



SID 4-A22

English



# 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 occur when handling or using the product. The following signal words are used:

#### **DANGER**

##### **DANGER !**

- ▶ Draws attention to imminent danger that will lead to serious personal injury or fatality.

#### **WARNING**

##### **WARNING !**

- ▶ Draws attention to a potential threat of danger that can lead to serious injury or fatality.





#### **CAUTION**

##### **CAUTION !**

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






### 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
	Dealing with recyclable materials
	Do not dispose of electric equipment and batteries as household waste

### 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 illustrations</b> and refer to the numbers used in the <b>product overview section</b>
	This symbol is intended to draw special attention to certain points when handling the product.
	Wireless data transfer

### 1.3 Product-dependent symbols

#### 1.3.1 Symbols on the product

The following symbols are used on the product:

$n_0$	Rated speed under no load
/min	Revolutions per minute
	Direct current (DC)

### 1.4 Product information

**HILTI** products are designed for professional users and only trained, authorized personnel are permitted to operate, service and maintain the products. This personnel must be specifically informed about the possible hazards. The product and its ancillary equipment can present hazards if used incorrectly by untrained personnel or if used not in accordance with the intended use.

The type designation and serial number are printed on the rating 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

Impact screwdriver	SID 4-A22
Generation	01
Serial no.	

### 1.5 Declaration of conformity

We declare, on our sole responsibility, that the product described here complies with the applicable directives and standards. A copy of the declaration of conformity can be found at the end of this documentation.

The technical documentation is filed here:

Hilti Entwicklungsgesellschaft mbH | Tool Certification | Hiltistrasse 6 | 86916 Kaufering, Germany

## 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.**

#### 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

- ▶ **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.

#### 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 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 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

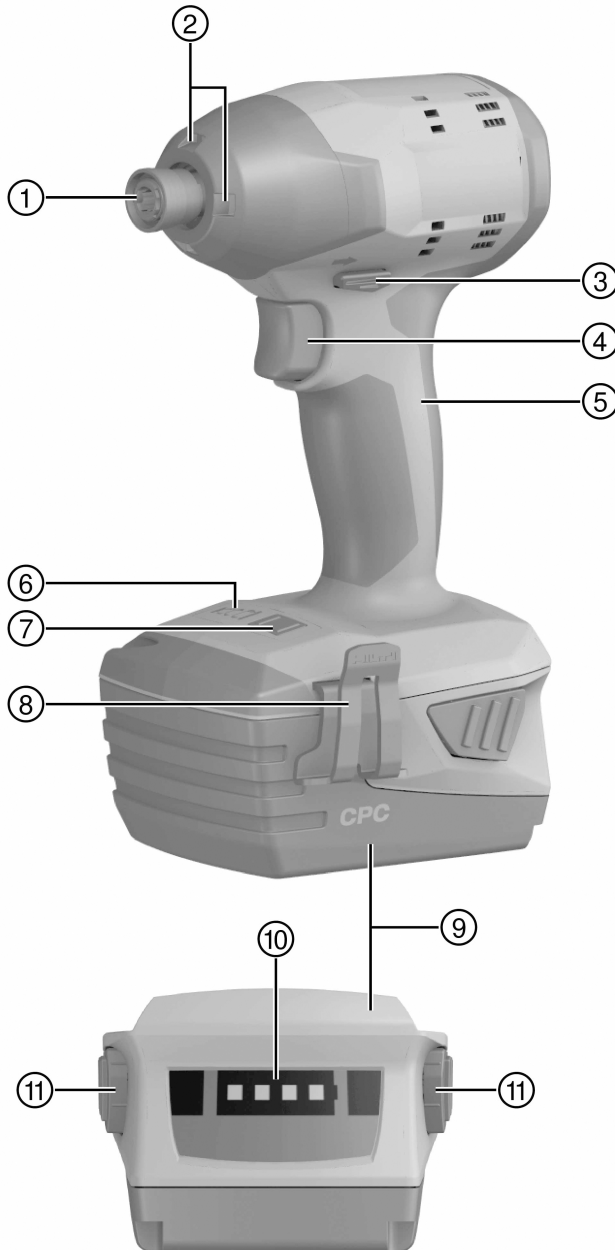
- ▶ Switch the power tool off immediately if the accessory tool jams. The power tool may go off course and veer to the side.
- ▶ Wait until the power tool has come to a complete stop before setting it down.

