

GK-HSTZX-S
NO BURRS



Giken Ltd,
The Japanese products



Drilling videos here!

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

ZERO BURR XS

Stainless Steel **Titanium** **Heat-resistant Alloys**

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.

*Not for use with hardened steel or hard materials.

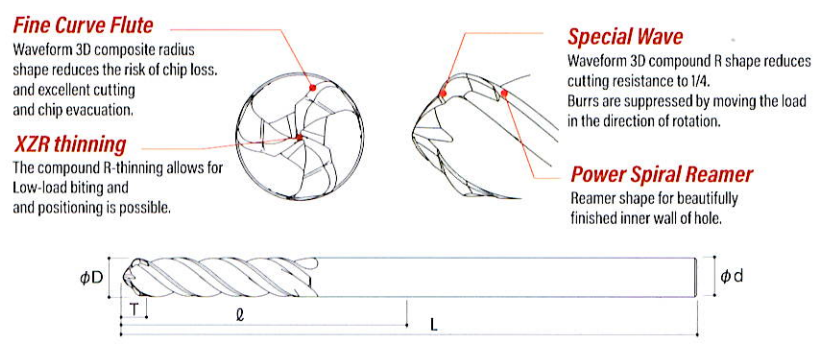


New Product! For **SUS Titan Heat resistant alloy Cross hole**
3 Blades!
NO BURRS
Hybrid Drill

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 -

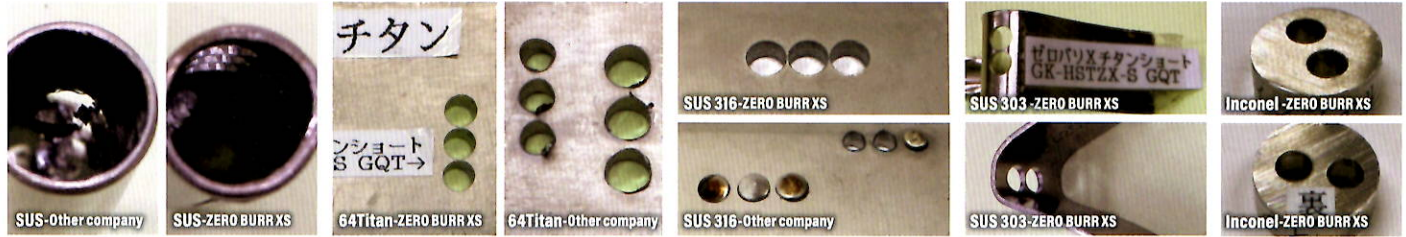
- * Please use for wet drilling.
- * Be sure to fix the work material firmly, and use the drill to completely pass through the penetration depth.
- * If the deflection is large when the drill is mounted, welding or the hole diameter may become large, or a spiral flaw may remain on a drilling surface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

H7 Plus Tolerances

- Cutting speed -

Size	Feed per revolution f =	S = Revolution(rpm)
V=30~70m/min	dia 1.0 - 3.0 0.005 - 0.02	V = Cutting speed(m/min)
S = V × 1000 ÷ 3.14 ÷ D	dia 3.0 - 6.0 0.01 - 0.04	F = Feed speed(mm/min)
F = S × f	dia 6.0 or more 0.02 - 0.06	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 Stainless steel / Titanium / Heat resistant alloy / Thin plate&Cross hole) GQT Coating

