

MAGIC DRILLS - GENERAL

RPM : rev./min FEED : mm/min

Cutting Condition								
RTDG30/RTDG30/RTDG50								
Material	Tool Steels/Alloy Steels < 700 N/mm		Alloy Steels / Prehardened Steels < 1000 N/mm		Soft Grey Cast Iron < HB240,GG25		Hard Grey Cast Iron <HB300,GG40	
Drilling Speed	Ø1.0 ~ Ø2.9 : 40~80 m/min Ø3.0 ~ : 100~120 m/min		Ø1.0 ~ Ø2.9 : 35~70 m/min Ø3.0 ~ : 85~105 m/min		Ø1.0 ~ Ø2.9 : 60~130 m/min Ø3.0 ~ : 180~200 m/min		Ø1.0 ~ Ø2.9 : 40~90 m/min Ø3.0 ~ : 110~130 m/min	
Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1.0	13,000	0.040	11,250	0.040	21,300	0.040	14,200	0.040
2.0	13,000	0.060	11,250	0.060	21,300	0.060	14,200	0.060
3.0	13,000	0.013	11,000	0.130	21,000	0.130	14,000	0.130
4.0	9,500	0.014	8,400	0.140	16,000	0.140	10,500	0.140
5.0	7,600	0.150	6,700	0.150	13,000	0.150	8,300	0.150
6.0	6,400	0.170	5,600	0.170	11,000	0.170	6,900	0.170
7.0	5,500	0.190	4,800	0.190	9,100	0.190	5,900	0.190
8.0	4,800	0.210	4,200	0.210	8,000	0.210	5,200	0.210
9.0	4,200	0.230	3,700	0.230	7,100	0.230	4,600	0.230
10.0	3,800	0.250	3,350	0.250	6,400	0.250	4,150	0.250
12.0	3,200	0.270	2,800	0.270	5,300	0.270	3,450	0.270
14.0	2,750	0.290	2,400	0.290	4,550	0.290	3,000	0.290
16.0	2,400	0.310	2,100	0.310	4,000	0.310	2,600	0.310
18.0	2,100	0.330	1,850	0.330	3,550	0.330	2,300	0.330
20.0	1,900	0.350	1,650	0.350	3,200	0.350	2,100	0.350

RTDG31/RTDG51/RTDG81								
Material	Tool Steels/Alloy Steels < 700 N/mm		Alloy Steels / Prehardened Steels < 1000 N/mm		Soft Grey Cast Iron < HB240,GG25		Hard Grey Cast Iron <HB300,GG40	
Drilling Speed	Ø1.0 ~ Ø2.9 : 40~80 m/min Ø3.0 ~ : 100~120 m/min		Ø1.0 ~ Ø2.9 : 35~70 m/min Ø3.0 ~ : 85~105 m/min		Ø1.0 ~ Ø2.9 : 60~130 m/min Ø3.0 ~ : 180~200 m/min		Ø1.0 ~ Ø2.9 : 40~90 m/min Ø3.0 ~ : 110~130 m/min	
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2.0	13,000	0.060	11,250	0.060	21,300	0.060	14,200	0.060
3.0	13,000	0.013	11,000	0.130	21,000	0.130	14,000	0.130
4.0	9,500	0.014	8,400	0.140	16,000	0.140	10,500	0.140
5.0	7,600	0.150	6,700	0.150	13,000	0.150	8,300	0.150
6.0	6,400	0.170	5,600	0.170	11,000	0.170	6,900	0.170
7.0	5,500	0.190	4,800	0.190	9,100	0.190	5,900	0.190
8.0	4,800	0.210	4,200	0.210	8,000	0.210	5,200	0.210
9.0	4,200	0.230	3,700	0.230	7,100	0.230	4,600	0.230
10.0	3,800	0.250	3,350	0.250	6,400	0.250	4,150	0.250
12.0	3,200	0.270	2,800	0.270	5,300	0.270	3,450	0.270
14.0	2,750	0.290	2,400	0.290	4,550	0.290	3,000	0.290
16.0	2,400	0.310	2,100	0.310	4,000	0.310	2,600	0.310
18.0	2,100	0.330	1,850	0.330	3,550	0.330	2,300	0.330
20.0	1,900	0.350	1,650	0.350	3,200	0.350	2,100	0.350