

MAGIC DRILLS - SUS

ECO-CUT

WIDE-CUT

HARD-CUT

ALU-CUT

D-CUT

SUS CUT

MAGIC DRILLS

RPM : rev/min. FEED : mm/min

Cutting Condition														
RTDS31/RTDS51/RTDS81														
Material	Stainless Steels		Stainless Steels		Aluminium		Aluminium		Titanium Ti Alloys		Carbon Steels Alloy Steels		Non Ferrous	
Strength	< 800 N/mm		< 800 N/mm		< 10% Si		>10% Si							
Drilling Speed	60~70 m/min		35~45 m/min		200~220 m/min		155~175 m/min		40~50 m/min		105~125 m/min		130~150 m/min	
Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1.0	12,000	0.020	6,200	0.020	48,000	0.040	38,000	0.030	8,100	0.010	26,000	0.020	38,000	0.020
1.5	9,000	0.030	5,400	0.020	43,000	0.050	32,000	0.040	7,500	0.010	18,000	0.030	25,500	0.030
2.5	7,000	0.040	4,200	0.030	25,500	0.080	19,500	0.060	4,500	0.020	10,800	0.050	15,500	0.050
3.0	7,400	0.040	4,700	0.020	23,000	0.120	18,500	0.100	5,300	0.030	13,000	0.040	16,000	0.080
4.0	5,600	0.050	3,600	0.030	17,500	0.180	13,900	0.150	4,000	0.040	10,000	0.050	11,900	0.100
5.0	4,400	0.050	2,800	0.030	14,000	0.200	11,000	0.180	3,200	0.050	8,000	0.050	9,500	0.120
6.0	3,700	0.060	2,400	0.040	11,700	0.250	9,300	0.250	2,650	0.060	6,600	0.060	8,000	0.150
8.0	2,800	0.080	1,800	0.060	8,800	0.300	7,000	0.300	2,000	0.070	5,000	0.080	6,000	0.180
10.0	2,200	0.100	1,400	0.080	7,000	0.400	5,600	0.350	1,600	0.080	4,000	0.100	4,800	0.220
12.0	1,900	0.120	1,200	0.100	5,800	0.500	4,600	0.400	1,300	0.100	3,300	0.120	4,000	0.260
14.0	1,600	0.150	1,000	0.120	5,000	0.600	4,000	0.500	1,100	0.120	2,800	0.150	3,400	0.300
16.0	1,400	0.200	900	0.150	4,380	0.800	3,500	0.600	1,000	0.140	2,500	0.200	3,000	0.400
18.0	1,250	0.220	800	0.170	3,900	1.000	3,100	0.700	900	0.160	2,200	0.220	2,650	0.450
20.0	1,120	0.240	720	0.190	3,500	1.200	2,800	0.800	800	0.180	2,000	0.240	2,400	0.500

Recommended to reduce the feed rate as following,

Feed 100%: RTDS31

Feed 85%: RTDS51

Feed 70%: RTDS81

N=R.P.M

S=Feed per Revolution(mm/rev.)