

GK-HAZX-L-OH
NO BURRS

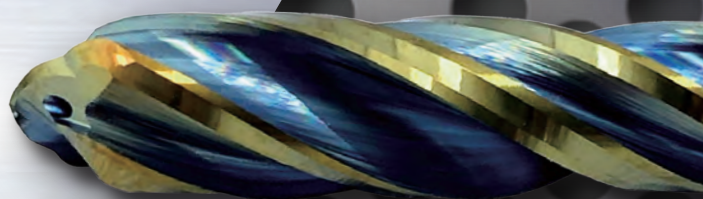


Giken Ltd.
The Japanese products

The world's first! 4 blades *Long Blade with OIL hole*

ZERO BURR X

For Aluminum and Resin Cross hole Hybrid Drill.



The world's first! Four blades 3D waveform composite R shape.

ZERO BURR X debut!

One punch without a pilot hole prevents burrs!

Perfect for drilling a cross hole
in aluminum, copper, brass, resin etc.

The drilling speed has increased compared to 2 blades.

Drill outer diameter H7 plus tolerance!

Trademark registered, patent pending.



Drilling videos here!



New Product!
4 Blades!
NO BURRS
Hybrid Drill

For **Alumi Brass Resin Deep/Cross hole**

ZERO BURR X

Aluminum Long Blade with OIL HOLE

- No Deburring!** Reducing deburring work enables cost reduction and high-efficiency production.
- Speed Up!** Four blades increases cutting speed. (Compared to our company's product)
- Repolishing!** Cost efficient because it can be repolished. (Repolishing is done by our company)
- Patent and designs** Expand into overseas markets(EU/USA/China) "ZERO BURR" Trademark registered.

The superior characteristics of ZEROBURR X (The results of drilling test)

OIL hole

Prevent welding damage due to heat.

XZX thinning

New development. Composite R shape that enables to bite smoothly and precise positioning with composite R.

Fine Curve Flute

Achieved excellent cutting and chip discharging with large waveform R shape.

Sub Fine Curve Flute

Complemented the fine curve flute in the main blade. Reducing and dispersing the load increased its cutting speed. Achieves excellent cutting and chip discharge without clogging.

Special Wave Drill

Cutting Resistance 1/4. Hole Accuracy H7 or less. 3D waveform composite R shape to slightly reduce burrs.

Sub Special Wave Drill

Removes burrs while increasing cutting speed. 3D waveform composite R shape.

Spiral Reamer

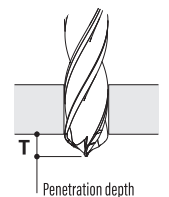
Reamer shape for beautifully finished inner wall of hole.

- 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 -

$$S = 1000 \times V \div 3.14 \div D$$

$$V = S \div (1000 \div 3.14 \div D)$$

$$F = f \times S$$

$$f = F \div S(3\text{blade} \times 1.5, 4\text{blade} \times 2)$$

$$S = \text{Revolution(rpm)}$$

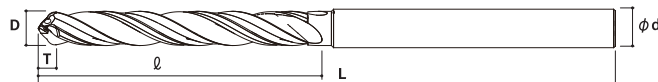
$$V = \text{Cutting speed(m/min)}$$

$$F = \text{Feed speed(mm/min)}$$

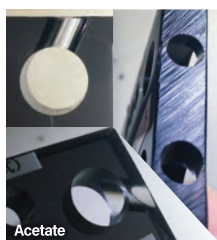
$$f = \text{Feed rate(mm/rev)}$$

H7 plus tolerance

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



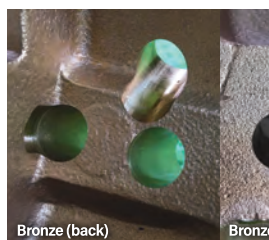
S=3350 F=250 V=64 f=0.08



S=3350 F=200 V=64 f=0.06



S=3350 F=200 V=64 f=0.06



S=3350 F=200 V=64 f=0.06 step: 5mm



S=3350 F=200 V=64 f=0.06 step: 5mm



S=3350 F=200 V=64 f=0.06 step: 5mm

ZEROBURR X LINEUP (for Aluminum / Resin / Brass / Copper / Deep hole / Cross hole)

