

BORING BARS

DIMPLE BAR

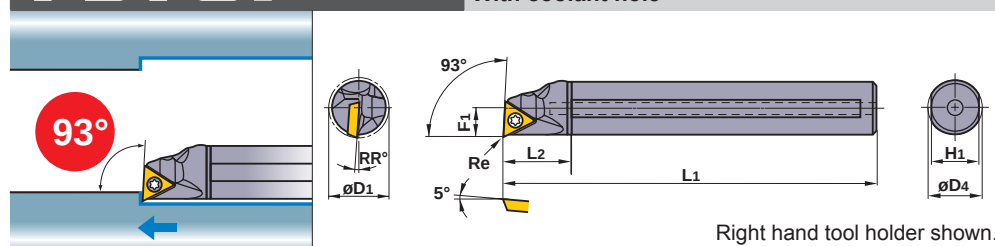
- Excellent vibration resistance due to light dimple head.
- Chip disposal is improved by having two channels for chip evacuation.
- A laser printed scale on the side for easy installation (Steel shank).
- l/d is 3 to 5 times the diameter (Carbide shank is 7 to 8 times the diameter).

FSTUP

With coolant hole

TP^{○○}inserts

Finish	Light	Medium
FV  (08,09)	SV  (08,09,11,16)	MV  (08,09,11,16)
PCD  (08,09,11)	CBN  (08,09,11,16)	



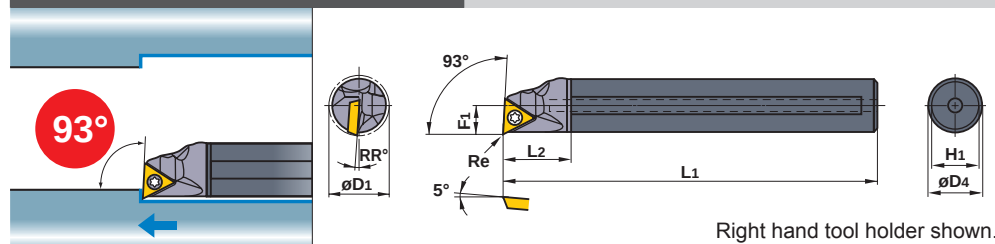
Order Number	Stock		Insert Number		Dimensions (mm)						Min. Cutting Diameter	Standard Corner Radius	Maximum Recommendation l/d Ratio	 ★	
	R	L			D4	L1	L2	F1	H1	RR°	D1	Re		Clamp Screw	Wrench
FSTUP1008R/L-08A	●	●	TPGH TPMH NP-TPGB NP-TPMB NP-TPMH	0802○○	8	125	18	5	7.2	10	10	0.4	3	TS2D	TKY06F
1210R/L-09A	●	●		0902○○	10	150	22.5	6	9	8	12	0.4	3.5	TS25D	TKY08F
1412R/L-09A	●	●		0902○○	12	150	27	7	11	7	14	0.4	4	TS25D	TKY08F
1816R/L-11A	●	●		1103○○	16	180	36	9	15	4	18	0.4	5	TS31D	TKY10F
2220R/L-11A	●	●		1103○○	20	220	45	11	19	0	22	0.4	5	TS31D	TKY10F
3225R/L-16A	●	●		1603○○	25	270	56.3	16	23.4	0	32	0.8	5	TS4D	TKY15F

★ Clamp Torque (N · m) : TS2D=0.6, TS25D=1.0, TS31D=2.5, TS4D=3.5

FSTUP_E

Carbide shank
with coolant holeTP^{○○}inserts

Finish	Light	Medium
FV  (08,09)	SV  (08,09,11)	MV  (08,09,11)
PCD  (08,09,11)	CBN  (08,09,11)	



Order Number	Stock		Insert Number	Dimensions (mm)						Min. Cutting Diameter	Standard Corner Radius	Maximum Recommendation l/d Ratio			
	R	L		D4	L1	L2	F1	H1	RR°						D1
FSTUP1008R/L-08E	●	●	TPGH TPMH NP-TPGB NP-TPMB NP-TPMH	0802○○	8	140	13.8	5	7.2	10	10	0.4	7	TS2D	TKY06F
1008R-08E-2/3	●			0802○○	8	90	13.8	5	7.2	10	10	0.4	7	TS2D	TKY06F
1008R-08E-1/2	●			0802○○	8	70	13.8	5	7.2	10	10	0.4	7	TS2D	TKY06F
1210R/L-09E	●	●		0902○○	10	160	16.0	6	9	8	12	0.4	7.5	TS25D	TKY08F
1210R-09E-2/3	●			0902○○	10	105	16.0	6	9	8	12	0.4	7.5	TS25D	TKY08F
1210R-09E-1/2	●			0902○○	10	80	16.0	6	9	8	12	0.4	7.5	TS25D	TKY08F
1412R/L-09E	●	●		0902○○	12	180	17.8	7	11	7	14	0.4	8	TS25D	TKY08F
1412R-09E-2/3	●			0902○○	12	120	17.8	7	11	7	14	0.4	8	TS25D	TKY08F
1412R-09E-1/2	●			0902○○	12	90	17.8	7	11	7	14	0.4	8	TS25D	TKY08F
1816R/L-11E	●	●		1103○○	16	220	21.8	9	15	4	18	0.4	8	TS31D	TKY10F
1816R-11E-2/3	●			1103○○	16	145	21.8	9	15	4	18	0.4	8	TS31D	TKY10F
1816R-11E-1/2	●			1103○○	16	110	21.8	9	15	4	18	0.4	8	TS31D	TKY10F
2220R/L-11E	●	●		1103○○	20	250	24.0	11	19	0	22	0.4	8	TS31D	TKY10F
2220R-11E-2/3	●			1103○○	20	165	24.0	11	19	0	22	0.4	8	TS31D	TKY10F
2220R-11E-1/2	●			1103○○	20	125	24.0	11	19	0	22	0.4	8	TS31D	TKY10F

★ Clamp Torque (N · m) : TS2D=0.6, TS25D=1.0, TS31D=2.5

(Note 1) Insert photo, letters show chip breaker style, figures show insert dimensions.

(Note 2) When using inserts with right or left hand chip breakers, please use left hand inserts for right hand holders and right hand inserts for left hand holders.

● : Inventory maintained. ★ : Inventory maintained in Japan.

TP^{○○} type inserts > A147, A148

CBN & PCD inserts > B040, B054