



**X-POWER PRO  
END MILLS**

**RECOMMENDED CUTTING CONDITIONS**

**GM207** SERIES

**4FLUTE SQUARE - SIDE CUTTING**

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)								
						1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
P	1-4	Non-alloy steel	0.05D	2.0D	SFM(Vc)	160	165	190	180	180	200	210	180	195
					IPT(fz)	.0003	.0006	.0008	.0011	.0014	.0013	.0013	.0014	.0017
					RPM	4890	3360	2900	2200	1830	1530	1280	920	750
					IPM(FEED)	5	8	9	10	10	8	7	5	5
	5	Non-alloy steel	0.05D	2.0D	SFM(Vc)	130	130	150	140	150	170	160	145	155
					IPT(fz)	.0003	.0006	.0009	.0011	.0013	.0013	.0014	.0013	.0016
					RPM	3970	2650	2290	1710	1530	1300	980	740	590
					IPM(FEED)	4	6	8	8	8	7	5	4	4
	6-7	Low alloy steel	0.05D	2.0D	SFM(Vc)	160	165	190	180	180	200	210	180	195
					IPT(fz)	.0003	.0006	.0008	.0011	.0014	.0013	.0013	.0014	.0017
					RPM	4890	3360	2900	2200	1830	1530	1280	920	750
					IPM(FEED)	5	8	9	10	10	8	7	5	5
8-9	Low alloy steel	0.05D	2.0D	SFM(Vc)	130	130	150	140	150	170	160	145	155	
				IPT(fz)	.0003	.0006	.0009	.0011	.0013	.0013	.0014	.0013	.0016	
				RPM	3970	2650	2290	1710	1530	1300	980	740	590	
				IPM(FEED)	4	6	8	8	8	7	5	4	4	
10	High alloyed steel, and tool steel	0.05D	2.0D	SFM(Vc)	160	165	190	180	180	200	210	180	195	
				IPT(fz)	.0003	.0006	.0008	.0011	.0014	.0013	.0013	.0014	.0017	
				RPM	4890	3360	2900	2200	1830	1530	1280	920	750	
				IPM(FEED)	5	8	9	10	10	8	7	5	5	
11.1-11.2	High alloyed steel, and tool steel	0.05D	2.0D	SFM(Vc)	130	130	150	140	150	170	160	145	155	
				IPT(fz)	.0003	.0006	.0009	.0011	.0013	.0013	.0014	.0013	.0016	
				RPM	3970	2650	2290	1710	1530	1300	980	740	590	
				IPM(FEED)	4	6	8	8	8	7	5	4	4	
H	38.1-38.2	Hardened steel	0.02D	2.0D	SFM(Vc)	80	85	100	95	90	100	100	90	95
					IPT(fz)	.0002	.0004	.0006	.0008	.0011	.0010	.0011	.0011	.0014
					RPM	2450	1730	1530	1160	920	760	610	460	360
					IPM(FEED)	2	3	4	4	4	3	3	2	2
	40	Chilled Cast Iron	0.05D	2.0D	SFM(Vc)	130	130	150	140	150	170	160	145	155
					IPT(fz)	.0003	.0006	.0009	.0011	.0013	.0013	.0014	.0013	.0016
					RPM	3970	2650	2290	1710	1530	1300	980	740	590
					IPM(FEED)	4	6	8	8	8	7	5	4	4
	41	Hardened Cast Iron	0.02D	2.0D	SFM(Vc)	80	85	100	95	90	100	100	90	95
					IPT(fz)	.0002	.0004	.0006	.0008	.0011	.0010	.0011	.0011	.0014
					RPM	2450	1730	1530	1160	920	760	610	460	360
					IPM(FEED)	2	3	4	4	4	3	3	2	2

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)