

DIXI 7305



ROUTING

	VDI 3323		CARBIDE Vc [m/min]	DLC Vc [m/min]	ae (mm)	ap (mm)	
N	Wrought aluminium alloy < 12% Si (DIBOND)	21 - 22		330	380	<0.3×ØD1	<0.5×ØD1
	Plastics with good machinability (expanded PVC)	29		400	460	<0.5×ØD1	<1×ØD1
	Plastics with moderate machinability (PETG, PPH, PC, PE-PP)	29		400	460	<0.4×ØD1	<1×ØD1
	Plastics with difficult machinability (compact PVC, black PMMA)	29		400	460	<0.3×ØD1	<1×ØD1
	Wood	30		400	460	<0.3×ØD1	<1×ØD1
	Glued wood (agglomerated, plywood)	30		400	460	<0.3×ØD1	<1×ØD1

$$n [\text{rpm}] = \frac{V_c [\text{m/min}] \times 1000}{\pi \times D_1 [\text{mm}]}$$

$$V_f [\text{mm/min}] = n [\text{rpm}] \times f_z [\text{mm}] \times Z$$

Feed per tooth $f_z [\text{mm}]$

$\emptyset D_1$ 1 - 1.50	$\emptyset D_1$ 2.00 - 3.00	$\emptyset D_1$ 4.00 - 5.00	$\emptyset D_1$ 6.00 - 8.00	$\emptyset D_1$ 10.00 - 12.00
0.018 - 0.027	0.036 - 0.054	0.062 - 0.080	0.070 - 0.100	0.110 - 0.130
0.030 - 0.045	0.060 - 0.090	0.104 - 0.130	0.120 - 0.160	0.180 - 0.220
0.027 - 0.041	0.054 - 0.081	0.094 - 0.115	0.110 - 0.140	0.160 - 0.190
0.024 - 0.036	0.048 - 0.072	0.084 - 0.105	0.100 - 0.130	0.140 - 0.170
0.030 - 0.045	0.060 - 0.090	0.104 - 0.130	0.120 - 0.160	0.180 - 0.220
0.021 - 0.032	0.042 - 0.063	0.072 - 0.090	0.080 - 0.110	0.130 - 0.150

SLOTTING

	VDI 3323		CARBIDE Vc [m/min]	DLC Vc [m/min]	ae (mm)	ap (mm)	
N	Wrought aluminium alloy < 12% Si (DIBOND)	21 - 22		330	380	1×ØD1	<0.5×ØD1
	Plastics with good machinability (expanded PVC)	29		400	460	1×ØD1	<1×ØD1
	Plastics with moderate machinability (PETG, PPH, PC, PE-PP)	29		400	460	1×ØD1	<1×ØD1
	Plastics with difficult machinability (compact PVC, black PMMA)	29		400	460	1×ØD1	<1×ØD1
	Wood	30		400	460	1×ØD1	<1×ØD1
	Glued wood (agglomerated, plywood)	30		400	460	1×ØD1	<1×ØD1

Feed per tooth $f_z [\text{mm}]$

$\emptyset D_1$ 1 - 1.50	$\emptyset D_1$ 2.00 - 3.00	$\emptyset D_1$ 4.00 - 5.00	$\emptyset D_1$ 6.00 - 8.00	$\emptyset D_1$ 10.00 - 12.00
0.005 - 0.007	0.007 - 0.011	0.012 - 0.015	0.017 - 0.023	0.026 - 0.032
0.008 - 0.012	0.012 - 0.018	0.020 - 0.025	0.029 - 0.038	0.044 - 0.053
0.006 - 0.010	0.010 - 0.014	0.016 - 0.020	0.023 - 0.031	0.035 - 0.042
0.006 - 0.008	0.008 - 0.013	0.014 - 0.020	0.020 - 0.027	0.031 - 0.037
0.008 - 0.012	0.012 - 0.018	0.020 - 0.025	0.029 - 0.038	0.044 - 0.053
0.006 - 0.008	0.008 - 0.013	0.014 - 0.020	0.020 - 0.027	0.031 - 0.037

Values based on dry use. The cutting parameters are very strongly influenced by external parameters, such as tool and workpiece stability, etc. The cutting conditions must be adapted to the operating conditions !