

■ Series 7S05 • Vision Plus

Material Group	Side Milling (A) and Slotting (B)			AITiN			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.								
	A		B	Cutting Speed – vc SFM			D1 – Diameter								
	ap	ae	ap				frac.	1/4	5/16	3/8	1/2	5/8	3/4	1	
	ap	ae	ap	min		max	dec.	.2500	.3100	.3800	.5000	.6300	.7500	1.000	
P	3	1 x D	0.4 x D	1 x D	390	–	520	IPT	.0017	.0021	.0025	.0032	.0037	.0042	.0050
	4	1 x D	0.4 x D	0.75 x D	300	–	490	IPT	.0015	.0019	.0022	.0029	.0033	.0036	.0043
H	1	1 x D	0.4 x D	0.75 x D	260	–	460	IPT	.0015	.0019	.0022	.0029	.0033	.0036	.0043
	2	1 x D	0.3 x D	0.5 x D	230	–	390	IPT	.0011	.0014	.0017	.0021	.0024	.0027	.0031
	3	1 x D	0.15 x D	0.3 x D	200	–	300	IPT	.0009	.0011	.0013	.0017	.0020	.0022	.0027
	4	1 x D	0.1 x D	0.15 x D	160	–	230	IPT	.0006	.0008	.0009	.0011	.0013	.0015	.0018

NOTE: 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.
When using tools with 6 flutes, reduce slotting ap by 60%.
Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters on diameters >1/2".

■ Series 7S15 • Vision Plus

Material Group	Side Milling (A) and Slotting (B)			AITiN-MT			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							frac.	1/4	5/16	3/8	1/2	5/8	3/4	1	
	ap	ae	ap	min		max	min		max	dec.	.2500	.3125	.3750	.5000	.6250	.7500	1.0000	
P	3	2.0 x D	0.3 x D	0.75 x D	390	–	520	390	–	520	IPT	.0017	.0021	.0025	.0032	.0038	.0042	.0050
	4	2.0 x D	0.25 x D	0.5 x D	300	–	490	300	–	490	IPT	.0015	.0019	.0022	.0028	.0033	.0037	.0042
H	1	2.0 x D	0.25 x D	0.5 x D	260	–	460	260	–	460	IPT	.0015	.0019	.0022	.0028	.0033	.0037	.0042
	2	2.0 x D	0.2 x D	0.4 x D	230	–	390	230	–	390	IPT	.0011	.0014	.0017	.0021	.0025	.0027	.0031
	3	2.0 x D	0.1 x D	0.2 x D	200	–	300	200	–	300	IPT	.0009	.0011	.0013	.0017	.0020	.0023	.0027
	4	2.0 x D	0.05 x D	0.05 x D	160	–	230	160	–	230	IPT	.0006	.0008	.0009	.0011	.0013	.0015	.0018

NOTE: 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 on diameters >1/2".
For better surface finish, reduce feed per tooth.

■ Series 7S25 • Vision Plus

Material Group	Side Milling (A) and Slotting (B)			AITiN-MT			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							frac.	1/4	5/16	3/8	1/2	5/8	3/4	1	
	ap	ae	ap	min		max	min		max	dec.	.2500	.3125	.3750	.5000	.6250	.7500	1.0000	
P	3	3.0 x D	0.2 x D	0.5 x D	390	–	520	390	–	520	IPT	.0017	.0021	.0025	.0032	.0038	.0042	.0050
	4	3.0 x D	0.2 x D	0.3 x D	300	–	490	300	–	490	IPT	.0015	.0019	.0022	.0028	.0033	.0037	.0042
H	1	3.0 x D	0.2 x D	0.3 x D	260	–	460	260	–	460	IPT	.0015	.0019	.0022	.0028	.0033	.0037	.0042
	2	3.0 x D	0.15 x D	0.2 x D	230	–	390	230	–	390	IPT	.0011	.0014	.0017	.0021	.0025	.0027	.0031
	3	3.0 x D	0.05 x D	–	200	–	300	200	–	300	IPT	.0009	.0011	.0013	.0017	.0020	.0023	.0027
	4	3.0 x D	0.03 x D	–	160	–	230	160	–	230	IPT	.0006	.0008	.0009	.0011	.0013	.0015	.0018

NOTE: 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 on diameters >1/2".
For better surface finish, reduce feed per tooth.

High-Performance Solid Carbide End Mills