

WARNING CORE DRILL MACHINE

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

SMI Dust and Silica Warning

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheets and/or consult your employer, the manufacturers/suppliers, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers/suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet grinding/cutting/drilling is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being used.

Grinding/cutting/drilling of masonry, concrete and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When grinding/cutting/drilling such materials, always follow the respiratory precautions mentioned above.

WARNING!

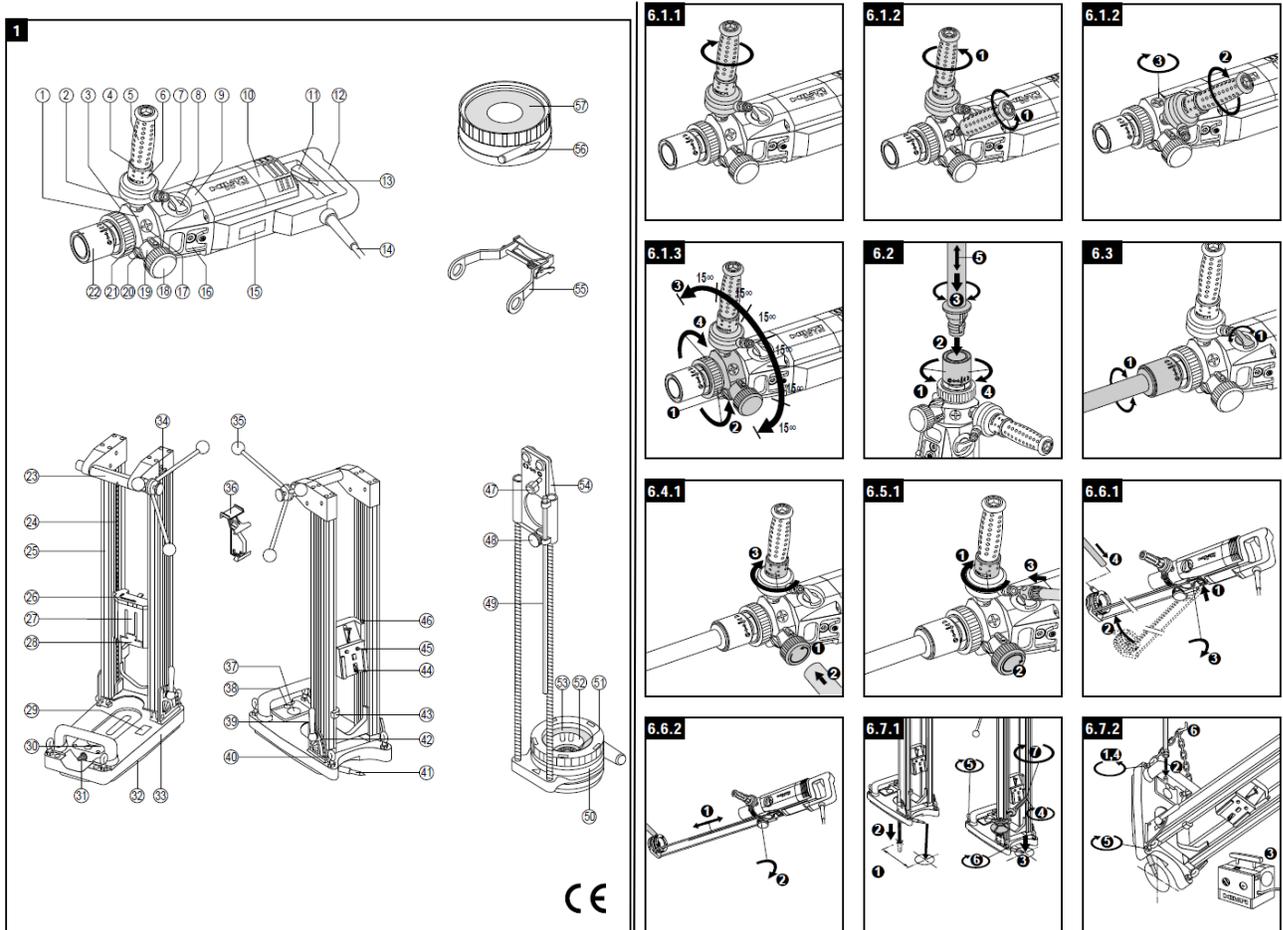
This product contains or produces one or more chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Danger: This tool has and creates multiple pinch points. Keep hands, feet and other body parts clear at all times.

