

# HILTI

**SD 4500-A22**

English

en





## 1 Information about the documentation




### 1.1 About this documentation

- Read this documentation before initial operation or use. This is a prerequisite for safe, trouble-free handling and use of the product.
- Observe the safety instructions and warnings in this documentation and on the product.
- Always keep the operating instructions with the product and make sure that the operating instructions are with the product when it is given to other persons.

### 1.2 Explanation of symbols used



#### 1.2.1 Warnings

Warnings alert persons to hazards that may occur when handling or using the product. The following signal words are used in combination with a symbol:

	<b>DANGER!</b> Draws attention to an imminent hazard that will lead to serious personal injury or fatality.
	<b>WARNING!</b> Draws attention to a potential hazard that could lead to serious personal injury or fatality.
	<b>CAUTION!</b> Draws attention to a potentially dangerous situation that could lead to minor personal injury or material damage.





#### 1.2.2 Symbols in the documentation

The following symbols are used in this document:

	Read the operating instructions before use
	Instructions for use and other useful information

#### 1.2.3 Symbols in the illustrations




The following symbols are used in illustrations:

	These numbers refer to the corresponding illustrations found at the beginning of these operating instructions.
	The numbering reflects the sequence of operations shown in the illustrations and may deviate from the steps described in the text.
	Item reference numbers are used in the <b>overview illustration</b> and refer to the numbers used in the key in the <b>product overview</b> section.
	This symbol is intended to draw special attention to certain points when handling the product.

### 1.3 Product-dependent symbols

#### 1.3.1 Symbols on the product

The following symbols are used on the product:

	Rated speed under no load
	Revolutions per minute
	Direct current (DC)

#### 1.4 Product information

Hilti products are designed for professional use and may be operated, serviced and maintained only by trained, authorized personnel. This personnel must be informed of any particular hazards that may be encountered. The product and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

The type designation and serial number are printed on the type identification plate.

- ▶ Write down the serial number in the table below. You will be required to state the product details when contacting Hilti Service or your local Hilti organization to inquire about the product.

#### Product information

Type:	SD 5000 A-22 SD 4500 A-22
Generation:	01
Serial number:	

## 2 Safety

### 2.1 General power tool safety warnings

#### ⚠ 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.

#### Work area safety

- ▶ **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- ▶ **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.

#### Electrical safety

- ▶ **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.
- ▶ **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.
- ▶ **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.
- ▶ **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.

#### 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.
- ▶ **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.
- ▶ **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.
- ▶ **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.
- ▶ **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.
- ▶ **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.

## Power tool use and care

- ▶ 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.
- ▶ **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.
- ▶ **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.
- ▶ **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.
- ▶ **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.
- ▶ **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.

## Battery tool use and care

- ▶ **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- ▶ **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- ▶ **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- ▶ **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

## Service

- ▶ **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.

## 2.2 Additional safety precautions for screwdrivers

### Personal safety

- ▶ Only use the product if it is in perfect working order.
- ▶ Never tamper with or modify the tool in any way.
- ▶ Use the auxiliary grip supplied with the tool. Loss of control can cause personal injury.
- ▶ Always hold the power tool with both hands on the grips provided. Keep the grips clean and dry.
- ▶ Hold the power tool by the insulated gripping surfaces when performing an operation where the accessory tool may come into contact with concealed wiring. If the accessory tool comes into contact with a live wire, metal parts of the power tool may also become live, causing the operator to receive an electric shock.
- ▶ Avoid touching rotating parts – risk of injury!
- ▶ Wear suitable protective glasses, a hard hat, ear protection, protective gloves and light respiratory protection while using the tool.
- ▶ Wear protective gloves also when changing the accessory tool. Touching the accessory tool presents a risk of injury (cuts or burns).
- ▶ Wear eye protection. Flying fragments present a risk of injury to the body and eyes.
- ▶ Before starting work, check the hazard class of the dust that will be produced when working. Use an industrial vacuum cleaner with an officially approved protection class in compliance with the locally applicable dust protection regulations. Dust from materials such as lead-based paint, certain types of wood and concrete/masonry/stone containing quartz, minerals or metal may be harmful to health.
- ▶ Make sure that the working area is well ventilated and, where necessary, wear a respirator appropriate for the type of dust generated. Contact with or inhalation of dust may cause allergic reactions and/or respiratory or other diseases to the operator or bystanders. Certain kinds of dust, such as oak and beech dust, are classified as carcinogenic, especially in conjunction with additives for treating wood (chromate, wood preservative). Materials containing asbestos may only be handled by specialists.

