RECOMMENDED CUTTING CONDITIONS

Work Material	Mild Steel (≤180HB) AISI 1010 etc			Carbon steel, Alloy steel (180－280HB) AISI 1045, AISI 4140 etc			Carbon steel, Alloy steel (280－350HB) AISI 4340 etc		
Drill Dia. (mm)	Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)		Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)		Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)	
3.2	6400	0.1	(0.06－0.13)	5900	0.1	(0.06－0.13)	5400	0.09	(0.06－0.12)
4.0	5500	0.12	(0.08－0.16)	5100	0.12	(0.08－0.16)	4700	0.11	(0.07－0.14)
5.0	4400	0.15	(0.10－0.20)	4100	0.15	(0.10－0.20)	3800	0.14	(0.09－0.18)
6.3	4000	0.2	(0.13－0.26)	3700	0.2	(0.13－0.26)	3500	0.18	(0.11－0.24)
8.0	3300	0.23	(0.18－0.28)	3100	0.23	(0.18－0.28)	2900	0.21	(0.16－0.25)
10.0	2800	0.27	(0.22－0.32)	2700	0.27	(0.22－0.32)	2500	0.23	(0.19－0.27)
12.0	2500	0.31	(0.28－0.34)	2300	0.31	(0.28－0.34)	2200	0.26	(0.23－0.29)
16.0	1900	0.33	(0.28－0.38)	1700	0.33	(0.28－0.38)	1600	0.29	(0.24－0.33)
20.0	1500	0.35	(0.30－0.40)	1400	0.35	(0.30－0.40)	1300	0.3	(0.26－0.34)

Work Material	Austenitic Stainless Steel (≤200HB) AISI 304, AISI 316 etc			Gray Cast Iron (≤350MPa) No 45 B etc			Ductile Cast Iron (≤450MPa) 60-40-8 etc		
Drill Dia. (mm)	Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)		Revolution (min^{-1})	Feed rate (min.—max.) (mm/rev)		Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)	
3.2	1900	0.07	(0.05－0.08)	6900	0.1	(0.06－0.13)	6400	0.1	(0.06－0.13)
4.0	1500	0.08	(0.06－0.10)	5500	0.12	(0.08－0.16)	5100	0.12	(0.08－0.16)
5.0	1200	0.1	(0.07－0.13)	4400	0.15	(0.10－0.20)	4100	0.15	(0.10－0.20)
6.3	1200	0.13	(0.09－0.17)	3700	0.2	(0.13－0.26)	3500	0.2	(0.13－0.26)
8.0	900	0.14	(0.10－0.18)	2900	0.25	(0.18－0.31)	2700	0.23	(0.18－0.28)
10.0	700	0.16	(0.12－0.19)	2300	0.29	(0.22－0.35)	2200	0.27	(0.22－0.32)
12.0	600	0.18	(0.15－0.20)	2100	0.33	(0.28－0.37)	1900	0.31	(0.28－0.34)
16.0	400	0.19	(0.15－0.23)	1500	0.35	(0.28－0.42)	1400	0.33	(0.28－0.38)
20.0	300	0.2	(0.15－0.24)	1300	0.37	(0.30－0.44)	1200	0.35	(0.30－0.40)

Work Material	Aluminium Alloy (Si<5%)			Heat Resistant Alloy Inconel718 etc			Hardened Steel (40－55HRC) AISI H13, L6 etc		
Drill Dia. (mm)	Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)		Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)		Revolution (min^{-1})	Feed rate (Min.—Max.) (mm/rev)	
3.2	7900	0.1	(0.06－0.13)	1900	0.07	(0.05－0.09)	1900	0.07	(0.05－0.09)
4.0	6300	0.12	(0.08－0.16)	1500	0.09	(0.06－0.11)	1500	0.09	(0.06－0.11)
5.0	5000	0.15	(0.10－0.20)	1200	0.11	(0.08－0.14)	1200	0.11	(0.08－0.14)
6.3	4500	0.2	(0.13－0.26)	1200	0.14	(0.09－0.19)	1200	0.14	(0.09－0.19)
8.0	3500	0.23	(0.18－0.28)	900	0.14	(0.11－0.17)	900	0.14	(0.11－0.17)
10.0	2800	0.27	(0.22－0.32)	700	0.16	(0.12－0.19)	700	0.16	(0.12－0.19)
12.0	2600	0.31	(0.28－0.34)	600	0.16	(0.13－0.18)	600	0.16	(0.13－0.18)
16.0	1900	0.33	(0.28－0.38)	400	0.18	(0.14－0.21)	400	0.18	(0.14－0.21)
20.0	1700	0.35	(0.30－0.40)	400	0.19	(0.15－0.22)	400	0.19	(0.15－0.22)