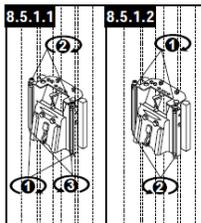
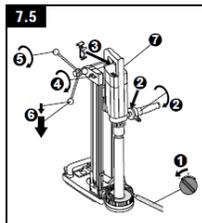
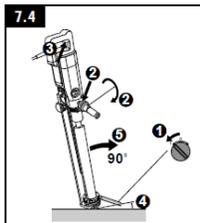
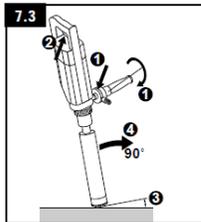
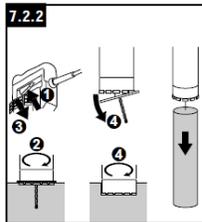
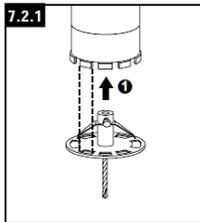
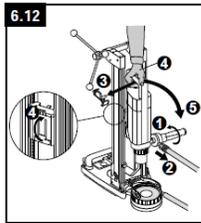
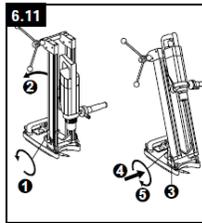
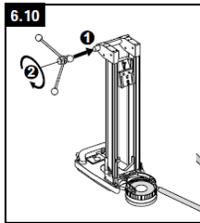
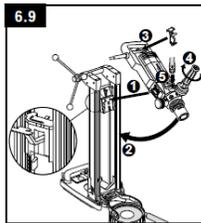
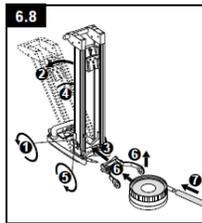
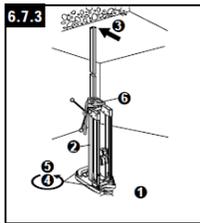
Always wear eye protection whenever using this equipment!

Never operate power equipment of any kind if you are tired or if you are under the influence of alcohol, drugs, medication or any substance that could affect your ability or judgment. Be alert! If you get tired while operating this equipment, take a break. Tiredness may result in loss of control.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or safety of the equipment, **DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!! FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH**



CE



DD 130 diamond core drilling machine

It is essential that the operating instructions are read before the tool is operated for the first time.

Always keep these operating instructions together with the tool.

Ensure that the operating instructions are with the tool when it is given to other persons.

Parts of the DD 130

- Core drilling machine**
- ① Water swivel / extraction head
 - ② Water flow indicator
 - ③ Level indicator
 - ④ Screwdriver (side handle)
 - ⑤ Side handle
 - ⑥ Water flow regulator
 - ⑦ Water hose connector
 - ⑧ Gear selector
 - ⑨ Gearing section
 - ⑩ Motor
 - ⑪ On / off switch
 - ⑫ Grip
 - ⑬ Overload indicator
 - ⑭ Supply cord with PRCD
 - ⑮ Rating plate
 - ⑯ Interface plate
 - ⑰ Screw plugs (water swivel / extraction head)
 - ⑱ Cover (water swivel / extraction head)
 - ⑲ Extraction connector
 - ⑳ Water swivel lock
 - ㉑ Locking ring (water swivel / extraction head)
 - ㉒ Chuck
- Drill stand**
- ㉓ Grip
 - ㉔ Chain
 - ㉕ Columns
 - ㉖ Hex. wrench
 - ㉗ Carriage
 - ㉘ Release lever
 - ㉙ Specification plate
 - ㉚ Vacuum release valve

- ㉛ Vacuum hose connector
- ㉜ Vacuum pad
- ㉝ Baseplate
- ㉞ Chain arrestor
- ㉟ Hand wheel
- ⓫ On / off switch lock
- ⓬ Pressure gauge
- ⓭ Level indicator
- ⓮ Adjusting lever
- ⓯ Levelling screws
- ⓰ Hole centre indicator
- ⓱ Locating lugs
- ⓲ Depth gauge
- ⓳ Locking mechanism
- ⓴ Mounting pins
- ⓵ Chain tensioner

Water collector for hand-held use

- ⓶ Securing knob
- ⓷ Clamping screw
- ⓸ Depth gauge
- ⓹ Water collector cup
- ⓺ Centring ring
- ⓻ Seal
- ⓼ Mounting plate

Water collector for use with the drill stand

- ⓽ Holder
- ⓿ Water collector cup
- ⓾ Seal

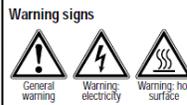
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1. General information

1.1 Indication of danger

-CAUTION-
Used to draw attention to a potentially dangerous situation which could lead to minor personal injury or damage to the equipment or other property when the given safety precautions are not observed.