DLC coating

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HAZX-L-OH 0300DLC	3.0	1.8	27	70	3.0
GK-HAZX-L-OH 0310DLC	3.1	2.1	36	75	3.0
GK-HAZX-L-OH 0320DLC	3.2				
GK-HAZX-L-OH 0330DLC	3.3				
GK-HAZX-L-OH 0340DLC	3.4				
GK-HAZX-L-OH 0350DLC	3.5				
GK-HAZX-L-OH 0360DLC	3.6	2.4	45	95	4.0
GK-HAZX-L-OH 0370DLC	3.7				
GK-HAZX-L-OH 0380DLC	3.8				
GK-HAZX-L-OH 0390DLC	3.9				
GK-HAZX-L-OH 0400DLC	4.0				
GK-HAZX-L-OH 0410DLC	4.1	2.7	54	100	8.0
GK-HAZX-L-OH 0420DLC	4.2				
GK-HAZX-L-OH 0430DLC	4.3				
GK-HAZX-L-OH 0440DLC	4.4				
GK-HAZX-L-OH 0450DLC	4.5				
GK-HAZX-L-OH 0460DLC	4.6				
GK-HAZX-L-OH 0470DLC	4.7				
GK-HAZX-L-OH 0480DLC	4.8				
GK-HAZX-L-OH 0490DLC	4.9				
GK-HAZX-L-OH 0500DLC	5.0				
GK-HAZX-L-OH 0510DLC	5.1	3.6	63	120	8.0
GK-HAZX-L-OH 0520DLC	5.2				
GK-HAZX-L-OH 0530DLC	5.3				
GK-HAZX-L-OH 0540DLC	5.4				
GK-HAZX-L-OH 0550DLC	5.5				
GK-HAZX-L-OH 0560DLC	5.6				
GK-HAZX-L-OH 0570DLC	5.7				
GK-HAZX-L-OH 0580DLC	5.8				
GK-HAZX-L-OH 0590DLC	5.9				
GK-HAZX-L-OH 0600DLC	6.0				
GK-HAZX-L-OH 0610DLC	6.1	3.9	72	120	8.0
GK-HAZX-L-OH 0620DLC	6.2				
GK-HAZX-L-OH 0630DLC	6.3				
GK-HAZX-L-OH 0640DLC	6.4				
GK-HAZX-L-OH 0650DLC	6.5				
GK-HAZX-L-OH 0660DLC	6.6				
GK-HAZX-L-OH 0670DLC	6.7				
GK-HAZX-L-OH 0680DLC	6.8				
GK-HAZX-L-OH 0690DLC	6.9				
GK-HAZX-L-OH 0700DLC	7.0				
GK-HAZX-L-OH 0710DLC	7.1	4.5	72	120	8.0
GK-HAZX-L-OH 0720DLC	7.2				
GK-HAZX-L-OH 0730DLC	7.3				

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HAZX-L-OH 0740DLC	7.4	4.5	72	120	8.0
GK-HAZX-L-OH 0750DLC	7.5				
GK-HAZX-L-OH 0760DLC	7.6				
GK-HAZX-L-OH 0770DLC	7.7				
GK-HAZX-L-OH 0780DLC	7.8				
GK-HAZX-L-OH 0790DLC	7.9	4.8	81	135	10.0
GK-HAZX-L-OH 0800DLC	8.0				
GK-HAZX-L-OH 0810DLC	8.1				
GK-HAZX-L-OH 0820DLC	8.2				
GK-HAZX-L-OH 0830DLC	8.3				
GK-HAZX-L-OH 0840DLC	8.4	5.1	90	160	12.0
GK-HAZX-L-OH 0850DLC	8.5				
GK-HAZX-L-OH 0860DLC	8.6				
GK-HAZX-L-OH 0870DLC	8.7				
GK-HAZX-L-OH 0880DLC	8.8				
GK-HAZX-L-OH 0890DLC	8.9	5.4	99	160	12.0
GK-HAZX-L-OH 0900DLC	9.0				
GK-HAZX-L-OH 0910DLC	9.1				
GK-HAZX-L-OH 0920DLC	9.2				
GK-HAZX-L-OH 0930DLC	9.3				
GK-HAZX-L-OH 0940DLC	9.4	5.7	108	160	12.0
GK-HAZX-L-OH 0950DLC	9.5				
GK-HAZX-L-OH 0960DLC	9.6				
GK-HAZX-L-OH 0970DLC	9.7				
GK-HAZX-L-OH 0980DLC	9.8				
GK-HAZX-L-OH 0990DLC	9.9	6	108	160	12.0
GK-HAZX-L-OH 1000DLC	10.0				
GK-HAZX-L-OH 1010DLC	10.1				
GK-HAZX-L-OH 1020DLC	10.2				
GK-HAZX-L-OH 1030DLC	10.3				
GK-HAZX-L-OH 1040DLC	10.4	6.3	108	160	12.0
GK-HAZX-L-OH 1050DLC	10.5				
GK-HAZX-L-OH 1060DLC	10.6				
GK-HAZX-L-OH 1070DLC	10.7				
GK-HAZX-L-OH 1080DLC	10.8				
GK-HAZX-L-OH 1090DLC	10.9	6.6	108	160	12.0
GK-HAZX-L-OH 1100DLC	11.0				
GK-HAZX-L-OH 1110DLC	11.1				
GK-HAZX-L-OH 1120DLC	11.2				
GK-HAZX-L-OH 1130DLC	11.3				
GK-HAZX-L-OH 1140DLC	11.4	7.2	108	160	12.0
GK-HAZX-L-OH 1150DLC	11.5				
GK-HAZX-L-OH 1160DLC	11.6				
GK-HAZX-L-OH 1170DLC	11.7				

