

DC-SE 20

de

en

fr

it

es

pt nl

da

SV

no

fi

el

hu

pl

ru

CS

sk

hr Sl

tr

ar

V

lt

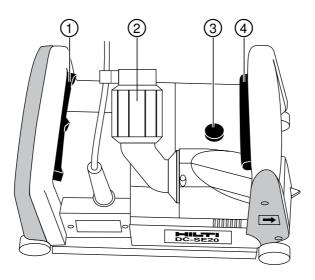
et kk

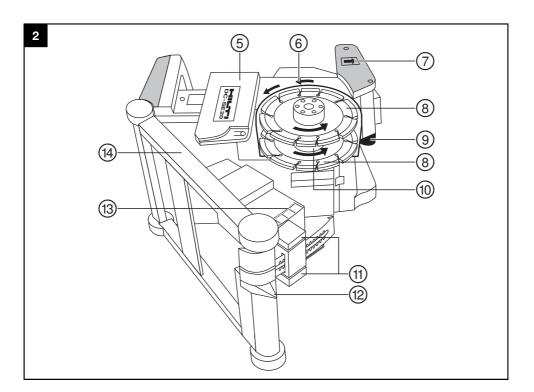
ko

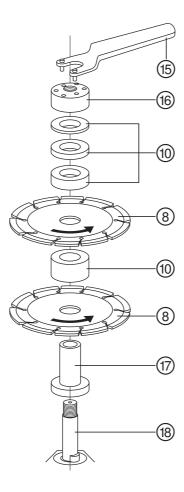
Bedienungsanleitung

Operating instructions Mode d'emploi Istruzioni d'uso Manual de instrucciones Manual de instruções Gebruiksaanwijzing **Brugsanvisning Bruksanvisning Bruksanvisning** Käyttöohje Οδηγιες χρησεως Használati utasítás Instrukcja obsługi Инструкция по зксплуатации Návod k obsluze Návod na obsluhu Upute za uporabu Navodila za uporabo Kulllanma Talimatı دليل الاستعمال Lietošanas pamācība Instrukcija Kasutusjuhend Пайдалану бойынша басшылық 사용설명서









ORIGINAL OPERATING INSTRUCTIONS

DC-SE 20 slitting machine

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

Always keep these operating instructions together with the machine.

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

Contents	Page
1 General information	11
2 Description	12
3 Technical data	12
4 Safety instructions	13
5 Before use	16
6 Operation	17
7 Care and maintenance	18
8 Troubleshooting	18
9 Disposal	18
10 Manufacturer's warranty	19
11 EC declaration of conformity (original)	19

■ These numbers refer to the illustrations. You can find the illustrations at the beginning of the operating instructions.

In these operating instructions, the designations "the machine" or "the tool" always refer to the DC-SE 20 slitting machine.

Top view 1

- 1 On / off switch
- (2) Vacuum cleaner hose connector
- 3 Lockbutton
- (4) Plunge movement lockbutton

Side view from the left 2

- (5) Side guard
- (6) Direction-of-rotation arrow
- 7 Cutting direction arrow
- 8 Diamond cutting disc9 Carriage lockbutton
- (10) Spacer ring
- 11) Depth adjustment buttons
- (12) Cutting line pointer
- 13 Depth scale(14) Carriage

Fitting the diamond cutting discs 3

- (15) Wrench
- (16) Clamping nut
- (17) Clamping flange
- (18) Spindle

1 General information

1.1 Safety notices and their meaning

DANGER

Draws attention to imminent danger that will lead to serious bodily injury or fatality.

WARNING

Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.

CAUTION

Draws attention to a potentially dangerous situation that could lead to slight personal injury or damage to the equipment or other property.

NOTE

Draws attention to an instruction or other useful information.

1.2 Explanation of the pictograms and other information

Obligation signs







Wear a hard hat.



Wear ear protection.



Wear protective gloves.



Wear breathing protection.



Read the operating instructions before use.

/min RPM

√l

Revolutions per minute

en

Revolutions per minute

Return materials for recycling

Location of identification data on the machine

The type designation and serial number can be found on the type identification plate on the machine. 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:		
Serial no :		

2 Description

2.1 Use of the product as directed

The DC-SE 20 is an electrically powered slitting machine for professional use.

The machine is designed for use with diamond cutting discs.