1.2 Pictograms

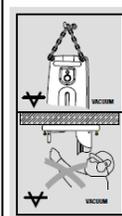


Obligation signs



Symbols

On the drill stand



Top
An additional means of securing the drill stand must be employed when used for horizontal drilling with vacuum attachment.

Bottom
The drill stand must be fastened by means of an anchor or quick-release brace when used for overhead drilling.

On the tool



Use of the water collector system in conjunction with a wet-type vacuum cleaner is mandatory when working overhead on ceilings.

These numbers refer to the corresponding illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while studying the operating instructions. In these operating instructions, the DD 130 core drilling machine is referred to as "the tool".

4. Technical data

Nominal voltage: *	110 V	120 V	220 V	230 V	240 V
Nominal power:	1700 W	1800 W	1900 W	1900 W	1900 W
Nominal current: *	16 A	15 A	9.1 A	8.7 A	8.3 A
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Nominal no-load speed	780 r.p.m.				
1 st gear	1400 r.p.m.				
2 nd gear	2600 r.p.m.				
3 rd gear	(Change gear only when rotation has stopped.)				
Max. permissible water supply pressure:	6 bar (In the event of higher water pressure, a pressure reduction valve must be fitted at the building site connection.)				
Dimensions (L×W×H):	515×114×170 mm				
Weight (basic tool):	approx. 7.1 kg				
Radio and television interference suppression	as per EN 55014-1				
Interference immunity:	as per EN 55014-2				
Protection class as per EN 50144 and IEC 60745:	Protection class I (earthed)				
Drilling depth:	max. 430 mm (730 mm with extension)				

Noise and vibration information (measured in accordance with EN 50144):

Typical A-weighted noise power level (L_{WA}): 89 dB (A)

Typical A-weighted noise emission pressure level (L_{pA}): 102 dB (A)

Wear ear protection!

Typical weighted vibration at the grips: < 2.5 m/s²

Information for the user in accordance with EN 61000-3-11:

Switching on the tool may cause a brief voltage drop. Under unfavourable conditions in the mains supply, this may cause interference to other appliances. No interference is to be expected when the mains supply has an impedance of < 0.15 ohms.

* The tool is available in versions for various nominal voltages. Please refer to the rating plate for information on the nominal voltage and nominal current rating of the applicable tool.

Right of technical changes reserved

5. Safety precautions

5.1 Basic safety information

In addition to the safety precautions listed in the individual sections of these operating instructions, the following points must be strictly observed at all times:

5.2 Use as intended

The DD 130 is designed for drilling through holes and blind holes in mineral materials.

Applications:

With / without drill stand	Core bit diameter	Drilling direction
Hand-held / dry	With dust extraction,	12–162 mm dia. All directions
Hand-held / wet	Without water collection system,	12– 62 mm dia. Not upwards
Hand-held / wet	With water collection system,	12– 62 mm dia. All directions
Drill stand / wet	Without water collection system,	12–152 mm dia. Not upwards
Drill stand / wet	With water collection system	12–132 mm dia. All directions

When drilling in an upwards direction, a wet-type vacuum cleaner must be connected to the water collection system.

Location of identification data on the tool

The type designation and serial number can be found on the rating plate on the tool. Make a note of this data in your operating instructions and always refer to it when making an enquiry to your Hilti representative or service department.

Type: DD 130

Serial no.:

2. Description

The DD 130 is an electrically powered diamond core drilling machine designed for hand-held use or for mounting on a drill stand. It is suitable for wet or dry core drilling.

Items supplied

The items supplied are: core drilling machine and operating instructions.

3. Accessories

Designation	Item no.
Vacuum pump	47034
Quick-release brace	9870
Water collector system for hand-held use	370462
Water collector system for drill stand use	370460
Drill stand	370461
Wheel assembly	232228
DD-CS M12S-SM clamping spindle	251830
DD-CN SML clamping nut	251834

5.3 Avoiding incorrect use



- Horizontal drilling with vacuum attachment is permissible only when an additional means of securing the drill stand is employed. The drill stand may be used for overhead drilling only when fastened by an anchor or by means of a quick-release brace.
- Drilling into materials containing asbestos is not permissible.
- Changes or modifications to the tool are not permissible.
- To avoid the risk of injury, use only original Hilti accessories and additional equipment.
- Observe the information printed in the operating instructions concerning operation, care and maintenance.

