

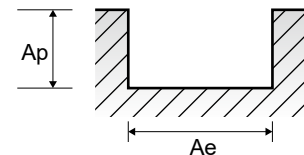
G8A01, G8A36 SERIES

2 FLUTE - SLOTTING

Vc = m/min.
 fz = mm/tooth
 RPM = rev./min.
 FEED = mm/min.

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)								
						0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.0	2.0
P	5	Non-alloy steel	1.0D	0.05D	Vc	30	45	65	80	95	125	140	150	210
					fz	0.001	0.002	0.002	0.004	0.005	0.006	0.007	0.01	0.013
					RPM	47746	47746	51725	50930	50399	49736	49515	47746	33423
					FEED	95	191	207	407	504	597	693	955	869
	8-9	Low alloy steel	1.0D	0.05D	Vc	30	45	65	80	95	125	140	150	210
					fz	0.001	0.002	0.002	0.004	0.005	0.006	0.007	0.01	0.013
					RPM	47746	47746	51725	50930	50399	49736	49515	47746	33423
					FEED	95	191	207	407	504	597	693	955	869
	11.1	High alloyed steel, and tool steel	1.0D	0.05D	Vc	30	45	65	80	95	125	140	150	210
					fz	0.001	0.002	0.002	0.004	0.005	0.006	0.007	0.01	0.013
					RPM	47746	47746	51725	50930	50399	49736	49515	47746	33423
					FEED	95	191	207	407	504	597	693	955	869
11.2	1.0D		0.05D	Vc	30	40	55	70	85	100	110	120	165	
				fz	0.001	0.002	0.002	0.003	0.004	0.006	0.007	0.008	0.013	
				RPM	47746	42441	43768	44563	45094	39789	38905	38197	26261	
				FEED	95	170	175	267	361	477	545	611	683	
H	38.1	Hardened steel	1.0D	0.05D	Vc	30	40	55	70	85	100	110	120	165
					fz	0.001	0.002	0.002	0.003	0.004	0.006	0.007	0.008	0.013
					RPM	47746	42441	43768	44563	45094	39789	38905	38197	26261
					FEED	95	170	175	267	361	477	545	611	683
	38.2		1.0D	0.05D	Vc	25	40	50	65	75	75	80	80	110
					fz	0.001	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.012
					RPM	39789	42441	39789	41380	39789	29842	28294	25465	17507
					FEED	80	85	159	248	318	298	340	357	420
	39.1		1.0D	0.05D	Vc	20	30	40	50	55	65	65	65	90
					fz	0.001	0.001	0.001	0.002	0.003	0.004	0.005	0.005	0.009
					RPM	31831	31831	31831	31831	29178	25863	22989	20690	14324
					FEED	64	64	64	127	175	207	230	207	258
	39.2		1.0D	0.05D	Vc	20	25	30	40	45	50	50	50	70
					fz	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.004	0.007
					RPM	31831	26526	23873	25465	23873	19894	17684	15915	11141
					FEED	64	53	48	102	95	119	141	127	156
	39.3		1.0D	0.02D	Vc	15	20	25	30	40	40	40	40	60
					fz	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.003	0.006
					RPM	23873	21221	19894	19099	21221	15915	14147	12732	9549
					FEED	29	38	40	57	81	83	91	87	116
	40	Chilled Cast Iron	1.0D	0.05D	Vc	30	40	55	70	85	100	110	120	165
					fz	0.001	0.002	0.002	0.003	0.004	0.006	0.007	0.008	0.013
					RPM	47746	42441	43768	44563	45094	39789	38905	38197	26261
					FEED	95	170	175	267	361	477	545	611	683
	41	Hardened Cast Iron	1.0D	0.05D	Vc	25	40	50	65	75	75	80	80	110
					fz	0.001	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.012
					RPM	39789	42441	39789	41380	39789	29842	28294	25465	17507
					FEED	80	85	159	248	318	298	340	357	420

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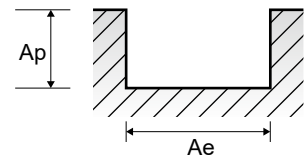
RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

G8A01, G8A36 SERIES 2 FLUTE - SLOTTING

Vc = m/min.
fz = mm/tooth
RPM = rev/min.
FEED = mm/min.

