X-POWER PRO END MILLS

RECOMMENDED CUTTING CONDITIONS

GM103 SERIES

4FLUTE CORNER RADIUS - SIDE CUTTING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø) 3/8	1/2	5/8	3/4	7/8
P	1-4	Non-alloy steel	0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0026	.0034	.0038	.0039	.0039
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	87	87	78	66	56
	5		0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0016	.0021	.0026	.0031	.0036
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	53	53	53	53	53
	6-7	Low alloy steel	0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0026	.0034	.0038	.0039	.0039
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	87	87	78	66	56
	8-9		0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0016	.0021	.0026	.0031	.0036
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	53	53	53	53	53
	10	High alloyed steel, and tool steel	0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0026	.0034	.0038	.0039	.0039
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	87	87	78	66	56
	11.1-11.2		0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0016	.0021	.0026	.0031	.0036
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	53	53	53	53	53
M	12-14.2	Hardened steel	0.05D	1.5D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0016	.0021	.0026	.0032	.0037
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	40	40	40	40	40
K	38.1-38.2	Hardened steel	0.05D	1.5D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0013	.0017	.0021	.0025	.0030
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	32	32	32	32	32
	40	Chilled Cast Iron	0.05D	1.5D	SFM(Vc)	830	830	830	830	830
					IPT(fz)	.0016	.0021	.0026	.0031	.0036
					RPM	8460	6340	5070	4230	3620
					IPM(FEED)	53	53	53	53	53
	41	Hardened Cast Iron	0.05D	1.5D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0013	.0017	.0021	.0025	.0030
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	32	32	32	32	32

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)

X-POWER PRO END MILLS

RECOMMENDED CUTTING CONDITIONS

GM103 SERIES 4FLUTE CORNER RADIUS - CONTOURING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø) 3/8	1/2	5/8	3/4	7/8
P	1-4	Non-alloy steel	0.3D ~ 0.5D	0.1D	SFM(Vc)	830	830	830	1050	830
					IPT(fz)	.0015	.0020	.0024	.0023	.0034
					RPM	8460	6340	5070	5350	3620
					IPM(FEED)	50	50	50	50	50
	5		0.3D ~ 0.5D	0.1D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0016	.0021	.0026	.0032	.0037
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	40	40	40	40	40
	6-7	Low alloy steel	0.3D ~ 0.5D	0.1D	SFM(Vc)	830	830	830	1050	830
					IPT(fz)	.0015	.0020	.0024	.0023	.0034
					RPM	8460	6340	5070	5350	3620
					IPM(FEED)	50	50	50	50	50
	8-9		0.3D ~ 0.5D	0.1D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0016	.0021	.0026	.0032	.0037
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	40	40	40	40	40
	10	High alloyed steel, and tool steel	0.3D ~ 0.5D	0.1D	SFM(Vc)	830	830	830	1050	830
					IPT(fz)	.0015	.0020	.0024	.0023	.0034
					RPM	8460	6340	5070	5350	3620
					IPM(FEED)	50	50	50	50	50
	11.1-11.2		0.3D ~ 0.5D	0.1D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0016	.0021	.0026	.0032	.0037
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	40	40	40	40	40
M	12-14.2	Hardened steel	0.3D ~ 0.5D	0.1D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0014	.0018	.0023	.0027	.0032
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	34	34	34	34	34
K	38.1-38.2	Hardened steel	0.2D ~ 0.3D	0.05D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0008	.0011	.0013	.0016	.0019
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	20	20	20	20	20
	40	Chilled Cast Iron	0.2D ~ 0.3D	0.1D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0016	.0021	.0026	.0032	.0037
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	40	40	40	40	40
	41	Hardened Cast Iron	0.2D ~ 0.3D	0.05D	SFM(Vc)	615	615	615	615	610
					IPT(fz)	.0008	.0011	.0013	.0016	.0019
					RPM	6270	4700	3760	3130	2660
					IPM(FEED)	20	20	20	20	20

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)