



TECHNICAL MANUAL
DIAMOND CORE DRILL BITS
68/72/82 MM
FOR MICRO-IMPACT DRILLS
TOP AND SIDE DUST
EXTRACTION
EKF PROFESSIONAL

1 DESCRIPTION

Diamond core drill bits EKF PROFESSIONAL are designed for coring (drilling blind holes) in concrete, brick, natural and artificial stone, and dense limestone with a hole diameter of 68/72/82 mm.

The diamond core bit product range includes models with top and side dust extraction.

Table 1 – Product range

Dust Extraction	Lateral	Top
Item code	dch-68-mh-m16 dch-72-mh-m16 dch-82-mh-m16	dch-68-mhs-m16 dch-72-mhs-m16 dch-82-mhs-m16

2 DESIGN AND OPERATION

Diamond core drill bits for micro-impact drills are a powerful, modern tool for drilling into reinforced concrete, brickwork, shelly limestone, concrete foundation blocks, etc. Diamond core drill bits EKF PROFESSIONAL are engineered to take advantage of the Micro Hit (micro-impact) technology. They enable rapid dry coring of material with a compatible drill of at least 800W in a micro-impact mode, without the need to stop and expose the diamonds on the cutting surfaces during the job. Laser-welded MH diamond cutters do not require water cooling or abrasive media to cut the material. The core drill bit design facilitates the rapid removal of dust and swarf.

The core bit is a section of round pipe with cutters on one side and a flange on the other. The sides or the top of the core drill bit feature slots for removal of dust and swarf when drilling concrete. The cutters are impregnated with industrial diamond dust, facilitating rapid drilling of stone, concrete, reinforced concrete, brick, ceramic or stoneware tile.



WARNING! Do not use with impact hammers.
Micro Hit core drill bits are designed to best work together with micro-impact diamond drills.

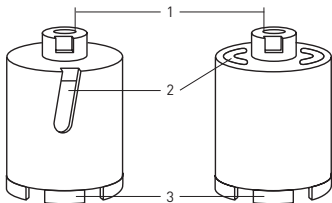
4 TECHNICAL DATA

The main technical data are listed in Table 2 below.

Table 2 - Technical data

Characteristics	Values
Diameter, mm	68/72/82
Number of cutters (68/72/82 mm models)	6/6/7
Cutter type	Diamond impregnated
Cutter joining method	Laser welding
Cutter height, mm	10 mm
Hub size	M16
Cut depth	70 mm
Power tool	Micro-impact diamond drills of at least 800W
Materials	Core: heat-treated tool steel. Cutter: diamond impregnated alloy.

4 PART IDENTIFICATION



1. M16 thread
2. Openings for cooling, dust and core extraction.
3. Segmented diamond cutters

The diamond core drill bit has a common M16 threaded hub that fits most adapters (if required).

5 SAFETY REQUIREMENTS AND PRECAUTIONS

WARNING! All electrical installation work must be carried out by qualified electrical personnel. The seller is not liable for any damages caused by faulty wiring, incorrectly laid out circuits, lack of earthing, poor contact due to loose screw terminals, or any other reason related to non-compliance with general safety regulations or inadequate quality of the electrical installation.

Observe industry-specific safety rules and regulations when operating the tool.

Do not operate the tool when tired, under the influence of alcohol, drugs or medication.

This tool is not a toy, keep away from children. Take a stable position when operating the tool. Do not use unstable scaffolding, ladders or supports.

Inspect the tool before starting the work. Do not use defective equipment and accessories, including blunted tools. Damaged or malfunctioning tool can cause injury to you or others.

Do not put your fingers or other body parts in the work area during operation.

Do not touch the working part during operation, as this may result in injury. Do not operate the tool in impact mode.

The list of warnings and precautions provided herein is not exhaustive. This technical manual cannot cover the full range of potential cases and events. Caution and common sense cannot be integrated into a tool, but should be practiced by the user.

Before starting the work, make sure that the tool and equipment are appropriate for the job and material at hand.

Before starting the work, carefully study the manual for the power tool that will be used.

WARNING! Prior to drilling, use wall scanners to detect hidden live wires, rebar or other obstacles that may cause injury to the user and/or damage to the tool.

Do not attempt to disassemble the core drill bit immediately after use. The tool may become hot through friction when drilling. Allow some time for the core drill bit to cool down.

Water cooling increases the service life of the tool.

Do not operate the diamond core drill bit in impact mode. This will not speed up the operation, but it will damage the bit!

Do not overtorque the tool. After starting the hole, remove the centering bit from the holder and continue drilling with the core bit only.

Always use hand, respiratory and eye protection when working!

6 TROUBLESHOOTING

If the core drill bit has stopped drilling properly, the cutters of the diamond core drill bit may have become smooth or «glazed up». The diamonds may have lost their sharp edges. This may happen when hitting rebar or granite stones. It is a rare but unpleasant occurrence.

The core bit may need to be redressed to «expose» diamonds.

Any abrasive material such as red brick or a special abrasive slab will be suitable for this.

Drill the abrasive material for about 30 seconds.

7 STORAGE AND TRANSPORTATION

Diamond core drill bits must be stored on racks in a dry, clean place.

Do not store the tool in a place subject to corrosion.

Diamond core drill bits EKF PROFESSIONAL can be transported by any means of enclosed transport that ensures protection of packed products from impact damage and weather exposure.

They shall be stored indoors, in their original packaging, at the ambient temperatures from -40°C to +50°C and relative humidity of max. 80% at +25°C.

8 DISPOSAL

Life-expired and failed products shall be disposed of in compliance with the effective national and local laws and regulations.

To dispose of the product, send it to an authorized company for recycling in compliance with the effective national and local laws and regulations. If the packaging is no longer required, it can be recycled.

9 MANUFACTURER'S WARRANTY

Warranty period: 30 days from the date of sale. Does not cover natural wear and tear, misuse, abuse or improper storage. Do not overheat. Service life: 10 years. Store in a clean, dry place. Avoid exposure to moisture.

The warranty does not cover defects arising from:

- improper storage, installation, operation and maintenance of the tools;
- improper transportation and handling of the tool;
- exposure to corroding substances;
- misuse or abuse of the tool;
- deliberate tampering with the tool;
- fire, elemental, force majeure damages to the tool.

The manufacturer reserves the right to make changes to the tool without prior notice.

Manufacturer: For information, refer to the product package.

Importer and EKF trademark service representative: EKF ELECTRICAL SOLUTION – FZCO, Dubai Silicon Oasis, DDP, Building A2, Dubai, United Arab Emirates.

Importer and EKF trademark service representative on the territory of the Russian Federation: OOO «Electroresheniya», Otradnaya st., 2b bld. 9, 5th floor, 127273, Moscow, Russia. Tel.: +7 (495) 788-88-15.

Importer and EKF trademark service representative on the territory of the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

10 CERTIFICATE OF ACCEPTANCE

Diamond core drill bits EKF PROFESSIONAL have been approved for operation.

Date of manufacture:

For information, refer to the product package.

Technical control stamp



EAC



v3

ekfgroup.com