## 2.3 Battery use and care

- ▶ Observe the special regulations and instructions applicable to the transport, storage and use of Li-ion batteries.
- ▶ Do not expose batteries to high temperatures, direct sunlight or fire.
- ▶ Do not disassemble, crush or incinerate batteries and do not subject them to temperatures over 80 °C.
- ▶ Do not use or charge batteries that have suffered mechanical impact, have been dropped from a height or show signs of damage. In this case, always contact your **Hilti Service**.
- ▶ If the battery is too hot to touch it may be defective. In this case, place the product in a non-flammable location, well away from flammable materials, where it can be kept under observation and allowed to cool down. In this case, always contact your **Hilti Service**.

### 3 Description

#### 3.1 Product overview



① Chuck (1/4" hex socket)

② Light

- |  |                                     |
|--|-------------------------------------|
| ③ Forward/reverse switch with safety lock        | ⑦ Torque selector button            |
| ④ Control switch (with electronic speed control) | ⑧ Belt hook (optional)              |
| ⑤ Grip   | ⑨ Battery                           |
| ⑥ Torque indicator                               | ⑩ Battery state of charge indicator |
|  | ⑪ Battery release button            |

### 3.2 Intended use

The product described is a compact cordless impact screwdriver with hex bit holder for medium-heavy-duty screwdriving in wood, metal and other materials.

The following applications are available:

- Driving self-drilling and self-tapping screws up to Ø 4.8 mm in steel
- Driving HUS screw anchors with 6 mm in masonry and concrete
- Driving Hilti HRD frame anchors Ø 8 mm to 10 mm
- Driving wood screws up to Ø 8 mm
- Drilling in wood with WDB-S spade drill bits
- ▶ Use only **Hilti** lithium-ion batteries of the B 22 series with this product.
- ▶ Use only **Hilti** battery chargers of the C4/36 series for charging these batteries.

### 3.3 State of charge display

The charge state of the Li-ion battery is displayed after pressing one of the two battery 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 %

- 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

Impact screwdriver, operating instructions.

- Other system products approved for use with this product can be found at your local **Hilti Store** or at: [www.hilti.group](http://www.hilti.group) | USA: [www.hilti.com](http://www.hilti.com)

## 4 Technical data

### 4.1 Impact wrench

<b>Rated voltage</b>	21.6 V	
<b>Weight in accordance with EPTA procedure 01/2003</b>	1.5 kg	
<b>Rated speed under no load</b>	<b>Setting I</b>	0 /min ... 1,000 /min
	<b>Setting II</b>	0 /min ... 1,500 /min
	<b>Setting III</b>	0 /min ... 2,700 /min
<b>Impact speed</b>	≤ 3,500 bpm	
<b>Torque adjustment</b>	3 settings	
<b>Large standard bolts</b>	M8 to M16	
<b>Large high-strength bolts</b>	M6 to M12	
<b>Socket/bit drive</b>	1/4" hex. socket with locking ring	



## 4.2 Noise and vibration values in accordance with EN 60745

The sound pressure and vibration values given in these instructions were measured in accordance with a standardized test and can be used to compare one power tool with another. They can also be used for a preliminary assessment of exposure.

The data given represents the main applications of the power tool. However, if the power tool is used for different applications, with different accessory tools, or is poorly maintained, the data can vary. This can significantly increase exposure over the total working period.

An accurate estimation of exposure should also take into account the times when the tool is switched off, or when it is running but not actually being used for a job. This can significantly reduce exposure over the total working period.

Identify additional safety measures to protect the operator from the effects of noise and/or vibration, for example: Maintaining the power tool and accessory tools, keeping the hands warm, organization of work patterns.

### Noise information

Sound (power) level ( $L_{WA}$ )	98 dB(A)
Uncertainty for the sound power level ( $K_{WA}$ )	3 dB(A)
Emission sound pressure level ( $L_{pA}$ )	87 dB(A)
Uncertainty for the sound pressure level ( $K_{pA}$ )	3 dB(A)

### Total vibration

Vibration emission value when tightening screws/bolts and nuts of the maximum permitted size ( $a_h$ )	12 m/s <sup>2</sup>
Uncertainty for tightening screws/bolts and nuts of the maximum permitted size	1.5 m/s <sup>2</sup>

## 4.3 Battery

Battery operating voltage	21.6 V
Ambient temperature	-17 °C ... 60 °C
Storage temperature	-20 °C ... 40 °C

## 5 Preparations at the workplace

### CAUTION

#### Risk of injury by inadvertent starting!

- ▶ Before inserting the battery, make sure that the product is switched off.
- ▶ Remove the battery before making any adjustments to the power tool or before changing accessories.

