

Series 6TOR

Material Group								Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.						
	Side Milling (A) and Slotting (B)		TiAlN					D1 – Diameter						
	A		B		Cutting Speed – vc SFM			frac.	1/2	5/8	3/4	1	1 1/4	1 1/2
	ap	ae	ap	min		max	dec.	.5000	.6250	.7500	1.0000	1.2500	1.5000	
S	3	1.25 x D	0.5 x D	1 x D	50	–	90	IPT	.0028	.0033	.0036	.0040	.0050	.0060
	4	1.25 x D	0.3 x D	0.5 x D	50	–	90	IPT	.0026	.0030	.0033	.0036	.0045	.0055

NOTE: Side milling applications – For longest length tools, reduce ae by 30%.
 Slot milling applications – For longest length tools, reduce ap by 30%.
 Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
 Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

Application Data • Series 6TNR

Series 6TNR

Material Group								Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.				
	Side Milling (A) and Slotting (B)		TiAlN					D1 – Diameter				
	A		B		Cutting Speed – vc SFM			frac.	5/8	3/4	1	1 1/4
	ap	ae	ap	min		max	dec.	.6250	.7500	1.0000	1.2500	
S	3	0.75 x D	0.4 x D	0.5 x D	50	–	90	IPT	.0033	.0036	.0040	.0050
	4	0.75 x D	0.3 x D	0.3 x D	50	–	90	IPT	.0030	.0033	.0036	.0045

NOTE: Side milling applications – For longest length tools, reduce ae by 30%.
 Slot milling applications – For longest length tools, reduce ap by 30%.
 Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
 Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

Application Data • Series 3405 3415 3425 3435 3455 3407 3417 3427 3437 3457

Series 3405 3415 3425 3435 3455 3407 3417 3427 3437 3457

Material Group																			
	Side Milling (A) and Slotting (B)		uncoated			TiAlN			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.										
	A		B		Cutting Speed – vc SFM			Cutting Speed – vc SFM			D1 – Diameter								
	ap	ae	ap	min		max	min		max	frac.	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2	
S	3	1.5 x D	0.1 x D	0.5 x D	50	–	80	50	–	90	IPT	.0020	.0025	.0029	.0032	.0038	.0042	.0045	.0048
	4	1.5 x D	0.1 x D	0.4 x D	40	–	60	50	–	90	IPT	.0018	.0023	.0026	.0029	.0035	.0038	.0041	.0044

NOTE: Side milling applications – For longest reach (L3) tools, reduce ae by 30%.
 Slot milling applications – For longest reach (L3) tools, reduce ap by 30%.
 For cutting aluminum with high silicon, coating is recommended.
 Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
 Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

High-Performance High-Speed Steel (HSS-E/PM)