- ▶ Take breaks between working and do physical exercises to improve the blood circulation in your fingers. Exposure to vibration during long periods of work can lead to disorders of the blood vessels and nervous system in the fingers, hands and wrists.

#### **Electrical safety**

- ▶ Before starting work, check the working area for concealed electric cables or gas and water pipes. If you damage an electric cable accidentally, external metal parts of the power tool may become live and present a risk of electric shock.

#### **Careful handling and use of power tools**

- ▶ Switch the power tool off immediately if the accessory tool jams. The power tool may go off course and veer to the side.
- ▶ Wait until the power tool has come to a complete stop before setting it down.

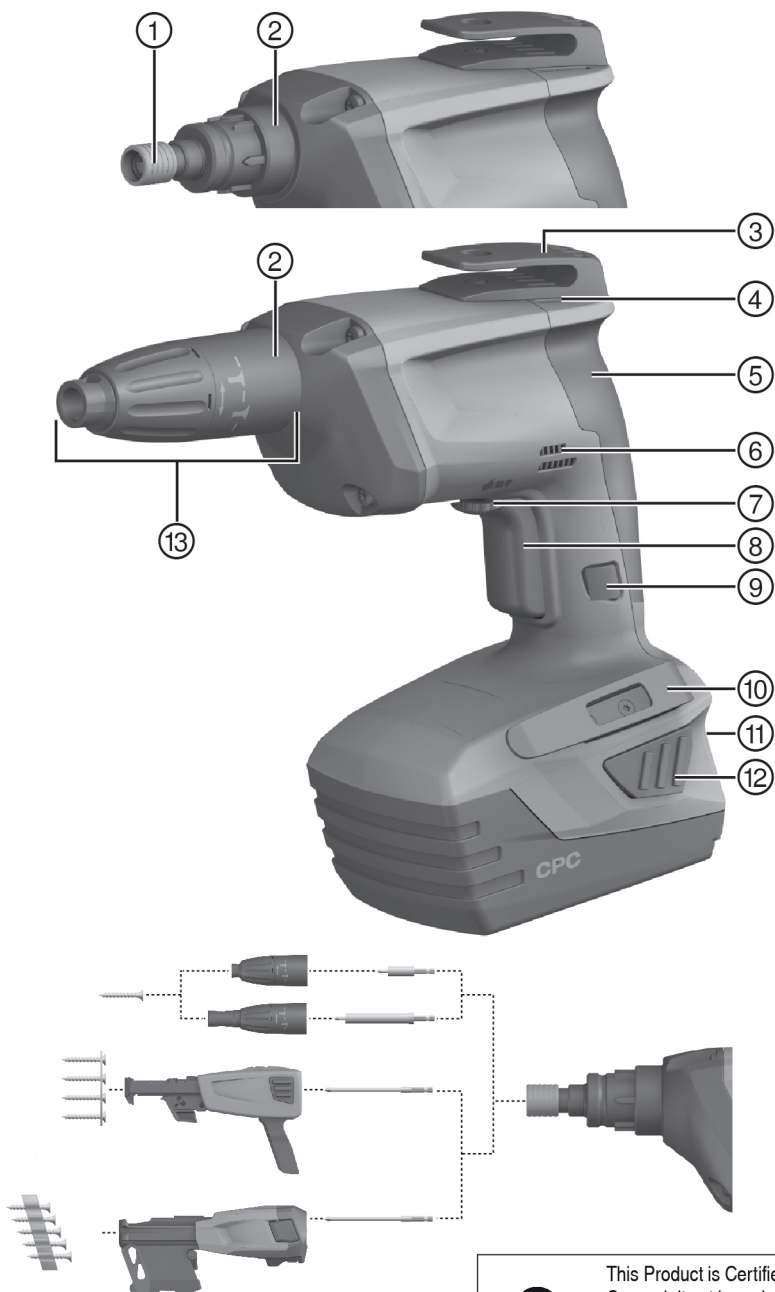


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### 3 Description

#### 3.1 Overview of the product



This Product is Certified  
Ce produit est homologué  
Producto homologado por  
Este producto está registrado

