

Introducing...

Kennametal's New KTMS™ T-Slot Cutter

...specifically engineered to deliver high metal-removal rates at a reduced cost per cutting edge!

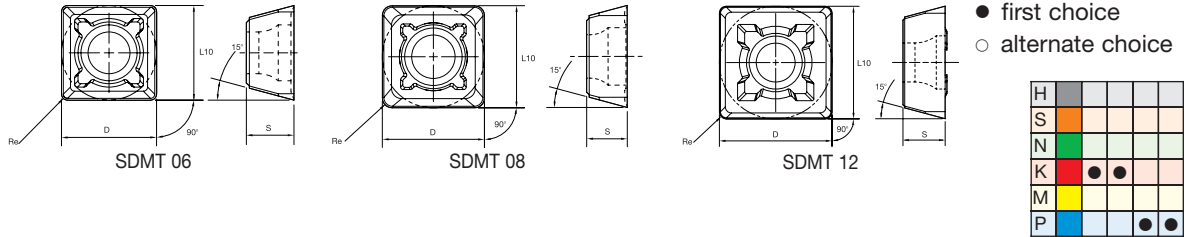
- Versatile machining solution for T-slotting and side milling of iron and steel!
- Ideal for applications in the Automotive and General Engineering markets!
- Balanced cutting forces reduce vibration and chatter!
- Available in metric sizes!

➤ DISTRIBUTED BY:



Indexable Inserts for KTMS T-Slot Cutter

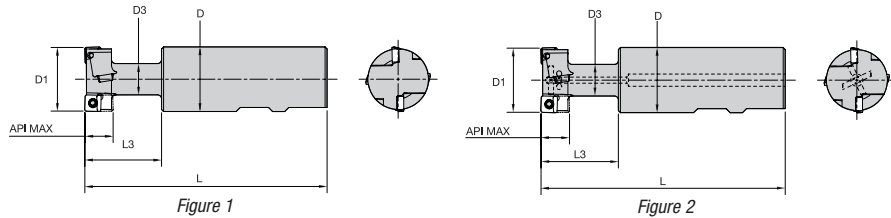
■ SDMT Inserts



ISO catalog number	cutting edges	D	S	L10	R ₀	hm	K110M	KC505M	KC730M	KC735M
SDMT060304EGG	4	6,35	3,18	6,35	0,40	0,06	●	●	●	●
SDMT080308EGG	4	8,00	3,18	8,00	0,80	0,06	●	●	●	●
SDMT120408EGG	4	12,70	4,76	12,70	0,80	0,06	●	●	●	●

KTMS Indexable T-Slot Cutter

- Prepare workpiece with a slot.
- Easy cutting inserts.
- Feed rates between 0,10–0,15mm per revolution, lower feed rates will induce vibration.
- Use air flow to evacuate chips.
- Always start the cutting process with a new cutting edge.



■ KTMS -T Slot Cutter- Metric-See Figure 1

D1	order number	catalog number	Z	Z U	D	D3	L3	L	Ap1 max	Figure	insert 1	kg
21	3577118	KTMS21S25SD06	2	1	25	11	29	109	9	FIG 1	SDMT060304EGG	0,37
25	3577120	KTMS25S25SD06	4	2	25	13	32	112	11	FIG 1	SDMT060304EGG	0,38
32	3577122	KTMS32S32SD08	4	2	32	16	38	120	14	FIG 1	SDMT080308EGG	0,62
40	3577134	KTMS40S32SD12	4	2	32	21	50	130	18	FIG 1	SDMT120408EGG	0,69
50	3577136	KTMS50S32SD12	4	2	32	27	60	140	22	FIG 1	SDMT120408EGG	0,88

■ KTMS -T Slot Cutter- Metric-See Figure 2

D1	order number	catalog number	Z	Z U	D	D3	L3	L	Ap1 max	Figure	insert 1	kg
21	3577119	KTMS21S25SD06H	2	1	25	11	29	109	9	FIG 2	SDMT060304EGG	0,35
25	3577121	KTMS25S25SD06H	4	2	25	13	32	112	11	FIG 2	SDMT060304EGG	0,36
32	3577133	KTMS32S32SD08H	4	2	32	16	38	120	14	FIG 2	SDMT080308EGG	0,60
40	3577135	KTMS40S32SD12H	4	2	32	21	50	130	18	FIG 2	SDMT120408EGG	0,66
50	3577137	KTMS50S32SD12H	4	2	32	27	60	140	22	FIG 2	SDMT120408EGG	0,85

