

GK-HAZX-S
NO BURRS



Giken Ltd,
The Japanese products



Drilling videos here!

World-first! Burr-free ultra-precision drilling drill

ZERO BURR XS

Aluminum

Acrylic

Copper

Brass

Thin Plate & Cross Hole

Hybrid Drill

Lineup from dia.1 to 16 in 0.1mm steps.

ZERO BURR XS debut!

Drill outer diameter H7 plus tolerance.

3 blades increase rigidity as force is concentrated in the center.

No oil hole, shortened blade length and overall length for lower price.

Reaming is possible with one-shot drilling without pre-drilling.

Patent and design registration pending in EU, USA and China.

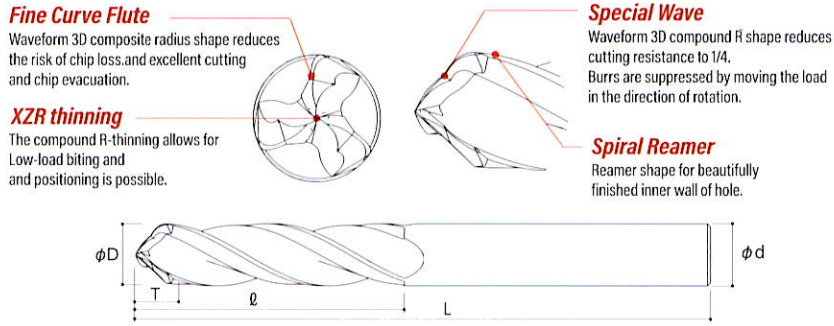
ZERO BURR Trademark registered.



New Product! For **Aluminum Acrylic Copper Brass Thin plate & Cross hole**
3 Blades!
NO BURRS
Hybrid Drill
ZERO BURR XS

No Deburring! Reducing deburring work enables cost reduction and high-efficiency production.
Increased rigidity! The three blades improve rigidity because the force is concentrated in the center.
Re-polishable! Cost efficient because it is regrinding. (Φ1 to Φ1.9 cannot be reground)
Patent and designs Expand into overseas markets(EU/USA/China) "ZERO BURR" Trademark registered.

The superior characteristics of ZERO BURR XS (The results of drilling test)



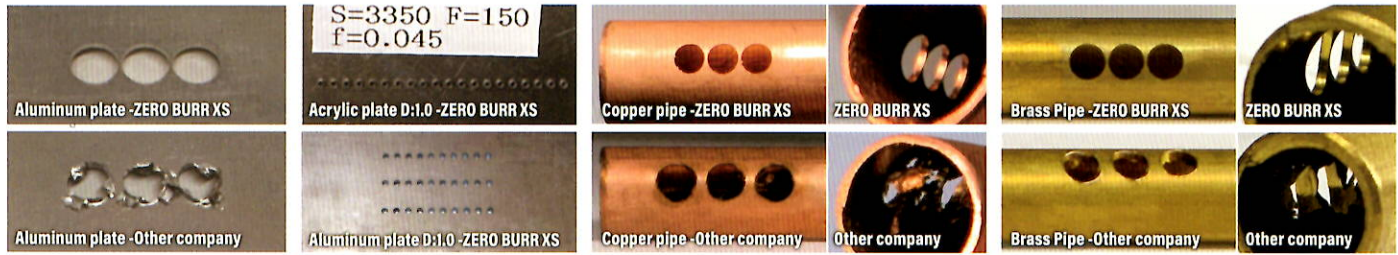
- PRECAUTIONS -

- Please use for wet drilling.
- Be sure to fix the work material firmly, and use the drill to completely pass through the penetration depth.
- If the deflection is large when the drill is mounted, welding or the hole diameter may become large, or a spiral flaw may remain on a drilling surface of the work material.

- Cutting speed -

Size	Feed per revolution f =	S = Revolution(rpm)
V=30~70m/min	dia 1.0 - 3.0 0.005 - 0.03	V = Cutting speed(m/min)
S = V × 1000 ÷ 3.14 ÷ D	dia 3.0 - 6.0 0.01 - 0.05	F = Feed speed(mm/min)
F = S × f	dia 6.0 or more 0.02 - 0.08	f = Feed rate(mm/rev)

*Recommended cutting conditions may vary depending on the cutting environment such as the type of work materials and thickness.