5.4 State of the art

- The tool is designed and manufactured according to the state of the art.
- The tool and its accessories may, nevertheless, present hazards when used incorrectly by untrained personnel or when used not as directed.

5.5 Proper arrangement and organisation of the workplace



- Do not wear loose clothing, loose long hair or jewellery which could become caught up in moving parts. Wear a hair net if you have long hair.
- Wear non-slip safety boots or shoes and always work from a secure stance.
- Do not work from a ladder.
- Avoid unfavourable body positions.
- Do not expose the tool to rain or snow and do not use it in damp or wet areas or where there is a risk of fire or explosion.
- Ensure that the workplace is well lit.
- Objects which could cause injury should be removed from the working area.
- Always lead the supply cord, extension cord and extraction hose away to the rear of the tool (away from rotating parts) when working.
- Take care to avoid tripping over the supply cord, extension cord or extraction hose.
- Keep other persons, children in particular, outside the area affected while you are working.
- Concealed electric cables or gas and water pipes present a serious hazard if damaged while you are working. Accordingly, check the area in which you were working beforehand (e.g. using a metal detector). External metal parts of the tool may become live, for example, when an electric cable is drilled into inadvertently.
- Avoid contact between your body and earthed / grounded objects such as pipes or radiators.

- When working outdoors, use only extension cords that are approved and correspondingly marked for this application.
- Do not touch the supply cord in the event of it becoming damaged while working. Disconnect the supply cord plug from the socket.
- Do not operate the tool when it is dirty or wet. Dust or dampness on the surface of the tool make it more difficult to hold and, under unfavourable conditions, may lead to electric shocks.

5.6.3 Thermal hazards



- The core bit may become hot during use. Wear safety gloves when changing core bits.

5.7 Requirements to be met by users

- The tool is intended for professional use.
- The tool may be operated, serviced and repaired only by authorised, trained personnel. This personnel must be informed of any special hazards that may be encountered.
- Always concentrate on the job you are doing. Proceed carefully and do not use the tool if your full attention is not on the job.

5.8 Personal protective equipment

The user and any other persons in the vicinity must wear suitable safety goggles, a safety helmet, ear protection, safety gloves and safety boots while the tool is in operation.



5.9 Protective equipment

Never use the tool without the applicable protective equipment:

- Never operate the tool without the water swivel / extraction head.
- An additional means of securing the drill stand must be employed when used for horizontal drilling with vacuum attachment.
- The drill stand must be fastened by means of an anchor or quick-release brace when used for overhead drilling.
- Use of the water collector system in conjunction with a wet-type vacuum cleaner is mandatory when carrying out wet overhead drilling.

- When drilling holes through ceilings or floors from above, secure the area below as the core may fall out, presenting a risk of injury or damage.

5.6 General safety precautions

- Operate the tool only as directed and only when it is in faultless condition.
- Use a vice or clamp to secure loose workpieces.
- The tool may be operated only when held in both hands or when mounted on the drill stand.
- Keep the grips dry, clean and free from oil and grease.
- Never leave the tool unsupervised.
- Ensure that the tool is switched off (remove the switch lock insert) before switching on at the PRCD (ground fault interrupter).
- Test the PRCD each time before use (see 7.1).
- Do not keep your finger on the on / off switch while carrying the tool when connected to the mains supply.
- Disconnect the supply cord plug from the socket when the tool is not in use (e.g. during breaks), before maintenance and before changing core bits.
- When not in use, the tool must be stored in a dry place, locked up or out of reach of children.
- Avoid skin contact with drilling slurry.

5.6.1 Mechanical hazards



- Observe the instructions concerning care and maintenance and the replacement of core bits in good time.
- Ensure that core bits used are equipped with the correct connection end system and properly fitted and secured in the chuck (see section 6.2).
- Always use the side handle for hand-held operation. Ensure that it is fitted correctly and properly secured (see 6.1.1 and 6.1.2).
- Ensure that the water swivel / extraction head (side handle mount) is properly secured in position and that the locking ring is tightened (see 6.1.3).
- Ensure that the tool is securely attached when mounted on the drill stand (see 6.9).
- Do not touch rotating parts.

5.6.2 Electrical hazards



- Check the condition of the tool including the supply cord and extension cord as well as the plug connections.
- Do not operate the tool if damage is found, if the tool is not complete or if its controls cannot be operated faultlessly.
- Never carry the tool by the supply cord.
- Grip the plug and not the cable when pulling it out of the socket.
- Do not expose the supply cord to heat, oil or sharp edges.
- Do not touch the supply cord in the event of it suffering damage while working. Disconnect the supply cord plug from the socket.

