

# 6 FLUTE & 6 FLUTE CORNER RADIUS

GMG12, GMG13, GMG14, GMG15, GMG16, GMG17, GMG18 & GMG19 Series

# CUTTING DATA

Side Cutting

Speed & Feed Recommendations				6	8	10	12	16	20	25	
Hardness (Brinell)	Work Materials	ap x D	ae x D								
P < 300	<b>CARBON STEEL</b> 1.1191(C45) 1.0726(35 S 20) 1.0715(9 SMN 28) 1.0718(9 SMNPB 28)	2*	0.05	Vc	300 (240-360)						
				RPM	15915	11937	9549	7958	5968	4775	3820
				Fz	0.068	0.116	0.144	0.173	0.202	0.225	0.232
				Feed	6494	8308	8251	8260	7234	6446	5317
P > 300 P < 380	<b>ALLOY STEEL</b> 1.2330(35 CRMO 4) 1.6565(40NICRMO6) 1.7033(34CR4) 1.6523(21 NICRMO2)	2*	0.05	Vc	203 (162-244)						
				RPM	10769	8077	6462	5385	4039	3231	2585
				Fz	0.05	0.085	0.106	0.128	0.149	0.167	0.174
				Feed	3231	4119	4110	4135	3610	3237	2698
P < 380	<b>TOOL STEEL</b> 1.2363(X100 CRMOV 5 1) 1.2379(X155 CRVMO 12 1) 1.2344(X40 CRMOV 5 1) 1.3243(S 6-5-2-5)	2*	0.05	Vc	100 (80-120)						
				RPM	5305	3979	3183	2653	1989	1592	1273
				Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.144
				Feed	1305	1695	1681	1671	1468	1308	1100
K < 260	<b>CAST IRON</b> 0.6020(GG20) 0.8145(GTS-45-06) 0.7060(GGG-60)	2*	0.05	Vc	203 (162-244)						
				RPM	10769	8077	6462	5385	4039	3231	2585
				Fz	0.05	0.085	0.106	0.128	0.149	0.167	0.174
				Feed	3231	4119	4110	4135	3610	3237	2698
M	<b>STAINLESS STEELS 300</b> 1.4301(X5 CRNI 18 10) 1.4436(X3 CRNIMO 17 13 3) 1.4306(X2 CRNI 19 11) 1.4435(X2 CRNIMO 18 14 3)	2*	0.05	Vc	147 (118-176)						
				RPM	7799	5849	4679	3899	2924	2340	1872
				Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.143
				Feed	1918	2492	2471	2457	2158	1923	1606
M	<b>STAINLESS STEELS 400</b> 1.4005(X12 CRS 13) 1.4104(X14 CRMOS 17)	2*	0.05	Vc	213 (170-256)						
				RPM	11300	8475	6780	5650	4238	3390	2712
				Fz	0.049	0.084	0.104	0.125	0.146	0.162	0.168
				Feed	3322	4271	4231	4238	3712	3295	2734
M	<b>STAINLESS STEELS(PH)</b> 1.4594(Z7 CNU 15.05)	2*	0.05	Vc	134 (107-161)						
				RPM	7109	5332	4265	3554	2666	2133	1706
				Fz	0.041	0.071	0.088	0.105	0.123	0.137	0.142
				Feed	1749	2271	2252	2239	1967	1753	1454
S	<b>TITANIUM</b> Ti6AL4V Ti5AL5V5MO Ti7AL4MO	2*	0.05	Vc	116 (100-125)						
				RPM	6154	4615	3692	3077	2308	1846	1477
				Fz	0.033	0.055	0.07	0.083	0.097	0.113	0.117
				Feed	1218	1523	1551	1532	1343	1252	1037
S	<b>HIGH TEMPERATURE ALLOY</b> INCONEL HASTELLOY, RENE	2*	0.05	Vc	33 (30-36)						
				RPM	1751	1313	1050	875	657	525	420
				Fz	0.033	0.055	0.07	0.082	0.097	0.112	0.115
				Feed	347	433	441	431	382	353	290



\* If length of cut is below 2D, it must be reduced to 90%

RPM: revolutions per minute Feed: mm per minute Vc: surface speed (metres per minute) Fz: feed per tooth