The machine is designed to be used with a suitable vacuum cleaner.

3 Technical data

Right of technical changes reserved.

Rated voltage	110 V	120 V	220 V	230 V	240 V
Rated current input	16 A		8.7 A	9.2 A	8.8 A
Rated power	1,700 W	1,800 W	1,800 W	1,950 W	1,950 W
AC frequency	5060 Hz	60 Hz	5060 Hz	5060 Hz	5060 Hz

NOTE

Information for users as per EN 61000-3-11: Switching on causes a brief drop in voltage. Other appliances may be negatively affected on mains supplies where conditions are unfavorable. No malfunctions are to be expected in mains supplies with an impedance of less than 0.15 ohms.

Diameter of the diamond cutting discs	Max. 125 mm
Thickness of the diamond cutting discs	Max. 2,5 mm
Diamond cutting disc arbor size	22.2 mm
Weight in accordance with EPTA procedure 01/2003	6.9 kg
Rated speed	7,900/min
Protection class	Protection class II (double-insulated)

NOTE

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or is poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period. An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

Noise and vibration information (measured in accordance with EN 60745-2-22)

Typical A-weighted emission sound pressure level	100 dB (A)
Typical A-weighted sound power level	111 dB (A)

12

Uncertainty for the given sound level	3 dB
Cutting concrete, a _h	4.5 m/s ²
Uncertainty (K)	1.5 m/s ²

4 Safety instructions

4.1 General Power Tool Safety Warnings

a) / WARNING

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

4.1.1 Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

4.1.2 Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

4.1.3 Personal safety

 Stay alert, watch what you are doing and use common sense when operating a power tool. Do

- not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4.1.4 Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- en
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

4.1.5 Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

4.2 Cut-off machine safety warnings

- a) The guard provided with the tool must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. Position yourself and bystanders away from the plane of the rotating wheel. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel.
- Use only diamond cut-off wheels for your power tool. Just because an accessory can be attached to your power tool, it does not assure safe operation.
- c) The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- d) Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- e) Always use undamaged wheel flanges that are of correct diameter for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.
- f) The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- g) The arbour size of wheels and flanges must properly fit the spindle of the power tool. Wheels and flanges with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- b) Do not use damaged wheels. Before each use, inspect the wheels for chips and cracks. If power tool or wheel is dropped, inspect for damage or install an undamaged wheel. After inspecting

- and installing the wheel, position yourself and bystanders away from the plane of the rotating wheel and run the power tool at maximum no load speed for one minute. Damaged wheels will normally break apart during this test time.
- i) Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- j) Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken wheel may fly away and cause injury beyond immediate area of operation.
- k) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Position the cord clear of the spinning accessory.
 If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning wheel.
- m) Never lay the power tool down until the accessory has come to a complete stop. The spinning wheel may grab the surface and pull the power tool out of your control.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- p) Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

4.3 Kickback and related warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel. Pinching or snagging causes rapid stalling of the rating wheel which in turn causes the uncontrolled power tool to be forced in the direction opposite of the wheel's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- b) Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- c) Do not position your body in line with the rotating wheel. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- d) Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- e) Do not attach a saw chain woodcarving blade, segmented diamond wheel with a peripheral gap greater than 10 mm or toothed saw blade. Such blades create frequent kickback and loss of control.
- f) Do not "jam" the wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.
- g) When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the wheel from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.
- h) Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.
- i) Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.
- i) Use extra caution when making a "pocket cut" into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

4.4 Additional safety instructions

4.4.1 Personal safety

- a) Wear ear protectors. Exposure to noise can cause hearing loss.
- b) Always hold the machine securely with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.
- c) Respiratory protection must be worn if the machine is used without a dust extraction system for work that creates dust.
- d) Always lead the supply cord and extension cord away from the power tool to the rear while working. This helps to avoid tripping over the cord while working.
- e) Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a live wire will make exposed metal parts of the power tool live and the operator will be at risk of receiving an electric shock.
- f) Children must be instructed not to play with the machine.
- g) The machine is not intended for use by children, by debilitated persons or those who have received no instruction or training.
- Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases to the operator or bystanders. Certain kinds of dust are classified as carcinogenic such as oak and beech dust especially in conjunction with additives for wood conditioning (chromate, wood preservative). Material containing asbestos must only be treated by specialists. Where the use of a dust extraction device is possible it shall be used. To achieve a high level of dust collection, use a suitable vacuum cleaner of the type recommended by Hilti for wood dust and/or mineral dust together with this tool. Ensure that the workplace is well ventilated. The use of a dust mask of filter class P2 is recommended. Follow national requirements for the materials you want to work with.
- i) Improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working.

