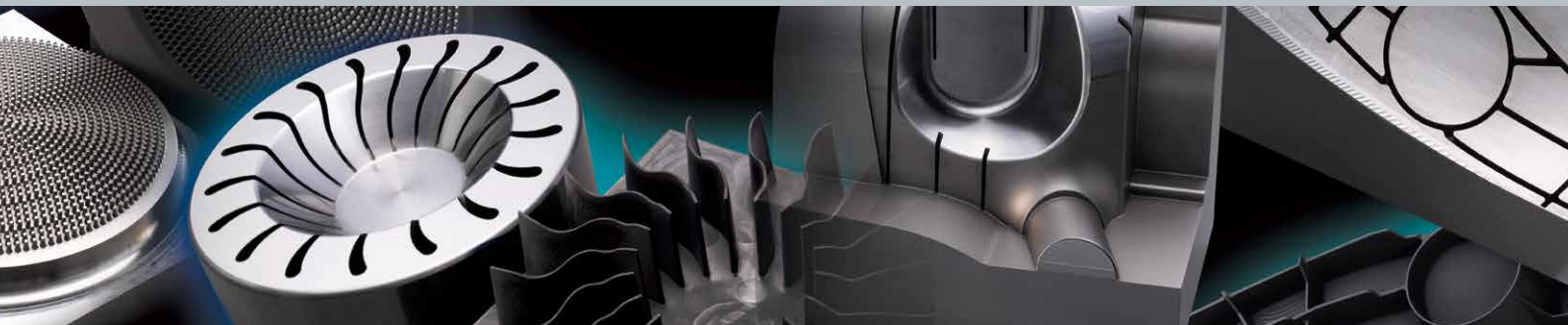




*High Speed, Small Hole Drilling Machines*

# K1C/K3HN



**Sodick**

# K1C – Best Selling Hole Driller

Best selling model for over 30 years

## Proven Reliability

The K1C was introduced into the market over 30 years ago. Decades of experience and know-how have made this model not only the most reliable small hole driller available on the market, but also the most wanted model on the second hand machine market.

## Operability

The operation panel and display are centralised at the front, in order that the machine can be operated easily without moving their standing position. A tray for the tools is also provided, and can be found underneath the work tank.

## The Latest Servo Technologies

A new servo function has been developed by accumulating knowledge over several years. Here, optimised servo control is realised which improves the cutting speed by up to 200%.

## Wide Range of Cutting Conditions

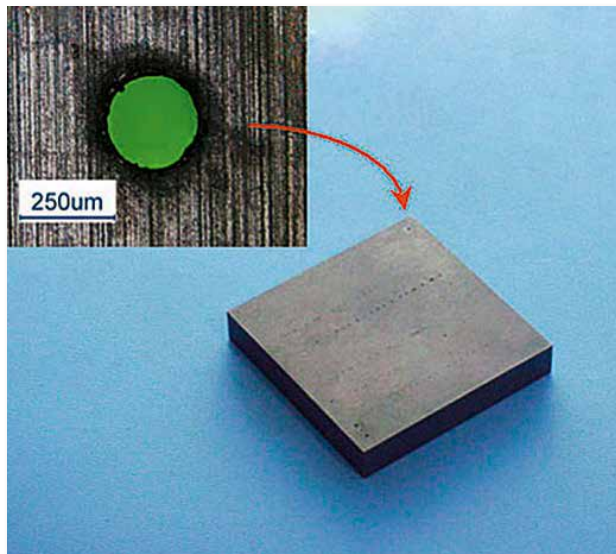
In order to cover potentially limitless demands from customers, Sodick offers a wide range of cutting conditions.

- Workpiece: SKD11, WC, Aluminum, Copper, Stainless Steel, Graphite
- Material thickness: 10, 20, 50, 100mm
- Electrode diameter: 0.25, 0.30, 0.50, 1.0, 2.0, 3.0mm



### Start Hole Drilling

A start hole for wire cut EDM can be easily and quickly made by the K1C. Neither specialised skills nor experience are required to work with the machine.



