



K-2 END MILLS

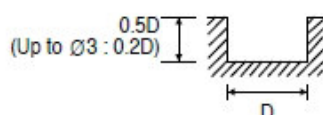
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 3 FLUTE FINISH SLOTTING

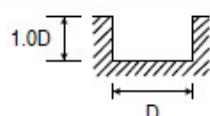
VOLLHARTMETALL, 3 SCHNEIDEN SCHLICHTEN NUTENFRÄSEN

G9553, G9G46, G9410, G9425, G9G47, G9439, G9528, G9433, G9G48, G9447, G9G49 SERIES

MATERIAL	P								M			
	NON-ALLOYED STEELS ALLOY STEELS TOOL STEELS				ALLOY STEELS HEAT RESISTANT STEELS				STAINLESS STEELS			
HARDNESS	~ HRc 30				HRc 30 ~ HRc 45							
STRENGTH	~1000N/mm ²				1000~1500N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
1.0	14300	75	45	0.002	8500	45	25	0.002	7150	35	20	0.002
1.5	12750	105	60	0.003	5550	60	25	0.004	5600	55	25	0.003
2.0	7850	110	50	0.005	5150	70	30	0.005	4300	55	25	0.004
3.0	6100	125	55	0.007	3800	85	35	0.007	3150	70	30	0.007
4.0	5150	180	65	0.012	3150	110	40	0.012	2650	90	35	0.011
5.0	4300	190	70	0.015	2550	110	40	0.014	2150	95	35	0.015
6.0	3800	210	70	0.018	2300	135	45	0.020	1950	110	35	0.019
8.0	2850	230	70	0.027	1700	120	45	0.024	1450	110	35	0.025
10.0	2200	195	70	0.030	1350	95	40	0.023	1150	95	35	0.028
12.0	1850	170	70	0.031	1150	75	45	0.022	950	75	35	0.026
14.0	1700	150	75	0.029	1050	70	45	0.022	850	70	35	0.027
16.0	1500	130	75	0.029	950	65	50	0.023	700	65	35	0.031
20.0	1150	100	70	0.029	700	50	45	0.024	550	50	35	0.030



MATERIAL	K				N							
	CAST IRON				ALUMINUM ALLOYS				COPPER, BRASS NON-FERROUS METALS			
HARDNESS												
STRENGTH												
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
1.0	18700	185	60	0.003	44000	300	140	0.002	24700	180	80	0.002
1.5	12100	185	55	0.005	27500	345	130	0.004	20300	270	95	0.004
2.0	9350	200	60	0.007	22000	420	140	0.006	16500	310	105	0.006
3.0	6050	200	55	0.011	15400	430	145	0.009	11000	310	105	0.009
4.0	4600	185	60	0.013	11000	420	140	0.013	8800	310	110	0.012
5.0	3650	200	55	0.018	9150	420	145	0.015	6800	310	105	0.015
6.0	2950	230	55	0.026	7600	440	145	0.019	5700	340	105	0.020
8.0	2200	240	55	0.036	5700	440	145	0.026	4400	330	110	0.025
10.0	1850	255	60	0.046	4600	440	145	0.032	3400	330	105	0.032
12.0	1450	275	55	0.063	3750	430	140	0.038	2850	330	105	0.039
14.0	1300	285	55	0.073	3300	430	145	0.043	2400	330	105	0.046
16.0	1100	285	55	0.086	2850	430	145	0.050	2200	330	110	0.050
20.0	900	310	55	0.115	2200	430	140	0.065	1700	330	105	0.065



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

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



K-2 END MILLS

RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 3 FLUTE FINISH SIDE CUTTING VOLLHARTMETALL, 3 SCHNEIDEN SCHLICHTEN SEITENFRÄSEN

G9553, G9G46, G9410, G9425, G9G47, G9439, G9528, G9433, G9G48, G9447, G9G49 SERIES

MATERIAL	P								M			
	NON-ALLOYED STEELS ALLOY STEELS TOOL STEELS				ALLOY STEELS HEAT RESISTANT STEELS				STAINLESS STEELS			
HARDNESS	~ HRc 30				HRc 30 ~ HRc 45							
STRENGTH	~1000N/mm ²				1000~1500N/mm ²							
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
1.0	17600	110	55	0.002	10250	65	30	0.002	8650	55	25	0.002
1.5	11800	160	55	0.005	7050	85	35	0.004	7050	90	35	0.004
2.0	9850	180	60	0.006	6450	120	40	0.006	5350	100	35	0.006
3.0	7800	205	70	0.009	4750	130	45	0.009	3950	105	35	0.009
4.0	6450	365	80	0.019	3950	220	50	0.019	3300	180	40	0.018
5.0	5350	385	85	0.024	3200	230	50	0.024	2700	195	40	0.024
6.0	4750	425	90	0.030	2850	265	55	0.031	2400	215	45	0.030
8.0	3550	450	90	0.042	2150	245	55	0.038	1800	225	45	0.042
10.0	2750	390	85	0.047	1700	195	55	0.038	1450	195	45	0.045
12.0	2350	330	90	0.047	1450	160	55	0.037	1150	155	45	0.045
14.0	2100	465	90	0.074	1300	145	55	0.037	1050	140	45	0.044
16.0	1850	265	95	0.048	1150	130	60	0.038	900	130	45	0.048
20.0	1450	205	90	0.047	900	100	55	0.037	700	100	45	0.048



MATERIAL	K				N							
	CAST IRON				ALUMINUM ALLOYS				COPPER, BRASS NON-FERROUS METALS			
HARDNESS												
STRENGTH												
DIAMETER	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz	RPM	FEED	Vc	fz
1.0	18700	460	60	0.008	44000	750	140	0.006	24700	450	80	0.006
1.5	12100	460	55	0.013	27500	860	130	0.010	20300	675	95	0.011
2.0	9350	475	60	0.017	22000	1035	140	0.016	16500	770	105	0.016
3.0	6050	475	55	0.026	15400	990	145	0.021	11000	760	105	0.023
4.0	4600	485	60	0.035	11000	1035	140	0.031	8800	770	110	0.029
5.0	3650	485	55	0.044	8150	1010	145	0.037	6800	760	105	0.037
6.0	2950	570	55	0.064	7600	1100	145	0.048	5700	825	105	0.048
8.0	2200	615	55	0.093	5700	1100	145	0.064	4400	825	110	0.063
10.0	1850	640	60	0.115	4600	1100	145	0.080	3400	825	105	0.081
12.0	1450	670	55	0.154	3750	1100	140	0.098	2850	825	105	0.096
14.0	1300	705	55	0.181	3300	1100	145	0.111	2400	825	105	0.115
16.0	1100	725	55	0.220	2850	1100	145	0.129	2200	825	110	0.125
20.0	900	770	55	0.285	2200	1100	140	0.167	1700	825	105	0.162



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

RPM = rev./min.
FEED = mm/min.
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