

■ HARVI III • UJDE • Unequal Flute Spacing • Roughing

Material Group	Side Milling (A)		KCSM15									
	A		Cutting Speed – vc SFM		Recommended feed per tooth (IPT = inch/th) for side milling (A).							
	ap	ae	min	max	frac.	D1 – Diameter						
						3/8	1/2	5/8	3/4	1	1 1/4	
dec.	.3750	.5000	.6250	.7500	1.0000	1.2500						
P	4	Ap max	0.4 x D	300	490	IPT	.0020	.0026	.0030	.0034	.0039	.0040
	5	Ap max	0.4 x D	200	330	IPT	.0018	.0023	.0027	.0031	.0036	.0039
M	1	Ap max	0.4 x D	300	380	IPT	.0023	.0029	.0034	.0039	.0045	.0048
	2	Ap max	0.4 x D	200	260	IPT	.0018	.0023	.0027	.0031	.0036	.0039
	3	Ap max	0.4 x D	200	230	IPT	.0015	.0019	.0022	.0025	.0028	.0029
S	1	Ap max	0.4 x D	160	300	IPT	.0023	.0029	.0034	.0039	.0045	.0048
	2	Ap max	0.4 x D	80	130	IPT	.0012	.0015	.0018	.0021	.0024	.0026
	3	Ap max	0.4 x D	80	130	IPT	.0012	.0015	.0018	.0021	.0024	.0026
	4	Ap max	0.4 x D	160	200	IPT	.0017	.0021	.0025	.0028	.0033	.0036
H	1	Ap max	0.4 x D	260	460	IPT	.0020	.0026	.0030	.0034	.0039	.0040

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Material Group	Side Milling (A)		KCSM15									
	A		Cutting Speed – vc SFM		Recommended feed per tooth (IPT = inch/th) for side milling (A).							
	ap	ae	min	max	frac.	D1 – Diameter						
						3/8	1/2	5/8	3/4	1	1 1/4	
dec.	.3750	.5000	.6250	.7500	1.0000	1.2500						
P	4	Ap max	0.06 x D	560	940	IPT	.0025	.0031	.0036	.0040	.0046	.0048
	5	Ap max	0.06 x D	370	620	IPT	.0022	.0028	.0033	.0037	.0043	.0047
M	1	Ap max	0.06 x D	560	720	IPT	.0027	.0035	.0041	.0046	.0054	.0058
	2	Ap max	0.06 x D	370	500	IPT	.0022	.0028	.0033	.0037	.0043	.0047
	3	Ap max	0.06 x D	370	440	IPT	.0018	.0023	.0027	.0030	.0034	.0035
S	1	Ap max	0.06 x D	310	560	IPT	.0027	.0035	.0041	.0046	.0054	.0058
	2	Ap max	0.06 x D	160	250	IPT	.0015	.0018	.0022	.0025	.0029	.0032
	3	Ap max	0.06 x D	160	250	IPT	.0015	.0018	.0022	.0025	.0029	.0032
	4	Ap max	0.06 x D	310	370	IPT	.0020	.0026	.0030	.0034	.0040	.0043
H	1	Ap max	0.06 x D	500	870	IPT	.0025	.0031	.0036	.0040	.0046	.0048

NOTE: Those guidelines may require variations to achieve optimum results.

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.

■ HARVI III • UJDE • Unequal Flute Spacing • Roughing • With Neck

Material Group	Side Milling (A)		KCSM15		Recommended feed per tooth (IPT = inch/th) for side milling (A).						
	A		Cutting Speed – vc SFM		frac.	D1 – Diameter					
	ap	ae	min	max		3/8	1/2	5/8	3/4	1	
					dec.	.3750	.5000	.6250	.7500	1.0000	
P	4	Ap1 max	0.4 x D	300	490	IPT	.0020	.0026	.0030	.0033	.0039
	5	Ap1 max	0.4 x D	200	330	IPT	.0018	.0023	.0027	.0030	.0036
M	1	Ap1 max	0.4 x D	300	380	IPT	.0023	.0029	.0034	.0038	.0046
	2	Ap1 max	0.4 x D	200	260	IPT	.0018	.0023	.0027	.0030	.0036
	3	Ap1 max	0.4 x D	200	230	IPT	.0015	.0019	.0022	.0024	.0028
S	1	Ap1 max	0.4 x D	160	300	IPT	.0023	.0029	.0034	.0038	.0046
	2	Ap1 max	0.4 x D	160	300	IPT	.0023	.0029	.0034	.0038	.0046
	3	Ap1 max	0.4 x D	80	130	IPT	.0012	.0016	.0018	.0020	.0025
	4	Ap1 max	0.4 x D	160	260	IPT	.0017	.0022	.0025	.0028	.0033
H	1	Ap1 max	0.4 x D	260	460	IPT	.0020	.0026	.0030	.0033	.0039

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Material Group	Side Milling (A)		KCSM15		Recommended feed per tooth (IPT = inch/th) for side milling (A).						
	A		Cutting Speed – vc SFM		frac.	D1 – Diameter					
	ap	ae	min	max		3/8	1/2	5/8	3/4	1	
					dec.	.3750	.5000	.6250	.7500	1.0000	
P	4	Ap1 max	0.06 x D	560	940	IPT	.0024	.0031	.0036	.0040	.0047
	5	Ap1 max	0.06 x D	370	620	IPT	.0022	.0028	.0033	.0036	.0044
M	1	Ap1 max	0.06 x D	560	720	IPT	.0027	.0035	.0041	.0045	.0055
	2	Ap1 max	0.06 x D	370	500	IPT	.0022	.0028	.0033	.0036	.0044
	3	Ap1 max	0.06 x D	370	440	IPT	.0018	.0023	.0027	.0029	.0034
S	1	Ap1 max	0.06 x D	310	560	IPT	.0027	.0035	.0041	.0045	.0055
	2	Ap1 max	0.06 x D	310	560	IPT	.0027	.0035	.0041	.0045	.0055
	3	Ap1 max	0.06 x D	160	250	IPT	.0014	.0019	.0022	.0024	.0029
	4	Ap1 max	0.06 x D	310	500	IPT	.0020	.0026	.0030	.0033	.0040
H	1	Ap1 max	0.06 x D	500	870	IPT	.0024	.0031	.0036	.0040	.0047

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