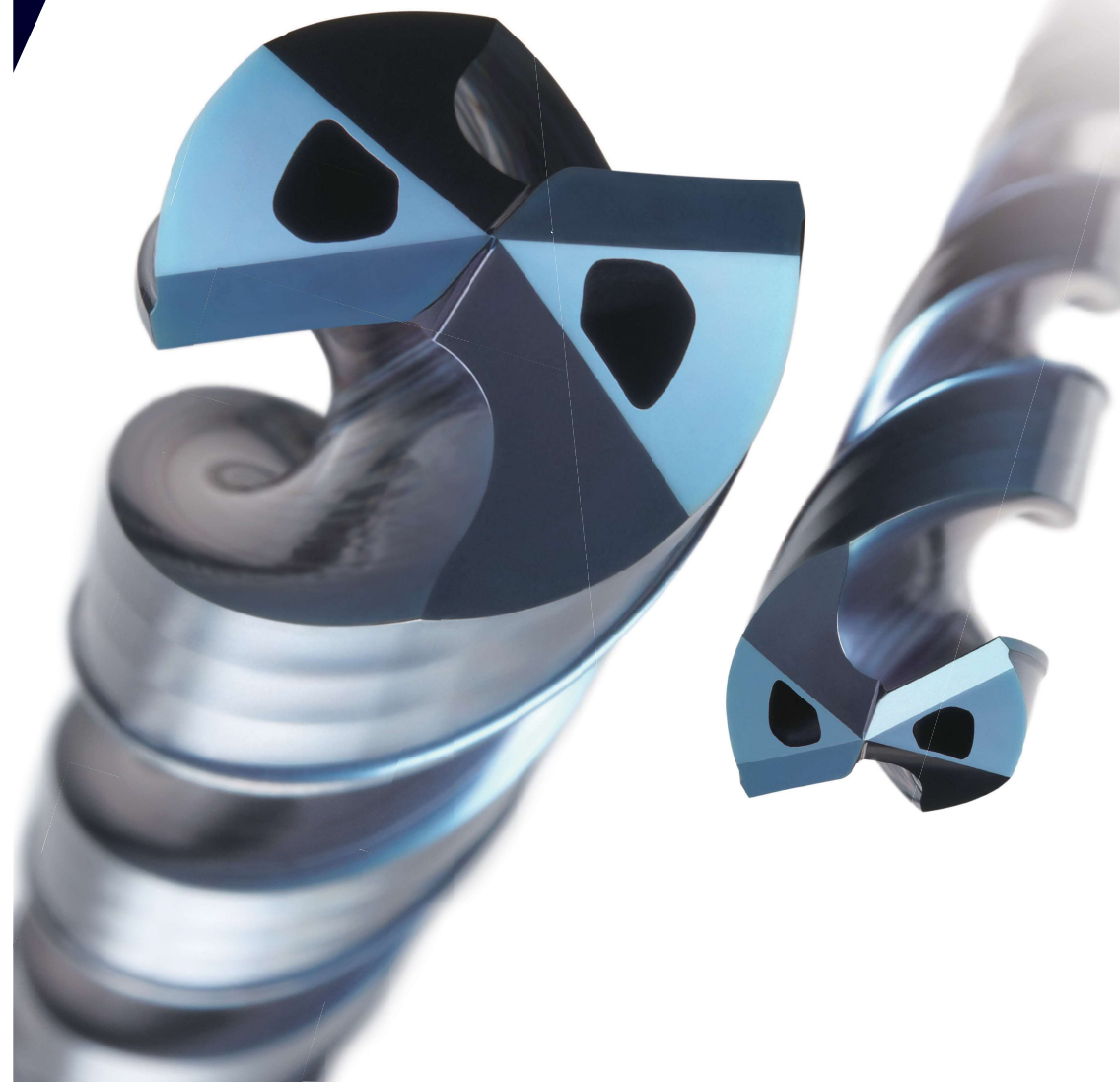


致力于掀起制造行业的革命 **NEW**

AquaREVO 油孔钻

AQRVDOH3D/5D/8D

REVOlutionize for the Manufacturing
AquaREVO Drills Oil-Hole



不二越 (中国) 有限公司

NSC分公司地址及联络方式

NEW

致力于掀起制造行业的革命

AquaREVO 油孔钻

AQRVDOH3D/5D/8D

焕然一新的材料、形状及涂层

AQUAREVO系列创新性的油孔诞生

采用REVO-D涂层和超平滑化处理、灵活运用流体分析
更有效提升 **冷却性** **润滑性** **铁屑排出性**

REVOlutionize for the Manufacturing

AquaREVO Drills Oil-Hole

New concept Oil-Hole was born in AquaREVO series that material, design, coating are completely all renewed. In addition to REVO-D coat and super smooth surface treatment, the use of fluid analysis further improves cooling, lubrication, and smooth chip evacuation.

