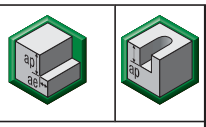
Series 4C43



Material Group		Side Milling (A) and Slotting (B)			uncoated			TiCN			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			Cutting Speed — vc SFM				D1 — Diameter								
														frac.	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
		ap	ae	ap	min		max	min		max	min		max	dec.	.1250	.1880	.2500	.3130	.3750	.5000	.6250	.7500	1.000
P	0	1.25 x D	0.3 x D	0.5 x D	245	–	330	392	–	528	490	–	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	1	1.25 x D	0.3 x D	0.5 x D	245	–	330	392	–	528	490	–	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	2	1.25 x D	0.3 x D	0.5 x D	230	–	310	368	–	496	460	–	620	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	3	1.25 x D	0.3 x D	0.5 x D	195	–	260	312	–	416	390	–	520	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	1.25 x D	0.3 x D	0.3 x D	150	–	245	240	–	392	300	–	490	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039
	5	1.25 x D	0.3 x D	0.5 x D	100	–	165	160	–	264	200	–	330	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
	6	1.25 x D	0.3 x D	0.3 x D	80	–	125	128	–	200	160	–	250	IPT	.0005	.0008	.0010	.0013	.0015	.0019	.0022	.0025	.0028
M	1	1.25 x D	0.3 x D	0.5 x D	150	–	190	240	–	304	300	–	380	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	1.25 x D	0.3 x D	0.5 x D	100	–	130	160	–	208	200	–	260	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
	3	1.25 x D	0.3 x D	0.5 x D	100	–	115	160	–	184	200	–	230	IPT	.0005	.0008	.0010	.0013	.0015	.0019	.0022	.0025	.0028
K	1	1.25 x D	0.3 x D	0.5 x D	195	–	245	312	–	392	390	–	490	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	2	1.25 x D	0.3 x D	0.5 x D	180	–	230	288	–	368	360	–	460	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	3	1.25 x D	0.3 x D	0.5 x D	180	–	215	288	–	344	360	–	430	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
S	1	1.25 x D	0.3 x D	0.3 x D	80	–	150	128	–	240	160	–	300	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	1.25 x D	0.3 x D	0.3 x D	40	–	65	64	–	104	80	–	130	IPT	.0004	.0006	.0008	.0010	.0012	.0015	.0018	.0021	.0024
	3	1.25 x D	0.3 x D	0.3 x D	100	–	130	160	–	208	200	–	260	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
	4	1.25 x D	0.3 x D	0.5 x D	80	–	100	128	–	160	160	–	200	IPT	.0005	.0008	.0011	.0014	.0017	.0021	.0025	.0028	.0033
H	1	1.25 x D	0.3 x D	0.3 x D	130	–	230	208	–	368	260	–	460	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039

Series 4C05 4C15 • Victory Grades

WIDIA VICTORY


Material Group		Side Milling (A)		WP15PE			Recommended feed per tooth (IPT = inch/th) for side milling (A).									
		A		Cutting Speed — vc SFM				D1 — Diameter								
							frac.	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
		ap	ae	min		max	dec.	.1250	.1875	.2500	.3125	.3750	.5000	.6250	.7500	1.0000
P	0	Ap1 max	0.1 x D	490	–	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	1	Ap1 max	0.1 x D	490	–	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	2	Ap1 max	0.1 x D	460	–	620	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	3	Ap1 max	0.1 x D	390	–	520	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	Ap1 max	0.1 x D	300	–	490	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039
	5	Ap1 max	0.1 x D	200	–	330	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
	6	Ap1 max	0.1 x D	160	–	250	IPT	.0005	.0008	.0010	.0013	.0015	.0019	.0022	.0025	.0028
M	1	Ap1 max	0.1 x D	300	–	380	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.1 x D	200	–	260	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
	3	Ap1 max	0.1 x D	200	–	230	IPT	.0005	.0008	.0010	.0013	.0015	.0019	.0022	.0025	.0028
K	1	Ap1 max	0.1 x D	390	–	490	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049
	2	Ap1 max	0.1 x D	360	–	460	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	3	Ap1 max	0.1 x D	360	–	430	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
H	1	Ap1 max	0.1 x D	260	–	460	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039
	2	Ap1 max	0.1 x D	230	–	390	IPT	.0005	.0008	.0010	.0013	.0015	.0019	.0022	.0025	.0028

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 accordingly on >1/2" diameter.