

MAGIC DRILLS - JOBBER & STUB LENGTH

RPM : rev/min. FEED : mm/min

Cutting Condition																
RTDJ30 / RTDJ50 / RTDJ80																
Material	Non Alloy Steels		Alloy Steels		Soft Grey Cast Iron		Hard Grey Cast Iron		Stainless Steels		Al-Si Alloys, Si<10%		Al-Si Alloys, Si>10%		Ti, Ni Alloys Steels	
Strength	< 700 N/mm		< 1000 N/mm		<HB240,GG25		<HB300,GG40									
Drilling Speed	65~75 m/min		45~55 m/min		80~100 m/min		50~70 m/min		30~40 m/min		150~170 m/min		110~130 m/min		33~38 m/min	
Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1.0	23,000	0.030	17,200	0.030	32,000	0.040	23,000	0.040	12,000	0.040	54,000	0.050	42,000	0.050	11,800	0.020
2.0	11,500	0.040	8,600	0.040	16,000	0.050	11,500	0.050	6,000	0.030	27,000	0.060	21,000	0.060	5,900	0.030
3.0	7,800	0.050	5,750	0.050	10,500	0.060	7,600	0.060	4,000	0.040	18,000	0.070	14,000	0.070	3,900	0.040
4.0	5,800	0.060	4,300	0.060	7,800	0.070	5,700	0.070	3,000	0.050	13,000	0.080	10,500	0.080	2,950	0.050
5.0	4,700	0.070	3,450	0.070	6,200	0.080	4,550	0.080	2,400	0.060	10,500	0.090	8,500	0.090	2,350	0.060
6.0	3,900	0.080	2,850	0.080	5,200	0.090	3,800	0.090	2,000	0.070	8,800	0.110	7,100	0.110	1,950	0.070
7.0	3,350	0.090	2,450	0.090	4,500	0.100	3,250	0.100	1,700	0.080	7,600	0.130	6,100	0.130	1,700	0.080
8.0	2,900	0.100	2,150	0.100	3,900	0.120	2,850	0.120	1,500	0.090	6,600	0.150	5,350	0.150	1,450	0.090
9.0	2,600	0.110	1,900	0.110	3,450	0.140	2,550	0.140	1,350	0.100	5,900	0.170	4,750	0.170	1,300	0.100
10.0	2,350	0.120	1,700	0.120	3,100	0.160	2,300	0.160	1,200	0.110	5,300	0.190	4,250	0.190	1,200	0.110
11.0	2,150	0.130	1,600	0.130	2,850	0.180	2,100	0.180	1,100	0.120	4,850	0.210	3,900	0.210	1,050	0.120
12.0	1,950	0.140	1,450	0.140	2,600	0.200	1,900	0.200	1,000	0.130	4,450	0.230	3,550	0.230	980	0.130
13.0	1,800	0.160	1,350	0.160	2,400	0.200	1,750	0.200	950	0.130	4,100	0.250	3,300	0.250	905	0.130

Recommended to reduce the feed rate as following,
 Feed 100%: RTDJ30
 Feed 85%: RTDJ50
 Feed 70%: RTDJ80

N=R.P.M
 S=Feed per Revolution(mm/rev.)