

RECOMMENDED CUTTING CONDITIONS

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

G9F44 / G9J56 SERIES					2 FLUTE BALL NOSE											fz = (mm/tooth) RPM = (rev./min.) FEED = (mm/min.)	
ISO	VDI 3323	Material Description	Ae(mm)	Ap(mm)	Parameter	Diameter (Ø)											
						2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0		
P	1-4	Non-alloy steel	0.2D	D1~D6 =0.2mm D8~D20 =0.3mm	Vc	84	116	121	132	148	166	185	204	221	242		
					fz	0.026	0.025	0.035	0.045	0.060	0.089	0.122	0.150	0.181	0.200		
					RPM	13350	12300	9650	8400	7850	6600	5900	5400	4400	3850		
					FEED	690	620	680	755	940	1180	1435	1620	1590	1540		
	5		0.2D	Vc	62	87	97	105	120	133	148	160	173	188			
				fz	0.023	0.023	0.031	0.040	0.060	0.080	0.100	0.121	0.141	0.159			
				RPM	9900	9250	7700	6700	6350	5300	4700	4250	3450	3000			
				FEED	450	420	485	530	760	850	940	1026	975	955			
	6-7	Low alloy steel	0.2D	Vc	84	116	121	132	148	166	185	204	221	242			
				fz	0.026	0.025	0.035	0.045	0.060	0.089	0.122	0.150	0.181	0.200			
				RPM	13350	12300	9650	8400	7850	6600	5900	5400	4400	3850			
				FEED	690	620	680	755	940	1180	1435	1620	1590	1540			
	8-9		0.2D	Vc	62	87	97	105	120	133	148	160	173	188			
				fz	0.023	0.023	0.031	0.040	0.060	0.080	0.100	0.121	0.141	0.159			
				RPM	9900	9250	7700	6700	6350	5300	4700	4250	3450	3000			
				FEED	450	420	485	530	760	850	940	1026	975	955			
	10	High alloyed steel, and tool steel	0.2D	Vc	84	116	121	132	148	166	185	204	221	242			
				fz	0.026	0.025	0.035	0.045	0.060	0.089	0.122	0.150	0.181	0.200			
				RPM	13350	12300	9650	8400	7850	6600	5900	5400	4400	3850			
				FEED	690	620	680	755	940	1180	1435	1620	1590	1540			
	11.1 11.2		0.2D	Vc	62	87	97	105	120	133	148	160	173	188			
				fz	0.023	0.023	0.031	0.040	0.060	0.080	0.100	0.121	0.141	0.159			
				RPM	9900	9250	7700	6700	6350	5300	4700	4250	3450	3000			
				FEED	450	420	485	530	760	850	940	1026	975	955			
K	15-16	Grey cast iron	0.7D	0.3D	Vc	71	72	70	71	69	68	69	72	70	72		
					fz	0.011	0.016	0.028	0.039	0.053	0.092	0.113	0.130	0.177	0.196		
					RPM	11350	7600	5550	4500	3650	2700	2200	1900	1400	1150		
					FEED	240	250	310	355	390	495	495	495	495	450		
	17-18	Nodular cast iron	0.7D	0.3D	Vc	71	72	70	71	69	68	69	72	70	72		
					fz	0.011	0.016	0.028	0.039	0.053	0.092	0.113	0.130	0.177	0.196		
					RPM	11350	7600	5550	4500	3650	2700	2200	1900	1400	1150		
					FEED	240	250	310	355	390	495	495	495	495	450		
	19-20	Malleable cast iron	0.7D	0.3D	Vc	71	72	70	71	69	68	69	72	70	72		
					fz	0.011	0.016	0.028	0.039	0.053	0.092	0.113	0.130	0.177	0.196		
					RPM	11350	7600	5550	4500	3650	2700	2200	1900	1400	1150		
					FEED	240	250	310	355	390	495	495	495	495	450		
H	38.1	Hardened steel	0.2D	D1~D6 =0.2mm D8~D20 =0.3mm	Vc	62	87	97	105	120	133	148	160	173	188		
					fz	0.023	0.023	0.031	0.040	0.060	0.080	0.100	0.121	0.141	0.159		
					RPM	9900	9250	7700	6700	6350	5300	4700	4250	3450	3000		
					FEED	450	420	485	530	760	850	940	1026	975	955		
	38.2		0.2D	Vc	27	39	49	53	55	55	60	60	63	66			
				fz	0.016	0.016	0.021	0.024	0.029	0.047	0.054	0.070	0.090	0.107			
				RPM	4300	4100	3900	3350	2900	2200	1900	1600	1250	1050			
				FEED	135	135	160	160	170	205	205	225	225	225			
	40	Chilled Cast Iron	0.2D	D1~D6 =0.2mm D8~D20 =0.3mm	Vc	62	87	97	105	120	133	148	160	173	188		
					fz	0.023	0.023	0.031	0.040	0.060	0.080	0.100	0.121	0.141	0.159		
					RPM	9900	9250	7700	6700	6350	5300	4700	4250	3450	3000		
					FEED	450	420	485	530	760	850	940	1026	975	955		
	41	Hardened Cast Iron	0.2D	D1~D6 =0.2mm D8~D20 =0.3mm	Vc	27	39	49	53	55	55	60	60	63	66		
					fz	0.016	0.016	0.021	0.024	0.029	0.047	0.054	0.070	0.090	0.107		
					RPM	4300	4100	3900	3350	2900	2200	1900	1600	1250	1050		
					FEED	135	135	160	160	170	205	205	225	225	225		

SUPER HARDENED
HSS END MILL

COATED CARBIDE END MILL
FOR GENERAL

COATED CARBIDE END MILL
FOR HEAVY CUTTING

COATED CARBIDE END MILL
FOR HARDENED MATERIAL

COATED CARBIDE DRILL
FOR GENERAL

