

**■ HPFSS 3-Flute • With Radius • Soft Steels and Stainless Steels**

Material Group	Side Milling (A) and Slotting (B)		KC635M		Feed per Tooth — fz information is for side milling (A). For slotting (B), reduce fz by 20%.															
	A		B		Cutting Speed — vc SFM		D1 — Diameter													
	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	1 1/4			
	ap	ae	ap	min	max	inch	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.625	0.750	1.000	1.250			
P	1	1 x D	0.5 x D	0.5 x D	500	650	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050	0.0062		
	2	1 x D	0.5 x D	0.5 x D	450	625	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050	0.0062		
	3	1 x D	0.5 x D	0.5 x D	400	525	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046	0.0057		
	4	1 x D	0.5 x D	0.5 x D	350	475	fz	0.0007	0.0010	0.0014	0.0018	0.0020	0.0023	0.0026	0.0030	0.0033	0.0039	0.0049		
	5	1 x D	0.5 x D	0.5 x D	200	325	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036	0.0046		
	6	1 x D	0.5 x D	0.5 x D	150	225	fz	0.0005	0.0008	0.0010	0.0013	0.0015	0.0017	0.0019	0.0022	0.0024	0.0028	0.0036		
M	1	1 x D	0.5 x D	0.5 x D	250	325	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046	0.0057		
	2	1 x D	0.5 x D	0.5 x D	190	260	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036	0.0046		
	3	1 x D	0.5 x D	0.5 x D	200	260	fz	0.0005	0.0008	0.0010	0.0013	0.0015	0.0017	0.0019	0.0022	0.0024	0.0028	0.0036		
K	1	1 x D	0.5 x D	0.5 x D	400	525	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0043	0.0050	0.0062		
	2	1 x D	0.5 x D	0.5 x D	360	460	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046	0.0057		
	3	1 x D	0.5 x D	0.5 x D	330	430	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0021	0.0023	0.0027	0.0030	0.0036	0.0046		
S	1	1 x D	0.3 x D	0.3 x D	150	275	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046	0.0057		
	2	1 x D	0.3 x D	0.3 x D	150	275	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0026	0.0029	0.0034	0.0038	0.0046	0.0057		
	3	1 x D	0.3 x D	0.3 x D	65	125	fz	0.0004	0.0006	0.0008	0.0010	0.0012	0.0014	0.0016	0.0018	0.0020	0.0025	0.0031		
	4	1 x D	0.5 x D	0.5 x D	150	220	fz	0.0005	0.0008	0.0011	0.0014	0.0017	0.0019	0.0022	0.0025	0.0028	0.0033	0.0042		

These guidelines may require variations to achieve optimum results.

**■ HPFSS 5-Flute • Soft Steels and Stainless Steels**

Material Group	Side Milling		KCPM15 KC635M		KC625M		KC600		Feed per Tooth — fz information is for side milling.											
	ap		ae		min		max		inch		D1 — Diameter									
	ap	ae	min	max	min	max	min	max	inch	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1		
	ap	ae	min	max	min	max	min	max	inch	0.125	0.188	0.250	0.313	0.375	0.500	0.625	0.750	1.000		
P	1	1.5 x D	0.15 x D	500	650	400	520	200	260	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0035	0.0039	0.0043	0.0050	
	2	1.5 x D	0.15 x D	450	625	360	500	180	250	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0035	0.0039	0.0043	0.0050	
	3	1.5 x D	0.1 x D	400	525	320	420	160	210	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0029	0.0034	0.0038	0.0046	
	4	1.5 x D	0.1 x D	300	475	240	380	—	—	fz	0.0007	0.0010	0.0014	0.0018	0.0020	0.0026	0.0030	0.0033	0.0039	
	5	1.5 x D	0.1 x D	200	325	160	260	—	—	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0023	0.0027	0.0030	0.0036	
	6	1.5 x D	0.1 x D	150	225	120	180	—	—	fz	0.0005	0.0008	0.0010	0.0013	0.0015	0.0019	0.0022	0.0024	0.0028	
M	1	1.5 x D	0.15 x D	260	330	208	264	104	132	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0029	0.0034	0.0038	0.0046	
	2	1.5 x D	0.1 x D	200	260	160	208	—	—	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0023	0.0027	0.0030	0.0036	
	3	1.5 x D	0.1 x D	200	260	160	208	—	—	fz	0.0005	0.0008	0.0010	0.0013	0.0015	0.0019	0.0022	0.0024	0.0028	
K	1	1.5 x D	0.15 x D	390	520	312	416	156	208	fz	0.0009	0.0014	0.0018	0.0023	0.0027	0.0035	0.0039	0.0043	0.0050	
	2	1.5 x D	0.15 x D	360	460	288	368	—	—	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0029	0.0034	0.0038	0.0046	
	3	1.5 x D	0.1 x D	330	430	264	344	—	—	fz	0.0006	0.0009	0.0012	0.0016	0.0018	0.0023	0.0027	0.0030	0.0036	
S	1	1.5 x D	0.1 x D	150	275	120	220	—	—	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0029	0.0034	0.0038	0.0046	
	2	1.5 x D	0.1 x D	150	275	120	220	—	—	fz	0.0007	0.0011	0.0015	0.0020	0.0023	0.0029	0.0034	0.0038	0.0046	
	3	1.5 x D	0.15 x D	70	130	56	104	—	—	fz	0.0004	0.0006	0.0008	0.0010	0.0012	0.0016	0.0018	0.0020	0.0025	
	4	1.5 x D	0.15 x D	150	210	120	168	—	—	fz	0.0005	0.0008	0.0011	0.0014	0.0017	0.0022	0.0025	0.0028	0.0033	
H	1	1.5 x D	0.1 x D	260	450	208	360	—	—	fz	0.0007	0.0010	0.0014	0.0018	0.0020	0.0026	0.0030	0.0033	0.0039	

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.