

**DREAM DRILL-ALU, THROUGH COOLANT**

D5432, D5433 & D5434 Series

**CUTTING DATA**

DRILLING

MATERIAL	ALUMINIUM ALLOY CASTING & ALUMINIUM DIE CASTING			WROUGHT ALUMINIUM ALLOYS			
	Diameter	RPM	Speed	Feed	RPM	Speed	Feed
<b>3 ~ 6</b>		8,000~15,000	80~150	0.2~0.5	8,000~15,000	80~150	0.15~0.3
<b>6.1 ~ 10</b>		6,000~10,500	100~200	0.3~1.0	6,000~10,500	100~200	0.2~0.4
<b>10.1 ~ 14</b>		4,500~5,800	150~250	0.3~1.0	4,500~5,800	150~250	0.2~0.4
<b>14.1 ~ 20</b>		3,200~4,600	150~200	0.3~1.0	3,200~4,600	150~200	0.2~0.4

**DREAM DRILL-MQL, THROUGH COOLANT**

DH510, DH515, DH520, DHM15 & DHM20 Series

**CUTTING DATA**

DRILLING

MATERIAL	CARBON STEEL & ALLOY STEELS		CAST IRON		DUCTILE CAST IRON	
	Hardness	~ 1060 N/mm <sup>2</sup>	250 ~ 350 N/mm <sup>2</sup>		400 ~ 500 N/mm <sup>2</sup>	
Drilling Speed	63 ~ 125 mm/min		63 ~ 125 mm/min		60 ~ 80 mm/min	
Diameter	RPM	Feed	RPM	Feed	RPM	Feed
<b>3</b>	7500	0.06~0.12	7500	0.06~0.12	7500	0.06~0.12
<b>4</b>	6400	0.08~0.16	6400	0.08~0.16	5600	0.08~0.16
<b>5</b>	5800	0.10~0.20	5800	0.10~0.20	4500	0.10~0.20
<b>6</b>	4800	0.12~0.24	4800	0.12~0.24	3800	0.12~0.24
<b>8</b>	3600	0.16~0.28	3600	0.16~0.28	2800	0.16~0.28
<b>10</b>	2900	0.20~0.35	2900	0.20~0.35	2300	0.20~0.35
<b>12</b>	2400	0.24~0.42	2400	0.24~0.42	1900	0.24~0.42
<b>14</b>	2050	0.28~0.46	2050	0.28~0.46	1600	0.28~0.46

**DHM25 & DHM30 Series**

DRILLING

MATERIAL	CARBON STEEL & ALLOY STEELS		CAST IRON		DUCTILE CAST IRON	
	Hardness	~ 1060 N/mm <sup>2</sup>	250 ~ 350 N/mm <sup>2</sup>		400 ~ 500 N/mm <sup>2</sup>	
Drilling Speed	50 ~ 110 mm/min		50 ~ 110 mm/min		40 ~ 70 mm/min	
Diameter	RPM	Feed	RPM	Feed	RPM	Feed
<b>3</b>	6400	0.06~0.12	6400	0.06~0.12	6400	0.06~0.12
<b>4</b>	5500	0.08~0.16	5500	0.08~0.16	4700	0.08~0.16
<b>5</b>	4900	0.10~0.20	4900	0.10~0.20	3800	0.10~0.20
<b>6</b>	4200	0.12~0.24	4200	0.12~0.24	3200	0.12~0.24
<b>8</b>	3000	0.16~0.28	3000	0.16~0.28	2400	0.16~0.28
<b>10</b>	2500	0.20~0.35	2500	0.20~0.35	1900	0.20~0.35

**PLEASE NOTE:** follow these guidelines when MQL drilling.

1. Guide Drilling should be done as Diameter+0.1mm between 3xD and 5xD.
2. For Main Drilling, proceed with low RPM at Guide Drilling segment. (RPM 300, FEED 400mm/min)
3. Just before the end of Guide Drilling segment, reduce feed to zero and increase the rpm according to Recommended Cutting Condition.
4. After then, proceed main drilling by increasing feed without step drilling.
5. When coming out from Guide Drilling start point after drilling, RPM should be reduced as 300 and feed should be 1000 mm/min.
6. When coming out from Guide Drilling segment to the outside, the feed should be decreased as 50%.

**RPM:** revolutions per minute **Feed:** mm per minute

