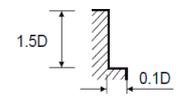
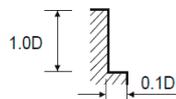


4 FLUTE END MILL

CUTTING DATA

G9F42, G9F82 & G9F84 Series

Material	Carbon, Alloy & Tool Steel				Alloy & Pre-Hardened Steel				Stainless Steel				Cast Iron			
Hardness	~ HRC30				HRC30 ~ HRC50				-				-			
Strength	~ 1000N/mm2				1000 ~ 1500N/mm2				-				-			
Dia.	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz
1.0	19000	160	60	0.002	11050	90	35	0.002	9350	80	29	0.002	20200	670	63	0.008
2.0	10650	260	67	0.006	6950	155	44	0.006	5800	130	36	0.006	10100	690	63	0.017
3.0	8200	290	77	0.009	5150	185	49	0.009	4250	155	40	0.009	6550	690	62	0.026
4.0	6950	525	87	0.019	4250	325	53	0.019	3550	260	45	0.018	4950	690	62	0.035
5.0	5800	550	91	0.024	3450	330	54	0.024	2900	275	46	0.024	3950	690	62	0.044
6.0	5100	605	96	0.030	3100	380	58	0.031	2600	300	49	0.029	3200	830	60	0.065
8.0	3850	655	97	0.043	2300	350	58	0.038	1950	325	49	0.042	2400	880	60	0.092
10.0	2950	560	93	0.047	1850	275	58	0.037	1500	275	47	0.046	2000	930	63	0.116
12.0	2550	475	96	0.047	1550	230	58	0.037	1250	220	47	0.044	1550	970	58	0.156
14.0	2250	425	99	0.047	1400	210	62	0.038	1150	205	51	0.045	1400	1020	62	0.182
16.0	2000	380	101	0.048	1250	185	63	0.037	1050	185	53	0.044	1200	1050	60	0.219
20.0	1550	290	97	0.047	950	145	60	0.038	750	140	47	0.047	950	1120	60	0.295



NOTE: For long & extra long types the feed should be reduced by around 50%.

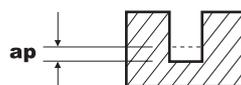
2 FLUTE, RIB PROCESSING

CUTTING DATA

G9F88 Series

Slotting

Material	Non-Alloyed Steel & Alloy Steel					Alloy Steel & Heat Resistant Steel				
Hardness	~ HRC 30					HRC 30 ~ HRC 45				
Strength	~ 1000N/mm ²					1000 ~ 1500N/mm ²				
Dia.	RPM	Feed	Vc	Fz	ap	RPM	Feed	Vc	Fz	ap
0.4	26500-34000	170-370	33-43	0.003-0.005	0.007-0.018	19000-24000	72-290	24-30	0.002-0.006	0.007-0.018
0.5	26500-34000	170-370	42-53	0.003-0.005	0.009-0.022	19000-24000	72-290	30-38	0.002-0.006	0.009-0.022
0.6	26500-34000	210-485	50-64	0.004-0.007	0.011-0.026	19000-24000	95-365	36-45	0.003-0.008	0.011-0.026
0.7	26500-34000	210-485	58-75	0.004-0.007	0.012-0.031	19000-24000	95-365	42-53	0.003-0.008	0.012-0.031
0.8	23000-30000	240-535	58-75	0.005-0.009	0.014-0.035	16500-21000	100-410	41-53	0.003-0.010	0.014-0.035
0.9	21500-27000	240-610	61-76	0.006-0.011	0.030-0.060	15000-19000	135-460	42-54	0.005-0.012	0.030-0.060
1	19000-24000	240-690	60-75	0.006-0.014	0.045-0.090	13500-17000	160-510	42-53	0.006-0.015	0.045-0.090
1.2	15500-19000	240-765	58-72	0.008-0.020	0.055-0.100	11000-14000	160-510	41-53	0.007-0.018	0.055-0.100
1.4	13600-17000	240-765	60-75	0.009-0.023	0.062-0.125	9800-12000	160-510	43-53	0.008-0.021	0.062-0.125
1.5	12500-15500	240-765	59-73	0.010-0.025	0.070-0.135	8950-11500	160-510	42-54	0.009-0.022	0.070-0.135
1.6	12000-15000	240-765	60-75	0.010-0.026	0.075-0.145	8700-10900	160-510	44-55	0.009-0.023	0.075-0.145
1.8	11000-14000	240-765	62-79	0.011-0.027	0.080-0.160	7800-9800	160-510	44-55	0.010-0.026	0.080-0.160
2	10000-12500	240-765	63-79	0.012-0.031	0.090-0.180	7000-8950	160-510	44-56	0.011-0.028	0.090-0.180
2.5	8000-10000	240-765	63-79	0.015-0.038	0.112-0.235	5700-7200	160-510	45-57	0.014-0.035	0.112-0.235
3	6800-8500	240-765	64-80	0.018-0.045	0.135-0.270	4700-6000	160-510	44-57	0.017-0.043	0.135-0.270
4	5100-6500	240-765	64-82	0.024-0.059	0.180-0.360	3500-4500	160-510	44-57	0.023-0.057	0.180-0.360



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