



4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

GMF17 SERIES

4FLUTE BALL NOSE - PLANE

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)					
						1/8	3/16	1/4	5/16	3/8	1/2
P	1-8	Non-alloy steel Low alloy steel	0.05D	0.02D	SFM(Vc)	745	865	940	935	940	940
					IPT(fz)	.0022	.0032	.0040	.0046	.0049	.0055
					RPM	22700	17600	14400	11400	9600	7200
					IPM(FEED)	202	224	231	208	190	159
	9	Low alloy steel	0.05D	0.02D	SFM(Vc)	540	640	755	760	760	760
					IPT(fz)	.0022	.0029	.0036	.0043	.0046	.0051
					RPM	16540	13020	11530	9270	7720	5790
					IPM(FEED)	144	153	167	158	143	119
	10-11.1	High alloyed steel, and tool steel	0.08D	0.02D	SFM(Vc)	745	865	940	935	940	940
					IPT(fz)	.0022	.0032	.0040	.0046	.0049	.0055
					RPM	22700	17600	14400	11400	9600	7200
					IPM(FEED)	202	224	231	208	190	159
11.2	High alloyed steel, and tool steel	0.05D	0.02D	SFM(Vc)	540	640	755	760	760	760	
				IPT(fz)	.0022	.0029	.0036	.0043	.0046	.0051	
				RPM	16540	13020	11530	9270	7720	5790	
				IPM(FEED)	144	153	167	158	143	119	
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.05D	0.02D	SFM(Vc)	745	865	940	935	940	940
					IPT(fz)	.0022	.0032	.0040	.0046	.0049	.0055
					RPM	22700	17600	14400	11400	9600	7200
					IPM(FEED)	202	224	231	208	190	159
H	38.1-38.2	Hardened steel	0.05D	0.02D	SFM(Vc)	495	600	685	685	685	685
					IPT(fz)	.0022	.0029	.0034	.0040	.0042	.0043
					RPM	15120	12250	10490	8390	6990	5230
					IPM(FEED)	136	144	143	133	119	89
	40	Chilled Cast Iron	0.05D	0.02D	SFM(Vc)	540	640	755	760	760	760
					IPT(fz)	.0022	.0029	.0036	.0043	.0046	.0051
					RPM	16540	13020	11530	9270	7720	5790
					IPM(FEED)	144	153	167	158	143	119
	41	Hardened Cast Iron	0.05D	0.02D	SFM(Vc)	495	600	685	685	685	685
					IPT(fz)	.0022	.0029	.0034	.0040	.0042	.0043
					RPM	15120	12250	10490	8390	6990	5230
					IPM(FEED)	136	144	143	133	119	89

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)

