DIXI 1537

CUTTING CONDITIONS

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

$$Vf\ [mm/min] = n\ [tr/min] \times fz\ [mm] \times z$$

Material to be machined			CUTINOX Vc [m/min]		Feed per tooth fz [mm] Ø D_1 50	Ø D_1 63	Ø D_1 80	Ø D_1 100
P	High alloyed steel	700 – 1500 N/mm²	**100**	150	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008
M	Stainless steel	400 – 700 N/mm²	**250**	400	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008
M	DUPLEX stainless steel	> 800 N/mm²	**100**	150	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008	**0.002** - 0.008

DIXI 1539

Material to be machined			CARBIDE Vc [m/min]		Feed per tooth fz [mm] Ø D_1 15 - 30	Ø D_1 30 - 40	Ø D_1 40 - 50
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**80**	140	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**50**	80	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
P	Lead alloyed cutting steel		**120**	160	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
P	High alloyed steel	700 – 1500 N/mm²	**50**	80	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
M	Stainless steel	400 – 700 N/mm²	**80**	120	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
M	DUPLEX stainless steel	> 800 N/mm²	**50**	80	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**80**	140	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
K	Nodular ferritic cast iron / Malleable cast iron		**50**	80	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	30	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
S	Titanium, titanium alloys		**30**	70	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
N	Copper alloys - easy to machine (brass - bronze)		**200**	450	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**150**	300	**0.0003** - 0.002	**0.0003** - 0.002	**0.0003** - 0.002