新油孔形状

New Oil-Hole design

REVO Power Cooler

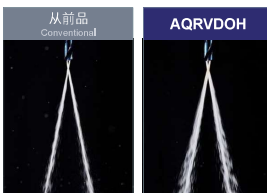
更为出色的流量性能

Overwhelming flow rate

油孔的截面积·出水量是从前品的2倍以上

Cross-sectional area and coolant amount of the oil hole are more than twice that of conventional.

VIDEO LINK

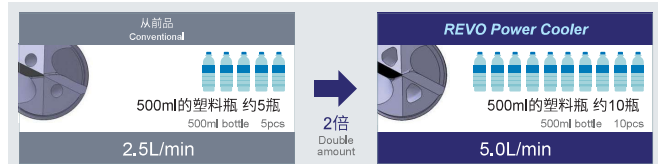


一分钟的切削液排出量

(钻头: φ8.0 设备: 1.5MPa 转速: 4,800min⁻¹)

Amount per 1 minute

(Drill: φ8.0 Equipment: 1.5MPa Rotation: 4,800min⁻¹)

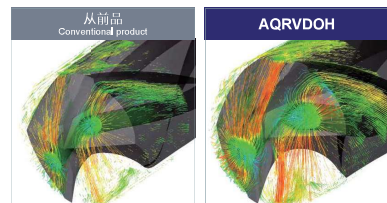


冷却性提高

Improved cooling

从转角到横刃修磨前刀面的流量、流速增加

Increased flow rate and flow velocity of corners and thinning



VIDEO LINK



抑制加工硬化

Suppresses work hardening

后道工序的寿命和精度也能提升

Tool life and accuracy will improve after drilling process

加工硬化的比较

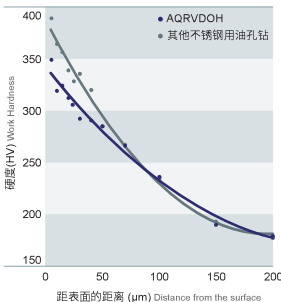
内部硬度

被削材: SUS304

Comparison of work hardening

Internal hardness

Work material: SUS304

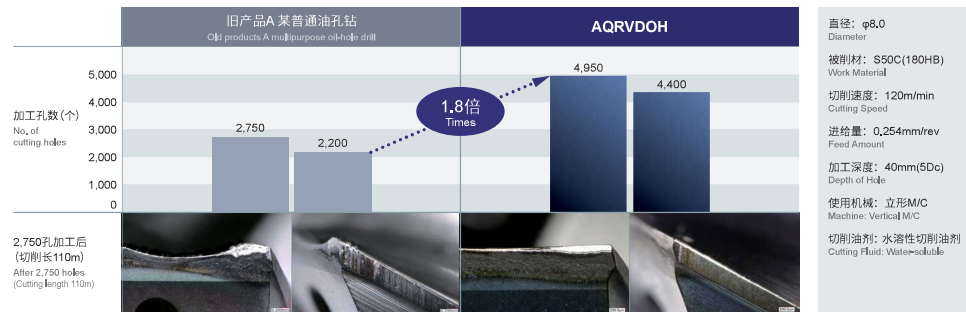


出色的长寿命 磨损抑制

Excellent tool life Wear suppression

凌驾于旧款钻头的耐久性和稳定性

Durability and stability surpass other drills



不锈钢材质加工优异的长寿命表现

Incredible tool life even in stainless steel drilling

从普通钻头到不锈钢专用钻头比较, 均能实现2倍以上的孔加工

Although it is a multi-purpose drill, even compared to the drill for Stainless steel, more than twice as much drilling



被削材料从普通钢到不锈钢、高硬度材都能广泛的对应

Compatible with a wide range of materials from Structural steel to Stainless steel and Hardened steel

被削材推荐表 Selection chart according to work materials

孔深度 L/D	一般结构用钢	炭素钢	合金钢	模具钢	高硬度钢			不锈钢			钛合金	镍基合金	铸铁	铝合金
	Structural Steel	Carbon Steel	Alloy Steel	Mold Steel	Hardened Steel			Stainless Steel			Titanium Alloy	Nickel based Alloy	Cast Iron	Aluminum Alloy
	SS400	S45C S50C	SCM SCr	30~40 HRC	40~50 HRC	50~57 HRC	58~65 HRC	SUS304 SUS316	SUS420	SUS630	Ti-6Al-4V	Inconel Hastelloy	FC FCD	AC ADC
AQRVDOH3D	◎	◎	◎	◎	◎	○	—	◎	◎	◎	○	○	◎	○
AQRVDOH5D	◎	◎	◎	◎	◎	○	—	◎	◎	◎	○	○	◎	○
AQRVDOH8D	◎	◎	◎	◎	◎	○	—	◎	◎	◎	○	○	◎	○

