

■ UCDE

Material Group																
	Side Milling (A) and Slotting (B)			KCPM15/KC643M			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	3/16 0.188	1/4 0.250	5/16 0.313	3/8 0.375	7/16 0.438	1/2 0.500	5/8 0.625	3/4 0.750	1 1.000	
P	1	1.25 x D	0.5 x D	1 x D	490	660	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	fz	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	160	300	fz	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	160	260	fz	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	70	130	fz	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	150	210	fz	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	fz	0.0010	0.0014	0.0018	0.0020	0.0023	0.0026	0.0030	0.0033	0.0039



Solid End Milling

■ UCDE • Extended Neck

Material Group													
	Side Milling (A) and Slotting (B)			KCPM15/KC643M			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 0.250	3/8 0.375	1/2 0.500	5/8 0.625	3/4 0.750	1 1.000	
P	1	0.75 x D	0.5 x D	0.75 x D	490	660	fz	0.0018	0.0027	0.0035	0.0039	0.0043	0.0050
	2	0.75 x D	0.5 x D	0.75 x D	460	620	fz	0.0018	0.0027	0.0035	0.0039	0.0043	0.0050
	3	0.75 x D	0.5 x D	0.75 x D	390	520	fz	0.0015	0.0023	0.0029	0.0034	0.0038	0.0046
	4	0.75 x D	0.5 x D	0.5 x D	300	490	fz	0.0014	0.0020	0.0026	0.0030	0.0033	0.0039
	5	0.75 x D	0.5 x D	0.75 x D	200	330	fz	0.0012	0.0018	0.0023	0.0027	0.0030	0.0036
	6	0.75 x D	0.5 x D	0.5 x D	160	250	fz	0.0010	0.0015	0.0019	0.0022	0.0024	0.0028
M	1	0.75 x D	0.5 x D	0.75 x D	260	330	fz	0.0015	0.0023	0.0029	0.0034	0.0038	0.0046
	2	0.75 x D	0.5 x D	0.75 x D	200	260	fz	0.0012	0.0018	0.0023	0.0027	0.0030	0.0036
	3	0.75 x D	0.5 x D	0.75 x D	200	260	fz	0.0010	0.0015	0.0019	0.0022	0.0024	0.0028
K	1	0.75 x D	0.5 x D	0.75 x D	390	520	fz	0.0018	0.0027	0.0035	0.0039	0.0043	0.0050
	2	0.75 x D	0.5 x D	0.75 x D	360	460	fz	0.0015	0.0023	0.0029	0.0034	0.0038	0.0046
	3	0.75 x D	0.5 x D	0.75 x D	330	430	fz	0.0012	0.0018	0.0023	0.0027	0.0030	0.0036
S	1	0.75 x D	0.3 x D	0.3 x D	160	300	fz	0.0015	0.0023	0.0029	0.0034	0.0038	0.0046
	2	0.75 x D	0.5 x D	0.75 x D	160	260	fz	0.0012	0.0018	0.0023	0.0027	0.0030	0.0036
	3	0.75 x D	0.3 x D	0.3 x D	70	130	fz	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
	4	0.75 x D	0.5 x D	0.75 x D	150	210	fz	0.0011	0.0017	0.0022	0.0025	0.0028	0.0033
H	1	0.75 x D	0.5 x D	0.5 x D	260	460	fz	0.0014	0.0020	0.0026	0.0030	0.0033	0.0039

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.