4.4.2 Use and care of electric tools

- a) Secure the workpiece. Use clamps or a vice to secure the workpiece. The workpiece is thus held more securely than by hand and both hands remain free to operate the machine.
- b) Check that the core bits used are compatible with the chuck system and that they are secured in the chuck correctly.
- Switch the machine off and unplug the supply cord in the event of a power failure or interruption

in the electric supply. This will prevent accidental restarting when the electric power returns.

4.4.3 Electrical safety

- a) Before beginning work, check the working area (e.g. using a metal detector) to ensure that no concealed electric cables or gas and water pipes are present. External metal parts of the machine may become live, for example, when an electric cable is damaged accidentally. This presents a serious risk of electric shock.
- b) Check the machine's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged. If the machine's supply cord is damaged it must be replaced with a special approved, ready-made supply cord available from Hiti Customer Service. Check extension cords at regular intervals and replace them if found to be damaged. Do not touch the supply cord or extension cord if damaged while working. Unplug the supply cord from the power outlet. Damaged supply cords or extension cords present a risk of electric shock.
- Dirty or dusty machines which have been used frequently for work on conductive materials should be checked at regular intervals at a Hilti Service

Center. Under unfavorable circumstances, dampness or dust adhering to the surface of the machine, especially dust from conductive materials, may present a risk of electric shock.

4.4.4 Work area

- a) Ensure that the workplace is well lit.
- Ensure that the workplace is well ventilated. Exposure to dust at a poorly ventilated workplace may result in damage to the health.

4.4.5 Personal protective equipment







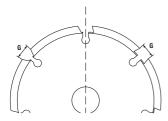




The user and any other persons in the vicinity must wear suitable eye protection, a hard hat, ear protection, protective gloves and breathing protection while the tool is in use.

5 Before use

5.1 Fitting the diamond cutting discs 3



The segments must have a negative rake angle and the size of the gap G between the segments must not exceed 10 mm. The maximum disc thickness is 2,5 mm.

- Lay the machine on its side so that the side guard is visible.
- Release the carriage by pressing the carriage lockbutton.
- Pivot the carriage away from the body of the machine.
- 4. Open the side guard.
- 5. Fit the clamping flange onto the spindle.
- Place the first diamond cutting disc on the clamping flange.

NOTE The direction-of-rotation arrows on the machine and on the diamond cutting discs must correspond.

- Place the desired number of spacer rings on the clamping flange.
 - **NOTE** The width of the channel to be cut can be calculated as follows: Channel width = thickness of the spacer rings + thickness of the diamond cutting discs.
- 8. Place the second diamond cutting disc on the clamping flange.
 - **NOTE** The direction-of-rotation arrows on the machine and on the diamond cutting discs must correspond.
- DANGER All of the spacer rings supplied must be fitted, irrespective of the desired channel width to be cut. The diamond cutting discs could otherwise work loose while the machine is running, presenting a risk of injury.
 - Place the remaining spacer rings on the clamping flange.
 - **NOTE** Number and thickness of the required spacer rings: 1 of each of the following: 3 mm, 6 mm, 13 mm and 21 mm.
- Press the spindle lockbutton to prevent rotation of the spindle.
- Screw on the clamping nut and tighten it securely with the wrench.
- 12. Close the side guard.
- 13. Pivot the carriage towards the body of the machine until it engages in position.

5.2 Connecting the vacuum cleaner

Connect the suction hose from the vacuum cleaner to the hose connector on the slitting machine.

6 Operation

CAUTION

Observe nationally applicable regulations including, for example, accident prevention regulations issued by trade associations and regulations concerning the general requirements to be met by workplaces on construction sites.

6.1 Adjusting the cutting depth 2

- Press the two depth adjustment buttons and hold them in the pressed position.
- Set the desired cutting depth according to the depth scale.
- 3. Release the two depth adjustment buttons.

6.2 Slitting

CAUTION

When switching on, the machine must be in the starting position. You may loose control of the machine if the diamond discs are in contact with the material to be cut when you switch the machine on.

