

**■ HARVI I™ • HPRSHV • Unequal Flute Spacing • Extended Reach**

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)		KCPM15		D1 — Diameter						
	A		B		Cutting Speed — vc SFM						
	ap	ae	ap	min	max	inch	1/2	5/8	3/4	1	
P	1	0.75 x D	0.5 x D	0.75 x D	500	650	IPT	0.0035	0.0039	0.0043	0.0050
	2	0.75 x D	0.5 x D	0.75 x D	450	625	IPT	0.0035	0.0039	0.0043	0.0050
	3	0.75 x D	0.5 x D	0.75 x D	400	525	IPT	0.0029	0.0034	0.0038	0.0046
	4	0.75 x D	0.5 x D	0.5 x D	300	475	IPT	0.0026	0.0030	0.0033	0.0039
	5	1.5 x D	0.5 x D	0.75 x D	200	325	IPT	0.0023	0.0027	0.0030	0.0036
	6	0.75 x D	0.5 x D	0.5 x D	150	225	IPT	0.0019	0.0022	0.0024	0.0028
M	1	0.75 x D	0.5 x D	0.75 x D	260	330	IPT	0.0029	0.0034	0.0038	0.0046
	2	0.75 x D	0.5 x D	0.75 x D	200	260	IPT	0.0023	0.0027	0.0030	0.0036
	3	0.75 x D	0.5 x D	0.75 x D	200	260	IPT	0.0019	0.0022	0.0024	0.0028
K	1	0.75 x D	0.5 x D	0.75 x D	390	520	IPT	0.0035	0.0039	0.0043	0.0050
	2	0.75 x D	0.5 x D	0.75 x D	360	460	IPT	0.0029	0.0034	0.0038	0.0046
	3	0.75 x D	0.5 x D	0.75 x D	330	430	IPT	0.0023	0.0027	0.0030	0.0036

Solid End Milling

**■ HARVI I • HPHVBN • Unequal Flute Spacing • Extended Length of Cut • Ball Nose**

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)		KCPM15		D1 — Diameter												
	A		B		Cutting Speed — vc SFM												
	ap	ae	ap	min	max	inch	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	
P	1	1.25 x D	0.5 x D	1 x D	490	660	IPT	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050
	2	1.25 x D	0.5 x D	1 x D	460	620	IPT	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050
	3	1.25 x D	0.5 x D	1 x D	390	520	IPT	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046
	4	1.25 x D	0.5 x D	0.75 x D	300	490	IPT	0.0007	0.0010	0.0014	0.0018	0.0020	0.0023	0.0026	0.0030	0.0033	0.0039
	5	1.25 x D	0.5 x D	1 x D	200	330	IPT	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036
	6	1.25 x D	0.5 x D	0.75 x D	160	250	IPT	0.0005	0.0008	0.0010	0.0013	0.0015	0.0017	0.0019	0.0022	0.0024	0.0028
M	1	1.25 x D	0.5 x D	1 x D	260	330	IPT	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046
	2	1.25 x D	0.5 x D	1 x D	200	260	IPT	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036
	3	1.25 x D	0.5 x D	1 x D	200	260	IPT	0.0005	0.0008	0.0010	0.0013	0.0015	0.0017	0.0019	0.0022	0.0024	0.0028
K	1	1.25 x D	0.5 x D	1 x D	390	520	IPT	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050
	2	1.25 x D	0.5 x D	1 x D	360	460	IPT	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046
	3	1.25 x D	0.5 x D	1 x D	330	430	IPT	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036
S	1	1.0 x D	0.3 x D	0.3 x D	—	—	IPT	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046
	2	1.25 x D	0.5 x D	1 x D	—	—	IPT	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036
	3	1.0 x D	0.3 x D	0.3 x D	—	—	IPT	0.0004	0.0006	0.0008	0.0010	0.0012	0.0014	0.0016	0.0018	0.0020	0.0025
	4	1.25 x D	0.5 x D	1 x D	—	—	IPT	0.0005	0.0008	0.0011	0.0014	0.0017	0.0019	0.0022	0.0025	0.0028	0.0033
H	1	1.25 x D	0.5 x D	0.75 x D	260	460	IPT	0.0007	0.0010	0.0014	0.0018	0.0020	0.0023	0.0026	0.0030	0.0033	0.0039

NOTE: These 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.