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)									
						3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	
P	5	Non-alloy steel	1.0D	0.05D	Vc	205	210	245	245	250	245	250	245	245	
					fz	0.019	0.026	0.032	0.036	0.047	0.054	0.064	0.074	0.085	
					RPM	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	827	869	998	936	935	842	849	721	663	
	8-9	Low alloy steel	1.0D	0.05D	Vc	205	210	245	245	250	245	250	245	245	
					fz	0.019	0.026	0.032	0.036	0.047	0.054	0.064	0.074	0.085	
					RPM	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	827	869	998	936	935	842	849	721	663	
	11.1	High alloyed steel, and tool steel	1.0D	0.05D	Vc	205	210	245	245	250	245	250	245	245	
					fz	0.019	0.026	0.032	0.036	0.047	0.054	0.064	0.074	0.085	
					RPM	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	827	869	998	936	935	842	849	721	663	
	11.2		1.0D	0.05D	Vc	165	165	195	195	195	195	200	195	195	
					fz	0.02	0.027	0.032	0.037	0.046	0.055	0.065	0.074	0.085	
					RPM	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	700	709	794	766	714	683	690	574	528	
H	38.1	Hardened steel	1.0D	0.05D	Vc	165	165	195	195	195	195	200	195	195	
					fz	0.02	0.027	0.032	0.037	0.046	0.055	0.065	0.074	0.085	
					RPM	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	700	709	794	766	714	683	690	574	528	
	38.2		1.0D	0.05D	Vc	110	110	130	130	130	130	130	130	130	
					fz	0.018	0.025	0.03	0.035	0.043	0.051	0.059	0.07	0.082	
					RPM	11671	8754	8276	6897	5173	4138	3448	2586	2069	
					FEED	420	438	497	483	445	422	407	362	339	
	39.1		1.0D	0.05D	Vc	90	90	100	100	100	100	100	100	100	
					fz	0.014	0.019	0.022	0.026	0.032	0.038	0.045	0.053	0.061	
					RPM	9549	7162	6366	5305	3979	3183	2653	1989	1592	
					FEED	267	272	280	276	255	242	239	211	194	
	39.2		1.0D	0.05D	Vc	70	70	80	80	80	80	80	80	80	
					fz	0.011	0.015	0.018	0.021	0.026	0.03	0.037	0.042	0.048	
					RPM	7427	5570	5093	4244	3183	2546	2122	1592	1273	
					FEED	163	167	183	178	166	153	157	134	122	
	39.3		1.0D	0.02D	Vc	60	60	70	70	70	70	70	70	70	
					fz	0.009	0.012	0.015	0.018	0.021	0.026	0.03	0.034	0.039	
					RPM	6366	4775	4456	3714	2785	2228	1857	1393	1114	
					FEED	115	118	132	131	119	114	112	94	86	
	40	Chilled Cast Iron	1.0D	0.05D	Vc	165	165	195	195	195	195	200	195	195	
					fz	0.02	0.027	0.032	0.037	0.046	0.055	0.065	0.074	0.085	
					RPM	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	700	709	794	766	714	683	690	574	528	
	41	Hardened Cast Iron	1.0D	0.05D	Vc	110	110	130	130	130	130	130	130	130	
					fz	0.018	0.025	0.03	0.035	0.043	0.051	0.059	0.07	0.082	
					RPM	11671	8754	8276	6897	5173	4138	3448	2586	2069	
					FEED	420	438	497	483	445	422	407	362	339	

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RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

G8A01, G8A36 SERIES 2 FLUTE - SIDE CUTTING

Vc = m/min.
fz = mm/tooth
RPM = rev/min.
FEED = mm/min.