6. Before use

It is essential that the safety precautions printed in these operating instructions are read and observed.

- CAUTION- Disconnect the tool from the mains supply.



If extension cables are used: Only extension cables of a type approved for the intended use and of adequate cross section may be used. Failure to observe this point may result in reduced performance and could cause the cable to overheat. Damaged extension cables must be replaced. The recommended cable cross-sections and maximum lengths are:

Mains voltage	Conductor cross-section			
	1.5 mm ²	2.0 mm ²	2.5 mm ²	3.5 mm ²
100 V		20 m	40 m	40 m
110-120 V	20 m		40 m	
220-230 V	50 m		80 m	



- CAUTION -
- The tool, the diamond core bit and the drill stand are heavy.
- There is a risk of pinching parts of the body.
- Wear a safety helmet, safety gloves and safety boots.



6.1 Side handle

6.1.1 Fitting the side handle

1. Screw the side handle onto the tool and tighten it securely.

6.1.2 Fitting the side handle in a different position

1. Remove the screw plug at the position where the side handle is to be fitted (e.g. for left-handed use). The grip at the end of the side handle can be unscrewed and used as a screwdriver.
2. Screw the side handle onto the tool at the desired position and tighten it securely.
3. Insert the screw plug in the exposed threaded hole.

6.1.3 Adjusting the extraction head / water swivel (and side handle)

1. Press the water swivel lock out of the gap between the locking ring and the water swivel/extraction head.
2. Release the locking ring between the chuck and side handle.

3. Move the side handle into the desired position (15° increments).
4. Tighten the locking ring securely until the teeth and the water swivel lock engage.

6.2 Fitting the diamond core bit

-CAUTION-	
	■ The core bit may become hot during use or during sharpening.
	■ It may burn your hands.
	■ The cutting edges (segments) may cause injury.
	■ Wear safety gloves when changing the core bit.

Note

- Use only original Hilti core bits and accessories!
1. Open the chuck by turning it counter-clockwise (as seen from the front end of the chuck).
 2. Insert the diamond core bit in the chuck.
 3. Push the diamond core bit into the chuck and rotate the core bit until it engages.
 4. Close the chuck by turning it clockwise (as seen from the front end of the chuck).
 5. Check that the core bit is securely seated by gripping it and attempting to pull it away from the chuck.

6.3 Selecting the drilling speed (gear selector positions 1-2-3)

- CAUTION- Do not operate the gear selector while the tool is running. Wait until rotation has stopped.

Hand-held use

	mm		Inch		
	mm	Ø	Inch	Ø	
	40 - 62	1 5/8" - 2 1/2"	1/2" - 1 1/2"		II
	122 - 162	4 3/4" - 6 1/2"	2 5/8" - 4 1/4"		I
	67 - 112	2 5/8" - 4 1/4"	1/2" - 2 1/2"		III



Use of the water collection system in conjunction with a wet-type vacuum cleaner is mandatory for overhead drilling. Position the side handle and water swivel / extraction head so that the water collection system can be fitted without obstruction. The centering ring and seal must be of a size suitable for the core bit diameter used.

1. From below the tool, position the water collection system on the two mounting pins.
2. Swing the water collection system towards the front.
3. Secure the water collection system by turning the knob.
4. Connect a wet-type vacuum cleaner to the front of the water collection system. Alternatively, the water can be allowed to flow away through a length of hose attached to the connector (not permissible for overhead drilling).

6.6.2 Adjusting the depth gauge

1. Set the depth gauge to the desired depth.
2. Use the clamping screw to secure the depth gauge.

6.7 Using the drill stand

6.7.1 Using an anchor (HKD-D M12) to secure the drill stand

1. Place the anchor at a distance of 200 mm (ideal distance) from the centre of the hole to be cored.
2. Screw the quick-release spindle into the anchor.
3. Place the drill stand over the quick-release spindle and use the hole centre indicator to bring the drill stand into alignment.
4. Fit the nut to the quick-release spindle but do not tighten it fully.
5. The four levelling screws should then be used to level the baseplate. The spirit level on the baseplate serves as a levelling aid.
6. Use the locknuts to prevent further movement of the levelling screws.
7. Tighten the nuts securely with an open-end wrench.

