

■ HPFDM

Material Group	Side Milling (A) and Slotting (B)		KC633M		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	1/4 0.25	5/16 0.31	3/8 0.38	1/2 0.50	5/8 0.63	3/4 0.75	1 1.00	
	P	3	1 x D	0.4 x D	1 x D	390	520	fz	0.0017	0.0021	0.0025	0.0032	0.0037	0.0042
4		1 x D	0.4 x D	0.75 x D	300	490	fz	0.0015	0.0019	0.0022	0.0029	0.0033	0.0036	0.0043
H	1	1 x D	0.4 x D	0.75 x D	260	460	fz	0.0015	0.0019	0.0022	0.0029	0.0033	0.0036	0.0043
	2	1 x D	0.3 x D	0.5 x D	230	390	fz	0.0011	0.0014	0.0017	0.0021	0.0024	0.0027	0.0031
	3	1 x D	0.15 x D	0.3 x D	200	300	fz	0.0009	0.0011	0.0013	0.0017	0.0020	0.0022	0.0027
	4	1 x D	0.1 x D	0.15 x D	160	230	fz	0.0006	0.0008	0.0009	0.0011	0.0013	0.0015	0.0018

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.
 For better surface finish, reduce feed per tooth.

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	A		B	Cutting Speed — vc SFM		D1 — Diameter										
	ap	ae	ap	min	max	inch	5/32 0.156	3/16 0.188	1/4 0.250	5/16 0.313	3/8 0.375	1/2 0.500	5/8 0.625	3/4 0.750	1 1.000	
	P	3	0.8 x D	0.5 x D	0.75 x D	520	590	fz	0.0008	0.0009	0.0013	0.0017	0.0019	0.0026	0.0031	0.0038
4		0.8 x D	0.5 x D	0.5 x D	460	520	fz	0.0007	0.0009	0.0012	0.0015	0.0017	0.0023	0.0027	0.0033	0.0039
5		0.8 x D	0.5 x D	0.75 x D	200	330	fz	0.0006	0.0008	0.0010	0.0013	0.0015	0.0021	0.0025	0.0030	0.0036
6		0.8 x D	0.4 x D	0.5 x D	160	260	fz	0.0005	0.0007	0.0009	0.0011	0.0013	0.0017	0.0020	0.0024	0.0028
M	1	0.8 x D	0.5 x D	0.75 x D	260	330	fz	0.0008	0.0009	0.0013	0.0017	0.0019	0.0026	0.0031	0.0038	0.0046
	2	0.8 x D	0.5 x D	0.75 x D	200	260	fz	0.0006	0.0008	0.0010	0.0013	0.0015	0.0021	0.0025	0.0030	0.0036
	3	0.8 x D	0.5 x D	0.75 x D	200	260	fz	0.0005	0.0007	0.0009	0.0011	0.0013	0.0017	0.0020	0.0024	0.0028
K	1	0.8 x D	0.5 x D	0.75 x D	390	520	fz	0.0009	0.0011	0.0016	0.0020	0.0023	0.0031	0.0035	0.0043	0.0050
	2	0.8 x D	0.5 x D	0.75 x D	360	460	fz	0.0008	0.0009	0.0013	0.0017	0.0019	0.0026	0.0031	0.0038	0.0046
	3	0.8 x D	0.5 x D	0.75 x D	330	430	fz	0.0006	0.0008	0.0010	0.0013	0.0015	0.0021	0.0025	0.0030	0.0036
S	1	0.8 x D	0.5 x D	0.75 x D	300	380	fz	0.0008	0.0009	0.0013	0.0017	0.0019	0.0026	0.0031	0.0038	0.0046
	2	0.8 x D	0.5 x D	0.75 x D	300	380	fz	0.0008	0.0009	0.0013	0.0017	0.0019	0.0026	0.0031	0.0038	0.0046
	3	0.8 x D	0.3 x D	0.3 x D	70	130	fz	0.0004	0.0005	0.0007	0.0009	0.0010	0.0014	0.0016	0.0020	0.0025
	4	0.8 x D	0.3 x D	0.5 x D	150	210	fz	0.0005	0.0007	0.0009	0.0012	0.0014	0.0019	0.0023	0.0028	0.0033
H	1	0.8 x D	0.5 x D	0.5 x D	390	460	fz	0.0007	0.0009	0.0012	0.0015	0.0017	0.0023	0.0027	0.0033	0.0039
	2	0.8 x D	0.3 x D	0.3 x D	260	430	fz	0.0005	0.0007	0.0009	0.0011	0.0013	0.0017	0.0020	0.0024	0.0028
	3	0.8 x D	0.3 x D	0.3 x D	230	330	fz	0.0004	0.0005	0.0007	0.0009	0.0010	0.0014	0.0016	0.0019	0.0023

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.
 When using tools with six flutes, reduce slotting ap by 40%.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

Solid End Milling