



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

G9B81 SERIES

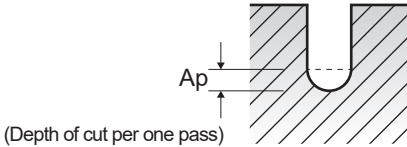
2 FLUTE BALL NOSE

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

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)				
				0.4	0.5	0.6	0.8	1.0
P	1-4	Non-alloy steel	Vc	33~43	41~53	50~64	66~85	77~97
			fz	0.003~0.006	0.003~0.006	0.004~0.008	0.004~0.008	0.004~0.010
			RPM	26350~34000	26350~34000	26350~34000	26350~34000	24650~31000
			FEED	150~415	150~415	190~535	190~535	210~595
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090
	5	Non-alloy steel	Vc	24~30	30~38	36~46	48~61	55~69
			fz	0.002~0.005	0.002~0.005	0.002~0.006	0.002~0.006	0.003~0.007
			RPM	19100~24200	19100~24200	19100~24200	19100~24200	17400~22100
			FEED	75~230	75~230	95~300	95~300	105~330
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090
	6-7	Low alloy steel	Vc	33~43	41~53	50~64	66~85	77~97
			fz	0.003~0.006	0.003~0.006	0.004~0.008	0.004~0.008	0.004~0.010
			RPM	26350~34000	26350~34000	26350~34000	26350~34000	24650~31000
			FEED	150~415	150~415	190~535	190~535	210~595
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090
	8-9	Low alloy steel	Vc	24~30	30~38	36~46	48~61	55~69
			fz	0.002~0.005	0.002~0.005	0.002~0.006	0.002~0.006	0.003~0.007
			RPM	19100~24200	19100~24200	19100~24200	19100~24200	17400~22100
			FEED	75~230	75~230	95~300	95~300	105~330
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090
	10	High alloyed steel, and tool steel	Vc	33~43	41~53	50~64	66~85	77~97
			fz	0.003~0.006	0.003~0.006	0.004~0.008	0.004~0.008	0.004~0.010
			RPM	26350~34000	26350~34000	26350~34000	26350~34000	24650~31000
			FEED	150~415	150~415	190~535	190~535	210~595
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090
	11.1 - 11.2	High alloyed steel, and tool steel	Vc	24~30	30~38	36~46	48~61	55~69
			fz	0.002~0.005	0.002~0.005	0.002~0.006	0.002~0.006	0.003~0.007
			RPM	19100~24200	19100~24200	19100~24200	19100~24200	17400~22100
			FEED	75~230	75~230	95~300	95~300	105~330
			Ap	0.018~0.036	0.023~0.045	0.027~0.054	0.036~0.072	0.045~0.090

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

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FEED = mm/min
Ap = mm

VDI 3323	Parameter	Diameter (Ø)							
		1.2	1.4	1.5	1.6	1.8	2.0	3.0	4.0
1-4	Vc	77~98	79~97	75~97	78~101	82~103	82~101	85~104	90~117
	fz	0.005~0.013	0.006~0.015	0.007~0.016	0.007~0.017	0.007~0.018	0.008~0.021	0.012~0.030	0.015~0.036
	RPM	20500~26000	18000~22000	16000~20500	15500~20000	14500~18200	13000~16000	9000~11000	7200~9350
	FEED	210~665	210~665	210~665	210~665	210~665	210~665	210~665	210~665
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360
5	Vc	55~69	56~67	54~70	56~70	58~72	59~72	57~108	63~83
	fz	0.004~0.009	0.004~0.011	0.005~0.011	0.005~0.012	0.005~0.013	0.006~0.014	0.009~0.014	0.011~0.025
	RPM	14500~18300	12800~15300	11500~14900	11200~14000	10200~12800	9400~11500	6000~11500	5000~6600
	FEED	105~330	105~330	105~330	105~330	105~330	105~330	105~330	105~330
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360
6-7	Vc	77~98	79~97	75~97	78~101	82~103	82~101	85~104	90~117
	fz	0.005~0.013	0.006~0.015	0.007~0.016	0.007~0.017	0.007~0.018	0.008~0.021	0.012~0.030	0.015~0.036
	RPM	20500~26000	18000~22000	16000~20500	15500~20000	14500~18200	13000~16000	9000~11000	7200~9350
	FEED	210~665	210~665	210~665	210~665	210~665	210~665	210~665	210~665
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360
8-9	Vc	55~69	56~67	54~70	56~70	58~72	59~72	57~108	63~83
	fz	0.004~0.009	0.004~0.011	0.005~0.011	0.005~0.012	0.005~0.013	0.006~0.014	0.009~0.014	0.011~0.025
	RPM	14500~18300	12800~15300	11500~14900	11200~14000	10200~12800	9400~11500	6000~11500	5000~6600
	FEED	105~330	105~330	105~330	105~330	105~330	105~330	105~330	105~330
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360
10	Vc	77~98	79~97	75~97	78~101	82~103	82~101	85~104	90~117
	fz	0.005~0.013	0.006~0.015	0.007~0.016	0.007~0.017	0.007~0.018	0.008~0.021	0.012~0.030	0.015~0.036
	RPM	20500~26000	18000~22000	16000~20500	15500~20000	14500~18200	13000~16000	9000~11000	7200~9350
	FEED	210~665	210~665	210~665	210~665	210~665	210~665	210~665	210~665
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360
11.1 - 11.2	Vc	55~69	56~67	54~70	56~70	58~72	59~72	57~108	63~83
	fz	0.004~0.009	0.004~0.011	0.005~0.011	0.005~0.012	0.005~0.013	0.006~0.014	0.009~0.014	0.011~0.025
	RPM	14500~18300	12800~15300	11500~14900	11200~14000	10200~12800	9400~11500	6000~11500	5000~6600
	FEED	105~330	105~330	105~330	105~330	105~330	105~330	105~330	105~330
	Ap	0.055~0.100	0.062~0.125	0.070~0.135	0.075~0.145	0.080~0.160	0.090~0.180	0.135~0.270	0.180~0.360

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