- |   |   |
|---|---|
| ① Chuck   | ⑧ Control switch (with electronic speed control)  |
| ② Power tool / accessory interface (snap-on connection) | ⑨ Lockbutton for continuous operation             |
| ③ Universal hook  | ⑩ Belt hook                                       |
| ④ Motor cooling air intake                              | ⑪ Charge state and fault display (Li-ion battery) |
| ⑤ Grip  | ⑫ Battery release buttons                         |
| ⑥ Motor cooling air intake                              | ⑬ Depth gauge                                     |
| ⑦ Forward / reverse selector switch with safety lock    |   |

### 3.2 Intended use

The product described is a hand-held cordless drywall screwdriver equipped with a clutch. Use only the drywall screws specified in the technical data.

The screwdriver handles best when gripped in the in-line position.

The motor cooling air is drawn in through the cooling air slots and blown out of the screwdriver through the air vents.

- ▶ Use only **Hilti** Li-ion batteries from the B 18 / B 22 series with this product.
- ▶ Use only **Hilti** battery chargers of the C4/36 series with these batteries.

### 3.3 Charge state display

The charge state of the Li-ion battery is displayed after pressing one of the release buttons lightly (press only until slight resistance is felt).

Status	Meaning
4 LEDs light.	• Charge state: 75 % to 100 %
3 LEDs light.	• Charge state: 50 % to 75 %
2 LEDs light.	• Charge state: 25 % to 50 %
1 LED lights.	• Charge state: 10 % to 25 %
1 LED blinks.	• Charge state: < 10 %



#### Note

Battery charge state cannot be displayed while the control switch is pressed and for up to 5 seconds after releasing the control switch.

### 3.4 Items supplied

Drywall screwdriver, operating instructions



#### Note

You can find other system products approved for use with your product at your local **Hilti** Center or online at: [www.hilti.com](http://www.hilti.com).

### 3.5 Overloading and overheating protection

The drywall screwdriver is protected from overloading and overheating by an automatic cut-out. Overloading or overheating is indicated by the four LEDs blinking. After overheating, when the control switch is pressed to restart the screwdriver, there may be a delay before the screwdriver restarts.

## 4 Technical data

### 4.1 Screwdriver

<b>Rated voltage</b>	21.6 V
<b>Weight</b>	4.6 lb (2.1 kg)
<b>Rated speed under no load</b>	0 Hz ...83.3 Hz (0 /min ...5,000 /min)

<b>Maximum torque</b>	7.0 ftlb <sub>t</sub> (9.5 Nm)
<b>Socket/bit drive</b>	Hex socket 1/4"
<b>Screw length</b>	≤ 2.2 in (≤ 55 mm)
<b>Screw diameter</b>	≤ 0.17 in (≤ 4.2 mm)

## 5 Preliminary and finishing work

### 5.1 Charging the battery



#### Note

Make sure that the outer surfaces of the battery are clean and dry before inserting the battery in an approved battery charger.

Read the operating instructions for the charger for further information about the charging procedure.

- ▶ Use an approved charger to charge the battery.

### 5.2 Inserting the battery



#### WARNING

**Risk of injury!** Inadvertent starting of the screwdriver.

- ▶ Before fitting the battery, check that the screwdriver is switched off and that the forward / reverse switch is in the middle position (i.e. safety lock engaged).



#### WARNING

**Risk of injury!** Hazard presented by a falling battery.

- ▶ A falling battery may present a risk of injury to yourself and others. Check that the battery is securely seated in the power tool.



#### WARNING

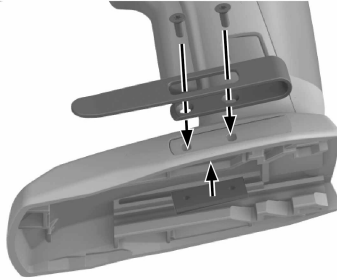
**Electrical hazard!** Risk of short circuiting.

- ▶ Before inserting the battery, check to ensure that the battery terminals and the contacts on the screwdriver are free from foreign objects.



- ▶ Insert the battery.

