

■ UEDE • 3-Flute • Sharp Edge



Material Group	Side Milling (A) and Slotting (B)			KC643M		Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.								
	A		B	Cutting Speed – vc SFM		D1 – Diameter								
	ap	ae	ap	min	max	frac.	5/64	1/8	3/16	1/4	5/16	3/8	1/2	
	ap	ae	ap	min	max	dec.	0.08	0.13	0.19	0.250	0.31	0.38	0.50	
P	0	1.5 x D	0.5 x D	1 x D	490	660	IPT	.0005	.0009	.0013	.0018	.0023	.0027	.0034
	1	1.5 x D	0.5 x D	1 x D	490	660	IPT	.0005	.0009	.0013	.0018	.0023	.0027	.0034
	2	1.5 x D	0.5 x D	1 x D	460	620	IPT	.0005	.0009	.0013	.0018	.0023	.0027	.0034
	3	1.5 x D	0.5 x D	1 x D	390	520	IPT	.0004	.0007	.0011	.0015	.0020	.0023	.0029
	4	1.5 x D	0.5 x D	0.75 x D	300	490	IPT	.0004	.0007	.0010	.0014	.0017	.0020	.0026
	5	1.5 x D	0.5 x D	1 x D	200	330	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023
M	1	1.5 x D	0.5 x D	1 x D	300	380	IPT	.0004	.0007	.0011	.0015	.0020	.0023	.0029
	2	1.5 x D	0.5 x D	1 x D	200	260	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023
	3	1.5 x D	0.5 x D	1 x D	200	230	IPT	.0003	.0005	.0008	.0010	.0013	.0015	.0019
K	1	1.5 x D	0.5 x D	1 x D	390	490	IPT	.0005	.0009	.0013	.0018	.0023	.0027	.0034
	2	1.5 x D	0.5 x D	1 x D	360	460	IPT	.0004	.0007	.0011	.0015	.0020	.0023	.0029
	3	1.5 x D	0.5 x D	1 x D	360	430	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023
S	1	1.5 x D	0.3 x D	0.3 x D	160	300	IPT	.0004	.0007	.0011	.0015	.0020	.0023	.0029
	2	1.5 x D	0.3 x D	0.3 x D	80	130	IPT	.0002	.0004	.0006	.0008	.0010	.0012	.0015
	3	1.5 x D	0.3 x D	0.3 x D	80	130	IPT	.0002	.0004	.0006	.0008	.0010	.0012	.0015
	4	1.5 x D	0.5 x D	1 x D	160	200	IPT	.0003	.0005	.0008	.0011	.0014	.0017	.0021
H	1	1.5 x D	0.5 x D	0.75 x D	260	460	IPT	.0004	.0007	.0010	.0014	.0017	.0020	.0026



High-Performance Solid Carbide End Mills

■ UEDE • 4-Flute • Chamfer



Material Group	Side Milling (A) and Slotting (B)			KC643M		Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.									
	A		B	Cutting Speed – vc SFM		D1 – Diameter									
	ap	ae	ap	min	max	frac.	5/64	1/8	5/32	3/16	1/4	5/16	3/8	1/2	
	ap	ae	ap	min	max	dec.	.0781	.1250	.1563	.1875	.2500	.3125	.3750	.5000	
P	0	1.5 x D	0.5 x D	1 x D	490	660	IPT	.0005	.0009	.0011	.0013	.0018	.0023	.0027	.0034
	1	1.5 x D	0.5 x D	1 x D	490	660	IPT	.0005	.0009	.0011	.0013	.0018	.0023	.0027	.0034
	2	1.5 x D	0.5 x D	1 x D	460	620	IPT	.0005	.0009	.0011	.0013	.0018	.0023	.0027	.0034
	3	1.5 x D	0.5 x D	1 x D	390	520	IPT	.0004	.0007	.0009	.0011	.0015	.0020	.0023	.0029
	4	1.5 x D	0.5 x D	0.75 x D	300	490	IPT	.0004	.0007	.0008	.0010	.0014	.0017	.0020	.0026
	5	1.5 x D	0.5 x D	1 x D	200	330	IPT	.0004	.0006	.0007	.0009	.0012	.0016	.0018	.0023
M	1	1.5 x D	0.5 x D	1 x D	300	380	IPT	.0004	.0007	.0009	.0011	.0015	.0020	.0023	.0029
	2	1.5 x D	0.5 x D	1 x D	200	260	IPT	.0004	.0006	.0007	.0009	.0012	.0016	.0018	.0023
	3	1.5 x D	0.5 x D	1 x D	200	230	IPT	.0003	.0005	.0006	.0008	.0010	.0013	.0015	.0019
K	1	1.5 x D	0.5 x D	1 x D	390	490	IPT	.0005	.0009	.0011	.0013	.0018	.0023	.0027	.0034
	2	1.5 x D	0.5 x D	1 x D	360	460	IPT	.0004	.0007	.0009	.0011	.0015	.0020	.0023	.0029
	3	1.5 x D	0.5 x D	1 x D	360	430	IPT	.0004	.0006	.0007	.0009	.0012	.0016	.0018	.0023
S	1	1.5 x D	0.3 x D	0.3 x D	160	300	IPT	.0004	.0007	.0009	.0011	.0015	.0020	.0023	.0029
	2	1.5 x D	0.3 x D	0.3 x D	80	130	IPT	.0002	.0004	.0005	.0006	.0008	.0010	.0012	.0015
	3	1.5 x D	0.3 x D	0.3 x D	80	130	IPT	.0002	.0004	.0005	.0006	.0008	.0010	.0012	.0015
	4	1.5 x D	0.5 x D	1 x D	160	200	IPT	.0003	.0005	.0006	.0008	.0011	.0014	.0017	.0021
H	1	1.5 x D	0.5 x D	0.75 x D	260	460	IPT	.0004	.0007	.0008	.0010	.0014	.0017	.0020	.0026

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.
 For better surface finish, reduce feed per tooth.