Drill-stand use

	mm		Inch		
	mm	Ø	Inch	Ø	
	57 - 152	2 1/4" - 6"	1 1/8" - 2"		I
	28 - 52	1 1/8" - 2"	1/2" - 1"		II
	12 - 25				III

1. Select the gear according to the table on the tool.
2. Move the gear selector to the desired setting while rotating the core bit.

6.4 Dry drilling

6.4.1 Connecting the extraction system

1. Unscrew the cover from the water swivel / extraction head.
2. Insert the extraction hose in the extraction connection.
3. Close the water valve in the side handle.

6.5 Hand-held wet drilling

6.5.1 Connecting the water supply

1. Close the water valve in the side handle.
2. Close the cover on the dust extraction connection.
3. Connect the water supply hose (hose connector).

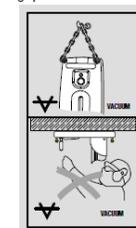
6.6 Hand-held wet drilling with the water collection system

6.6.1 Fitting the water collection system

Use of the water collection system permits water to be drained away from the core bit thus avoiding soiling the surrounding area. Best results are achieved in conjunction with a wet-type vacuum cleaner.

6.7.2 Securing the drill stand with the vacuum pad

A vacuum release valve is incorporated in the baseplate grip.



Overhead drilling with the drill stand attached only by vacuum is not permissible.

1. Unscrew the four levelling screws until they project approx. 5 mm beneath the baseplate.
2. Connect the hose between the vacuum connector on the baseplate and the vacuum pump.
3. Switch on the vacuum pump and extend the hole centre indicator. While pressing the vacuum release valve and observing the hole centre indicator, bring the baseplate into the desired position. When positioned correctly, press the baseplate against the work surface and remove your finger from the vacuum release valve. Before beginning drilling and during operation, it must be ensured that the pressure gauge pointer remains within the green area.
4. The four levelling screws should then be used to level the baseplate. The spirit level on the baseplate serves as a levelling aid.
5. Tighten the lock nuts to prevent further movement of the levelling screws.
6. An additional means of securing the drill stand must be employed when drilling horizontally (e.g. a chain attached to an anchor, ...)

6.7.3 Securing the drill stand with a quick-release brace (e.g. between floor and ceiling)

1. Extend the hole centre indicator and then use it as an aid to bring the drill stand into alignment with the centre point of the hole to be cored.
2. Position the end of the quick-release brace carefully in the inner oval of the baseplate (not on the level indicator or pressure gauge).
3. Secure the baseplate by applying slight pressure with the quick-release brace.
4. The four levelling screws should then be used to level the baseplate. The spirit level on the baseplate serves as a levelling aid.
5. Tighten the lock nuts to prevent further movement of the levelling screws.
6. Tighten the quick-release brace securely.

6.8 Water collection system for use with the drill stand

Use of the water collection system permits water to be drained away from the core bit thus avoiding soiling the surrounding area. Best results are achieved in conjunction with a wet-type vacuum cleaner.

Use of the water collection system in conjunction with a wet-type vacuum cleaner is mandatory for overhead drilling. The drill stand must be set up at 90° to the work surface.

The water collector sleeve and seal must be of a size suitable for the core bit diameter used.

1. Slacken the column adjusting lever until the locating lugs are disengaged.
2. Tilt the frame.
3. Fit the water collector holder.
4. Bring the frame back to the vertical position.
5. Close the adjusting levers until the locating lugs are fully engaged and the frame is again secured.
6. Lift the holder and push the water collector cup under the retainer as far as it will go.
7. Connect a wet-type vacuum cleaner to the water collector cup or connect a length of hose through which the water can flow away.

6.9 Mounting the tool on the drill stand

The release lever on the drill stand must be in the open position and the carriage should be at the top of its travel. The drilling advance mechanism must be locked (chain arrester engaged).

1. Fit the tool interface plate onto the two mounting pins on the drill stand.
2. Pivot the tool towards the drill stand until it engages.
3. Insert the switch lock in the grip opening. The switch lock is used to hold the switch in the ON position during sustained operation.
4. Close the water valve in the side handle.
5. Connect the water supply.

6.10 Fitting the hand wheel

1. Fit the hand wheel onto the axle.
2. Secure the hand wheel by tightening the screw knob.
3. The hand wheel may be fitted on either side of the drill stand.

6.11 Adjusting the drill stand drilling angle

(In increments of 7.5°; adjustable to max. 45°)

1. Slacken the column adjusting levers until the locating lugs are disengaged.
2. Bring the columns into the desired position.
3. Engage the locating lugs.
4. Move the adjusting levers until the locating lugs are fully engaged and the frame is again secured.
5. Press in and pivot the adjusting levers to return them to the vertical position.

