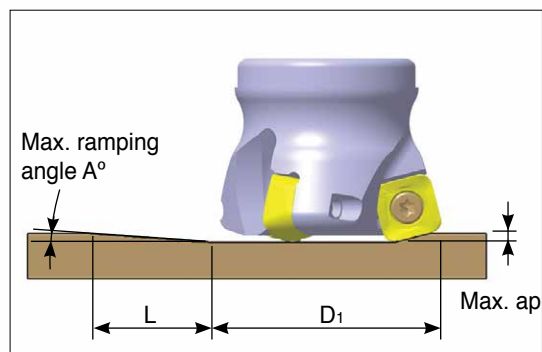
Spare parts

Designation	Screw	Wrench			
TFMSB...-R-13	TS 501151	T-T20			

Programming technical data

1. Recommended ramping angle

- Straight ramping



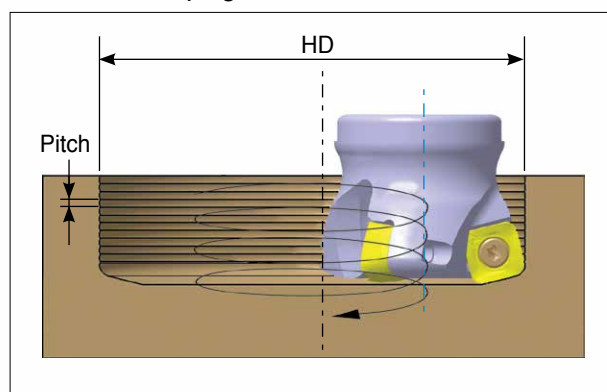
End mill

Diameter(D ₁)	32	33	35	40	42
Max. Angle(A°)	7.0	6.9	6.4	5.3	5.0

Face mill

Diameter(D ₁)	50	52	63	80	100	125
Max. Angle(A°)	4.3	4.0	2.9	2.0	1.5	1.1

- Helical ramping

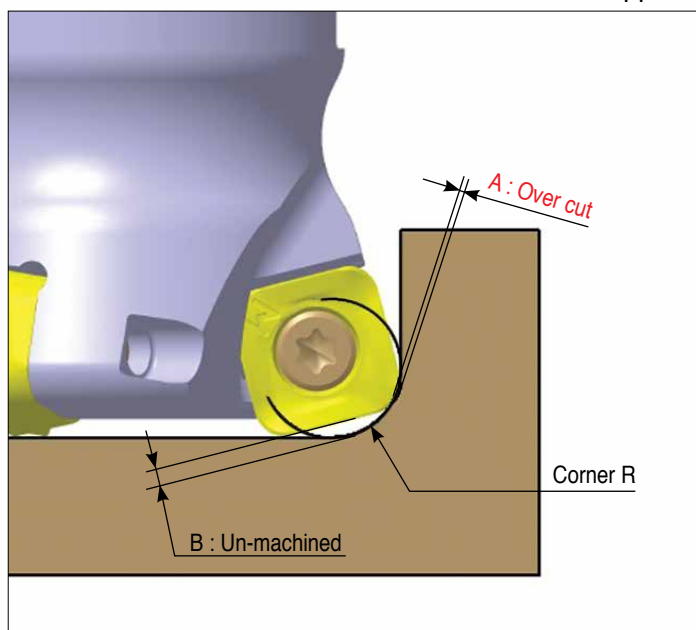


SBMT 13

Cutter Dia. (D ₁)	Straight Ramp Down			Helical Ramp Down		
	Max. Ramp (A°)	Max. ap (mm)	Min. Length (L)	Min. Dia.(HD)	Max. Dia.(HD)	Max. Pitch/Rev.
32	7.0	2	16	53		2
					64	2
40	5.3	2	22	69		2
					80	2
50	4.3	2	27	89		2
					100	2
63	2.9	2	40	115		2
					126	2
80	2.0	2	57	149		2
					160	2
100	1.5	2	76	189		2
					200	2
125	1.1	2	104	239		2
					250	2

2. Programming Tip

When performing CNC programming operations, specify tools with the “Corner R” value for the SBMT 13 insert. This will achieve un-machined material thickness of approximately “B” mm along the corner.

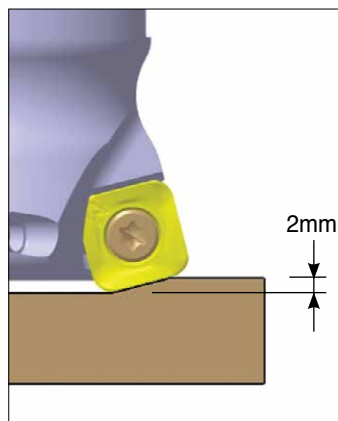


When applying the CNC program with “Corner R,” the over cut area is indicated as “A” mm. For other program “Corner R” data, please refer to the diagram below.

	Corner R Program	A Over cut	B Un-machined material thickness
SBMT 13	4.0	0	1.62
	4.5	0	1.51
	5.0	0.04	1.4
	5.5	0.14	1.29
	6.0	0.28	1.18

: Recommended program 'Corner R'

Max. depth of cut



Recommended cutting conditions

SBMT 13

Material	Hardness (HB)	D.O.C (mm)	Cutting speed (m/min)	Best grades	Feed (mm/tooth)
Carbon Steel	85-225	0.3-2.0	130-300	TT9080	0.5 - 2.0
Alloy Steel	275-375	0.3-1.6	120-250	TT9080	0.4 - 1.5
Alloy Steel	375-480	0.3-1.6	60-140	TT9080	0.3 - 1.5
Pre-Hardened Steel	250-470	0.3-1.6	50-200	TT9080	0.1 - 0.8
Hardened Steel	480-	0.3-1.6	50-110	TT2510	0.1 - 0.5
Stainless 300 Series	-	0.3-1.6	80-170	TT8080	0.3 - 1.5
Stainless 400 Series	-	0.3-1.6	100-210	TT9080	0.4 - 1.5
High Temp. Alloy	-	0.3-1.2	30-100	TT8080	0.3 - 1.2
Inconel	-	0.3-1.2	20-60	TT8080	0.3 - 1.2
Titanium Alloy	-	0.3-1.2	30-80	TT8080	0.3 - 1.2
Gray Cast Iron	190-220	0.3-2.0	150-400	TT6800	0.5 - 2.0
Nodular Cast Iron	140-200	0.3-2.0	100-250	TT6080	0.5 - 2.0