

GK-HFZX-OH
NO BURRS



Giken Ltd.
The Japanese products



The world's first! 4 blades **OIL HOLE** **STEEL**

ZERO BURR X

For Carbon steel / HSTT / SCM / FCD
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 carbon steel and HTSS 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 **STEEL**

For Carbon steel HSTT SCM FCD Cross hole

ZERO BURR X

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.

Power Wave Drill

Dispersed cutting resistance to less than 1/4. 3D waveform composite R shape with power wave that cuts well but does not chip, achieves no burr.

Sub Power Wave Drill

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

Power Spiral Reamer

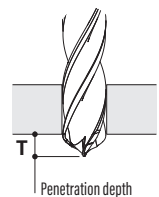
Strong twist reamer shape for beautifully finished inner wall of hole.

- 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 -

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

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

$$F = f \times S$$

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

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

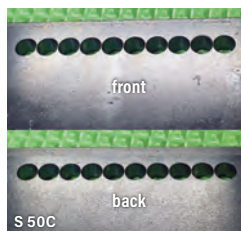
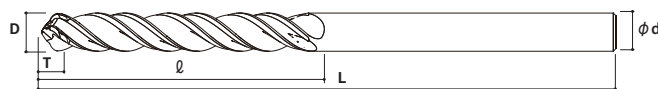
$$V = \text{Cutting speed(m/min)}$$

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

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

H7 plus tolerance

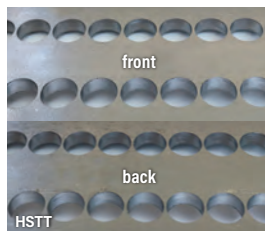
*Recommended cutting conditions may vary depending on the cutting environment such as the type of work materials and thickness.



S=2430 F=73 V=47 f=0.03



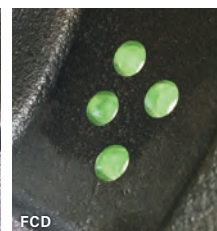
S=2430 F=73 V=47 f=0.03



S=1720 F=52 V=32.5 f=0.03



S=3350 F=135 V=64 f=0.03



S=2430 F=73 V=47 f=0.03

ZEROBURR X LINEUP (for Carbon steel / HSTT / SCM / FCD / Cross hole)

GQA coating

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HFZX-OH 0300 GQA	3.0	1.8	21	62	3.0
GK-HFZX-OH 0310 GQA	3.1				
GK-HFZX-OH 0320 GQA	3.2				
GK-HFZX-OH 0330 GQA	3.3	2.1			
GK-HFZX-OH 0340 GQA	3.4				
GK-HFZX-OH 0350 GQA	3.5				
GK-HFZX-OH 0360 GQA	3.6		28	75	4.0
GK-HFZX-OH 0370 GQA	3.7				
GK-HFZX-OH 0380 GQA	3.8	2.4			
GK-HFZX-OH 0390 GQA	3.9				
GK-HFZX-OH 0400 GQA	4.0				
GK-HFZX-OH 0410 GQA	4.1				
GK-HFZX-OH 0420 GQA	4.2				
GK-HFZX-OH 0430 GQA	4.3	2.7			
GK-HFZX-OH 0440 GQA	4.4				
GK-HFZX-OH 0450 GQA	4.5				
GK-HFZX-OH 0460 GQA	4.6				
GK-HFZX-OH 0470 GQA	4.7				
GK-HFZX-OH 0480 GQA	4.8	3			
GK-HFZX-OH 0490 GQA	4.9				
GK-HFZX-OH 0500 GQA	5.0				
GK-HFZX-OH 0510 GQA	5.1				
GK-HFZX-OH 0520 GQA	5.2				
GK-HFZX-OH 0530 GQA	5.3				
GK-HFZX-OH 0540 GQA	5.4				
GK-HFZX-OH 0550 GQA	5.5	3.6			
GK-HFZX-OH 0560 GQA	5.6				
GK-HFZX-OH 0570 GQA	5.7				
GK-HFZX-OH 0580 GQA	5.8				
GK-HFZX-OH 0590 GQA	5.9				
GK-HFZX-OH 0600 GQA	6.0				
GK-HFZX-OH 0610 GQA	6.1				
GK-HFZX-OH 0620 GQA	6.2				
GK-HFZX-OH 0630 GQA	6.3	3.9			
GK-HFZX-OH 0640 GQA	6.4				
GK-HFZX-OH 0650 GQA	6.5				
GK-HFZX-OH 0660 GQA	6.6				
GK-HFZX-OH 0670 GQA	6.7				
GK-HFZX-OH 0680 GQA	6.8	4.2			
GK-HFZX-OH 0690 GQA	6.9				
GK-HFZX-OH 0700 GQA	7.0				
GK-HFZX-OH 0710 GQA	7.1				
GK-HFZX-OH 0720 GQA	7.2	4.5			
GK-HFZX-OH 0730 GQA	7.3				