- Position the machine on the material in which the slits are to be cut.
 - **NOTE** The cutting line pointer indicates the position of the first diamond disc.
 - **NOTE** The working direction is indicated by the cutting direction arrow.
- Push the on/off switch to the side, press it in and hold it in the pressed-in position.
- Press the plunge movement lockbutton and hold it in this position.
- Apply reasonable pressure to the front grip of the machine, causing the discs to plunge slowly into the material to be cut until the preset cutting depth is reached.
- Guide the machine with both hands, applying reasonable pressure in the cutting direction.
 - **NOTE** Application of excessive pressure in the cutting direction when slow cutting progress is made may result in overheating and irreparable damage to the diamond discs.

NOTE Application of excessive pressure in the cutting direction when slow cutting progress is made may cause the motor to stall.

- Release the on/off switch if you wish to interrupt or end the slitting operation.
- DANGER After lifting the machine away from the working surface, release the plunge movement lockbutton. This will lock the parts of the machine in their original starting position. Diamond cutting discs that project from the machine present a risk of injury.

Lift the machine away from the working surface without pivoting or tilting it and then release the plunge movement lockbutton.

6.3 Sharpening the diamond discs

CAUTION

Never hold the sharpening plate against the rotating diamond cutting discs.

- Lay the sharpening plate flat (not on its edge) on a solid, flat surface (concrete) and secure it in position.
- 2. Set the machine to cut to a depth of 15 mm.
- Hold the machine securely with both hands and guide it towards the sharpening plate that is fixed in position.
- 4. Make two to three cuts across the sharpening plate.

6.4 Working with the machine

Work in a downwards direction when making vertical cuts

Do not pivot or tilt the machine while guiding it.

NOTE

It is not possible to cut curves.

Select the right type of diamond disc for the material to be cut.

If cutting performance drops, check whether the diamond cutting discs are badly worn or if they need to be replaced or sharpened.

A cloth, a brush or, if necessary, compressed air can be used to clean the machine.

7.2 Changing the carbon brushes

DANGER

Have the machine repaired by an electrical specialist (Hilti Service) using genuine Hilti spare parts. The users may otherwise be exposed to potential hazards.

8 Troubleshooting

Fault	Possible cause	Remedy
The machine doesn't start.	The supply cord or plug is defective.	Contact Hilti Service.
	No electric power.	Check the electric supply. Connect the machine to a functioning electric supply.
	The carbon brushes are worn.	Contact Hilti Service.
The motor doesn't run at full power.	The machine was overloaded due to application of excessive cutting pressure.	Reduce cutting pressure.
	The machine has overheated due to prolonged overloading.	Allow the machine to cool down (run- ning without load accelerates cool- ing). After cooling, switch off and then on again in order to operate the ma- chine at full power.
Cutting performance is low.	The diamond discs are unsuitable for the material to be cut.	Use suitable diamond cutting discs.
	The diamond cutting discs are badly worn or inadequately sharpened.	Change or sharpen the diamond cutting discs.

9 Disposal



Most of the materials from which Hilti machines or appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back old machines and appliances for recycling. Ask Hilti customer service or your Hilti representative for further information.



For EC countries only

Disposal of electric appliances together with household waste is not permissible.

In observance of the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electrical appliances that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

en

10 Manufacturer's warranty

Please contact your local Hilti representative if you have questions about the warranty conditions.

11 EC declaration of conformity (original)

Designation:	Slitting machine
Type:	DC-SE 20
Year of design:	1997

We declare, on our sole responsibility, that this product complies with the following directives and standards: until 19th April 2016: 2004/108/EC, from 20th April 2016: 2014/30/EU, 2006/42/EC, 2011/65/EU, EN 60745-1, EN 60745-2-22, EN ISO 12100.

Hilti Corporation, Feldkircherstrasse 100, FL-9494 Schaan

pale wan

05/2015

Paolo Luccini Head of BA Quality and Process Management Business Area Electric Tools & Accessories Johannes Wilfried Huber Senior Vice President

Business Unit Diamond

05/2015

Technical documentation filed at:

Hilti Entwicklungsgesellschaft mbH Zulassung Elektrowerkzeuge Hiltistrasse 6 86916 Kaufering Deutschland



Hilti Corporation

LI-9494 Schaan Tel.: +423/2342111 Fax: +423/2342965 www.hilti.com

312278