ZERO BURR XS LINE UP (for Aluminium / Acrylic / Copper / Brass / Thin plate & Cross hole) DLC Coating

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HAZX-S 0100 DLC	1	0.6	5	50	3
GK-HAZX-S 0110 DLC	1.1				
GK-HAZX-S 0120 DLC	1.2				
GK-HAZX-S 0130 DLC	1.3	0.9	6		
GK-HAZX-S 0140 DLC	1.4				
GK-HAZX-S 0150 DLC	1.5				
GK-HAZX-S 0160 DLC	1.6				
GK-HAZX-S 0170 DLC	1.7				
GK-HAZX-S 0180 DLC	1.8	1.2	9		
GK-HAZX-S 0190 DLC	1.9				
GK-HAZX-S 0200 DLC	2			50	3
GK-HAZX-S 0210 DLC	2.1				
GK-HAZX-S 0220 DLC	2.2				
GK-HAZX-S 0230 DLC	2.3	1.5	12		
GK-HAZX-S 0240 DLC	2.4				
GK-HAZX-S 0250 DLC	2.5				
GK-HAZX-S 0260 DLC	2.6				
GK-HAZX-S 0270 DLC	2.7				
GK-HAZX-S 0280 DLC	2.8	1.8	14		
GK-HAZX-S 0290 DLC	2.9				
GK-HAZX-S 0300 DLC	3				
GK-HAZX-S 0310 DLC	3.1				
GK-HAZX-S 0320 DLC	3.2				
GK-HAZX-S 0330 DLC	3.3				
GK-HAZX-S 0340 DLC	3.4				
GK-HAZX-S 0350 DLC	3.5	2.4	18	55	4
GK-HAZX-S 0360 DLC	3.6				
GK-HAZX-S 0370 DLC	3.7				
GK-HAZX-S 0380 DLC	3.8				
GK-HAZX-S 0390 DLC	3.9				
GK-HAZX-S 0400 DLC	4				
GK-HAZX-S 0410 DLC	4.1				
GK-HAZX-S 0420 DLC	4.2				
GK-HAZX-S 0430DLC	4.3				
GK-HAZX-S 0440 DLC	4.4				
GK-HAZX-S 0450 DLC	4.5	3	23		
GK-HAZX-S 0460 DLC	4.6				
GK-HAZX-S 0470 DLC	4.7				
GK-HAZX-S 0480 DLC	4.8				
GK-HAZX-S 0490 DLC	4.9				
GK-HAZX-S 0500 DLC	5			65	6
GK-HAZX-S 0510 DLC	5.1				
GK-HAZX-S 0520 DLC	5.2				
GK-HAZX-S 0530 DLC	5.3				
GK-HAZX-S 0540 DLC	5.4				
GK-HAZX-S 0550 DLC	5.5	3.6	25		
GK-HAZX-S 0560 DLC	5.6				
GK-HAZX-S 0570 DLC	5.7				
GK-HAZX-S 0580 DLC	5.8				
GK-HAZX-S 0590 DLC	5.9				

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HAZX-S 0600 DLC	6	3.6	25	65	6
GK-HAZX-S 0610 DLC	6.1				
GK-HAZX-S 0620 DLC	6.2				
GK-HAZX-S 0630 DLC	6.3				
GK-HAZX-S 0640 DLC	6.4				
GK-HAZX-S 0650 DLC	6.5	4.2	33		
GK-HAZX-S 0660 DLC	6.6				
GK-HAZX-S 0670 DLC	6.7				
GK-HAZX-S 0680 DLC	6.8				
GK-HAZX-S 0690 DLC	6.9				
GK-HAZX-S 0700 DLC	7			75	8
GK-HAZX-S 0710 DLC	7.1				
GK-HAZX-S 0720 DLC	7.2				
GK-HAZX-S 0730 DLC	7.3				
GK-HAZX-S 0740 DLC	7.4				
GK-HAZX-S 0750 DLC	7.5	4.8	35		
GK-HAZX-S 0760 DLC	7.6				
GK-HAZX-S 0770 DLC	7.7				
GK-HAZX-S 0780 DLC	7.8				
GK-HAZX-S 0790 DLC	7.9				
GK-HAZX-S 0800 DLC	8				
GK-HAZX-S 0810 DLC	8.1				
GK-HAZX-S 0820 DLC	8.2				
GK-HAZX-S 0830 DLC	8.3				
GK-HAZX-S 0840 DLC	8.4				
GK-HAZX-S 0850 DLC	8.5	5.4	42		
GK-HAZX-S 0860 DLC	8.6				
GK-HAZX-S 0870 DLC	8.7				
GK-HAZX-S 0880 DLC	8.8				
GK-HAZX-S 0890 DLC	8.9				
GK-HAZX-S 0900 DLC	9			90	10
GK-HAZX-S 0910 DLC	9.1				
GK-HAZX-S 0920 DLC	9.2				
GK-HAZX-S 0930 DLC	9.3				
GK-HAZX-S 0940 DLC	9.4				
GK-HAZX-S 0950 DLC	9.5	6	44		
GK-HAZX-S 0960 DLC	9.6				
GK-HAZX-S 0970 DLC	9.7				
GK-HAZX-S 0980 DLC	9.8				
GK-HAZX-S 0990 DLC	9.9				
GK-HAZX-S 1000 DLC	10				
GK-HAZX-S 1010 DLC	10.1				
GK-HAZX-S 1020 DLC	10.2				
GK-HAZX-S 1030 DLC	10.3				
GK-HAZX-S 1040 DLC	10.4				
GK-HAZX-S 1050 DLC	10.5	6.6	52	100	12
GK-HAZX-S 1060 DLC	10.6				
GK-HAZX-S 1070 DLC	10.7				
GK-HAZX-S 1080 DLC	10.8				
GK-HAZX-S 1090 DLC	10.9				

