

# Diamond Dry Core Bits User Guide

Please observe the following guidelines to ensure a long working life for your Faithfull Diamond Core Bits.

Faithfull Diamond Dry Core Bits are suitable for cutting breeze block, brick and soft concrete.

They are not designed to cut extremely dense concrete, engineering bricks or abrasive materials because doing so may damage or reduce the working life of the core bit.

Diamond Core Bits must always be used with power drills rated at between 850 to 1,000 watts, which are equipped with a safety clutch and a variable speed function capable of speeds of up to 3000 rpm.

**Always** use the drill at the recommended rotational speed for the size of core bit being used. Speeds of between 1,000 and 3,000 rpm are normal for the correct operation of diamond core bits.

## ROTARY USE ONLY –

**Must not be used on Percussion/Hammer mode**

**DO NOT** use Diamond Cores larger than 78mm in diameter with SDS-plus drills as this may result in damage to the power tool or SDS adaptor.

## Operation Instructions

Diamond Core Bits can be used with or without a pilot drill.

### A) WITH A PILOT DRILL

- 1 Push the pilot drill into the Hex or SDS adaptor.
- 2 After marking out, drill until the diamond core bit is at least 5mm into the material.
- 3 Withdraw from the material, disconnect the power, and remove the pilot drill using the drift key.
- 4 Restart drilling.

### B) WITHOUT A PILOT DRILL

Experienced operatives may use the following procedure

- 1 With the diamond core bit running, apply the cutting edge to the surface of the material to be cut, with the drill at an angle of approximately 15°.
- 2 As the teeth bite, gradually move the core bit towards a 90° angle to the surface of the material, while continuing to apply pressure.

Please note that this procedure should not damage the diamond core bit.

**Always** ensure that the core bit is rotating when entering and exiting the material being cut.

**Never** use “hammer” action when using a diamond core bit, as this is likely to cause damage to both the core drill bit and to your power tool.

**Never** attempt to cut metal or reinforced concrete as damage to the core bit is likely to occur.

**Never** allow the core bit to become excessively hot while cutting, and allow a cooling down time between cutting applications.

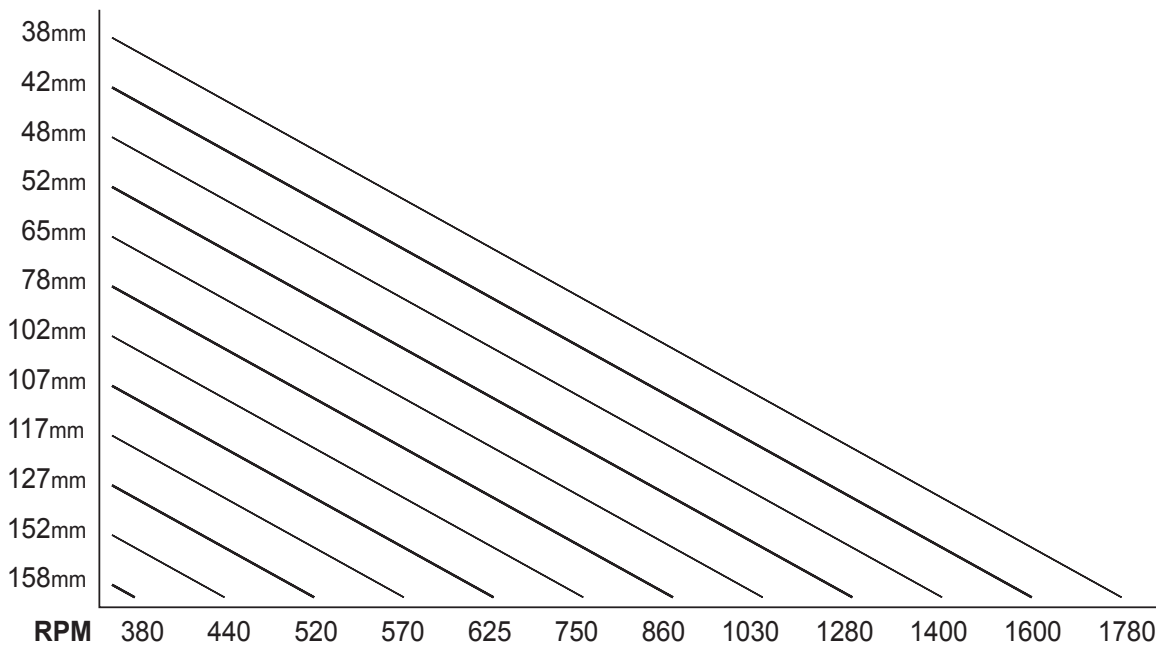
Please refer to your manufacturers' instructions as to the maximum core diameter that can be safely used with your power tool.

