

Recommended Cutting Conditions

(mm)

Workpiece Material		Heat Resistant Alloys Inconel718 etc.		Titanium Alloys Ti-6Al-4V etc.	
DC	L/D	Revolution n (min ⁻¹)	Feed fr (Min.—Max.) (mm/rev.)	Revolution n (min ⁻¹)	Feed fr (Min.—Max.) (mm/rev.)
3	≤ 3	1000	0.06 (0.04—0.10)	4200	0.08 (0.06—0.12)
4	≤ 3	790	0.06 (0.04—0.10)	3100	0.10 (0.08—0.16)
5	≤ 3	760	0.08 (0.06—0.12)	2500	0.12 (0.08—0.20)
6	≤ 3	790	0.10 (0.08—0.15)	2100	0.14 (0.10—0.20)
8	≤ 3	590	0.10 (0.08—0.15)	1600	0.18 (0.15—0.25)
10	≤ 3	570	0.10 (0.08—0.15)	1300	0.22 (0.18—0.28)
12	≤ 3	530	0.12 (0.08—0.15)	1100	0.24 (0.20—0.30)

Note 1) Spindle through & high pressure coolant system is recommended to make stable holes.

Note 2) Emulsion type of water-soluble coolant is recommended.

Note 3) In non water-insoluble coolant, reduce the cutting speed by 10%-20%.

Note 4) When drilling length of DCx1 or more with the use of external coolant system, step drilling is recommended in every DCx0.5 to encourage chips to break.