

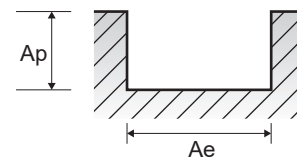
G9553, G9G46, G9410, G9425, G9G47, G9439

G9528, G9433, G9G48, G9447, G9G49 SERIES

3 FLUTE - SLOTTING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Mill Diameter (Ø)													
						1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0	
P	1-4	Non-alloy steel	1.0D	0.5D (Up to Ø3 : 0.2D)	Vc	45	60	50	55	65	70	70	70	70	70	75	75	70	
					fz	0.002	0.003	0.005	0.007	0.012	0.015	0.018	0.027	0.03	0.031	0.029	0.029	0.029	
					RPM	14324	12732	7958	5836	5173	4456	3714	2785	2228	1857	1705	1492	1114	
	5	Non-alloy steel	1.0D	0.5D (Up to Ø3 : 0.2D)	FEED	86	115	119	123	186	201	201	226	201	173	148	130	97	
					Vc	25	25	30	35	40	40	45	45	40	45	45	50	45	
					fz	0.002	0.004	0.005	0.007	0.012	0.014	0.02	0.024	0.023	0.022	0.022	0.023	0.024	
	6-7	Low alloy steel	1.0D	0.5D (Up to Ø3 : 0.2D)	RPM	7958	5305	4775	3714	3183	2546	2387	1790	1273	1194	1023	995	716	
					FEED	48	64	72	78	115	107	143	129	88	79	68	69	52	
					Vc	45	60	50	55	65	70	70	70	70	70	75	75	70	
	8-9	Low alloy steel	1.0D	0.5D (Up to Ø3 : 0.2D)	fz	0.002	0.004	0.005	0.007	0.012	0.014	0.02	0.024	0.023	0.022	0.022	0.023	0.024	
					RPM	7958	5305	4775	3714	3183	2546	2387	1790	1273	1194	1023	995	716	
					FEED	48	64	72	78	115	107	143	129	88	79	68	69	52	
10	High alloyed steel, and tool steel	1.0D	0.5D (Up to Ø3 : 0.2D)	Vc	45	60	50	55	65	70	70	70	70	70	75	75	70		
				fz	0.002	0.003	0.005	0.007	0.012	0.015	0.018	0.027	0.03	0.031	0.029	0.029	0.029		
				RPM	14324	12732	7958	5836	5173	4456	3714	2785	2228	1857	1705	1492	1114		
11.1 - 11.2	High alloyed steel, and tool steel	1.0D	0.5D (Up to Ø3 : 0.2D)	FEED	86	115	119	123	186	201	201	226	201	173	148	130	97		
				Vc	25	25	30	35	40	40	45	45	40	45	45	50	45		
				fz	0.002	0.004	0.005	0.007	0.012	0.014	0.02	0.024	0.023	0.022	0.022	0.023	0.024		
M	14.1	Stainless steel	1.0D	0.5D (Up to Ø3 : 0.2D)	RPM	7958	5305	4775	3714	3183	2546	2387	1790	1273	1194	1023	995	716	
					FEED	48	64	72	78	115	107	143	129	88	79	68	69	52	
					Vc	20	25	25	30	35	35	35	35	35	35	35	35	35	
	15-20	Grey cast iron Nodular cast iron Malleable cast iron	1.0D	1.0D	fz	0.002	0.003	0.004	0.007	0.011	0.015	0.019	0.025	0.028	0.026	0.027	0.031	0.03	
					RPM	6366	5305	3979	3183	2785	2228	1857	1393	1114	928	796	696	557	
					FEED	38	48	48	67	92	100	106	104	94	72	64	65	50	
	N	21~22	Aluminum-wrought alloy	1.0D	1.0D	Vc	140	130	140	145	140	145	145	145	140	145	145	140	
						fz	0.002	0.004	0.006	0.009	0.013	0.015	0.019	0.026	0.032	0.038	0.043	0.05	0.065
						RPM	44563	27587	22282	15385	11141	9231	7692	5769	4615	3714	3297	2885	2228
		23~25	Aluminum-cast, alloyed	1.0D	1.0D	FEED	267	331	401	415	434	415	438	450	443	423	425	433	434
						Vc	140	130	140	145	140	145	145	145	140	145	145	140	
						fz	0.002	0.004	0.006	0.009	0.013	0.015	0.019	0.026	0.032	0.038	0.043	0.05	0.065
26-28		Copper and Copper Alloys (Bronze / Brass)	1.0D	1.0D	RPM	44563	27587	22282	15385	11141	9231	7692	5769	4615	3714	3297	2885	2228	
					FEED	267	331	401	415	434	415	438	450	443	423	425	433	434	
					Vc	80	95	105	105	110	105	105	110	105	105	105	110	105	
29.1		Non Metallic Materials	1.0D	1.0D	fz	0.002	0.004	0.006	0.009	0.012	0.015	0.02	0.025	0.032	0.039	0.046	0.05	0.065	
					RPM	25465	20160	16711	11141	8754	6685	5570	4377	3342	2785	2387	2188	1671	
					FEED	153	242	301	301	315	301	334	328	321	326	329	328	326	
H	40	Chilled Cast Iron	1.0D	1.0D	Vc	25	25	30	35	40	40	45	45	40	45	45	50	45	
					fz	0.002	0.004	0.005	0.007	0.012	0.014	0.02	0.024	0.023	0.022	0.022	0.023	0.024	
					RPM	7958	5305	4775	3714	3183	2546	2387	1790	1273	1194	1023	995	716	
					FEED	48	64	72	78	115	107	143	129	88	79	68	69	52	
					Vc	20	25	25	30	35	35	35	35	35	35	35	35	35	