### Through machining

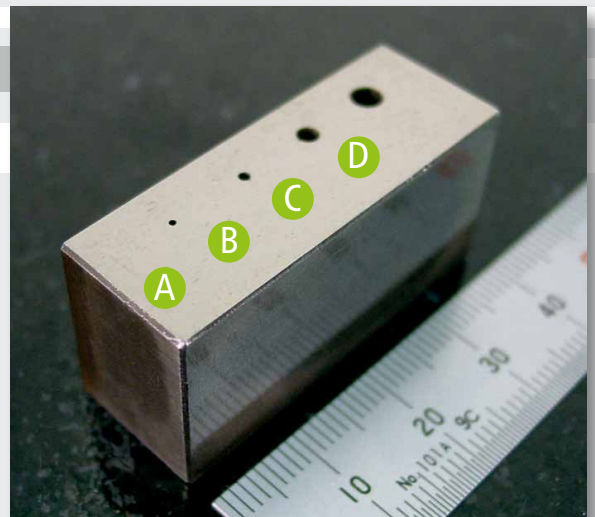
Workpiece material	■ Cemented carbide
Workpiece thickness	■ 10 mm (through hole)
Electrode material	■ Copper pipe
Dielectric fluid	■ Water
Electrode diameter	■ $\varnothing$ 0.2 mm
Machining time	■ 3 min 38 sec

### Through-hole

Workpiece material	■ WC
Workpiece thickness	■ 20 mm
Electrode material	■ Copper pipe
Dielectric fluid	■ Water
Electrode diameter	■ A: $\varnothing$ 0.6 mm B: $\varnothing$ 1.0 mm C: $\varnothing$ 2.0 mm D: $\varnothing$ 3.0 mm
Machining time	■ A: 5 min B: 6 min C: 7 min D: 6 min

### K1C Option

- Column up (100/200mm)
- 100 litre tank
- 30A booster (electrode up to  $\varnothing$  6.0mm)



# K3HN – The NC Controlled High Speed Hole Driller

LN Assist is Equipped as Standard for Automatic Programming Automatic Continuous Cutting is Possible

## High Speed Drilling

By coming equipped with "KSMC; Sodick Motion Controller", optimised servo control is realised which improves the cutting speed by up to 200%.

## Fine Feeding

Accurate fine feeding is controlled for stable cutting.

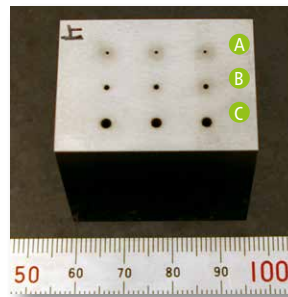
## Automatic Depth Measurement

Automatic Depth Measurement function is available for blind hole cutting.



### Automatic Electrode Feeder

AEF (Automatic Electrode Feeder) comes equipped as standard on the K3HN. It enables continuous cutting with several electrodes.

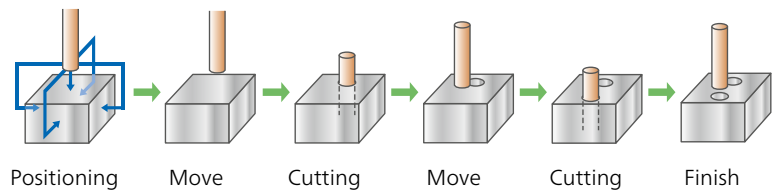


### Through-hole cutting

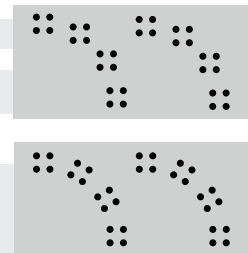
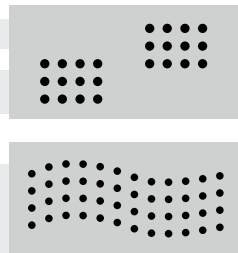
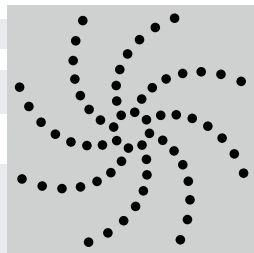
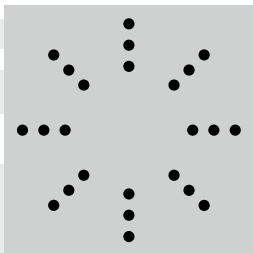
Workpiece material	■ STAVAX
Workpiece thickness	■ 20 mm
Electrode material	■ Copper pipe
Dielectric fluid	■ Oil (VITOL-KS)
Electrode diameter	■ A: $\varnothing$ 0.5 mm ■ B: $\varnothing$ 1.0 mm ■ C: $\varnothing$ 2.0 mm
Machining time	■ A: 40 sec ■ B: 40 sec ■ C: 1 min 40 sec
Electrode wear rate	■ A: 146% per hole ■ B: 80% per hole ■ C: 58% per hole

## LN Assist – Easy Operation with Graphic Screen

An automatic programming system, LN Assist, comes as standard on K3HN. Its simplified graphic screen allows for easy operation. As LN Assist is also capable of a series of calculations and macro-functions, operators can easily work with any kind of complex cutting layouts and programmes. A customised function is available where operators can register their own programmes as a utility.