Model number	φ D	T	ℓ	L	φ d
	Diameter	Penetration Depth	Groove Length	Overall Length	Shank
GK-HAZX-L-OH 1180DLC	11.8	7.2	108	160	12.0
GK-HAZX-L-OH 1190DLC	11.9				
GK-HAZX-L-OH 1200DLC	12.0				
GK-HAZX-L-OH 1210DLC	12.1	7.5	117	180	14.0
GK-HAZX-L-OH 1220DLC	12.2				
GK-HAZX-L-OH 1230DLC	12.3				
GK-HAZX-L-OH 1240DLC	12.4				
GK-HAZX-L-OH 1250DLC	12.5				
GK-HAZX-L-OH 1260DLC	12.6	7.8	126	200	16.0
GK-HAZX-L-OH 1270DLC	12.7				
GK-HAZX-L-OH 1280DLC	12.8				
GK-HAZX-L-OH 1290DLC	12.9				
GK-HAZX-L-OH 1300DLC	13.0				
GK-HAZX-L-OH 1310DLC	13.1	8.1	135	200	16.0
GK-HAZX-L-OH 1320DLC	13.2				
GK-HAZX-L-OH 1330DLC	13.3				
GK-HAZX-L-OH 1340DLC	13.4				
GK-HAZX-L-OH 1350DLC	13.5				
GK-HAZX-L-OH 1360DLC	13.6	8.4	144	200	16.0
GK-HAZX-L-OH 1370DLC	13.7				
GK-HAZX-L-OH 1380DLC	13.8				
GK-HAZX-L-OH 1390DLC	13.9				
GK-HAZX-L-OH 1400DLC	14.0				
GK-HAZX-L-OH 1410DLC	14.1	8.7	153	200	16.0
GK-HAZX-L-OH 1420DLC	14.2				
GK-HAZX-L-OH 1430DLC	14.3				
GK-HAZX-L-OH 1440DLC	14.4				
GK-HAZX-L-OH 1450DLC	14.5				
GK-HAZX-L-OH 1460DLC	14.6	9	162	200	16.0
GK-HAZX-L-OH 1470DLC	14.7				
GK-HAZX-L-OH 1480DLC	14.8				
GK-HAZX-L-OH 1490DLC	14.9				
GK-HAZX-L-OH 1500DLC	15.0				
GK-HAZX-L-OH 1510DLC	15.1	9.3	171	200	16.0
GK-HAZX-L-OH 1520DLC	15.2				
GK-HAZX-L-OH 1530DLC	15.3				
GK-HAZX-L-OH 1540DLC	15.4				
GK-HAZX-L-OH 1550DLC	15.5				
GK-HAZX-L-OH 1560DLC	15.6	9.6	180	200	16.0
GK-HAZX-L-OH 1570DLC	15.7				
GK-HAZX-L-OH 1580DLC	15.8				
GK-HAZX-L-OH 1590DLC	15.9				
GK-HAZX-L-OH 1600DLC	16.0				