

# NPA

New Product Announcement No. 2021-06



## HDRILL

**High Productivity and Tool Life Solid Carbide  
NHD-K Drills for Cast Iron Machining**



## KEY POINT

**TaeguTec expands its holemaking range with new NHD-K solid carbide drills dedicated for cast iron machining.**

TaeguTec continues to diversify its holemaking drill range for workpiece materials with the introduction of solid carbide drills dedicated for cast iron machining. The newly released NHD-K type drills are designed to minimize chipping or damage to the cutting edge that may occur when machining cast iron.

The NHD-K type drills are optimized for cast iron machining because of its unique multi-angle cutting edge geometry for maximized edge strength and a cutting edge that evenly distributes the machining load across the cutting edge. The solid carbide drills minimize burrs to produce an excellent surface finish during operation.

Please contact the product manager for more information.

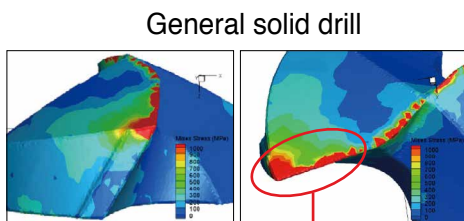
### Features

- Dedicated geometry for cast iron machining

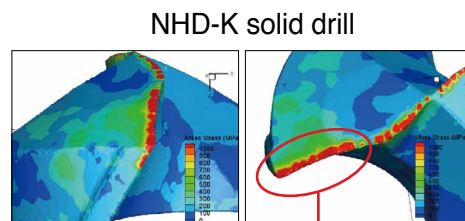


Multi-angle cutting edges

- Uniform cutting load

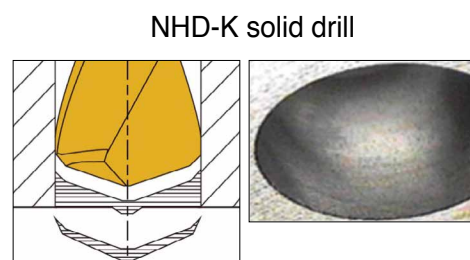
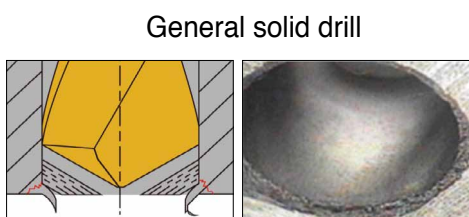