## Operation Hints

- 1 Although a soft or abrasive material will cut easily, it will also cause rapid wear to the cutting edge of the core bit. With such materials, increased drilling speed (rpm) will extend the life of the core bit.
- 2 For harder materials, the drilling speed should be decreased to prevent overheating.
- 3 Diamond core bits rely on an air flow to keep them cool and help disperse heat, to aid this process withdraw the core at regular intervals during the drilling process and allow the core to rotate outside the hole for a few seconds to cool the core down.
- 4 Exiting the cut at regular intervals keeps the core running cool and helps clear any abraded waste material, minimising the risk of the core becoming jammed.
- 5 Do not apply extreme pressure by attempting to force the core, this will cause excessive heat resulting in premature wear to the diamond segments. Always let the drilling machine and the diamond segments do the work.
- 6 If a diamond core bit becomes polished (blunt) make a shallow cut in a soft building brick or block to refresh the diamond segment cutting edge.
- 7 Only use diamond core bits with the machine set to the “rotary” option.
- 8 Regularly check the core drill bit for damage and signs of uneven wear.

# General Guide to Speed Settings

## Core Size



## General Safety Advice



**Always** wear eye protection to BS 2092 Grade1, EN166B.



**Always** wear the correct respirator or dust mask for the material being cut.



**Always** drill with gentle pressure and ensure that excess dust is cleared away.

**Always** ensure that your power tool is disconnected from its power source when removing and fitting core drill bits.

**Always** hold the power tool with both hands when cutting materials with core drill bits.

**Never** drill above head height, or in a position that is uncomfortable.

## Faithfull Core Bits and Accessories

Faithfull offer a comprehensive range of Diamond core bits and accessories.

\* All threads are 1/2in BSP.

### Diamond Dry Core Bits

STOCK NO	DIAMETER	LENGTH
FAI DCD38	38mm	150mm
FAI DCD52	52mm	150mm
FAI DCD65	65mm	150mm
FAI DCD107	107mm	150mm
FAI DCD117	117mm	150mm
FAI DCD127	127mm	150mm
FAI DCD152	152mm	150mm
FAI DCD157	157mm	150mm

### Diamond Core in One Kits

STOCK NO	DIAMETER	LENGTH
FAI DCIO38	38mm	150mm
FAI DCIO52	52mm	150mm
FAI DCIO65	65mm	150mm
FAI DCIO107	107mm	150mm
FAI DCIO117	117mm	150mm
FAI DCIO127	127mm	150mm
FAI DCIO152	152mm	150mm
FAI DCIO157	157mm	150mm

### Accessories

STOCK NO	DESCRIPTION
FAI DCSDSBSP	SDS Adaptor x 1/2in BSP
FAI DCHEXBSP	HEX Adaptor x 1/2in BSP
FAI DCSDSADAP	SDS Extension Adaptor 10mm x 240mm
FAI DCHEXADAP	HEX Extension Adaptor 12mm x 240mm
FAI DCEXT250	Extension 1/2in BSP x 250mm
FAI DCMD	Taper Wedge Masonry Drill 200mm
FAI DCDP	Extractor Drift Key

### Diamond Core Sets in Aluminium Cases

FAI DCKIT7	7 Piece Diamond Core Set in Case - 38, 52 & 117mm Cores, SDS & HEX Extensions
FAI DCKIT11	11 Piece Diamond Core Set in Case - 38, 52, 65, 117 & 127mm Cores, SDS & HEX Extensions

**FAITHFULL TOOLS**  
Phoenix House,  
3 White Lodge Business Estate,  
Hall Road, Norwich, Norfolk,  
NR4 6DG, United Kingdom

E-mail: [enquiries@faithfulltools.com](mailto:enquiries@faithfulltools.com)

[www.fairhfulltools.com](http://www.fairhfulltools.com)