Even complex layouts with a large number of holes can be programmed easily!



### K3HN Options

- Column up (100/200mm)
- 30A booster (electrode up to  $\varnothing$  6.0mm)
- De-ionized Water Spec.
- Rotary table (WS-4P)
- Oscilloscope
- W-axis digital



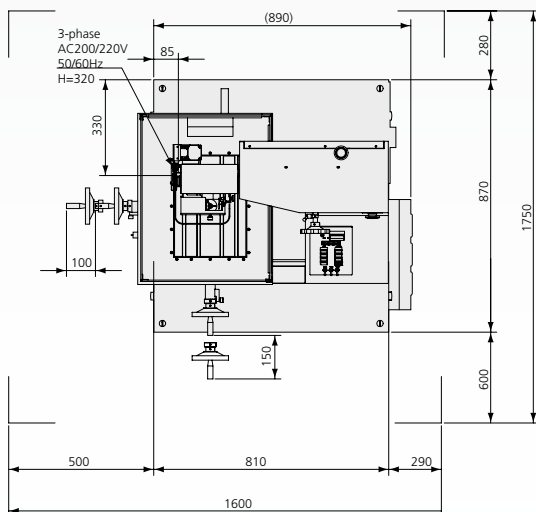
# Specifications

Specification	K1C	K3HN
Table size (W x D)	250 x 350 mm	400 x 450 mm
X-/Y-/Z-axis travel	200 x 300 x 300 mm	300 x 400 x 300 mm
W-axis travel	250 mm	230 mm (NC control: option)
Max. workpiece weight	100 kg	200 kg
Max. workpiece size (W x D x H)	250 x 350 x 300 mm	400 x 450 x 300 mm
Applicable electrode diameter	ø 0.2 ~ ø 3.0 mm	ø 0.25 ~ ø 3.0 mm
Distance from guide bottom to table top	50 ~ 300 mm	70 ~ 300 mm
Distance from the floor to table top	1020 mm	900 mm
Machine dimensions (W x D x H)	890 x 870 x 2015 mm	1425 x 1120 x 2080 mm
Machine installation space (W x D) (not including maintenance space)	1600 x 1750 mm	1425 x 1620 mm
Machine weight	550 kg	850 kg
Dielectric fluid	Water (VITOL-KS)	Water (VITOL-KS)*
Dielectric tank total capacity	20 litre**	110 litre
Dielectric fluid filtration method	Replaceable sponge filter	Replaceable paper filter HF-17
30A booster (up to ø 6.0 mm electrode available)	Available as option	Available as option
Rotary Table	Not available	Available as option
LN Assist	Not available	Standard Feature

\*De-ionized water spec. available as factory option on K3HN \*\*Additional 100 litre tank available as option on K1C  
 Due to ongoing research, specifications are subject to change without prior notice.

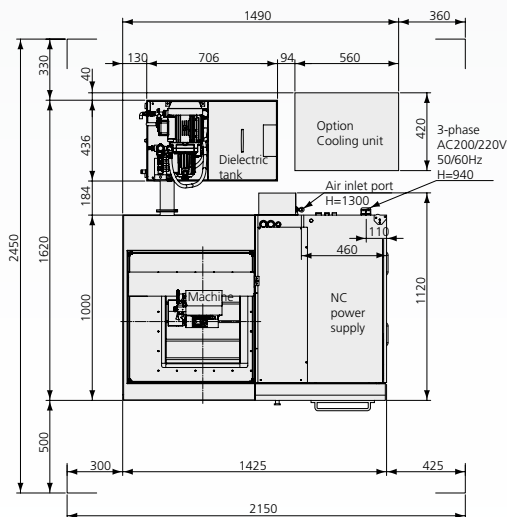
## Floor Layout

### K1C



Total height of machine is 2015 mm

### K3HN



Total height of machine is 2080 mm

# Sodick

create your future

Sodick Europe Ltd.

Rowley Drive, Baginton  
 Coventry, CV3 4FG  
 United Kingdom

Sodick Contact

Phone +44 (0) 24 7621 4314  
 email europe@sodick.eu.com  
 online www.sodick.org