■ Spare Parts

D1	insert screw	Torx driver	insert screw	Torx driver	insert screw	Torx driver	anti-seize lube
21	MS-2206	DT8					ASL3GT
25	MS-2206	DT8					ASL3GT
32			MS-2207	DT10			ASL3GT
40					MS-2208	DT15	ASL3GT
50					MS-2208	DT15	ASL3GT

For more information or to place an order, contact your Kennametal Representative or Authorized Kennametal Distributor, or visit www.kennametal.com.

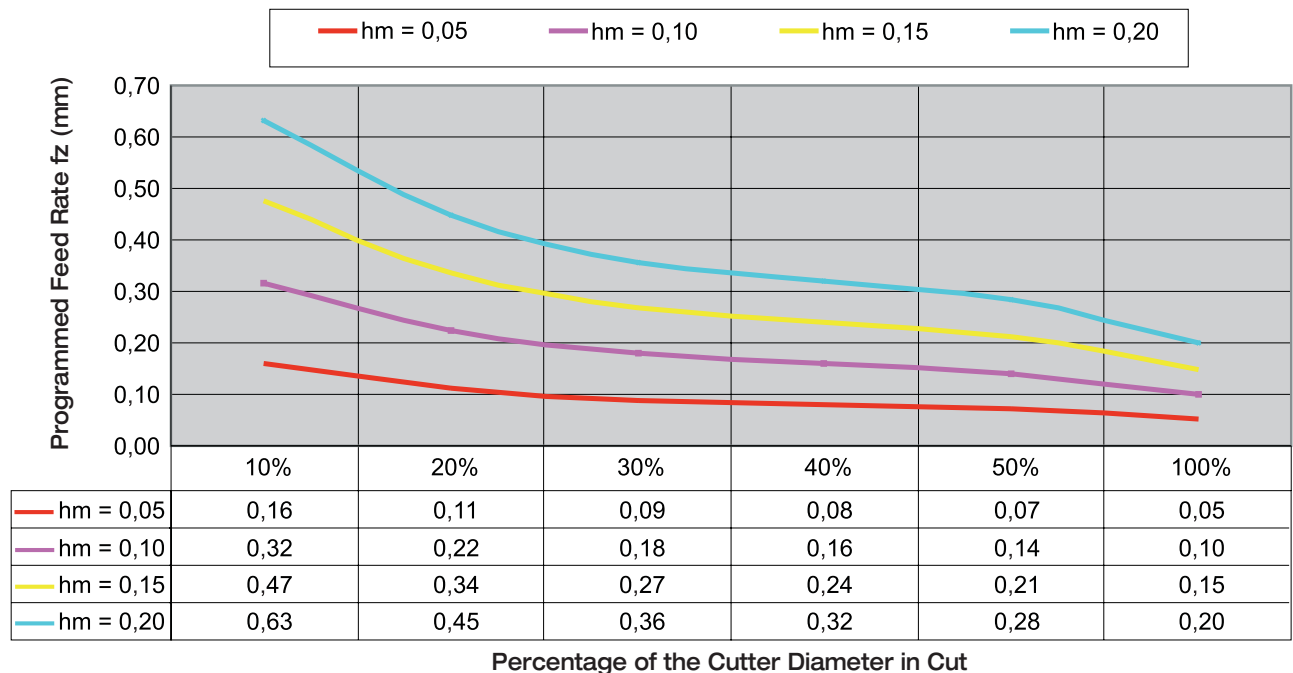
Recommended Starting Speeds (m/min)

Material Group	K110M™		KC505M™		KC730M™		KC735M™				
P1						130	120	100	150	140	130
P2						120	110	105	140	130	120
P3						110	100	90	130	120	110
P4						100	90	80	120	110	100
P5						90	80	75	110	90	80
P6						80	75	70	90	80	70
M1											
M2											
M3											
K1	125	120	115	150	140	120					
K2	110	100	90	140	120	105					
K3	85	80	75	105	95	80					
N1											
N2											
S1											
S2											
S3											
S4											
H1											

FIRST choice starting speeds are in bold type.
As the average chip thickness goes higher the speed should be decreased.

