



ROUTING

		VDI 3323		DIXI 7215 Vc [m/min]	DIXI 715 - FC Vc [m/min]	ae (mm)	ap (mm)
N	Wrought aluminium alloy < 12% Si	21 - 22		475	620	<0.4×ØD1	<1×L1
	Cast aluminium alloy >12% Si	23 - 25		200	260	<1×ØD1	<1.3×ØD1
	Copper alloy good machinability with Pb	26		200	260	<0.4×ØD1	<1×L1
	Copper alloy with difficult machinability	27 - 28		140	180	<0.4×ØD1	<1×L1
	Gold, silver	-		200	325	<0.4×ØD1	<1×L1

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

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

Feed per tooth **fz [mm]**

Ø D ₁ 4.00 - 6.00	Ø D ₁ 8.00 - 10.00	Ø D ₁ 12.00 - 16.00
0.058 - 0.086	0.115 - 0.140	0.170 - 0.230
0.048 - 0.072	0.095 - 0.120	0.140 - 0.190
0.048 - 0.072	0.095 - 0.120	0.140 - 0.190
0.038 - 0.058	0.075 - 0.100	0.120 - 0.150
0.038 - 0.058	0.075 - 0.100	0.120 - 0.150

SLOTTING

		VDI 3323		DIXI 7215 Vc [m/min]	DIXI 715 - FC Vc [m/min]	ae (mm)	ap (mm)
N	Wrought aluminium alloy < 12% Si	21 - 22		380	490	1×ØD1	<1.5×ØD1
	Cast aluminium alloy >12% Si	23 - 25		160	210	1×ØD1	<1.3×ØD1
	Copper alloy good machinability with Pb	26		160	210	1×ØD1	<1.5×ØD1
	Copper alloy with difficult machinability	27 - 28		110	150	1×ØD1	<1×ØD1
	Gold, silver	-		200	260	1×ØD1	<1×ØD1

Feed per tooth **fz [mm]**

Ø D ₁ 4.00 - 6.00	Ø D ₁ 8.00 - 10.00	Ø D ₁ 12.00 - 16.00
0.044 - 0.064	0.085 - 0.110	0.130 - 0.170
0.036 - 0.054	0.070 - 0.090	0.110 - 0.140
0.036 - 0.054	0.070 - 0.090	0.110 - 0.140
0.029 - 0.044	0.055 - 0.080	0.090 - 0.110
0.029 - 0.044	0.055 - 0.080	0.090 - 0.110

RAMPING

		VDI 3323		DIXI 7215 Vc [m/min]	DIXI 715 - FC Vc [m/min]	max. depth (mm)	Ramp angle α
N	Wrought aluminium alloy < 12% Si	21 - 22		380	490	<1×ØD1	<1.5×ØD1
	Cast aluminium alloy >12% Si	23 - 25		160	210	<1×ØD1	<1.3×ØD1
	Copper alloy good machinability with Pb	26		160	210	<1×ØD1	<1.5×ØD1
	Copper alloy with difficult machinability	27 - 28		110	150	<1×ØD1	<1×ØD1
	Gold, silver	-		200	260	<1×ØD1	<1×ØD1

Feed per tooth **fz [mm]**

Ø D ₁ 4.00 - 6.00	Ø D ₁ 8.00 - 10.00	Ø D ₁ 12.00 - 16.00
0.044 - 0.064	0.085 - 0.110	0.130 - 0.170
0.036 - 0.054	0.070 - 0.090	0.110 - 0.140
0.036 - 0.054	0.070 - 0.090	0.110 - 0.140
0.029 - 0.044	0.055 - 0.080	0.090 - 0.110
0.029 - 0.044	0.055 - 0.080	0.090 - 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 !