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)											
						1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	
P	5	Non-alloy steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245	
					fz	0.011	0.018	0.028	0.037	0.046	0.052	0.067	0.077	0.09	0.107	0.122	
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	1050	1203	1218	1237	1435	1352	1333	1201	1194	1043	951	
	8-9	Low alloy steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245	
					fz	0.011	0.018	0.028	0.037	0.046	0.052	0.067	0.077	0.09	0.107	0.122	
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	1050	1203	1218	1237	1435	1352	1333	1201	1194	1043	951	
	11.1	High alloyed steel, and tool steel	0.03D	1.0D	Vc	150	210	205	210	245	245	250	245	250	245	245	
					fz	0.011	0.018	0.028	0.037	0.046	0.052	0.067	0.08	0.09	0.107	0.122	
					RPM	47746	33423	21751	16711	15597	12998	9947	7799	6631	4874	3899	
					FEED	1050	1203	1218	1237	1435	1352	1333	1248	1194	1043	951	
	11.2		0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195	
					fz	0.011	0.019	0.028	0.038	0.046	0.053	0.066	0.079	0.092	0.108	0.121	
					RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	840	998	980	998	1142	1097	1024	981	976	838	751	
H	38.1	Hardened steel	0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195	
					fz	0.011	0.019	0.028	0.038	0.046	0.053	0.066	0.079	0.092	0.108	0.121	
					RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	840	998	980	998	1142	1097	1024	981	976	838	751	
	38.2		0.03D	1.0D	Vc	80	110	110	110	130	130	130	130	130	130	130	
					fz	0.01	0.017	0.026	0.036	0.043	0.05	0.061	0.072	0.084	0.1	0.116	
					RPM	25465	17507	11671	8754	8276	6897	5173	4138	3448	2586	2069	
					FEED	509	595	607	630	712	690	631	596	579	517	480	
	39.1		0.03D	1.0D	Vc	65	90	90	90	100	100	100	100	100	100	100	
					fz	0.008	0.013	0.019	0.027	0.032	0.038	0.046	0.053	0.064	0.075	0.086	
					RPM	20690	14324	9549	7162	6366	5305	3979	3183	2653	1989	1592	
					FEED	331	372	363	387	407	403	366	337	340	298	274	
	39.2		0.03D	1.0D	Vc	50	70	70	70	80	80	80	80	80	80	80	
					fz	0.006	0.01	0.015	0.021	0.025	0.03	0.037	0.043	0.052	0.059	0.067	
					RPM	15915	11141	7427	5570	5093	4244	3183	2546	2122	1592	1273	
					FEED	191	223	223	234	255	255	236	219	221	188	171	
39.3		0.03D	1.0D	Vc	40	60	60	60	70	70	70	70	70	70	70		
				fz	0.005	0.009	0.013	0.018	0.021	0.025	0.03	0.036	0.043	0.05	0.057		
				RPM	12732	9549	6366	4775	4456	3714	2785	2228	1857	1393	1114		
				FEED	127	172	166	172	187	186	167	160	160	139	127		
40		Chilled Cast Iron	0.03D	1.0D	Vc	120	165	165	165	195	195	195	195	200	195	195	
					fz	0.011	0.019	0.028	0.038	0.046	0.053	0.066	0.079	0.092	0.108	0.121	
					RPM	38197	26261	17507	13130	12414	10345	7759	6207	5305	3879	3104	
					FEED	840	998	980	998	1142	1097	1024	981	976	838	751	
41		Hardened Cast Iron	0.03D	1.0D	Vc	80	110	110	110	130	130	130	130	130	130	130	
					fz	0.01	0.017	0.026	0.036	0.043	0.05	0.061	0.072	0.084	0.1	0.116	
					RPM	25465	17507	11671	8754	8276	6897	5173	4138	3448	2586	2069	
					FEED	509	595	607	630	712	690	631	596	579	517	480	