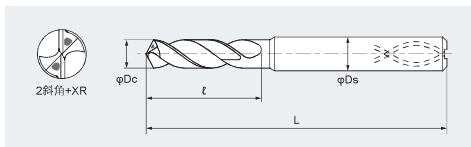
◎: 最优秀 Excellent ○: 适用 Good —: 不推荐 Not recommended

AQRVDOH3D

超硬 REVO D h7 140° 26°~30° h6 3.0-16.0
 工具材料 涂层 直径公差 先端角 螺旋角 柄径公差 直径范围

AquaREVO 油孔钻 3D

AquaREVO Drills Oil-Hole 3D



LIST9864 如何订购 Order 商品型号 Code

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH3D0300	3.0	19	68	3	
AQRVDOH3D0310	3.1				
AQRVDOH3D0320	3.2				
AQRVDOH3D0330	3.3	21			
AQRVDOH3D0340	3.4				
AQRVDOH3D0350	3.5		72	4	
AQRVDOH3D0360	3.6				
AQRVDOH3D0370	3.7				
AQRVDOH3D0380	3.8	23			
AQRVDOH3D0390	3.9				
AQRVDOH3D0400	4.0				
AQRVDOH3D0410	4.1				
AQRVDOH3D0420	4.2				
AQRVDOH3D0430	4.3	26			
AQRVDOH3D0440	4.4				
AQRVDOH3D0450	4.5		80	5	
AQRVDOH3D0460	4.6				
AQRVDOH3D0470	4.7				
AQRVDOH3D0480	4.8				
AQRVDOH3D0490	4.9				
AQRVDOH3D0500	5.0	29			
AQRVDOH3D0510	5.1				
AQRVDOH3D0520	5.2				
AQRVDOH3D0530	5.3				
AQRVDOH3D0540	5.4				
AQRVDOH3D0550	5.5		82	6	
AQRVDOH3D0560	5.6				
AQRVDOH3D0570	5.7				
AQRVDOH3D0580	5.8	32			
AQRVDOH3D0590	5.9				
AQRVDOH3D0600	6.0				
AQRVDOH3D0610	6.1				
AQRVDOH3D0620	6.2				
AQRVDOH3D0630	6.3	34			
AQRVDOH3D0640	6.4				
AQRVDOH3D0650	6.5		88	7	
AQRVDOH3D0660	6.6				
AQRVDOH3D0670	6.7	37			
AQRVDOH3D0680	6.8				
AQRVDOH3D0690	6.9				

单位 (Unit) :mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH3D0700	7.0	37	88	7	
AQRVDOH3D0710	7.1				
AQRVDOH3D0720	7.2				
AQRVDOH3D0730	7.3	39			
AQRVDOH3D0740	7.4				
AQRVDOH3D0750	7.5		94	8	
AQRVDOH3D0760	7.6				
AQRVDOH3D0770	7.7				
AQRVDOH3D0780	7.8	42			
AQRVDOH3D0790	7.9				
AQRVDOH3D0800	8.0				
AQRVDOH3D0810	8.1				
AQRVDOH3D0820	8.2				
AQRVDOH3D0830	8.3	44			
AQRVDOH3D0840	8.4				
AQRVDOH3D0850	8.5		100	9	
AQRVDOH3D0860	8.6				
AQRVDOH3D0870	8.7				
AQRVDOH3D0880	8.8	47			
AQRVDOH3D0890	8.9				
AQRVDOH3D0900	9.0				
AQRVDOH3D0910	9.1				
AQRVDOH3D0920	9.2				
AQRVDOH3D0930	9.3	49			
AQRVDOH3D0940	9.4				
AQRVDOH3D0950	9.5		106	10	
AQRVDOH3D0960	9.6				
AQRVDOH3D0970	9.7				
AQRVDOH3D0980	9.8	52			
AQRVDOH3D0990	9.9				
AQRVDOH3D1000	10.0				
AQRVDOH3D1010	10.1				
AQRVDOH3D1020	10.2				
AQRVDOH3D1030	10.3	54			
AQRVDOH3D1040	10.4				
AQRVDOH3D1050	10.5		116	11	
AQRVDOH3D1060	10.6				
AQRVDOH3D1070	10.7	57			
AQRVDOH3D1080	10.8				
AQRVDOH3D1090	10.9				