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

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HFZX-OH 1180 GQA	11.8				
GK-HFZX-OH 1190 GQA	11.9	7.2	84	130	12.0
GK-HFZX-OH 1200 GQA	12.0				
GK-HFZX-OH 1210 GQA	12.1				
GK-HFZX-OH 1220 GQA	12.2				
GK-HFZX-OH 1230 GQA	12.3	7.5			
GK-HFZX-OH 1240 GQA	12.4				
GK-HFZX-OH 1250 GQA	12.5				
GK-HFZX-OH 1260 GQA	12.6				
GK-HFZX-OH 1270 GQA	12.7				
GK-HFZX-OH 1280 GQA	12.8	7.8			
GK-HFZX-OH 1290 GQA	12.9				
GK-HFZX-OH 1300 GQA	13.0				
GK-HFZX-OH 1310 GQA	13.1				
GK-HFZX-OH 1320 GQA	13.2				
GK-HFZX-OH 1330 GQA	13.3	8.1			
GK-HFZX-OH 1340 GQA	13.4				
GK-HFZX-OH 1350 GQA	13.5				
GK-HFZX-OH 1360 GQA	13.6				
GK-HFZX-OH 1370 GQA	13.7				
GK-HFZX-OH 1380 GQA	13.8	8.4			
GK-HFZX-OH 1390 GQA	13.9				
GK-HFZX-OH 1400 GQA	14.0				
GK-HFZX-OH 1410 GQA	14.1				
GK-HFZX-OH 1420 GQA	14.2				
GK-HFZX-OH 1430 GQA	14.3	8.7			
GK-HFZX-OH 1440 GQA	14.4				
GK-HFZX-OH 1450 GQA	14.5				
GK-HFZX-OH 1460 GQA	14.6				
GK-HFZX-OH 1470 GQA	14.7				
GK-HFZX-OH 1480 GQA	14.8	9			
GK-HFZX-OH 1490 GQA	14.9				
GK-HFZX-OH 1500 GQA	15.0				
GK-HFZX-OH 1510 GQA	15.1				
GK-HFZX-OH 1520 GQA	15.2				
GK-HFZX-OH 1530 GQA	15.3	9.3			
GK-HFZX-OH 1540 GQA	15.4				
GK-HFZX-OH 1550 GQA	15.5				
GK-HFZX-OH 1560 GQA	15.6				
GK-HFZX-OH 1570 GQA	15.7				
GK-HFZX-OH 1580 GQA	15.8	9.6			
GK-HFZX-OH 1590 GQA	15.9				
GK-HFZX-OH 1600 GQA	16.0				

Giken Ltd.

The Japanese products

9-3-1 Funayose Maruoka-cho Sakai city Fukui, Japan 910-0381

www.kk-giken.com
info@kk-giken.com

TEL +81-0776-66-2200
FAX +81-0776-66-2227