Observe the safety instructions and warnings in this documentation and on the product.

### 5.1 Charging the battery

1. Before charging the battery, read the operating instructions for the charger.
2. Make sure that the contacts on the battery and the contacts on the charger are clean and dry.
3. Use an approved charger to charge the battery.

### 5.2 Inserting the battery

### CAUTION

#### Risk of injury by short circuit or falling battery!

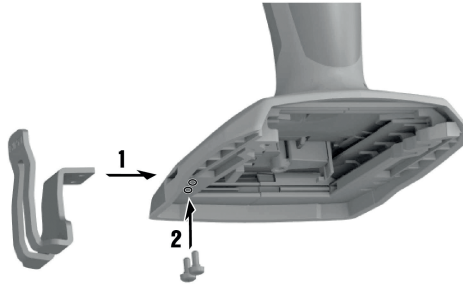
- ▶ Before inserting the battery, make sure that the contacts on the battery and the contacts on the product are free of foreign matter.
- ▶ Make sure that the battery always engages correctly.

1. Charge the battery fully before using it for the first time.
2. Push the battery into the battery holder until it engages with an audible click.
3. Check that the battery is seated securely.

### 5.3 Removing the battery

1. Press the release buttons on the battery.
2. Pull the battery out of its holder in the device.

### 5.4 Fitting the belt hook (optional)



The belt hook enables you to attach suitable power tools to your belt. It can be fitted to allow attachment on the left or right side of the body.

#### CAUTION

##### **Risk of injury by falling power tools!**

- ▶ Check that the belt hook is fitted securely before beginning work.

1. Fit the belt hook.
2. Attach your power tool to the belt hook.
3. Check that belt hook and power tool are secure.

### 5.5 Fitting an accessory tool



1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Check that the connection end of the accessory tool is clean. Clean the connection end if necessary.
3. Push the accessory tool into the chuck as far as it will go (until it engages).
4. Check that the accessory tool is held securely.

## 6 Types of work

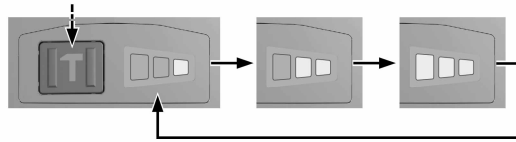
#### ATTENTION

##### **Risk of damage by incorrect handling!**

- ▶ Do not operate the switches for direction of rotation and/or function selection during operation.

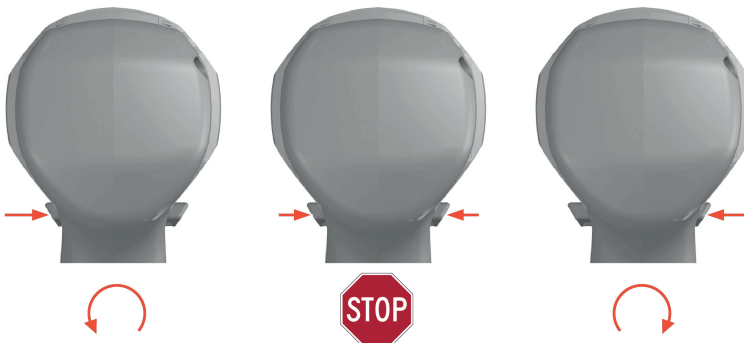
Observe the safety instructions and warnings in this documentation and on the product.

## 6.1 Setting the torque



- ▶ Push the torque selector button repeatedly until the desired torque setting is displayed in the torque display.

## 6.2 Setting forward or reverse rotation



- ▶ Set the forward/reverse switch to the desired direction of rotation.
  - ◀ The control switch is locked when the forward/reverse switch is in the middle position (safety lock). An interlock prevents switching while the motor is running.

## 6.3 Switching on

- ▶ Press the control switch.
  - ◀ Speed of rotation is regulated by the distance the control switch is pressed in.

## 6.4 Screwdriving

### CAUTION

**Risk of injury by damaged workpieces!** Screws or workpiece can be damaged if torque is too high. This presents a risk of injury.