单位 (Unit) :mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH3D1100	11.0	57	116	11	
AQRVDOH3D1110	11.1				
AQRVDOH3D1120	11.2				
AQRVDOH3D1130	11.3	60			
AQRVDOH3D1140	11.4				
AQRVDOH3D1150	11.5		122	12	
AQRVDOH3D1160	11.6				
AQRVDOH3D1170	11.7				
AQRVDOH3D1180	11.8	63			
AQRVDOH3D1190	11.9				
AQRVDOH3D1200	12.0				
AQRVDOH3D1210	12.1				
AQRVDOH3D1220	12.2				
AQRVDOH3D1230	12.3	65			
AQRVDOH3D1240	12.4				
AQRVDOH3D1250	12.5		128	13	
AQRVDOH3D1260	12.6				
AQRVDOH3D1270	12.7				
AQRVDOH3D1280	12.8	68			
AQRVDOH3D1290	12.9				
AQRVDOH3D1300	13.0				
AQRVDOH3D1310	13.1				
AQRVDOH3D1320	13.2				
AQRVDOH3D1330	13.3	70			
AQRVDOH3D1340	13.4				
AQRVDOH3D1350	13.5		134	14	
AQRVDOH3D1360	13.6				
AQRVDOH3D1370	13.7				
AQRVDOH3D1380	13.8	73			
AQRVDOH3D1390	13.9				
AQRVDOH3D1400	14.0				
AQRVDOH3D1410	14.1				
AQRVDOH3D1420	14.2				
AQRVDOH3D1430	14.3	75			
AQRVDOH3D1440	14.4				
AQRVDOH3D1450	14.5		140	15	
AQRVDOH3D1460	14.6				
AQRVDOH3D1470	14.7	78			
AQRVDOH3D1480	14.8				
AQRVDOH3D1490	14.9				

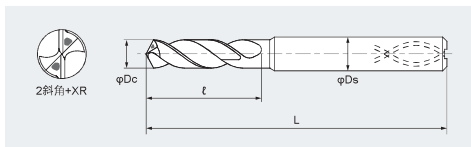
商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH3D1500	15.0	78	140	15	
AQRVDOH3D1510	15.1				
AQRVDOH3D1520	15.2				
AQRVDOH3D1530	15.3	80			
AQRVDOH3D1540	15.4				
AQRVDOH3D1550	15.5		146	16	
AQRVDOH3D1560	15.6				
AQRVDOH3D1570	15.7				
AQRVDOH3D1580	15.8	83			
AQRVDOH3D1590	15.9				
AQRVDOH3D1600	16.0				

AQRVDOH5D

超硬 REVO D h7 140° 26°~30° h6 3.0-16.0
 工具材料 涂层 直径公差 先端角 螺旋角 柄径公差 直径范围

AquaREVO 油孔钻 5D

AquaREVO Drills Oil-Hole 5D



LIST9866 [如何订购](#) [Order](#) [商品型号](#) [Code](#)

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH5D0300	3.0	29	78	3	
AQRVDOH5D0310	3.1				
AQRVDOH5D0320	3.2				
AQRVDOH5D0330	3.3	33			
AQRVDOH5D0340	3.4				
AQRVDOH5D0350	3.5		86	4	
AQRVDOH5D0360	3.6				
AQRVDOH5D0370	3.7				
AQRVDOH5D0380	3.8	37			
AQRVDOH5D0390	3.9				
AQRVDOH5D0400	4.0				
AQRVDOH5D0410	4.1				
AQRVDOH5D0420	4.2				
AQRVDOH5D0430	4.3	41			
AQRVDOH5D0440	4.4				
AQRVDOH5D0450	4.5		98	5	
AQRVDOH5D0460	4.6				
AQRVDOH5D0470	4.7				
AQRVDOH5D0480	4.8	45			
AQRVDOH5D0490	4.9				
AQRVDOH5D0500	5.0				
AQRVDOH5D0510	5.1				
AQRVDOH5D0520	5.2				
AQRVDOH5D0530	5.3	46			
AQRVDOH5D0540	5.4				
AQRVDOH5D0550	5.5		100	6	
AQRVDOH5D0560	5.6				
AQRVDOH5D0570	5.7				
AQRVDOH5D0580	5.8	50			
AQRVDOH5D0590	5.9				
AQRVDOH5D0600	6.0				
AQRVDOH5D0610	6.1				
AQRVDOH5D0620	6.2				
AQRVDOH5D0630	6.3	54			
AQRVDOH5D0640	6.4				
AQRVDOH5D0650	6.5		109	7	
AQRVDOH5D0660	6.6				
AQRVDOH5D0670	6.7	58			
AQRVDOH5D0680	6.8				
AQRVDOH5D0690	6.9				

