

Recommended Cutting Parameters for Drilling Tools

GZD Series Twist Drill (Internal Cooling Type)

3D 5D

Processed Material	Mild Steel (HB≤180)		Carbon Steel/ Alloy Steel (~30HRC)		Stainless Steel					
					Austenite Series		Martensitic Series		Ferrite Series	
Cutting Speed	80~150 m/min		80~150 m/min		40~80 m/min		50~100 m/min		60~120 m/min	
Diameter (mm)	Rotational Speed (min-1)	Feed Rate (mm/r)	Rotational Speed (min-1)	Feed Rate (mm/r)	Rotational Speed (min-1)	Feed Rate (mm/r)	Rotational Speed (min-1)	Feed Rate (mm/r)	Rotational Speed (min-1)	Feed Rate (mm/r)
3	12700	(0.09~0.12)	12700	(0.09~0.12)	6300	(0.03~0.07)	7400	(0.03~0.07)	9000	(0.03~0.07)
4	9600	(0.10~0.15)	9600	(0.10~0.15)	4700	(0.04~0.08)	5600	(0.04~0.08)	6700	(0.04~0.08)
5	7600	(0.12~0.18)	7600	(0.12~0.18)	3800	(0.05~0.10)	4500	(0.05~0.10)	5400	(0.05~0.10)
6	6400	(0.14~0.20)	6400	(0.14~0.20)	3200	(0.06~0.12)	3700	(0.06~0.12)	4500	(0.06~0.12)
8	4800	(0.16~0.24)	4800	(0.16~0.24)	2400	(0.08~0.16)	2800	(0.08~0.16)	3400	(0.08~0.16)
10	3800	(0.18~0.27)	3800	(0.18~0.27)	1900	(0.10~0.18)	2200	(0.10~0.18)	2700	(0.10~0.18)
12	3200	(0.20~0.30)	3200	(0.20~0.30)	1600	(0.12~0.20)	1900	(0.12~0.20)	2300	(0.12~0.20)
14	2700	(0.22~0.35)	2700	(0.22~0.35)	1350	(0.13~0.22)	1600	(0.13~0.22)	1900	(0.13~0.22)
16	2400	(0.25~0.36)	2400	(0.25~0.36)	1200	(0.14~0.25)	1400	(0.14~0.25)	1700	(0.14~0.25)
18	2100	(0.28~0.38)	2100	(0.28~0.38)	1050	(0.15~0.28)	1200	(0.15~0.28)	1500	(0.15~0.28)
20	1900	(0.30~0.40)	1900	(0.30~0.40)	950	(0.16~0.30)	1100	(0.16~0.30)	1350	(0.16~0.30)