Model number	φD Diameter	T Penetration Depth	ℓ Groove Length	L Overall Length	φd Shank
GK-HSTZX-S 0100 GQT	1	0.6	5	50	3
GK-HSTZX-S 0110 GQT	1.1				
GK-HSTZX-S 0120 GQT	1.2				
GK-HSTZX-S 0130 GQT	1.3	0.9	6		
GK-HSTZX-S 0140 GQT	1.4				
GK-HSTZX-S 0150 GQT	1.5				
GK-HSTZX-S 0160 GQT	1.6				
GK-HSTZX-S 0170 GQT	1.7				
GK-HSTZX-S 0180 GQT	1.8	1.2	9		
GK-HSTZX-S 0190 GQT	1.9				
GK-HSTZX-S 0200 GQT	2			50	3
GK-HSTZX-S 0210 GQT	2.1				
GK-HSTZX-S 0220 GQT	2.2				
GK-HSTZX-S 0230 GQT	2.3	1.5	12		
GK-HSTZX-S 0240 GQT	2.4				
GK-HSTZX-S 0250 GQT	2.5				
GK-HSTZX-S 0260 GQT	2.6				
GK-HSTZX-S 0270 GQT	2.7				
GK-HSTZX-S 0280 GQT	2.8	1.8	14		
GK-HSTZX-S 0290 GQT	2.9				
GK-HSTZX-S 0300 GQT	3				
GK-HSTZX-S 0310 GQT	3.1				
GK-HSTZX-S 0320 GQT	3.2				
GK-HSTZX-S 0330 GQT	3.3				
GK-HSTZX-S 0340 GQT	3.4				
GK-HSTZX-S 0350 GQT	3.5	2.4	18	55	4
GK-HSTZX-S 0360 GQT	3.6				
GK-HSTZX-S 0370 GQT	3.7				
GK-HSTZX-S 0380 GQT	3.8				
GK-HSTZX-S 0390 GQT	3.9				
GK-HSTZX-S 0400 GQT	4				
GK-HSTZX-S 0410 GQT	4.1				
GK-HSTZX-S 0420 GQT	4.2				
GK-HSTZX-S 0430GQT	4.3				
GK-HSTZX-S 0440 GQT	4.4				
GK-HSTZX-S 0450 GQT	4.5	3	23		
GK-HSTZX-S 0460 GQT	4.6				
GK-HSTZX-S 0470 GQT	4.7				
GK-HSTZX-S 0480 GQT	4.8				
GK-HSTZX-S 0490 GQT	4.9				
GK-HSTZX-S 0500 GQT	5			65	6
GK-HSTZX-S 0510 GQT	5.1				
GK-HSTZX-S 0520 GQT	5.2				
GK-HSTZX-S 0530 GQT	5.3				
GK-HSTZX-S 0540 GQT	5.4				
GK-HSTZX-S 0550 GQT	5.5	3.6	25		
GK-HSTZX-S 0560 GQT	5.6				
GK-HSTZX-S 0570 GQT	5.7				
GK-HSTZX-S 0580 GQT	5.8				
GK-HSTZX-S 0590 GQT	5.9				
GK-HSTZX-S 0600 GQT	6	3.6	25	65	6
GK-HSTZX-S 0610 GQT	6.1				
GK-HSTZX-S 0620 GQT	6.2				
GK-HSTZX-S 0630 GQT	6.3				
GK-HSTZX-S 0640 GQT	6.4				
GK-HSTZX-S 0650 GQT	6.5	4.2	33		
GK-HSTZX-S 0660 GQT	6.6				
GK-HSTZX-S 0670 GQT	6.7				
GK-HSTZX-S 0680 GQT	6.8				
GK-HSTZX-S 0690 GQT	6.9				
GK-HSTZX-S 0700 GQT	7			75	8
GK-HSTZX-S 0710 GQT	7.1				
GK-HSTZX-S 0720 GQT	7.2				
GK-HSTZX-S 0730 GQT	7.3				
GK-HSTZX-S 0740 GQT	7.4				
GK-HSTZX-S 0750 GQT	7.5	4.8	35		
GK-HSTZX-S 0760 GQT	7.6				
GK-HSTZX-S 0770 GQT	7.7				
GK-HSTZX-S 0780 GQT	7.8				
GK-HSTZX-S 0790 GQT	7.9				
GK-HSTZX-S 0800 GQT	8				
GK-HSTZX-S 0810 GQT	8.1				
GK-HSTZX-S 0820 GQT	8.2				
GK-HSTZX-S 0830 GQT	8.3				
GK-HSTZX-S 0840 GQT	8.4				
GK-HSTZX-S 0850 GQT	8.5	5.4	42		