单位 (Unit) :mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH5D0700	7.0	58	109	7	
AQRVDOH5D0710	7.1				
AQRVDOH5D0720	7.2				
AQRVDOH5D0730	7.3	62			
AQRVDOH5D0740	7.4				
AQRVDOH5D0750	7.5		118	8	
AQRVDOH5D0760	7.6				
AQRVDOH5D0770	7.7				
AQRVDOH5D0780	7.8	66			
AQRVDOH5D0790	7.9				
AQRVDOH5D0800	8.0				
AQRVDOH5D0810	8.1				
AQRVDOH5D0820	8.2				
AQRVDOH5D0830	8.3	70			
AQRVDOH5D0840	8.4				
AQRVDOH5D0850	8.5		127	9	
AQRVDOH5D0860	8.6				
AQRVDOH5D0870	8.7				
AQRVDOH5D0880	8.8	74			
AQRVDOH5D0890	8.9				
AQRVDOH5D0900	9.0				
AQRVDOH5D0910	9.1				
AQRVDOH5D0920	9.2				
AQRVDOH5D0930	9.3	78			
AQRVDOH5D0940	9.4				
AQRVDOH5D0950	9.5		136	10	
AQRVDOH5D0960	9.6				
AQRVDOH5D0970	9.7				
AQRVDOH5D0980	9.8	82			
AQRVDOH5D0990	9.9				
AQRVDOH5D1000	10.0				
AQRVDOH5D1010	10.1				
AQRVDOH5D1020	10.2				
AQRVDOH5D1030	10.3	87			
AQRVDOH5D1040	10.4				
AQRVDOH5D1050	10.5		149	11	
AQRVDOH5D1060	10.6				
AQRVDOH5D1070	10.7	91			
AQRVDOH5D1080	10.8				
AQRVDOH5D1090	10.9				

单位 (Unit) :mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH5D1100	11.0	91	149	11	
AQRVDOH5D1110	11.1				
AQRVDOH5D1120	11.2				
AQRVDOH5D1130	11.3	95			
AQRVDOH5D1140	11.4				
AQRVDOH5D1150	11.5		158	12	
AQRVDOH5D1160	11.6				
AQRVDOH5D1170	11.7				
AQRVDOH5D1180	11.8	99			
AQRVDOH5D1190	11.9				
AQRVDOH5D1200	12.0				
AQRVDOH5D1210	12.1				
AQRVDOH5D1220	12.2				
AQRVDOH5D1230	12.3	103			
AQRVDOH5D1240	12.4				
AQRVDOH5D1250	12.5		167	13	
AQRVDOH5D1260	12.6				
AQRVDOH5D1270	12.7				
AQRVDOH5D1280	12.8	107			
AQRVDOH5D1290	12.9				
AQRVDOH5D1300	13.0				
AQRVDOH5D1310	13.1				
AQRVDOH5D1320	13.2				
AQRVDOH5D1330	13.3	111			
AQRVDOH5D1340	13.4				
AQRVDOH5D1350	13.5		176	14	
AQRVDOH5D1360	13.6				
AQRVDOH5D1370	13.7				
AQRVDOH5D1380	13.8	115			
AQRVDOH5D1390	13.9				
AQRVDOH5D1400	14.0				
AQRVDOH5D1410	14.1				
AQRVDOH5D1420	14.2				
AQRVDOH5D1430	14.3	119			
AQRVDOH5D1440	14.4				
AQRVDOH5D1450	14.5		185	15	
AQRVDOH5D1460	14.6				
AQRVDOH5D1470	14.7	124			
AQRVDOH5D1480	14.8				
AQRVDOH5D1490	14.9				

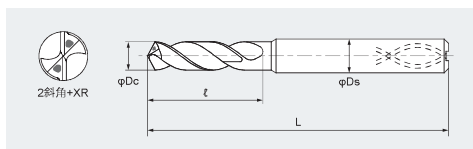
商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH5D1500	15.0	124	185	15	
AQRVDOH5D1510	15.1				
AQRVDOH5D1520	15.2				
AQRVDOH5D1530	15.3	128			
AQRVDOH5D1540	15.4				
AQRVDOH5D1550	15.5		194	16	
AQRVDOH5D1560	15.6				
AQRVDOH5D1570	15.7				
AQRVDOH5D1580	15.8	132			
AQRVDOH5D1590	15.9				
AQRVDOH5D1600	16.0				