### 5.3 Fitting the belt hook in the alternative position



1. Press both battery release buttons simultaneously and pull the battery out of the screwdriver.
2. Unscrew both belt hook retaining screws.
3. Bring the belt hook and threaded piece into place on the other side of the tool.
4. Reinsert and tighten the two retaining screws.

### 5.4 Working safely with the belt hook and universal hook

- ▶ Before beginning work, make sure that the belt hook and universal hook are securely attached to the screwdriver.
- ▶ Use the universal hook only when necessary. Lay the screwdriver down in a safe place when it is not in use for a long period.

### 5.5 Forward / reverse



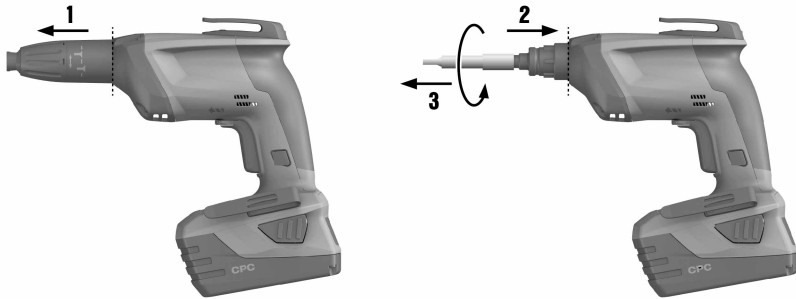
#### Note

The control switch is locked when the forward / reverse switch is in the middle position (safety lock).



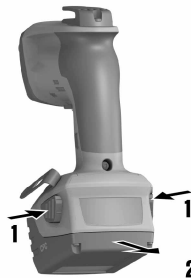
- ▶ Set the forward / reverse selector switch to forward or reverse rotation.

## 5.6 Changing the accessory tool.



1. Pull the depth gauge away from the power tool, releasing the snap-on connection.
2. Push the chuck towards the screwdriver, turning the chuck slightly at the same time, and then hold it in this position.
3. Remove the accessory tool with your other hand.
4. Insert the desired accessory tool in the chuck, pushing it into the screwdriver as far as it will go.

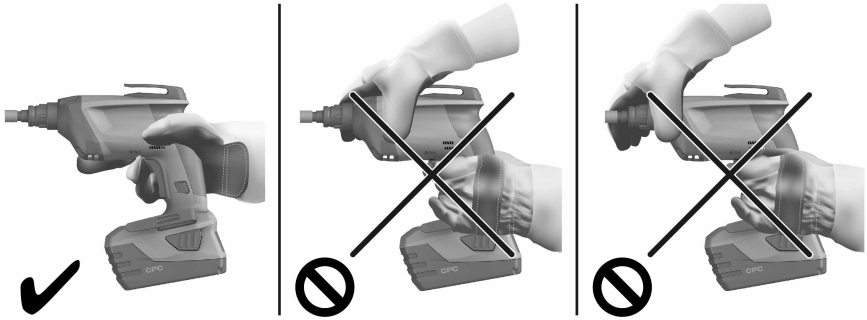
## 5.7 Removing the battery



- ▶ Press both battery release buttons simultaneously and pull the battery out of the screwdriver.

## 6 Driving and removing screws

### 6.1 Driving screws



#### WARNING

**Electrical hazards** There is a risk of electric shock if a screw is driven into a concealed electric cable and, at the same time, the bit holder or depth gauge is touched.

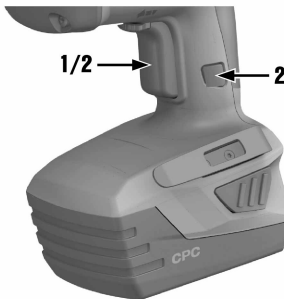
- ▶ Hold the screwdriver only by the grip when driving or removing screws.

1. Set the screwdriver to forward rotation.
2. Check that the battery is in the working position.
3. Position the screw on the bit and bring the tip of the screw into contact with the working surface.
4. Use the control switch to regulate the speed of the screwdriver.

### 6.2 Removing screws

1. Pull the depth gauge off.
2. Set the screwdriver to reverse rotation.
3. Insert the bit in the head of the screw and use the control switch to regulate the speed of the screwdriver.
4. Refit the depth gauge after removing the screws.

### 6.3 Switching on in sustained operating mode



- ▶ Switch on in sustained operating mode.