6.12 Removing the tool from the drill stand

-CAUTION-

The tool must be disconnected from the electric mains supply.

also causes the vacuum cleaner to be switched off after a short delay.

Switching on

1. Press the on / off switch on the tool.
2. With the hole-starting aid fitted, begin drilling and continue until the projecting segments have established a kerf in the base material.
3. Switch the tool off.
4. Remove the hole-starting aid and continue drilling.

Switching off

1. Switch the tool off.
2. Remove the core if necessary.

7.2.3 Vacuum cleaner without power socket for electric tools

Switching on

1. Switch the vacuum cleaner on.
2. Press the on / off switch on the tool.

Switching off

1. Switch the tool off.
2. Allow the vacuum cleaner to run for a short time in order to remove remaining dust before switching off.

7.3 Hand-held wet drilling

Switching on

1. Open the water valve in the side handle until the desired water volume flows. The water flow volume can be observed at the indicator on the hand grip.
2. Press the on / off switch.
3. When starting a hole, hold the tool at a slight angle to the work surface. This makes hole-starting easier.
4. Once the hole has been started, bring the tool into the 90° position and continue drilling.

Switching off

1. Switch the tool off.
2. Close the water valve on the side handle.

7.4 Hand-held wet drilling using the water collection system

The crosshair marks at the front end of the water collection system serve as an accurate positioning aid.

Switching on

1. Switch on the water extraction system (if used).
2. Open the water valve on the side handle slowly until the desired water volume flows. Use the indicator on the side handle to check the water flow rate.
3. Press the on / off switch.
4. Hold the tool at a slight angle to the work surface when starting a hole. This makes hole-starting easier.
5. After starting the hole, bring the tool into the 90° position and continue drilling.

Switching off

1. Switch the tool off.
- Caution: When drilling overhead, any water remain-

The drilling advance mechanism must be locked (chain arrester engaged).

1. Close the water valve in the side handle.
2. Disconnect the water supply.
3. Remove the switch lock from the grip.
4. Hold the tool with one hand on the grip and release the lever on the drill stand.
5. Pivot the tool away from the drill stand.

7. Operation

7.1 Connect the tool to the electric mains supply

The voltage given on the rating plate must correspond to the voltage provided by the mains supply.

1. Check that the tool is switched off or, respectively, remove the switch lock.
2. Insert the supply cord plug in the mains socket.
3. Press the "ON" button on the PRCD ground fault interrupter (the lamp must light).
4. Press the "TEST" button on the PRCD ground fault interrupter (the lamp must not light).
5. Press the "ON" button on the PRCD ground fault interrupter (the lamp must light).

-CAUTION-	
	<ul style="list-style-type: none"> ■ The tool and the coring operation create noise. ■ Excessive noise may damage the hearing. ■ Wear ear protection.

-CAUTION-	
	<ul style="list-style-type: none"> ■ The coring operation may cause hazardous fragments to fly off. ■ Flying fragments may cause injury to the eyes or other parts of the body. ■ Wear eye protection and a safety helmet.

7.2 Dry drilling

7.2.1 Fitting the hole-starting aid

A different hole-starting aid is required for each diamond core bit diameter.

1. Fit the hole-starting aid into the front end of the diamond core bit.

7.2.2 Vacuum cleaner with power socket for electric tools

The vacuum cleaner starts automatically after switching on the electric tool. Switching off the electric tool in the core bit must not be allowed to run down over the tool.

2. Close the water valve on the side handle.
3. Switch off the vacuum cleaner (if used).
4. Remove the core if necessary.

7.5 Wet drilling using the drill stand

Switching on

1. Switch on the (wet) vacuum cleaner (if used).
2. Open the water valve at the side handle slowly until the desired volume of water flows. The indicator at the side handle can be used to check the water flow rate.
3. Use the switch actuator to run the tool in sustained operation mode.
4. Release the chain arrester.
5. Bring the core bit into contact with the work surface by turning the hand wheel.
6. Apply only slight pressure to the core bit when beginning drilling and then increase pressure once the core bit has become centred.
7. Keep an eye on the overload indicator while drilling. Pressure on the core bit must be reduced if the overload indicator lights.

Switching off

1. Close the water regulation valve at the side handle.
2. Pull the core bit out of the hole.
3. Engage the chain arrester.
4. Switch the tool off.
5. Switch off the vacuum cleaner (if used).
6. Remove the core if necessary.
7. Switch the tool off.
8. Ensure stability of the drill stand by lowering the tool and core bit to the baseplate.