GK-HSTZX-S 0860 GQT	8.6				
GK-HSTZX-S 0870 GQT	8.7				
GK-HSTZX-S 0880 GQT	8.8				
GK-HSTZX-S 0890 GQT	8.9				
GK-HSTZX-S 0900 GQT	9			90	10
GK-HSTZX-S 0910 GQT	9.1				
GK-HSTZX-S 0920 GQT	9.2				
GK-HSTZX-S 0930 GQT	9.3				
GK-HSTZX-S 0940 GQT	9.4				
GK-HSTZX-S 0950 GQT	9.5	6	44		
GK-HSTZX-S 0960 GQT	9.6				
GK-HSTZX-S 0970 GQT	9.7				
GK-HSTZX-S 0980 GQT	9.8				
GK-HSTZX-S 0990 GQT	9.9				
GK-HSTZX-S 1000 GQT	10				
GK-HSTZX-S 1010 GQT	10.1				
GK-HSTZX-S 1020 GQT	10.2				
GK-HSTZX-S 1030 GQT	10.3				
GK-HSTZX-S 1040 GQT	10.4				
GK-HSTZX-S 1050 GQT	10.5	6.6	52	100	12
GK-HSTZX-S 1060 GQT	10.6				
GK-HSTZX-S 1070 GQT	10.7				
GK-HSTZX-S 1080 GQT	10.8				
GK-HSTZX-S 1090 GQT	10.9				
GK-HSTZX-S 1100 GQT	11	6.6	52		
GK-HSTZX-S 1110 GQT	11.1				
GK-HSTZX-S 1120 GQT	11.2				
GK-HSTZX-S 1130 GQT	11.3				
GK-HSTZX-S 1140 GQT	11.4				
GK-HSTZX-S 1150 GQT	11.5	7.2	54	100	12
GK-HSTZX-S 1160 GQT	11.6				
GK-HSTZX-S 1170 GQT	11.7				
GK-HSTZX-S 1180 GQT	11.8				
GK-HSTZX-S 1190 GQT	11.9				
GK-HSTZX-S 1200 GQT	12				
GK-HSTZX-S 1210 GQT	12.1				
GK-HSTZX-S 1220 GQT	12.2				
GK-HSTZX-S 1230 GQT	12.3				
GK-HSTZX-S 1240 GQT	12.4				
GK-HSTZX-S 1250 GQT	12.5	7.8	56		
GK-HSTZX-S 1260 GQT	12.6				
GK-HSTZX-S 1270 GQT	12.7				
GK-HSTZX-S 1280 GQT	12.8				
GK-HSTZX-S 1290 GQT	12.9				
GK-HSTZX-S 1300 GQT	13			105	14
GK-HSTZX-S 1310 GQT	13.1				
GK-HSTZX-S 1320 GQT	13.2				
GK-HSTZX-S 1330 GQT	13.3				
GK-HSTZX-S 1340 GQT	13.4				
GK-HSTZX-S 1350 GQT	13.5	8.2	58		
GK-HSTZX-S 1360 GQT	13.6				
GK-HSTZX-S 1370 GQT	13.7				
GK-HSTZX-S 1380 GQT	13.8				
GK-HSTZX-S 1390 GQT	13.9				
GK-HSTZX-S 1400 GQT	14				
GK-HSTZX-S 1410 GQT	14.1				
GK-HSTZX-S 1420 GQT	14.2				
GK-HSTZX-S 1430 GQT	14.3				
GK-HSTZX-S 1440 GQT	14.4				
GK-HSTZX-S 1450 GQT	14.5	9	60		
GK-HSTZX-S 1460 GQT	14.6				
GK-HSTZX-S 1470 GQT	14.7				
GK-HSTZX-S 1480 GQT	14.8				
GK-HSTZX-S 1490 GQT	14.9				
GK-HSTZX-S 1500 GQT	15			120	16
GK-HSTZX-S 1510 GQT	15.1				
GK-HSTZX-S 1520 GQT	15.2				
GK-HSTZX-S 1530 GQT	15.3				
GK-HSTZX-S 1540 GQT	15.4				
GK-HSTZX-S 1550 GQT	15.5	9.6	64		
GK-HSTZX-S 1560 GQT	15.6				
GK-HSTZX-S 1570 GQT	15.7				
GK-HSTZX-S 1580 GQT	15.8				
GK-HSTZX-S 1590 GQT	15.9				
GK-HSTZX-S 1600 GQT	16				

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