Concentrated cutting force on the end of the cutting edge



Uniform cutting force across the cutting edge

- Minimized burrs



### Availability

In stock

### Price

Available in the GAL system

Sincerely,  
**TaeguTec**



**Sung-chang-ho**  
Hole-Making General PM

Sincerely,  
**TaeguTec**



**Suh-jang-hoon**  
Hole-Making Drill PM

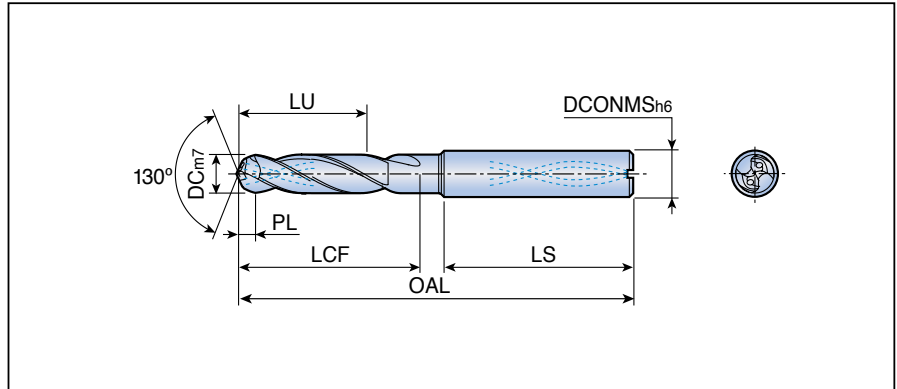
## NHD...KI3



Solid carbide drills with oil holes for cast iron machining



• Drilling depth: 3xdiameter



Designation	Dimension (mm)							Grade
	DC	DCONMS	OAL	LU	LCF	LS	PL	TT9030
<b>NHD 030-014-06 KI3</b>	3.0	6.0	62	14	20	34	1.4	●
<b>033-014-06 KI3</b>	3.3	6.0	62	14	20	34	1.6	●
<b>035-014-06 KI3</b>	3.5	6.0	62	14	20	34	1.7	●
<b>040-017-06 KI3</b>	4.0	6.0	66	17	24	35	1.9	●
<b>041-017-06 KI3</b>	4.1	6.0	66	17	24	35	2.0	●
<b>042-017-06 KI3</b>	4.2	6.0	66	17	24	35	2.0	●
<b>045-017-06 KI3</b>	4.5	6.0	66	17	24	35	2.2	●
<b>046-017-06 KI3</b>	4.6	6.0	66	17	24	35	2.2	●
<b>050-020-06 KI3</b>	5.0	6.0	66	20	27	36	2.4	●
<b>051-020-06 KI3</b>	5.1	6.0	66	20	27	36	2.5	●
<b>052-020-06 KI3</b>	5.2	6.0	66	20	27	36	2.5	●
<b>055-020-06 KI3</b>	5.5	6.0	66	20	27	36	2.6	●
<b>060-020-06 KI3</b>	6.0	6.0	66	20	27	36	2.9	●
<b>061-024-08 KI3</b>	6.1	8.0	79	24	34	36	2.9	●
<b>065-024-08 KI3</b>	6.5	8.0	79	24	34	36	3.1	●
<b>067-024-08 KI3</b>	6.7	8.0	79	24	34	36	3.2	●
<b>068-024-08 KI3</b>	6.8	8.0	79	24	34	36	3.3	●
<b>070-024-08 KI3</b>	7.0	8.0	79	24	34	36	3.4	●
<b>075-029-08 KI3</b>	7.5	8.0	79	29	40	36	3.6	●
<b>080-029-08 KI3</b>	8.0	8.0	79	29	40	36	3.8	●
<b>081-035-10 KI3</b>	8.1	10.0	89	35	45	40	3.9	●
<b>085-035-10 KI3</b>	8.5	10.0	89	35	45	40	4.1	●
<b>087-035-10 KI3</b>	8.7	10.0	89	35	45	40	4.2	●
<b>089-035-10 KI3</b>	8.9	10.0	89	35	45	40	4.3	●
<b>090-035-10 KI3</b>	9.0	10.0	89	35	45	40	4.3	●
<b>095-035-10 KI3</b>	9.5	10.0	89	35	45	40	4.6	●
<b>100-035-10 KI3</b>	10.0	10.0	89	35	45	40	4.8	●
<b>103-040-12 KI3</b>	10.3	12.0	102	40	53	45	4.9	●
<b>105-040-12 KI3</b>	10.5	12.0	102	40	53	45	5.0	●
<b>110-040-12 KI3</b>	11.0	12.0	102	40	53	45	5.3	●
<b>115-040-12 KI3</b>	11.5	12.0	102	40	53	45	5.5	●
<b>120-040-12 KI3</b>	12.0	12.0	102	40	53	45	5.8	●

