

■ Series 7VNX • VariMill III ER • With Neck • Semi-Finishing • Victory Grades



Material Group	Side Milling (A)		WS15PE			Recommended feed per tooth (IPT = inch/th) for side milling (A).						
	A		Cutting Speed – vc SFM			frac. dec.	D1 – Diameter					
	ap	ae	min		max		3/8	1/2	5/8	3/4	1	
							.3750	.5000	.6250	.7500	1.0000	
P	4	Ap1 max	0.3 x D	300	–	490	IPT	.0020	.0026	.0030	.0034	.0039
	5	Ap1 max	0.3 x D	200	–	330	IPT	.0018	.0023	.0027	.0031	.0036
M	1	Ap1 max	0.3 x D	300	–	380	IPT	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.3 x D	200	–	260	IPT	.0018	.0023	.0027	.0031	.0036
	3	Ap1 max	0.3 x D	200	–	230	IPT	.0015	.0019	.0022	.0025	.0028
S	1	Ap1 max	0.3 x D	160	–	300	IPT	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.3 x D	80	–	130	IPT	.0012	.0015	.0018	.0021	.0024
	3	Ap1 max	0.3 x D	200	–	260	IPT	.0018	.0023	.0027	.0031	.0036
	4	Ap1 max	0.3 x D	160	–	200	IPT	.0017	.0021	.0025	.0028	.0033
H	1	Ap1 max	0.3 x D	260	–	460	IPT	.0020	.0026	.0030	.0034	.0039
	2	Ap1 max	0.3 x D	230	–	390	IPT	.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.

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Material Group	Side Milling (A)		WS15PE			Recommended feed per tooth (IPT = inch/th) for side milling (A).						
	A		Cutting Speed – vc SFM			frac. dec.	D1 – Diameter					
	ap	ae	min		max		3/8	1/2	5/8	3/4	1	
							.3750	.5000	.6250	.7500	1.0000	
P	4	Ap1 max	0.06 x D	590	–	980	IPT	.0025	.0031	.0036	.0040	.0046
	5	Ap1 max	0.06 x D	390	–	660	IPT	.0022	.0028	.0033	.0037	.0043
M	1	Ap1 max	0.06 x D	590	–	750	IPT	.0027	.0035	.0041	.0046	.0054
	2	Ap1 max	0.06 x D	390	–	520	IPT	.0022	.0028	.0033	.0037	.0043
	3	Ap1 max	0.06 x D	390	–	460	IPT	.0018	.0023	.0027	.0030	.0034
S	1	Ap1 max	0.06 x D	330	–	590	IPT	.0027	.0035	.0041	.0046	.0054
	2	Ap1 max	0.06 x D	160	–	260	IPT	.0015	.0018	.0022	.0025	.0029
	3	Ap1 max	0.06 x D	390	–	520	IPT	.0022	.0028	.0033	.0037	.0043
	4	Ap1 max	0.06 x D	330	–	390	IPT	.0020	.0026	.0030	.0034	.0040
H	1	Ap1 max	0.06 x D	520	–	920	IPT	.0025	.0031	.0036	.0040	.0046
	2	Ap1 max	0.06 x D	460	–	790	IPT	.0018	.0023	.0027	.0030	.0034

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.

High-Performance Solid Carbide End Mills