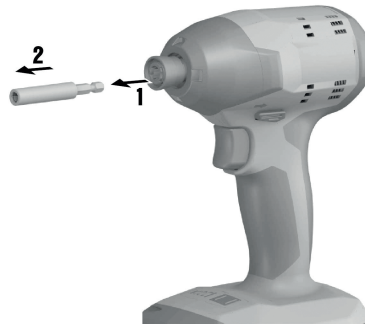
- ▶ Make sure that screws and workpiece are suitable for the torque produced by the tool.

1. Move the forward/reverse switch into the middle position.
2. Use the torque selector button to set the desired torque. → page 9
3. Set the forward/reverse switch to the desired direction of rotation.

## 6.5 Switching off

- ▶ Release the control switch.

## 6.6 Removing the accessory tool



### CAUTION

**Risk of injury by the accessory tool!** The accessory tool might be hot or have sharp edges.

- ▶ Wear protective gloves when using the power tool and when changing accessory tools.

1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Pull the chuck ring forward and hold it in this position.
3. Pull the accessory tool out of the chuck.
4. Release the chuck ring.

## 7 Care and maintenance of cordless tools

### WARNING

**Risk of injury with battery inserted !**

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

#### Care and maintenance of the tool

- Carefully remove stubborn dirt from the tool.
- 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 Li-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.

## 8 Transport and storage of cordless tools

### Transport

#### CAUTION

#### Accidental starting during transport !

- ▶ Always transport your products with the batteries removed!
- ▶ Remove the battery.
- ▶ Transport the tool and batteries individually packaged.
- ▶ Never transport batteries in bulk form (loose, unprotected).
- ▶ Check the tool and batteries for damage before use after long periods of transport.

### Storage

#### CAUTION

#### Accidental damage caused by defective or leaking batteries !

- ▶ Always store your products with the batteries removed!
- ▶ Store the tool and batteries in a place that is as cool and dry as possible.
- ▶ Never store batteries in direct sunlight, on heating units or behind a window pane.
- ▶ Store the tool and batteries in a place where they cannot be accessed by children or unauthorized persons.
- ▶ Check the tool and batteries for damage before use after long periods of storage.

## 9 Troubleshooting

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

Trouble or fault	Possible cause	Action to be taken
The power tool doesn't run.	The battery is not fully inserted.	▶ Push the battery in until it engages with an audible double click.
	Low battery.	▶ Change the battery and charge the empty battery.
The power tool doesn't run.	The battery is not fully inserted.	▶ Push the battery in until it engages with an audible double click.
	Low battery.	▶ Change the battery and charge the empty battery.
Running speed suddenly drops considerably.	Low battery.	▶ Change the battery and charge the empty battery.
The battery runs down more quickly than usual.	Very low ambient temperature.	▶ Allow the battery to warm up slowly to room temperature.
The battery doesn't engage with an audible double click.	The retaining lugs on the battery are dirty.	▶ Clean the retaining lugs and push the battery in until it engages. Contact <b>Hilti Service</b> if the problem persists.
The power tool or the battery becomes very warm.	Electrical fault.	▶ Switch the power tool off immediately, remove the battery, keep it under observation, allow it to cool down and contact <b>Hilti Service</b> .
	The tool is overloaded (application limits exceeded).	▶ Select a suitable power tool for the application.

## 10 Disposal

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.

### **Battery disposal**

Improper disposal of batteries can result in health hazards from leaking gases or fluids.

- ▶ DO NOT send batteries through the mail!
- ▶ Cover the terminals with a non-conductive material (such as electrical tape) to prevent short circuiting.
- ▶ Dispose of your battery out of the reach of children.
- ▶ Dispose of the battery at your **Hilti Store**, or consult your local governmental garbage disposal or public health and safety resources for disposal instructions.



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- ▶ Do not dispose of power tools, electronic equipment or batteries as household waste!
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## **11 Manufacturer's warranty**

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



**Hilti Corporation**  
Feldkircherstraße 100  
9494 Schaan | Liechtenstein

**SID 4 - A22 (01)**

[2016]

2006/42/EG

EN ISO 12100

2006/66/EG

EN 60745-1

2011/65/EU

EN 60745-2-2

2014/30/EU

Schaan, 01/2018

A handwritten signature in black ink, appearing to read "Paolo Luccini".

**Paolo Luccini**

Head of Quality and  
Process-Management  
BA Electric Tools & Accessories

A handwritten signature in black ink, appearing to read "Tassilo Deinzer".

**Tassilo Deinzer**

Executive Vice President  
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Hilti Connect