8. Care and maintenance

Disconnect the supply cord plug from the socket.

8.1 Care of core bits

Remove any dirt adhering to the core bits and protect their surfaces from corrosion by rubbing them with an oily cloth from time to time. Always keep the connection end clean and slightly greased.

8.2 Care of the tool

Check that the supply cord plug is disconnected. Never operate the tool if its ventilation slots are blocked. Clean the ventilation slots carefully with a dry brush. Do not allow foreign objects to enter the interior of the tool. Clean the outside surfaces of the tool with a damp cloth at regular intervals. Do not use a spray, steam cleaning

equipment or running water for cleaning. This could negatively affect the electrical safety of the tool. Always keep the grip surfaces of the tool free from oil and grease. Do not use cleaning agents which contain silicone. Clean the chuck and the clamping segments with a cloth at regular intervals and lubricate these parts with Hilti lubricant spray. Remove any dirt and fragments from the chuck.

Remove the filter in the water intake at the side handle from time to time and rinse the filter sieve under running water in the direction opposite to the normal water flow.

If the water flow indicator has become dirty, remove and clean the parts. Do not use abrasive agents or sharp objects to clean the sight glass. This may negatively affect functionality of the water flow indicator.

8.3 Maintenance of the tool

Check all external parts of the tool for damage at regular intervals and check that all operating controls function faultlessly. Do not operate the tool when parts are damaged or when operating controls do not function faultlessly. The tool should be repaired at a Hilti service centre.

Repairs to the electrical section of the tool may be carried out by trained electrical specialists only.

8.4 Care of the drill stand

8.4.1 Care of the chain

Check the chain guides to ensure they remain clean and free from drilling slurry. The chain must always be protected by a film of grease.

8.5 Maintenance of the drill stand

8.5.1 Adjusting the movement

Movement should be easy but without play. The movement can be adjusted by way of screws (2 at the top and 2 at the bottom).

8.5.1.1 Stiffer movement

1. Release the lower screw.
2. Tighten the upper screw as far as necessary.
3. Tighten the lower screw as far as it will go.

8.5.1.2 Easier movement

1. Release the upper screw.
2. Tighten the lower screw as far as it will go.

8.5.2 Adjusting the chain tension

When the carriage is in the end position, the chain should sag only slightly when running horizontally. Chain tension can be adjusted by way of two screws (chain symbol on the cover).

- Turning in a clockwise direction increases chain tension.
- Turning in a counter-clockwise direction decreases chain tension.

Both chains must be tensioned equally.

9. Troubleshooting

Fault	Possible cause	Remedy
The tool doesn't start.	Fault in mains supply	Plug in another electric appliance and check whether it works.
	Supply cord or plug defective	The cord should be checked and replaced if necessary by an electrical specialist.
	Switch defective	The switch should be checked and replaced if necessary by an electrical specialist.
Motor runs but the core bit doesn't rotate.	Gearing defective	The tool should be repaired at a Hilti service centre.
Rate of drilling progress decreases.	Water pressure / water flow rate too high	Regulate the water flow rate at the side handle.
	Core bit defective	Check the core bit for damage and replace it if necessary.
	Gearing defective	The tool should be repaired at a Hilti service centre.
Motor cuts out.	Core bit segments polished	Resharpener the core bit on a sharpening plate under water flow.
	Tool stops running.	Guide the tool straight.
	Tool has overheated. The motor's thermal overload protection has been activated.	Ease the load on the tool and allow it to run up to full speed by pressing the switch several times.
	Electronics defective	The tool should be repaired at a Hilti service centre.
Water does not flow.	Cooling fan defective	The tool should be repaired at a Hilti service centre.
	Filter or water flow indicator blocked	Remove the filter or water flow indicator and flush it through.
Water escapes at the gear housing.	Shaft seal / water swivel / extraction head defective	The tool should be repaired at a Hilti service centre.
The core bit cannot be inserted in the chuck.	Connection end or chuck dirty or damaged	Clean the connection end and chuck. Replace parts if necessary.
Water escapes at the chuck.	Connection end or chuck dirty	Clean the connection end and chuck.
	Chuck seal defective	Check the seal and replace it if necessary.
Excessive play in the drilling system.	Excessive play at the guides	Readjust the guides.
	Chain inadequately tensioned	Tension the chain.
	Pivot mechanism loose	Tighten the pivot mechanism adjusting lever (6.11).