

DREAM DRILL-HIGH FEED, THROUGH COOLANT

DGR493 & DGR495 Series

CUTTING DATA

DRILLING

MATERIAL	CARBON STEELS & ALLOY STEELS			ALLOY STEELS			CAST IRON			DUCTILE CAST IRON		
Hardness	~ HRc 20			HRc 20 ~ 35			-			-		
Drilling Speed	110 m/min			75 m/min			100 m/min			80 m/min		
Diameter	RPM	FEED		RPM	FEED		RPM	FEED		RPM	FEED	
		Min.	Max.		Min.	Max.		Min.	Max.		Min.	Max.
5	6370	0.2	0.25	4780	0.2	0.25	6370	0.23	0.3	5100	0.2	0.25
6	5310	0.24	0.3	3980	0.24	0.3	5310	0.27	0.36	4250	0.24	0.3
7	4550	0.28	0.35	3420	0.28	0.35	4550	0.32	0.42	3640	0.28	0.35
8	3980	0.32	0.4	2990	0.32	0.4	3980	0.36	0.48	3190	0.32	0.4
9	3540	0.36	0.45	2660	0.36	0.45	3540	0.41	0.54	2840	0.36	0.45
10	3190	0.4	0.5	2390	0.4	0.5	3190	0.45	0.6	2550	0.4	0.5
12	2660	0.48	0.6	2000	0.48	0.54	2660	0.54	0.72	2130	0.48	0.6
14	2280	0.56	0.7	1710	0.56	0.63	2280	0.63	0.84	1820	0.56	0.7
16	1990	0.56	0.72	1500	0.56	0.64	1990	0.64	0.8	1600	0.56	0.72
18	1770	0.63	0.81	1330	0.63	0.72	1770	0.72	0.9	1420	0.63	0.81
20	1600	0.7	0.88	1190	0.68	0.81	1600	0.8	0.98	1280	0.7	0.9

DREAM DRILL-FLAT BOTTOM

DPP447 Series

CUTTING DATA

DRILLING

MATERIAL	STRUCTURAL STEELS		CARBON STEELS & ALLOY STEELS		PREHARDENED STEEL		HARDENED STEEL		STAINLESS STEEL		CAST IRON		ALUMINIUM	
Strength	-		< HB225		HRc 30 ~ 40		HRc 40 ~ 50		~ HB200		-		-	
Drilling Speed	80 mm/min		70 mm/min		38 mm/min		25 mm/min		30 mm/min		68 mm/min		165 mm/min	
Diameter	RPM	Feed	RPM	Feed	RPM	Feed	RPM	Feed	RPM	Feed	RPM	Feed	RPM	Feed
4	6250	0.07	5410	0.07	2940	0.06	2100	0.04	2380	0.03	5410	0.06	13130	0.08
5	5040	0.08	4360	0.08	2310	0.08	1680	0.05	1910	0.04	4360	0.07	10500	0.1
6	4200	0.1	3630	0.1	1890	0.09	1370	0.06	1590	0.05	3630	0.09	8930	0.12
8	3150	0.14	2730	0.13	1470	0.12	1050	0.08	1190	0.06	2730	0.12	6670	0.16
10	2520	0.17	2160	0.17	1160	0.15	840	0.1	955	0.08	2160	0.15	5360	0.2
12	2100	0.21	1790	0.21	1000	0.18	690	0.12	796	0.1	1790	0.18	4470	0.24
16	1580	0.28	1370	0.28	740	0.24	530	0.16	597	0.12	1370	0.24	3360	0.32
20	1260	0.35	1110	0.34	580	0.31	420	0.2	477	0.15	1110	0.3	2680	0.4

PLEASE NOTE:

- ▶ The cutting conditions are for 2xD.
- ▶ A rigid and precise machine and holder are required.
- ▶ The recommended depth of hole is measured from the highest point of the hole on drilling in inclined and angled surfaces.
- ▶ Please decrease cutting speed as material hardness increases.
- ▶ Only use for drilling. Do not use for side milling, traversing & helical milling.
- ▶ The recommended cutting conditions are those for drilling on flat and horizontal surfaces.

CUTTING CONDITION ADJUSTMENT ACCORDING TO SURFACE ANGLE		
Surface Angle	RPM	Feed
0° ~ 15°	100%	100%
15° ~ 30°	100%	50%
30° ~	70%	30%

RPM: revolutions per minute Feed: mm per minute

