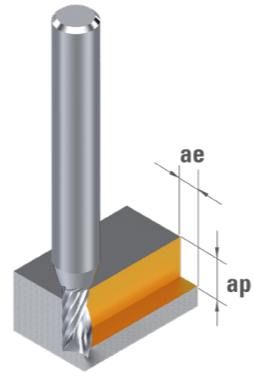


ROUTING

	VDI 3323		CARBIDE	DLC	ae	ap
			Vc [m/min]	Vc [m/min]	(mm)	(mm)
Wrought aluminium alloy < 12% Si	21 - 22		250	330	<1×ØD1	<1×ØD1
Cast aluminium alloy >12% Si	23 - 35		200	260	<1×ØD1	<1×ØD1
Copper alloy good machinability with Pb	26		275	360	<1×ØD1	<1×ØD1
Copper alloy with difficult machinability	27 - 28		150	200	<1×ØD1	<0.5×ØD1
Gold, silver	-		150	200	<1×ØD1	<0.5×ØD1

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

$$Vf \text{ [mm/min]} = n \text{ [rpm]} \times fz \text{ [mm]} \times Z$$

				Feed per tooth	fz [mm]
Ø D ₁ 2.00 - 3.00	Ø D ₁ 4.00 - 5.00	Ø D ₁ 6.00 - 8.00	Ø D ₁ 10.00 - 12.00		
0.045 - 0.068	0.090 - 0.112	0.125 - 0.160	0.180 - 0.200		
0.030 - 0.045	0.060 - 0.076	0.085 - 0.100	0.120 - 0.130		
0.036 - 0.054	0.072 - 0.090	0.100 - 0.120	0.140 - 0.160		
0.024 - 0.036	0.048 - 0.060	0.065 - 0.080	0.100 - 0.110		
0.024 - 0.036	0.048 - 0.060	0.065 - 0.080	0.100 - 0.110		

Values based on cutting oil 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 !