### 6.4 Switching off after sustained operation

- ▶ Press the control switch.
  - ◀ The lockbutton returns to its original position.

## 6.5 Screwdriver / depth gauge interface

1. Pull the depth gauge away from the power tool, releasing the snap-on connection.
2. Pull the depth gauge forward, away from the power tool.



### Note

With the drive spindle exposed in this way, the following operations can be carried out:  
Removing screws (set to reverse rotation),  
changing bits,  
changing bit holders,  
changing to magazine operation,  
redriving screws.

## 7 Care and maintenance

### 7.1 Care and maintenance of cordless tools



### WARNING

**Danger of electric shock!** Carrying out care and maintenance while the battery is fitted presents a risk of serious physical injury and burning injury.

- ▶ Always remove the battery before carrying out all care and maintenance tasks.

### Care and maintenance of the tool

- Carefully remove any dirt that may be adhering to parts.
- Clean the air vents carefully with a dry brush.
- Use only a slightly damp cloth to clean the casing. Do not use cleaning agents containing silicone as these may attack the plastic parts.

### Care of the lithium-ion batteries

- Keep the battery free from oil and grease.
- Use only a slightly damp cloth to clean the casing. Do not use cleaning agents containing silicone as these may attack the plastic parts.
- Avoid ingress of moisture.

### Maintenance

- Check all visible parts and controls for signs of damage at regular intervals and make sure that they all function correctly.
- Do not operate the cordless tool if signs of damage are found or if parts malfunction. Have the tool repaired by **Hilti** Service immediately.
- After cleaning and maintenance, fit all guards or protective devices and check that they function correctly.



### Note

To help ensure safe and reliable operation, use only genuine Hilti spare parts and consumables. Spare parts, consumables and accessories approved by Hilti for use with the product can be found at your local **Hilti** Center or online at: [www.hilti.com](http://www.hilti.com)

## 8 Troubleshooting



### Note

If the trouble you are experiencing is not listed in this table or if you are unable to remedy the problem by yourself, please contact **Hilti** Service.

Trouble or fault	Possible cause	Action to be taken
The screwdriver doesn't work.	Low battery.	▶ Use an approved charger to charge the battery. → page 9
	The battery is not in the working position.	▶ Insert the battery. → page 9

Trouble or fault	Possible cause	Action to be taken
The screwdriver doesn't work and one LED blinks.	Low battery.	▶ Change or charge the battery.
	The battery is too hot or too cold.	▶ Bring the battery to the recommended operating temperature.
The screwdriver doesn't work and all four LEDs blink.	The overload cut-out has been activated.	▶ Release the control switch and then press it again. Reduce the load on the tool.
The control switch can't be pressed, i.e. the switch is locked.	The safety lock is engaged.	▶ Set the forward / reverse selector switch to forward or reverse rotation.
The screwdriver runs but the screw can't be driven.	The wrong direction of rotation is set.	▶ Use the forward / reverse selector switch to set the right direction of rotation.
Running speed suddenly drops considerably.	Low battery.	▶ Use an approved charger to charge the battery. → page 9
The battery runs down more quickly than usual.	Battery condition is not optimal.	▶ Have the battery condition diagnosed by <b>Hilti Service</b> or fit a new battery.
The battery doesn't engage with an audible click.	The retaining lugs on the battery are dirty.	▶ Clean the retaining lugs and engage the battery in the working position.
The screwdriver or the battery gets very hot.	Electrical fault.	▶ Switch the screwdriver off immediately, remove the battery and contact <b>Hilti Service</b> .
	The screwdriver has been overloaded by exceeding its application limits.	▶ Select a screwdriver with adequate performance for the application.

## 9 Disposal



### WARNING

**Risk of injury.** Hazards presented by improper disposal.

- ▶ Improper disposal of the equipment may have the following consequences: The burning of plastic components generates toxic fumes which may present a health hazard. Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution. Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.
- ▶ Dispose of defective batteries right away. Keep them out of reach of children. Do not disassemble or incinerate the batteries.
- ▶ Batteries that have reached the end of their life must be disposed of in accordance with national regulations or returned to **Hilti**.

♻️ Most of the materials from which **Hilti** tools and appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, your old tools, machines or appliances can be returned to **Hilti** for recycling. Ask **Hilti Service** or your Hilti representative for further information.

## 10 Manufacturer's warranty

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







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