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HAZX-S 1100 DLC	11	6.6	52		
GK-HAZX-S 1110 DLC	11.1				
GK-HAZX-S 1120 DLC	11.2				
GK-HAZX-S 1130 DLC	11.3				
GK-HAZX-S 1140 DLC	11.4				
GK-HAZX-S 1150 DLC	11.5	7.2	54	100	12
GK-HAZX-S 1160 DLC	11.6				
GK-HAZX-S 1170 DLC	11.7				
GK-HAZX-S 1180 DLC	11.8				
GK-HAZX-S 1190 DLC	11.9				
GK-HAZX-S 1200 DLC	12				
GK-HAZX-S 1210 DLC	12.1				
GK-HAZX-S 1220 DLC	12.2				
GK-HAZX-S 1230 DLC	12.3				
GK-HAZX-S 1240 DLC	12.4				
GK-HAZX-S 1250 DLC	12.5	7.8	56		
GK-HAZX-S 1260 DLC	12.6				
GK-HAZX-S 1270 DLC	12.7				
GK-HAZX-S 1280 DLC	12.8				
GK-HAZX-S 1290 DLC	12.9				
GK-HAZX-S 1300 DLC	13			105	14
GK-HAZX-S 1310 DLC	13.1				
GK-HAZX-S 1320 DLC	13.2				
GK-HAZX-S 1330 DLC	13.3				
GK-HAZX-S 1340 DLC	13.4				
GK-HAZX-S 1350 DLC	13.5	8.2	58		
GK-HAZX-S 1360 DLC	13.6				
GK-HAZX-S 1370 DLC	13.7				
GK-HAZX-S 1380 DLC	13.8				
GK-HAZX-S 1390 DLC	13.9				
GK-HAZX-S 1400 DLC	14				
GK-HAZX-S 1410 DLC	14.1				
GK-HAZX-S 1420 DLC	14.2				
GK-HAZX-S 1430 DLC	14.3				
GK-HAZX-S 1440 DLC	14.4				
GK-HAZX-S 1450 DLC	14.5	9	60		
GK-HAZX-S 1460 DLC	14.6				
GK-HAZX-S 1470 DLC	14.7				
GK-HAZX-S 1480 DLC	14.8				
GK-HAZX-S 1490 DLC	14.9				
GK-HAZX-S 1500 DLC	15				
GK-HAZX-S 1510 DLC	15.1			120	16
GK-HAZX-S 1520 DLC	15.2				
GK-HAZX-S 1530 DLC	15.3				
GK-HAZX-S 1540 DLC	15.4				
GK-HAZX-S 1550 DLC	15.5	9.6	64		
GK-HAZX-S 1560 DLC	15.6				
GK-HAZX-S 1570 DLC	15.7				
GK-HAZX-S 1580 DLC	15.8				
GK-HAZX-S 1590 DLC	15.9				
GK-HAZX-S 1600 DLC	16				

*We can regrind from Φ2 or larger. (Φ1 to Φ1.9 cannot be reground.)