

**YG X5070 END MILLS**

**RECOMMENDED CUTTING CONDITIONS**

**G8A50 SERIES 2 FLUTE CORNER RADIUS - SLOTTING**

ISO	VDI 3323	Material Description	HRc	Ae	Ap	Parameter	Diameter (Ø)								
							0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	2
P	5	Non-alloy steel	32	1.0D	0.05D	SFM (vc)	155	205	260	310	410	495	520	570	685
						IPT (fz)	.0001	.0001	.0002	.0002	.0002	.0003	.0004	.0004	.0005
						RPM	50000	50000	50000	50000	50000	48000	42000	37000	33300
						IPM (feed)	8	9	15	19	24	30	31	31	34
	8-9	Low alloy steel	32-38	1.0D	0.05D	SFM (vc)	155	205	260	310	410	495	520	570	685
						IPT (fz)	.0001	.0001	.0002	.0002	.0002	.0003	.0004	.0004	.0005
						RPM	50000	50000	50000	50000	50000	48000	42000	37000	33300
						IPM (feed)	8	9	15	19	24	30	31	31	34
	11.1	High alloyed steel, and tool steel	35	1.0D	0.05D	SFM (vc)	155	205	260	310	410	495	520	570	685
						IPT (fz)	.0001	.0001	.0002	.0002	.0002	.0003	.0004	.0004	.0005
						RPM	50000	50000	50000	50000	50000	48000	42000	37000	33300
						IPM (feed)	8	9	15	19	24	30	31	31	34
	11.2	High alloyed steel, and tool steel	44	1.0D	0.05D	SFM (vc)	140	185	230	280	330	390	420	470	535
						IPT (fz)	.0001	.0001	.0001	.0002	.0002	.0003	.0004	.0004	.0005
						RPM	45000	45000	45000	45000	40000	38000	34000	30500	26000
						IPM (feed)	6	7	11	14	17	22	25	26	27
H	38.1	Hardened steel	45-49	1.0D	0.05D	SFM (vc)	140	185	230	280	330	390	420	470	535
						IPT (fz)	.0001	.0001	.0001	.0002	.0002	.0003	.0004	.0004	.0005
						RPM	45000	45000	45000	45000	40000	38000	34000	30500	26000
						IPM (feed)	6	7	11	14	17	22	25	26	27
	38.2	Hardened steel	50-55	1.0D	0.05D	SFM (vc)	125	165	205	245	245	265	280	325	360
						IPT (fz)	.0001	.0001	.0001	.0001	.0002	.0003	.0003	.0004	.0005
						RPM	40000	40000	40000	40000	30000	25500	22500	21000	17500
						IPM (feed)	5	6	9	11	12	14	15	16	17
	39.1	Hardened steel	56-60	1.0D	0.02D	SFM (vc)	100	135	170	185	205	210	245	265	300
						IPT (fz)	.0000	.0001	.0001	.0001	.0001	.0002	.0003	.0003	.0003
						RPM	33000	33000	33000	30000	25000	20500	20000	17000	14500
						IPM (feed)	3	4	6	6	7	9	10	10	10
	39.2	Hardened steel	61-65	1.0D	0.02D	SFM (vc)	75	105	130	155	155	165	180	200	225
						IPT (fz)	.0000	.0000	.0001	.0001	.0001	.0002	.0002	.0002	.0003
						RPM	25000	25000	25000	25000	19000	16000	14500	13000	11000
						IPM (feed)	2	2	3	4	4	5	6	6	6
40	Chilled Cast Iron	42	1.0D	0.05D	SFM (vc)	140	185	230	280	330	390	420	470	535	
					IPT (fz)	.0001	.0001	.0001	.0002	.0002	.0003	.0004	.0004	.0005	
					RPM	45000	45000	45000	45000	40000	38000	34000	30500	26000	
					IPM (feed)	6	7	11	14	17	22	25	26	27	
41	Hardened Cast Iron	55	1.0D	0.05D	SFM (vc)	125	165	205	245	245	265	280	325	360	
					IPT (fz)	.0001	.0001	.0001	.0001	.0002	.0003	.0003	.0004	.0005	
					RPM	40000	40000	40000	40000	30000	25500	22500	21000	17500	
					IPM (feed)	5	6	9	11	12	14	15	16	17	

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)

