



**X5070
END MILLS**

RECOMMENDED CUTTING CONDITIONS

G8A39 SERIES

6 FLUTE CORNER RADIUS - SIDE CUTTING

ISO	VDI 3323	Material Description	HRc	Ae	Ap	Parameter	Diameter (Ø)					
							6	8	10	12	16	20
P	5	Non-alloy steel	32	0.05D	1.0D	SFM (vc)	1535	1650	1650	1610	1650	1650
						IPT (fz)	.0014	.0018	.0020	.0023	.0026	.0028
						RPM	24800	20000	16000	13000	10000	8000
						IPM (feed)	211	217	193	177	158	132
	8-9	Low alloy steel	32-38	0.05D	1.0D	SFM (vc)	1535	1650	1650	1610	1650	1650
						IPT (fz)	.0014	.0018	.0020	.0023	.0026	.0028
						RPM	24800	20000	16000	13000	10000	8000
						IPM (feed)	211	217	193	177	158	132
	11.1	High alloyed steel, and tool steel	35	0.05D	1.0D	SFM (vc)	1535	1650	1650	1610	1650	1650
						IPT (fz)	.0014	.0018	.0020	.0023	.0026	.0028
						RPM	24800	20000	16000	13000	10000	8000
						IPM (feed)	211	217	193	177	158	132
11.2	High alloyed steel, and tool steel	44	0.05D	1.0D	SFM (vc)	1455	1565	1595	1545	1600	1610	
					IPT (fz)	.0014	.0017	.0019	.0021	.0025	.0029	
					RPM	23500	19000	15500	12500	9700	7800	
					IPM (feed)	193	197	177	161	146	134	
H	38.1	Hardened steel	45-49	0.05D	1.0D	SFM (vc)	1455	1565	1595	1545	1600	1610
						IPT (fz)	.0014	.0017	.0019	.0021	.0025	.0029
						RPM	23500	19000	15500	12500	9700	7800
						IPM (feed)	193	197	177	161	146	134
	38.2	Hardened steel	50-55	0.05D	1.0D	SFM (vc)	990	990	980	990	990	990
						IPT (fz)	.0020	.0025	.0028	.0031	.0037	.0044
						RPM	16000	12000	9500	8000	6000	4800
						IPM (feed)	193	181	161	150	134	126
	39.1	Hardened steel	56-60	0.03D	1.0D	SFM (vc)	835	825	825	815	825	825
						IPT (fz)	.0016	.0020	.0024	.0025	.0030	.0035
						RPM	13500	10000	8000	6600	5000	4000
						IPM (feed)	130	122	114	98	91	83
39.2	Hardened steel	61-65	0.03D	1.0D	SFM (vc)	650	660	660	655	660	660	
					IPT (fz)	.0013	.0016	.0018	.0020	.0020	.0021	
					RPM	10500	8000	6400	5300	4000	3200	
					IPM (feed)	83	79	71	63	49	40	
39.3	Hardened steel	66-70	0.03D	1.0D	SFM (vc)	495	495	495	495	495	495	
					IPT (fz)	.0012	.0015	.0018	.0019	.0019	.0019	
					RPM	8000	6000	4800	4000	3000	2400	
					IPM (feed)	57	55	51	45	34	27	
40	Chilled Cast Iron	42	0.05D	1.0D	SFM (vc)	1455	1565	1595	1545	1600	1610	
					IPT (fz)	.0014	.0017	.0019	.0021	.0025	.0029	
					RPM	23500	19000	15500	12500	9700	7800	
					IPM (feed)	193	197	177	161	146	134	
41	Hardened Cast Iron	55	0.05D	1.0D	SFM (vc)	990	990	980	990	990	990	
					IPT (fz)	.0020	.0025	.0028	.0031	.0037	.0044	
					RPM	16000	12000	9500	8000	6000	4800	
					IPM (feed)	193	181	161	150	134	126	

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : Inch (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)