Recommended Starting Feeds

90° Approach Angle Feed-Per-Tooth Compensation
(Radial Width-of-Cut Dependent)



Slotting

Steel

- Machining a vertical slot, depth to be kept at a minimum as shown in Figure 1.
- If the depth is greater than Figure 1, chip evacuation problems could occur.
- Vibrations could occur when the "T" slot cutter diameter increases, use Figure 1 as the starting point
- If chattering is a concern adopt the Figure 2. solution.

Cast Iron

- Fewer problems with chip evacuation, and reduced cutting forces enable deeper vertical slots as shown in Figure. 2 and 3.
- Air blast is recommended to disperse the chips, this can be used for Steel and Cast Iron.

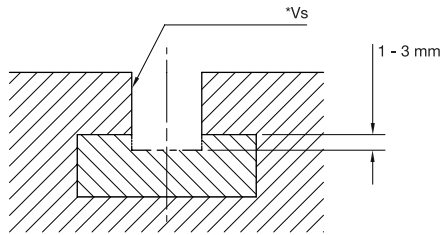


Figure 1

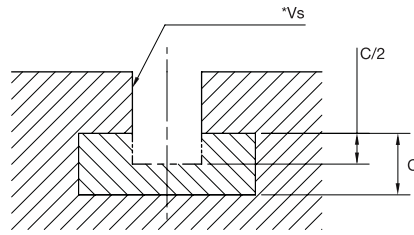


Figure 2

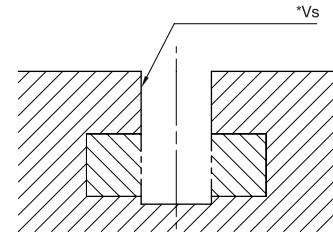


Figure 3

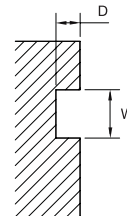
■ Cutting Data Table—Slotting

	Item Number	Cutting Conditions (Vc) (m/min)	Feed per tooth	* Vs
Carbon Steel / Alloy Steel	KTMS21S25SD06H	120	0.10	Figure 1
	KTMS25S25SD06H	120	0.10	Figure 1
	KTMS32S32SD08H	100	0.10	Figure 1
	KTMS40S32SD12H	80	0.15	Figure 2
	KTMS50S32SD12H	Not recommended due to Frequent Chattering		
Cast Iron	KTMS21S25SD06H	120	0.12	Figure 1, 2, 3
	KTMS25S25SD06H	120	0.12	Figure 1, 2, 3
	KTMS32S32SD08H	120	0.12	Figure 1, 2, 3
	KTMS40S32SD12H	120	0.15	Figure 2, 3
	KTMS50S32SD12H	120	0.15	Figure 3

■ Side Slot Machining

Side Slot Dimension	(Unit: mm)	
Item Number	W -0.1/ -0.3	D Max
KTMS21S25SD06H	9	4.4
KTMS25S25SD06H	11	5.4
KTMS32S32SD08H	14	6.9
KTMS40S32SD12H	18	8.9
KTMS50S32SD12H	22	10.9

Side Machining



side slotting

■ Cutting Data—Side Machining

	Item Number	Cutting Conditions (Vc) (m/min)	n (RPM)	Feed per tooth
Carbon Steel / Alloy	KTMS21S25SD06H	120	1820	0.10
	KTMS25S25SD06H	120	1530	0.10
	KTMS32S32SD08H	120	1190	0.10
	KTMS40S32SD12H	120	960	0.10
	KTMS50S32SD12H	120	760	0.10
Cast Iron	KTMS21S25SD06H	150	2270	0.12
	KTMS25S25SD06H	150	1910	0.12
	KTMS32S32SD08H	150	1490	0.12
	KTMS40S32SD12H	150	1190	0.15
	KTMS50S32SD12H	150	960	0.15