AQRVDOH8D

超硬 REVO D h7 140° 26°~30° h6 3.0-16.0
 工具材料 涂层 直径公差 先端角 螺旋角 柄径公差 直径范围

AquaREVO 油孔钻 8D

AquaREVO Drills Oil-Hole 8D



LIST9868 如何订购 Order 商品型号 Code

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH8D0300	3.0	34	81	3	
AQRVDOH8D0310	3.1				
AQRVDOH8D0320	3.2				
AQRVDOH8D0330	3.3	39			
AQRVDOH8D0340	3.4				
AQRVDOH8D0350	3.5		92	4	
AQRVDOH8D0360	3.6				
AQRVDOH8D0370	3.7				
AQRVDOH8D0380	3.8	45			
AQRVDOH8D0390	3.9				
AQRVDOH8D0400	4.0				
AQRVDOH8D0410	4.1				
AQRVDOH8D0420	4.2				
AQRVDOH8D0430	4.3	50			
AQRVDOH8D0440	4.4				
AQRVDOH8D0450	4.5		105	5	
AQRVDOH8D0460	4.6				
AQRVDOH8D0470	4.7				
AQRVDOH8D0480	4.8	56			
AQRVDOH8D0490	4.9				
AQRVDOH8D0500	5.0				
AQRVDOH8D0510	5.1				
AQRVDOH8D0520	5.2				
AQRVDOH8D0530	5.3	62			
AQRVDOH8D0540	5.4				
AQRVDOH8D0550	5.5		118	6	
AQRVDOH8D0560	5.6				
AQRVDOH8D0570	5.7				
AQRVDOH8D0580	5.8	68			
AQRVDOH8D0590	5.9				
AQRVDOH8D0600	6.0				
AQRVDOH8D0610	6.1				
AQRVDOH8D0620	6.2				
AQRVDOH8D0630	6.3	73			
AQRVDOH8D0640	6.4				
AQRVDOH8D0650	6.5		130	7	
AQRVDOH8D0660	6.6				
AQRVDOH8D0670	6.7	79			
AQRVDOH8D0680	6.8				
AQRVDOH8D0690	6.9				

单位 (Unit): mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH8D0700	7.0	79	130	7	
AQRVDOH8D0710	7.1				
AQRVDOH8D0720	7.2				
AQRVDOH8D0730	7.3	84			
AQRVDOH8D0740	7.4				
AQRVDOH8D0750	7.5		142	8	
AQRVDOH8D0760	7.6				
AQRVDOH8D0770	7.7				
AQRVDOH8D0780	7.8	90			
AQRVDOH8D0790	7.9				
AQRVDOH8D0800	8.0				
AQRVDOH8D0810	8.1				
AQRVDOH8D0820	8.2				
AQRVDOH8D0830	8.3	95			
AQRVDOH8D0840	8.4				
AQRVDOH8D0850	8.5		154	9	
AQRVDOH8D0860	8.6				
AQRVDOH8D0870	8.7				
AQRVDOH8D0880	8.8	101			
AQRVDOH8D0890	8.9				
AQRVDOH8D0900	9.0				
AQRVDOH8D0910	9.1				
AQRVDOH8D0920	9.2				
AQRVDOH8D0930	9.3	106			
AQRVDOH8D0940	9.4				
AQRVDOH8D0950	9.5		166	10	
AQRVDOH8D0960	9.6				
AQRVDOH8D0970	9.7				
AQRVDOH8D0980	9.8	112			
AQRVDOH8D0990	9.9				
AQRVDOH8D1000	10.0				
AQRVDOH8D1010	10.1				
AQRVDOH8D1020	10.2				
AQRVDOH8D1030	10.3	118			
AQRVDOH8D1040	10.4				
AQRVDOH8D1050	10.5		182	11	
AQRVDOH8D1060	10.6				
AQRVDOH8D1070	10.7	124			
AQRVDOH8D1080	10.8				
AQRVDOH8D1090	10.9				

● 近期发售 ● It will be on sale soon

单位 (Unit): mm

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH8D1500	15.0	169	230	15	
AQRVDOH8D1510	15.1				
AQRVDOH8D1520	15.2				
AQRVDOH8D1530	15.3	174			
AQRVDOH8D1540	15.4				
AQRVDOH8D1550	15.5		242	16	
AQRVDOH8D1560	15.6				
AQRVDOH8D1570	15.7				
AQRVDOH8D1580	15.8	180			
AQRVDOH8D1590	15.9				
AQRVDOH8D1600	16.0				