※ The FEED, in long & extra long types, should be reduced by around 50%



G9553, G9G46, G9410, G9425, G9G47, G9439

G9528, G9433, G9G48, G9447, G9G49 SERIES

3 FLUTE - SIDE CUTTING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Mill Diameter (Ø)												
						1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0
P	1-4	Non-alloy steel	0.1D	1.0D	Vc	55	55	60	70	80	85	90	90	85	90	90	95	90
					fz	0.002	0.005	0.006	0.009	0.019	0.024	0.03	0.042	0.047	0.047	0.047	0.048	0.047
					RPM	17507	11671	9549	7427	6366	5411	4775	3581	2706	2387	2046	1890	1432
	5	Non-alloy steel	0.1D	1.0D	FEED	105	175	172	201	363	390	430	451	381	337	289	272	202
					Vc	30	35	40	45	50	50	55	55	55	55	60	55	
					fz	0.002	0.004	0.006	0.009	0.019	0.024	0.031	0.038	0.038	0.037	0.037	0.038	0.037
	6-7	Low alloy steel	0.1D	1.0D	RPM	9549	7427	6366	4775	3979	3183	2918	2188	1751	1459	1251	1194	875
					FEED	57	89	115	129	227	229	271	249	200	162	139	136	97
					Vc	55	55	60	70	80	85	90	90	85	90	90	95	90
	8-9	Low alloy steel	0.1D	1.0D	fz	0.002	0.004	0.006	0.009	0.019	0.024	0.03	0.038	0.038	0.037	0.037	0.038	0.037
					RPM	17507	11671	9549	7427	6366	5411	4775	3581	2706	2387	2046	1890	1432
					FEED	105	175	172	201	363	390	430	451	381	337	289	272	202
10	High alloyed steel, and tool steel	0.1D	1.0D	Vc	55	55	60	70	80	85	90	90	85	90	90	95	90	
				fz	0.002	0.005	0.006	0.009	0.019	0.024	0.03	0.042	0.047	0.047	0.047	0.048	0.047	
				RPM	17507	11671	9549	7427	6366	5411	4775	3581	2706	2387	2046	1890	1432	
11.1 ~ 11.2	High alloyed steel, and tool steel	0.1D	1.0D	FEED	105	175	172	201	363	390	430	451	381	337	289	272	202	
				Vc	30	35	40	45	50	50	55	55	55	55	60	55		
				fz	0.002	0.004	0.006	0.009	0.019	0.024	0.031	0.038	0.038	0.037	0.037	0.038	0.037	
M	14.1	Stainless steel	0.1D	1.0D	RPM	9549	7427	6366	4775	3979	3183	2918	2188	1751	1459	1251	1194	875
					FEED	57	89	115	129	227	229	271	249	200	162	139	136	97
					Vc	25	35	35	35	40	40	45	45	45	45	45	45	45
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	0.1D	1.5D	fz	0.002	0.004	0.006	0.009	0.018	0.024	0.03	0.042	0.045	0.045	0.044	0.048	0.048
					RPM	7958	7427	5570	3714	3183	2546	2387	1790	1432	1194	1023	895	716
					FEED	48	89	100	100	172	183	215	226	193	161	135	129	103
N	21~22	Aluminum-wrought alloy	0.1D	1.5D	Vc	60	55	60	55	60	55	55	55	60	55	55	55	55
					fz	0.008	0.013	0.017	0.026	0.035	0.044	0.064	0.093	0.115	0.154	0.181	0.22	0.285
					RPM	19099	11671	9549	5836	4775	3501	2918	2188	1910	1459	1251	1094	875
	23~25	Aluminum-cast, alloyed	0.1D	1.5D	FEED	458	455	487	455	501	462	560	611	659	674	679	722	748
					Vc	140	130	140	145	140	145	145	145	145	140	145	145	140
					fz	0.006	0.01	0.016	0.021	0.031	0.037	0.048	0.064	0.08	0.098	0.111	0.129	0.167
	26-28	Copper and Copper Alloys (Bronze / Brass)	0.1D	1.5D	RPM	44563	27587	22282	15385	11141	9231	7692	5769	4615	3714	3297	2885	2228
					FEED	802	828	1070	969	1036	1025	1108	1108	1108	1092	1098	1116	1116
					Vc	80	95	105	105	110	105	105	110	105	105	105	110	105
	29.1	Non Metallic Materials	0.1D	1.5D	fz	0.006	0.011	0.016	0.023	0.029	0.037	0.048	0.063	0.081	0.096	0.115	0.125	0.162
					RPM	25465	20160	16711	11141	8754	6685	5570	4377	3342	2785	2387	2188	1671
					FEED	458	665	802	769	762	742	802	827	812	802	824	821	812
H	40	Chilled Cast Iron	0.1D	1.0D	Vc	30	35	40	45	50	50	55	55	55	55	60	55	
					fz	0.002	0.004	0.006	0.009	0.019	0.024	0.031	0.038	0.038	0.037	0.037	0.038	0.037
					RPM	9549	7427	6366	4775	3979	3183	2918	2188	1751	1459	1251	1194	875
					FEED	57	89	115	129	227	229	271	249	200	162	139	136	97