

**■ HARVI • ULDV • Asymmetrical Flute Spacing**

Material Group																				
	Side Milling (A) and Slotting (B)			short			medium			long			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.							
	A		B	adapter reach									D1 – Diameter							
	ap		ae	KCSM15			KCSM15			KCSM15			frac.	3/8	1/2	5/8	3/4	1	1 1/4	
	ap		ae	Cutting Speed – vc SFM		Cutting Speed – vc SFM		Cutting Speed – vc SFM		Cutting Speed – vc SFM		dec.	.3750	.5000	.6250	.7500	1.2500	1.2500		
P	0	1.5 x D	0.5 x D	1 x D	490	-	660	441	-	594	441	-	594	IPT	.0023	.0029	.0034	.0037	.0042	.0042
	1	1.5 x D	0.5 x D	1 x D	490	-	660	441	-	594	441	-	594	IPT	.0023	.0029	.0034	.0037	.0042	.0042
	2	1.5 x D	0.5 x D	1 x D	460	-	620	414	-	558	414	-	558	IPT	.0023	.0029	.0034	.0037	.0042	.0042
	3	1.5 x D	0.5 x D	1 x D	390	-	520	351	-	468	351	-	468	IPT	.0019	.0025	.0029	.0033	.0041	.0041
	4	1.5 x D	0.4 x D	0.75 x D	300	-	490	270	-	441	270	-	441	IPT	.0017	.0022	.0026	.0029	.0034	.0034
	5	1.5 x D	0.4 x D	1 x D	200	-	330	170	-	280.5	160	-	264	IPT	.0016	.0020	.0023	.0026	.0033	.0033
	6	1.5 x D	0.4 x D	0.75 x D	160	-	250	136	-	212.5	128	-	200	IPT	.0013	.0016	.0019	.0021	.0024	.0024
M	1	1.5 x D	0.4 x D	1 x D	300	-	380	240	-	304	210	-	266	IPT	.0019	.0025	.0029	.0033	.0041	.0041
	2	1.5 x D	0.4 x D	1 x D	200	-	260	160	-	208	140	-	182	IPT	.0016	.0020	.0023	.0026	.0033	.0033
	3	1.5 x D	0.4 x D	1 x D	200	-	230	160	-	184	140	-	161	IPT	.0013	.0016	.0019	.0021	.0024	.0024
K	1	1.5 x D	0.5 x D	1 x D	390	-	490	351	-	441	351	-	441	IPT	.0023	.0029	.0034	.0037	.0042	.0042
	2	1.5 x D	0.5 x D	1 x D	360	-	460	324	-	414	324	-	414	IPT	.0019	.0025	.0029	.0033	.0041	.0041
	3	1.5 x D	0.5 x D	1 x D	360	-	430	324	-	387	324	-	387	IPT	.0016	.0020	.0023	.0026	.0033	.0033
S	1	1.5 x D	0.3 x D	0.3 x D	160	-	300	128	-	240	96	-	180	IPT	.0019	.0025	.0029	.0033	.0041	.0041
	2	1.5 x D	0.3 x D	0.3 x D	80	-	130	64	-	104	48	-	78	IPT	.0010	.0013	.0015	.0018	.0022	.0022
	3	1.5 x D	0.3 x D	0.3 x D	80	-	130	64	-	104	48	-	78	IPT	.0010	.0013	.0015	.0018	.0022	.0022
	4	1.5 x D	0.4 x D	1 x D	160	-	200	128	-	160	96	-	120	IPT	.0014	.0018	.0021	.0024	.0030	.0030
H	1	1.5 x D	0.4 x D	0.75 x D	260	-	460	208	-	368	156	-	276	IPT	.0017	.0022	.0026	.0029	.0034	.0034
	2	1.5 x D	0.2 x D	0.5 x D	230	-	390	184	-	312	138	-	234	IPT	.0013	.0016	.0019	.0021	.0024	.0024

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.

Above parameters are based on ideal conditions. Please adjust parameters according to system stability.

For side milling with ap larger than 1 x D, reduce fz by 20%!

Cylindrical shanks not recommended for full slotting.