● 近期发售 ● It will be on sale soon

商品型号	直径	槽长	全长	柄径	库存
Code	Dc	ℓ	L	Ds	Stock
AQRVDOH8D1100	11.0	124	182	11	
AQRVDOH8D1110	11.1				
AQRVDOH8D1120	11.2				
AQRVDOH8D1130	11.3	129			
AQRVDOH8D1140	11.4				
AQRVDOH8D1150	11.5		194	12	
AQRVDOH8D1160	11.6				
AQRVDOH8D1170	11.7				
AQRVDOH8D1180	11.8	135			
AQRVDOH8D1190	11.9				
AQRVDOH8D1200	12.0				
AQRVDOH8D1210	12.1				
AQRVDOH8D1220	12.2				
AQRVDOH8D1230	12.3	140			
AQRVDOH8D1240	12.4				
AQRVDOH8D1250	12.5		206	13	
AQRVDOH8D1260	12.6				
AQRVDOH8D1270	12.7				
AQRVDOH8D1280	12.8	146			
AQRVDOH8D1290	12.9				
AQRVDOH8D1300	13.0				
AQRVDOH8D1310	13.1				
AQRVDOH8D1320	13.2				
AQRVDOH8D1330	13.3	151			
AQRVDOH8D1340	13.4				
AQRVDOH8D1350	13.5		218	14	
AQRVDOH8D1360	13.6				
AQRVDOH8D1370	13.7				
AQRVDOH8D1380	13.8	157			
AQRVDOH8D1390	13.9				
AQRVDOH8D1400	14.0				
AQRVDOH8D1410	14.1				
AQRVDOH8D1420	14.2				
AQRVDOH8D1430	14.3	163			
AQRVDOH8D1440	14.4				
AQRVDOH8D1450	14.5		230	15	
AQRVDOH8D1460	14.6				
AQRVDOH8D1470	14.7	169			
AQRVDOH8D1480	14.8				
AQRVDOH8D1490	14.9				

基准切削条件表

Standard Cutting Conditions

AQRVDOH3D/5D

AquaREVO 油孔钻 3D/5D

AquaREVO Drills Oil-Hole 3D/5D

湿式加工		Wet condition																	
被削材 Work Material	一般结构用钢 碳素钢 灰口铸铁		合金钢 调质钢		模具钢 预硬钢		高硬度钢		球墨铸铁		不锈钢 铁素体系 马氏体系 奥氏体系		不锈钢 析出硬化系		钛合金		镍基合金		
	SS400 S50C FC250		SCM440 SCr		SKD61 NAK HPM		Harden Steel		FCD400		SUS430 SUS403 SUS304		SUS630		Ti-6Al-4V		Inconel 718		
	Structural Steel Carbon Steel Cast Iron ~200HB		Alloy Steel Heat treated Steel 20~30HRC		Mold Steel Hardened Steel 30~40HRC		Hardened Steel 40~50HRC		Ductile Cast Iron		Stainless Steel		Stainless Steel		Titanium Alloy		Nickel based Alloy Inconel		
直径 Drill Dia. mm	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	
3.0	12700	1220	10600	1020	8500	760	4250	260	10600	950	8500	680	5300	400	4200	320	4200	190	
4.0	9600	1220	8000	1020	6400	760	3200	260	8000	950	6400	680	4000	400	3200	320	3200	190	
6.0	6400	1220	5300	1020	4200	710	2100	240	5300	950	4200	660	2600	400	2100	320	2100	190	
8.0	4800	1220	4000	1020	3200	710	1600	240	4000	880	3200	640	2000	400	1600	320	1600	190	
10.0	3800	1140	3200	960	2500	640	1300	230	3200	790	2500	590	1600	370	1300	300	1300	180	
12.0	3200	1070	2700	920	2100	540	1050	220	2700	670	2100	560	1300	350	1050	280	1050	180	
16.0	2400	960	2000	890	1600	480	800	210	2000	620	1600	510	1000	320	800	260	800	150	

MQL加工		MQL condition									
被削材 Work Material	一般结构用钢 碳素钢 灰口铸铁		合金钢 调质钢		模具钢 预硬钢		高硬度钢		球墨铸铁		
	SS400 S50C FC250		SCM440 SCr		SKD61 NAK HPM		Harden Steel		FCD400		
	Structural Steel Carbon Steel Cast Iron ~200HB		Alloy Steel Heat treated Steel 20~30HRC		Mold Steel Hardened Steel 30~40HRC		Hardened Steel 40~50HRC		Ductile Cast Iron		
直径 Drill Dia. mm	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	
3.0	8500	770	7400	570	6400	540	2550	140	7400	620	
4.0	6400	770	5600	570	4800	540	1900	140	5600	620	
6.0	4200	770	3700	570	3200	540	1300	130	3700	620	
8.0	3200	770	2800	570	2400	500	1000	130	2800	580	
10.0	2500	720	2200	540	1900	440	800	120	2200	500	
12.0	2100	670	1900	500	1600	380	650	120	1900	460	
16.0	1600	600	1400	500	1200	340	480	100	1400	400	