●: Standard items

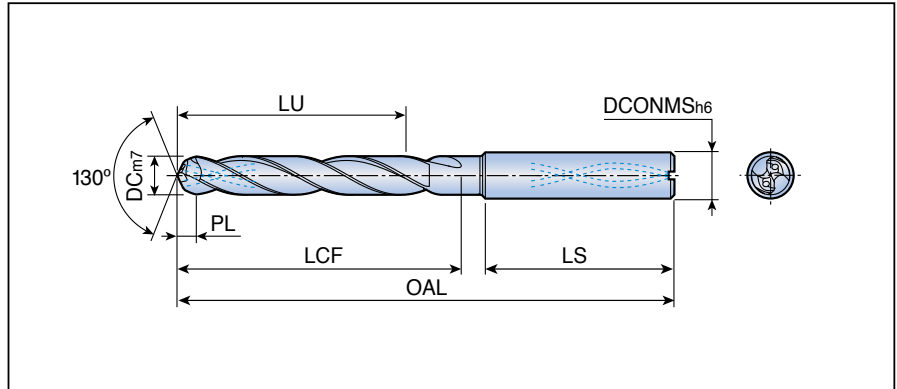
## NHD...KI5



Solid carbide drills with oil holes for cast iron machining



• Drilling depth: 5xdiameter



Designation	Dimension (mm)							Grade
	DC	DCONMS	OAL	LU	LCF	LS	PL	TT9030
<b>NHD 030-023-06 KI5</b>	3.0	6.0	66	23	27	34	1.4	●
<b>033-023-06 KI5</b>	3.3	6.0	66	23	27	34	1.6	●
<b>035-023-06 KI5</b>	3.5	6.0	66	23	27	34	1.7	●
<b>040-029-06 KI5</b>	4.0	6.0	74	29	34	35	1.9	●
<b>042-029-06 KI5</b>	4.2	6.0	74	29	34	35	2.0	●
<b>045-029-06 KI5</b>	4.5	6.0	74	29	35	35	2.2	●
<b>046-029-06 KI5</b>	4.6	6.0	74	29	35	35	2.2	●
<b>050-035-06 KI5</b>	5.0	6.0	82	35	43	36	2.4	●
<b>052-035-06 KI5</b>	5.2	6.0	82	35	43	36	2.5	●
<b>055-035-06 KI5</b>	5.5	6.0	82	35	43	36	2.6	●
<b>060-035-06 KI5</b>	6.0	6.0	82	35	43	36	2.9	●
<b>065-043-08 KI5</b>	6.5	8.0	91	43	52	36	3.1	●
<b>067-043-08 KI5</b>	6.7	8.0	91	43	52	36	3.2	●
<b>068-043-08 KI5</b>	6.8	8.0	91	43	52	36	3.3	●
<b>070-043-08 KI5</b>	7.0	8.0	91	43	52	36	3.4	●
<b>075-043-08 KI5</b>	7.5	8.0	91	43	52	36	3.6	●
<b>080-043-08 KI5</b>	8.0	8.0	91	43	52	36	3.8	●
<b>081-049-10 KI5</b>	8.1	10.0	103	49	59	40	3.9	●
<b>085-049-10 KI5</b>	8.5	10.0	103	49	59	40	4.1	●
<b>087-049-10 KI5</b>	8.7	10.0	103	49	59	40	4.2	●
<b>089-049-10 KI5</b>	8.9	10.0	103	49	59	40	4.3	●
<b>090-049-10 KI5</b>	9.0	10.0	103	49	59	40	4.3	●
<b>095-049-10 KI5</b>	9.5	10.0	103	49	59	40	4.6	●
<b>100-049-10 KI5</b>	10.0	10.0	103	49	59	40	4.8	●
<b>103-056-12 KI5</b>	10.3	12.0	118	56	69	45	4.9	●
<b>105-056-12 KI5</b>	10.5	12.0	118	56	69	45	5.0	●
<b>110-056-12 KI5</b>	11.0	12.0	118	56	69	45	5.3	●
<b>115-056-12 KI5</b>	11.5	12.0	118	56	69	45	5.5	●
<b>120-056-12 KI5</b>	12.0	12.0	118	56	69	45	5.8	●

● Standard items

## Recommended Cutting Conditions



### Machining data for H-DRILL (NHD-K)

ISO	Material	Condition	Tensile strength (N/mm <sup>2</sup> )	Hardness HB	Material No.	Cutting speed V <sub>c</sub> (m/min)	Feed (mm/rev) vs. drill diameter		
							Ø3 - Ø5	Ø5.1 - Ø8	Ø8.1 - Ø12
K	Gray cast iron (GG)	Ferritic		160	15	100 -120	0.10-0.20	0.20-0.30	0.25-0.35
		Pearlitic		250	16	100 -120	0.10-0.20	0.20-0.30	0.25-0.35
	Cast iron nodular (GGG)	Ferritic		180	17	120-140	0.10-0.20	0.15-0.25	0.20-0.30
		Pearlitic		260	18	80-100	0.10-0.20	0.15-0.25	0.20-0.30
	Malleable cast iron	Ferritic		130	19	70-90	0.10-0.20	0.15-0.25	0.20-0.30
		Pearlitic		230	20	65-80	0.10-0.20	0.15-0.25	0.20-0.30

■ Cast iron