AQRVDOH8D

AquaREVO 油孔钻 8D

AquaREVO Drills Oil-Hole 8D

湿式加工		Wet condition																	
被削材 Work Material	一般结构用钢 碳素钢 灰口铸铁		合金钢 调质钢		模具钢 预硬钢		高硬度钢		球墨铸铁		不锈钢 铁素体系 马氏体系 奥氏体系		不锈钢 析出硬化系		钛合金		镍基合金		
	SS400 S50C FC250		SCM440 SCr		SKD61 NAK HPM		Harden Steel		FCD400		SUS430 SUS403 SUS304		SUS630		Ti-6Al-4V		Inconel 718		
	Structural Steel Carbon Steel Cast Iron ~200HB		Alloy Steel Heat treated Steel 20~30HRC		Mold Steel Hardened Steel 30~40HRC		Hardened Steel 40~50HRC		Ductile Cast Iron		Stainless Steel		Stainless Steel		Titanium Alloy		Nickel based Alloy Inconel		
直径 Drill Dia. mm	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	
3.0	12700	1020	10600	920	8500	630	4250	230	10600	800	8500	630	5300	360	4200	290	4200	170	
4.0	9600	1020	8000	920	6400	630	3200	230	8000	800	6400	630	4000	360	3200	290	3200	170	
6.0	6400	1020	5300	920	4200	600	2100	220	5300	740	4200	600	2600	360	2100	290	2100	170	
8.0	4800	1020	4000	920	3200	590	1600	220	4000	740	3200	570	2000	360	1600	290	1600	170	
10.0	3800	950	3200	860	2500	530	1300	210	3200	680	2500	530	1600	330	1300	260	1300	160	
12.0	3200	890	2700	820	2100	480	1050	200	2700	630	2100	500	1300	320	1050	250	1050	150	
16.0	2400	800	2000	800	1600	440	800	190	2000	550	1600	470	1000	290	800	230	800	140	

MQL加工		MQL condition									
被削材 Work Material	一般结构用钢 碳素钢 灰口铸铁		合金钢 调质钢		模具钢 预硬钢		高硬度钢		球墨铸铁		
	SS400 S50C FC250		SCM440 SCr		SKD61 NAK HPM		Harden Steel		FCD400		
	Structural Steel Carbon Steel Cast Iron ~200HB		Alloy Steel Heat treated Steel 20~30HRC		Mold Steel Hardened Steel 30~40HRC		Hardened Steel 40~50HRC		Ductile Cast Iron		
直径 Drill Dia. mm	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	转速 Rotation min ⁻¹	进给速度 Feed mm/min	
3.0	8500	640	7400	510	6400	400	2550	120	7400	500	
4.0	6400	640	5600	510	4800	400	1900	120	5600	500	
6.0	4200	640	3700	510	3200	370	1300	120	3700	470	
8.0	3200	640	2800	510	2400	370	1000	120	2800	470	
10.0	2500	600	2200	480	1900	340	800	100	2200	440	
12.0	2100	560	1900	450	1600	340	650	100	1900	430	
16.0	1600	500	1400	450	1200	330	480	90	1400	360	

切削条件使用时注意事项

- 1) 请根据机床刚性及工具夹具、加工形状等的情况调整切削条件。
- 2) 湿式加工是指使用水溶性切削油的加工。
- 3) 使用非水溶性切削油时，请将转速和进给速度降低20%。
- 4) 请采用内部冷却方式。
- 5) 可采用分级加工。
但是，依被削材及加工条件，铁屑的排出性有时会变差。
即便加工孔深小于规定孔深时，也请使用分级进给。
分级进给时请留意孔上表面。
请将分给量级的大致标准设定为0.2~1Dc。

Attention on using the cutting condition tables

- 1) Adjust cutting condition according to the rigidity of machine or work clamp status.
- 2) Wet condition are for drilling with water soluble cutting fluid.
- 3) In non-water soluble cutting fluid, reduce the rotation and feed by 20%.
- 4) Use an internal coolant.
- 5) Non-step drilling is possible.
However, a work material and cutting condition to chip removal may be worse.
In that case, even if under predetermined hole depth, please step feed.
In step feed, return to the entrance hole.
Step feed interval is about 0.2~1Dc.

注：

*本样册中的产品图片及内容仅作示意，实物产品效果（包括但不限于外观、颜色、尺寸）可能略有差异，请以实物为准。
*The pictures and contents of the products in this sample book are only for illustration. The effects of the physical products (including but not limited to appearance, color and size) may vary slightly. Please refer to the physical products.
*The data in this sample book are theoretical values, which are derived from the internal experiments in MQL. The data obtained under the specific test environment (see the specific instructions). The actual use may vary slightly according to the individual differences of the products, the use conditions and environmental factors. Please take the actual use as the criterion.